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## An Explanation of Happiness with Secure Attachment, Basic Psychological Needs and Hope: The Case of Turkish University Students

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**Abstract:** In this study we aimed to investigate the role of hope, secure attachment with the parents, and satisfaction levels of the basic psychological needs (autonomy, competence and relatedness) of university students in predicting their happiness levels. A total of 558 university students were recruited and 70% of them were female and 30% of them were male. Ages of the participants ranged from 18 to 29. The data were collected in classroom settings using personal information form, the Oxford Happiness Scale, the Attachment with the Parents Scale, the Basic Psychological Needs Scale, and the Dispositional Hope Scale. Results indicated that the satisfaction levels of the competence needs were the most powerful predictor of happiness among university students. The satisfaction levels of autonomy, relatedness needs, and a secure attachment to the father, along with hope contributed little to the explanation of happiness; whereas, a secure attachment to the mother was not a predictor of happiness of the university students. The findings were discussed within the framework of the developmental characteristics of university students and the characteristics of collectivist societies.

**Keywords:** *Happiness, hope, psychological needs, attachment, university students.*

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### Introduction

The positive psychology approach, which focuses on the positive development of individuals, is an approach that helps individuals attach themselves to life and to lead a better quality of life. It also serves to present information and findings about the positive aspects of a good life (Peterson, 2000). Variables related to the field of positive psychology are dealt with in three steps. These can be listed as well-being, life and needs satisfaction that stem from the past experiences, hope and optimism for the future, and flow and happiness for the present (Seligman & Csikszentmihalyi, 2000). Happiness, which is among the main topics of research in positive psychology, is accepted as a fundamental element of a good life and it contains such concepts as contentment, life satisfaction, positive emotions, and having meaning in life. The state called happiness in daily life is defined as subjective well-being in the literature and is sometimes used interchangeably (Diener, Scollon & Lucas, 2004; Park, 2004). Happiness is crucial for human beings. Studies on happiness, well-being or life satisfaction usually included demographical variables, individual characteristics, environmental and interpersonal variables. All those factors were found to be related with happiness at different levels (Layous & Lyubomirsky, 2012). However, psychosocial processes that underlies within individual, interpersonal and environmental variables need to be examined deeper. Such studies would explain why some individuals are happier and some are less.

Within the personal factors, meeting one's basic psychological needs is a basic condition to achieve subjective well-being (Kasser & Ryan, 1999). Therefore, well-being is seen as a direct function of basic psychological needs (Reis et al., 2000) and studies have revealed that the satisfaction of the basic psychological needs is strongly and significantly correlated with well-being (Cihangir Cankaya, 2009a, 2009b; Deci & Ryan, 2000; La Guardia, Ryan, Couchman and Deci, 2000; Sheldon and Elliot, 1999). The psychological needs contained in the Self-Determination Theory include autonomy, competence and relatedness and they are accepted as being universal (Coleman, 2000; Deci and Ryan, 1985a; Ryan & Deci, 2000a).

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One of the basic psychological needs, autonomy, is defined as an individual initiating his/her own actions and making choices indicated by the Self-Determination Theory (Andersen, 2000; Williams, Grow, Freedman, Ryan, & Deci 1996). The need for autonomy is claimed to help an individual to direct his/her activities himself/herself (Reis, Sheldon, Gable, Roscoe & Ryan, 2000). The need for competence among the basic psychological needs is perceived as an individual's desire to make an impression on their environment (Kowal & Fortier, 1999), and their capacity to have an effective interaction with their environment (Deci and Ryan, 1985b). It refers to being effective in reaching the desired outcomes (Reis et al., 2000) and feeling competent while coping with their environment (Ingledeu, Markland & Sheppard, 2004). Individuals who enjoy a sense of competence believe they can attain their goals successfully (Williams et al., 2002). The need for being related to, on the other hand, is an individual's need for being connected to others. The need for relatedness requires mutual respect, care and trust in others (Baumeister & Leary, 1995) and it involves sensitivity, warmth and emotional acceptance (Andersen, 2000).

Parent-child relationship, which is one of the interpersonal factors, contributed to the happiness levels of individuals (Jiang, Huebner, & Hills, 2013; Ma & Huebner, 2008; Suldo & Huebner, 2004). The Attachment Theory focuses on the children's relationship with their caregivers (Bowlby, 1969, 1980) and emphasizes that the quality of that relationship built during early childhood has a determining role in the relationships that are built in later years in life, and that it is one of the most critical factors that determines an individual's psychological health (Shorey, Snyder, Yang & Lewin, 2003; Simmons, Gooty, Nelson, Little, 2009). Several studies have revealed that positive perceptions developed during childhood about the self and others affects adult functioning and happiness (Simmons, Gooty, Nelson & Little, 2009). Hope is one of the important variables that are considered as mediating variables between attachment levels and happiness levels of individuals (Jiang, Huebner, & Hills, 2013; Shorey, Synder, Yang & Lewin, 2003). Because in the attachment theory explanation, secure attachment is important for obtaining goal-directed thinking style, since individuals start to learn pathways and agency thinking beginning from the infancy and continue to learn during other developmental periods (Snyder, Hoza et al., 1997). In other words, secure attachment patterns with parents lead to higher levels of hope in children whereas insecure attachment patterns diminishes hope levels of toddlers (Jiang, Huebner, & Hills, 2013).

Hope is considered to be a basic personal characteristic (Snyder et al., 1991) and hope is dealt with as a cognitive and motivational construct reflecting an individual's perception of their capacities. This construct has three categories, which are defined as: "having clearly conceptualized goals", "developing specific strategies to attain these goals (pathways thinking) and having the motivation to use and maintain these strategies (agency thinking) (Snyder, 2002). Many studies carried out both in Turkey and abroad have presented the relationship between an individual's hope level and subjective wellbeing/happiness (Bailey, Eng, Frisch, & Snyder, 2007; Cihangir Cankaya & Meydan, 2018; Demirli, Turkmen & Arik, 2015; Gallagher & Lopez 2009; Magaletta & Oliver 1999; Marques, Lopez & Mitchell, 2013; Marques, Lopez, & Pais-Ribeiro, 2011; Peterson & Seligman, 2004; Satici, 2016; Sahin, Aydin, Sari, Kaya & Pala, 2012; Tarhan & Bacanli, 2015; Wong & Lim, 2009).

In conclusion, it is known that many studies have been conducted to determine the sources of happiness and related variables in the literature, which have found that psychological needs, hope and secure attachment patterns with the parents affect an individual's happiness levels. It could be said that there are still limited studies carried out on the variables affecting the happiness levels of young university students in Turkey despite the recent increase in their number. Therefore, there is a need for explaining the relationship of these variables to happiness levels of Turkish university students. Some of the studies with Turkish university students have found that perceived family support (Gulacti, 2010), attachment styles (Terzi & Cihangir Cankaya, 2009), satisfaction of basic psychological needs (Cihangir Cankaya, 2009a; Cihangir Cankaya, 2009b; Kermen & Sari, 2014; Ilhan & Ozbay, 2010), a perceived economic situation, perceived parent attitudes, religious beliefs, locus of control (Tuzgol-Dost, 2006), self-respect (Dogan & Eryilmaz, 2013), and perceived self-control (Eryilmaz & Ercan, 2010) have significant effects on Turkish university students' happiness levels.

As also stated by Steel, Taras, Uggerslev and Bosco (2018), despite the remarkable improvements in the field of subjective wellbeing/happiness, there is still an uncertain understanding of what creates subjective wellbeing and it seems important to focus on the less studied "culture" of this. In this respect, we thought that it was significant to present what affects university students' happiness levels, and especially to what extent in Turkey, which is among collectivistic cultures in the world. The results of our study were expected to contribute to determining the sources of happiness for university students in Turkey, the literature concerning the factors affecting happiness in different cultures, as well as studies conducted with international students in the counseling center.

## Methodology

### *Research Goal*

The main starting point of this study was to determine the sources of happiness of Turkish university students and to examine the factors affecting their happiness levels within the scope of the Self-Determination, Hope and Attachment Theories. To this end, we examined university students' satisfaction of their psychological needs and secure

attachments to their parents in order to discover their evaluations of the past and their perceived relationship patterns. To this end, our study sought an answer to the question “To what extent are happiness levels of university students predicted by their satisfaction of psychological needs, secure attachment with the parents and hope levels?”

### *Research Design*

This study was a descriptive correlational research which aimed to investigate the role of hope, secure attachment with the parents, and satisfaction levels of the basic psychological needs (autonomy, competence and relatedness) of university students in predicting their happiness levels. Independent variables of the study were hope levels, secure attachment with the parents, and satisfaction levels of basic psychological needs (autonomy, competence and relatedness), whereas the dependent variable was the happiness levels of the university students.

### *Sample*

A total of 558 participants were recruited during the 2016-2017 academic year from the faculties of dentistry, literature, education, science, nursing, business, communication, engineering, sports, medicine and agriculture. The ages of the participants ranged from 18 to 29 ( $\bar{X}=21.03$ ,  $Sd=1.63$ ) and 70% of them were female and 30% of them were male.

### *Data Collection Tools*

The data were collected in classroom settings using personal information form, the Oxford Happiness Scale, the Attachment with the Parents Scale, the Basic Psychological Needs Scale, and the Dispositional Hope Scale.

### *Oxford Happiness Scale*

The happiness levels of the participants were measured using the Turkish version of the Oxford Happiness Scale (OHS) (Dogan & Sapmaz, 2012). The original form of the OHS was developed by Hills and Argyle (2002; cited in Dogan & Sapmaz, 2012). The original OHS form is a one-dimensional measurement tool with 29 items that uses a six-point Likert type scale. Cronbach's Alpha for the original scale was .91. OHS that was translated-into Turkish and used to conduct the validity and reliability studies on university students (Dogan & Sapmaz, 2012). Similar to the original form, the Turkish OHS form demonstrated a single factor solution based on exploratory and confirmatory factor analyses. Cronbach's Alpha for the Turkish OHS form was .91. We also obtained a Cronbach's Alpha coefficient of .91 for our sample.

### *Inventory of Parent and Peer Attachment*

The Turkish versions of the Inventory of Parent and the Peer Attachment-Short (IPPA-S) forms were used in order to assess the attachment levels of university students to their mothers and fathers. The original IPPA was developed by Armsden and Greenberg (1987). The IPPA has three parent scales which are Trust (10 items), Communication (10 items), and Alienation (8 items). The Cronbach's Alpha for the subscales ranged from .86 to .91 (Armsden & Greenberg). A 12-item-short form of the IPPA was developed by Raja, McGee and Stanton (1992). Gunaydin, Selcuk, Sumer and Uysal (2005) conducted an adaptation study of the IPPA-S in Turkish. Exploratory factor analysis of the Turkish version of the IPPA-S yielded a two-factor solution including mother and father subscales only and did not include trust, communication or alienation subscales unlike the original form. Gunaydin et.al. merged the trust, communication and alienation items into a one general attachment dimension and the scale eventually consisted of 12 items for the mother and 12 items for the father with attachment evaluations on a 6-point-rating scale. Cronbach's Alpha for the scale was .88 for the mother subscale and .91 for the father subscale. Higher scores from the scale indicated a healthier attachment to the father or mother. We obtained a Cronbach's Alpha coefficient of .87 for an attachment to the mother and .88 for the father subscale in our sample.

### *The Basic Needs Satisfaction in General Scale*

The Basic Needs Satisfaction in General Scale (BPNSG-S) was developed by Deci and Ryan (2000) and converted to Turkish by Bacanli and Cihangir Cankaya (2003). BPNS is a 7-point-likert type scale which includes 21 items to evaluate satisfaction levels of autonomy, competence and relatedness needs of the respondents. The Cronbach's Alpha for the total scale was found to be .83 and ranged from .60 to .74 for the subscales. Bacanli and Cihangir Cankaya confirmed the factor structure of the BPNS with confirmatory factor analysis and reported acceptable fit for the three dimensional model. Higher scores from the scale indicate more satisfaction for the basic psychological needs either for the total scale or for the subscales. We calculated the Cronbach's Alpha for our sample as .87 for the total scale, .65 for autonomy, .63 for competence and .82 for the relatedness scale.

### Dispositional Hope Scale

The Dispositional Hope Scale (DHS) (Snyder et al., 1991) is a 4-point-likert-type scale and consists of two subscales called agency (4 items) and pathways (4 items). Snyder et al. Reported Cronbach's Alpha coefficients of .74 to .84 for overall hope, .71 to .76 for the agency subscale and .63 to .80 for the pathways subscale. The Turkish form of the DHS was translated into Turkish by Tarhan and Bacanli (2015). Tarhan and Bacanli demonstrated that the Turkish form of the DHS presented the same factor structure as the original form after exploratory and confirmatory factor analytical studies. They reported that Cronbach's Alpha coefficient of the scale was .83. Higher scores indicated higher levels of hope for the total scale and subscales. They also found that scores of the Turkish version of DHS showed significant correlations with the satisfaction of life, loneliness and anxiety scores of the sample. In our study, the Cronbach's Alpha for the sample was found to be .86 for total scale, .77 for the pathways subscale and .80 for the agency subscale of the Turkish version of the DHS.

### Data Analysis

A stepwise multiple linear regression analysis was used to investigate the role of hope, secure attachment with the mother, secure attachment with the father and satisfaction levels of the basic psychological needs (autonomy, competence and relatedness) of university students in predicting their happiness levels. Before the regression analysis, normal distribution of the data was assured by investigating the Skewness and the Kurtosis values of the sample. The Skewness and Kurtosis values of the distribution were in the range of +1.5 and -1.5 points and normality assumption was assured for all variables (Tabachnick & Fidell, 2013). The correlation between the independent variables was examined. The correlations among variables changed from .20 to .40 and as expected no tolerance values less than .10 and no VIF values more than 10 were observed (Pallant, 2016), therefore it was decided that multicollinearity did not exist in the data.

### Results

Mean scores, standard deviations for hope, secure attachment with mother, secure attachment with father and satisfaction levels of basic psychological needs (autonomy, competence and relatedness) of the sample in the first place. Means and standard deviations of the variables are presented in Table 1 and Pearson correlation coefficients among variables are presented in Table 2.

Table 1. Means and Standard Deviations for hope, secure attachment with mother, secure attachment with father and satisfaction levels of basic psychological needs (autonomy, competence and relatedness) of the sample

	Mean	Std. Deviation	N
Happiness	118.09	19.77	558
Hope	49.25	7.48	558
Attachment to Mother	67.96	10.78	558
Attachment to Father	61.34	14.39	558
Autonomy	30.59	5.62	558
Competence	35.03	5.12	558
Relatedness	48.18	7.94	558

Table 2. Pearson Correlation Coefficients among Dependent and Independent Variables

	Happiness	Autonomy	Competence	Relatedness	Hope	Attachment to Mother	Attachment to Father
Happiness	.						
Autonomy	.542*	.					
Competence	.596*	.613*	.				
Relatedness	.565*	.468*	.464*	.			
Hope	.581*	.438*	.517*	.374*	.		
Attachment to Mother	.377*	.401*	.377*	.397*	.311*	.	
Attachment to Father	.347*	.399*	.323*	.269*	.203*	.523*	.
N	558	558	558	558	558	558	558

\*p< .001

The results of the multiple stepwise regression analysis, which examined whether hope levels, satisfaction levels of basic psychological needs (autonomy, competence and relatedness) and secure attachment with the mother and father in order to predict happiness levels of university students, revealed that the first predictor of happiness was the

satisfaction level of competence needs [ $R^2=.35$ ,  $F(1, 556) = 306.30$ ,  $p < .01$ ]. The satisfaction level of competence needs accounted for 35% of the total variance and according to Leech, Barret and Morgan (2015) this proportion of explained variance is large. *B* coefficient indicated a positive relationship between variables.

Secondly, the satisfaction level of relatedness needs entered into the regression equation [ $R^2=.11$ ,  $F(1, 555) = 109.55$ ,  $p < .01$ ] and added approximately 11% of additional variance. The variance explained by the relatedness needs alone is small (Leech et al., 2005). Third, the predictor of the happiness levels of the university students was represented by dispositional hope scores of [ $R^2=.07$ ,  $F(1, 554) = 83.641$ ,  $p < .01$ ] with a mere 7% of additional variance and this proportion for explained variance was also small (Leech et al.). *B* coefficient indicated a positive relationship between the variables.

Finally, the secure attachment to the father [ $R^2=.01$ ,  $F(1, 553) = 15.40$ ,  $p < .01$ ] and satisfaction needs of autonomy [ $R^2=.01$ ,  $F(1, 552) = 8.19$ ,  $p < .05$ ] were entered into the regression equation in the fourth and fifth steps with an additional variance of 1% each. According to Leech et al. (2005), the proportion of variance explained by a secure attachment to the father and the satisfaction levels of autonomy needs scores are very small. *B* coefficient indicated a positive relationship between the variables.

Among the predictors, only the secure attachment to the mother scores did not predict the happiness levels of the university students. All predictor variables explained approximately 55% of the variance in the happiness levels of the university students. The proportion of the explained variance for the regression model indicated that this prediction was quite powerful (Leech et al., 2005). Standardized Beta, *t* values and significance levels of the variables are presented in Table 3.

Table 3. Unstandardized and standardized coefficients for stepwise regression analysis

	<b>B</b>	<b>Std. Error</b>	<b>Beta</b>	<b>t</b>	<b>p</b>
(Constant)	-2.989	4.726		-.632	.53
Competence	.82	.15	.21	5.407	.00
Relatedness	.68	.08	.27	8.170	.00
Hope	.79	.09	.29	8.760	.00
Attachment to Father	.13	.04	.09	3.142	.00
Autonomy	.39	.13	.11	2.863	.00

## Discussion

Our study examined variables affecting university student's happiness levels. The variables which affect the university students' happiness levels were identified as the basic psychological needs (competence, relatedness, autonomy) satisfaction, hope and secure attachment with the father. We found that the greatest contribution to the youths' happiness levels came from the satisfaction levels of competence and relatedness needs. It was noted that the lowest contribution to the university students' happiness levels were made by the satisfaction of the need for autonomy and that the mother attachment level did not contribute to happiness levels. In order to conduct a holistic discussion about the findings, satisfaction of psychological needs and a secure attachment with the mother and father were mentioned together.

We found that the basic psychological needs satisfaction (competence, relatedness, autonomy) were related to the happiness levels of the youth. In many studies conducted in the scope of the Self-Determination Theory, positive relations have been revealed between the basic psychological needs satisfaction and the subjective wellbeing components (happiness, vitality, life satisfaction etc.). For example, Ryan and Deci (2000a) obtained some findings supporting the fact that satisfaction of the three basic psychological needs increased subjective wellbeing while inhibition of these needs caused a decrease. On the other hand, studies showed that a decreased psychological needs satisfaction related to defensiveness, lack of self-confidence, unhealthy self-concept and even psychopathology (Chen, Assche, Vansteenkiste, Soenens & Beyers 2015; Ryan & Deci, 2000b; Ryan et al., 2006; Vansteenkiste and Ryan, 2013). It is emphasized that autonomy, competence and relatedness needs are necessary for the optimal functioning and development of all individuals regardless of gender, ethnicity, race, culture or socioeconomic status (Deci and Ryan, 2011). In this regard, one study conducted in Turkey revealed that autonomy, competence and relatedness needs explained 58.4% of the variance concerning subjective wellbeing (Kermen and Sari, 2014); and another study found basic psychological needs satisfaction to be the most powerful predictor of a youth's subjective well-being (Ilhan & Ozbay, 2010).

Our study concluded that the satisfaction of competence needs was the most powerful predictor of the university students' happiness levels. In the related literature, studies focusing on the satisfaction of the three psychological needs showed that satisfaction of competence needs had significant effects on happiness (Sheldon, Ryan & Reis, 1996;

Véronneau, Koestner & Abela, 2005; Milyavskaya, et al., 2009). The need for competence is based upon people's need to be able to control the environment they are in and therefore to feel that they are effective (Deci & Vansteenkiste, 2004). Competence consists of an individual's capacity to interact with their environment based on their desire to influence others (Deci & Ryan, 1985a; Kowal & Fortier, 1999), combined with the feeling of being good at what they do (Lyness, Lurie, Ward, Mooney & Lambert, 2013). The need for competence is satisfied when success is attained in reaching the targeted effects and results (Reis, et al., 2000). In this respect, it was seen that competence was not a skill that could be acquired, but rather the confidence and effectiveness felt for an action (Deci & Ryan, 2002) and the people who feel competent believe they could attain their goals successfully (Williams et al., 2002). Our findings showed that young people who believe they have an influential power over others and that they would reach their goals feel happier. However, studies carried out on psychological needs satisfaction, particularly abroad, have mostly been based on autonomy while competence has not attracted much interest in this area. This may partly be associated with the idea that perceived competence does not yield to wellbeing unless the behavior is autonomous as in the self-determination theory (Levesque, Zuehlke, Stanek & Ryan, 2004). From this point of view, our findings related to competence were significant in cultural terms as well. Due to the Turkish culture-specific characteristics, it is more important for young adults to feel competent in the first place, rather than being autonomous in order to be happy. This is considered to be related to the fact that the youth have to gain competence in academic, social and cultural areas in order not to fall behind the rapidly globalizing world and to build a good life in the conditions that exist in Turkey. Compared to past generations, young adults in Turkey today need to make their career plans according to the changing world, and develop many competencies that could be complicated and challenging due to changes in the economy, technology and society. It seems significant that young people who develop these competencies feel happier. Additionally, our research revealed that university students, who have goals that they believe they can reach, are consistently happier than students who do not.

The need for relatedness was found to be the second significant variable to contribute to the university students' happiness levels. The need for relatedness has been defined as an individual's feeling of existence during their interaction with others, being in an environment where they are interested in others, attracting the interest of others, and possessing the perception that they are part of a social circle (Baumeister & Leary, 1995; Deci & Vansteenkiste, 2004; Ryan, 1995). In this respect, it could be said that the youths feel happier when they experience mutual respect, care, trust, warmth and emotional acceptance in their environment. This finding is supported by studies that reveal positive relationships between psychological needs satisfaction and subjective wellbeing (Sheldon, Ryan and Reis, 1996; Véronneau, Koestner & Abela, 2005; Milyavskaya, et al., 2009). At this point, the finding that fulfillment of the youths' need for relatedness contributes significantly to their happiness levels can be accepted as a culturally significant result. While individualistic cultures need high levels of autonomy, communitarian cultures need to feel more connected (Hui & Villareal, 1989). In communitarian cultures, the group's approval is paid more attention to than in individualistic cultures by comparison (Hui & Triandis, 1986). Accordingly, individuals see themselves primarily as a member of a community and attach more importance to their adjustment (Nisbett, 2003). In that respect, this finding obtained from our study seems significant. In a study conducted on adolescents in Turkey, it was found that adolescents with relational and autonomous-relational self-concept have higher positive emotions and life satisfaction scores than those having an autonomous self-concept; while negative emotions scores of adolescents with an autonomous self-concept were higher than adolescents having an autonomous relational self-concept (Ozdemir, 2012). When the findings of these two studies are evaluated together, we can conclude that the fulfillment of the need for autonomy alone is not sufficient, but the need for relatedness has to be satisfied in the first place.

Another variable that contributes to the university students' happiness levels was observed as being autonomy, but with very little contribution. Our study also found that the need for autonomy used to predict the youth's happiness levels was lower than other psychological needs. At the very center of the Self-Determination Theory is the concept of autonomy and a distinction that is suggested by the theory between behaviors of being autonomous and being controlled (Deci & Ryan, 1985b; Deci & Ryan, 2000; Ryan, 1995). Studies carried out in different cultures show that these three needs are universal and affect well-being in different cultures (Deci & Ryan, 2008). Similarly, our study found that psychological needs satisfaction predicted happiness levels; however, autonomy was not satisfied in the first place. It was discovered that the need for autonomy was not specific to western societies only, but was true for all cultures, either collectivist or individualistic; however, the way and degree that this need was satisfied may vary due to cultural differences (Chirkov, Ryan, Kim & Kaplan, 2003; Kagitcibasi, 1996). In addition, there are also studies claiming that people's basic need was to belong to and be part of a group (Baumeister & Leary, 1995). As Berne (1964) also states, autonomy occurs in an individual when his/her capacities for awareness, spontaneity and intimacy are released. Therefore, when parenting styles do not support these processes, children's autonomy gaining periods, rates and satisfaction of the need for autonomy expectations may be different. Because Turkey is a collectivist culture, the fact that youths were not raised in a family and educational environment that supported autonomy may have greatly decreased the effect of satisfaction and the need for autonomy. At this point, it would also be beneficial to assess autonomy on the basis of the developmental stages since it is impossible for individuals to either have no autonomy at all or to be totally autonomous. Like in all psychological structures, the interaction between the biological structure and the environment is effective in the development of autonomy. As a matter of fact, a study conducted on adolescents in

Turkey (Toprak, 2014) found autonomy to be the most powerful predictor of adolescents' happiness and life satisfaction. On the other hand, our study found that instead of feeling autonomous, it was more important for the youths to feel competent, to think that they could influence others in their environment, and to be part of a group by building close relationships in order to be happy.

When findings concerning psychological needs satisfaction are evaluated together, the main need to be satisfied in order to be happy and healthy in western cultures comes up as the need for autonomy whereas the satisfaction of competence and relatedness needs were essential for Turkish university students. More studies are needed to evaluate these findings. This could be explained by the fact that children are less exposed to autonomous experiences and are therefore unaware of their need for autonomy or that there is a different perception of autonomy in Turkey. Bao and Lam (2008) also stated that the absence of freedom of choice in children who were in a good socioemotional relationship with their mother were still motivated to complete tasks and that their perceived autonomy would not be inhibited due to any internalization they may experience. Also, findings have been obtained showing that intrinsic motivation of individuals was diminished when they were provided with choices in communitarian cultures while their intrinsic motivation increases when others make choices for them (Iyengar & Lepper, 1999).

In a meta-analysis study aimed at determining the relationship between culture and wellbeing, it was found that individualism is negatively correlated with many indicators of subjective wellbeing, and individualism and autonomy are not good for wellbeing at the individual level, while on the basis of nations (48 countries and 3 different time zones); happy cultures are those with high individualism and welfare levels where there is no inequality (Steel, Taras, Uggerslev & Bosco, 2018). One study carried out in Turkey showed that psychological control is not significantly related to self-worth in adolescents (Kindap, Sayil & Kumru, 2007). Considering that psychological control is an environmental factor inhibiting autonomy, this finding is consistent with the result of our study. In this respect, since the effects of the variables influencing happiness and, more specifically, satisfaction of the need for autonomy on happiness may vary at individual and national levels (Steel, Taras, Uggerslev & Bosco, 2018); it is important to conduct studies and to discuss findings on both levels and to examine young peoples' autonomy perceptions and developments both in Turkey and other countries with collectivist cultures.

Hope was seen as another variable that contributed significantly to the university students' happiness levels. This finding is also consistent with previous studies (Bailey, Eng, Frisch & Snyder, 2007; Cihangir Cankaya & Meydan, 2018;; Demirli, Turkmen & Arik, 2015; Gallagher & Lopez 2009; Magaletta & Oliver 1999; Peterson & Seligman, 2004; Satici, 2016; Sahin, Aydin, Sari, Kaya & Pala, 2012; Tarhan & Bacanli, 2015; Wong & Lim, 2009). When hope is conceptualized as having the motivation to set and pursue goals, as well as seeking ways to realize those goals; then the fact that young university students face the requirements of adult life and decision making situations, and that they need to undertake important goals for their lives in order to explain the significance of their hope levels versus their happiness, then it could be asserted that young adults with high hope levels have goals, and they find ways to reach those goals, they therefore feel happier.

It was discovered that another variable predicting university students' happiness levels was an attachment to the father (with a low degree of contribution), while a secure attachment to the mother was not a significant predictor of university students' happiness levels. The fact that an attachment to the father contributed to the university students' happiness levels, albeit low, was supported by the findings of a longitudinal study conducted by Grossmann et al., (2002). They concluded that an attachment with the mother stronger effect in earlier years, and that the effect of the attachment with the father became more apparent during middle childhood.

The attachment theory introduces a framework concerning individuals' capacities to build relationships with others and to develop supportive relationships (Lopez & Brennan, 2000; Mallinckrodt, 2000). Since building close relationships is a fundamental premise of happiness in this framework, then young people building a secure attachment relationship with their parents is considered to draw an essential frame for their later relationships, which would affect their happiness levels. The fact that an attachment to the mother is not a predictor of young individuals' happiness levels, and the fact that an attachment to the father contributes very little to the model can be explained by the individualization of the youth and an attachment in close relationships to people other than their parents when coming into prominence developmentally.

In terms of building close relationships, young university students possessed attachment styles and relationship building patterns that were initiated by their attachment to their parents, but were later shaped by the effects of siblings, friends and teachers. Several studies have found that adult attachment styles of the youth were significantly correlated to happiness and subjective wellbeing (Diener & Seligman, 2002; Terzi & Cihangir Cankaya, 2009; Torquati & Raffaelli, 2004; Van Buren & Cooley, 2002; Wearden, Lamberton, Crook & Walsh, 2005; Wei, Liao, Ku & Shaffer, 2011) and psychological symptom (Koruk, 2017). In this regard, it was thought that rather than having secure attachment patterns with the parents that the attachment styles that young people build with others may affect their happiness levels.

The present study has some limitations. The research was conducted among students at a state university in the west of Turkey. The similar characteristics of the students may have influenced the research findings.

### Conclusion and Suggestions

Our findings indicated that the satisfaction levels of the competence needs were the most powerful predictor of happiness among university students. The satisfaction levels of autonomy, relatedness needs, and a secure attachment to the father, along with hope contributed little to the explanation of happiness; whereas, a secure attachment to the mother was not a predictor of happiness of the university students. Our findings related to the satisfaction of the basic psychological needs were culturally meaningful since the satisfaction of autonomy was the least important among others in predicting the happiness levels of the university students in Turkey where a collectivist culture is dominant. The findings related to a secure attachment to the parents are consistent with the developmental characteristics of young adults where they are moving toward emotional independence and away from their parents, and they are trying to establish new attachments in their other relationships. In future studies, the relationship between attachment styles of young people and happiness and other positive structures can be investigated. When the results of the research are evaluated in general, individual and group studies can be organized in the university psychological counseling and guidance centers, which will contribute to the satisfaction of the basic psychological needs and hopes of the youth.

### References

- Andersen, S. (2000). Fundamental human needs: Making social cognition relevant. *Psychological Inquiry*, 11(4), 269-276.
- Andersen, S. L., & Teicher, M. H. (2008). Stress, sensitive periods and maturational events in adolescent depression. *Trends in Neurosciences*, 31(4), 183-191.
- Armsden, G. C., & Greenberg, M. T. (1987). The inventory of parent and peer attachment: individual differences and their relationship to psychological well-being in adolescence. *Journal of Youth and Adolescence*, 16(59), 427-454.
- Bacanli, H., & Cihangir Cankaya, Z. (2003, July). *Ihtiyac doyumu olceginin gecerlik ve guvenirlilik calismasi* [Adaptation of the basic need satisfaction scale]. Paper presented at VII. Ulusal Psikolojik Danisma ve Rehberlik Kongresi [7th National Congress of Counseling and Guidance], Malatya, Turkey.
- Bailey, T. C., Eng, W., Frisch, M. B., & Snyder, C. R. (2007). Hope and optimism as related to life satisfaction. *The Journal of Positive Psychology*, 2(3), 168-175.
- Bao, X., & Lam, S. (2008). Who makes the choice? Rethinking the role of autonomy and relatedness in Chinese children's motivation. *Child Development*, 79(2), 269-283.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497-529.
- Berne, E. (1964). *Games people play: the psychology of human relationships*. (H.U. Haktanir, Trans.). Istanbul, Turkey: Koridor.
- Bowlby, J. (1969). *Attachment and loss. vol. 1: attachment*. New York, NY: Basic Books.
- Bowlby, J. (1980). *Attachment and loss*. New York, NY: Basic Books.
- Chen, B., Van Assche, J., Vansteenkiste, M., Soenens, B., & Beyers, W. (2015). Does psychological need satisfaction matter when environmental or financial safety are at risk? *Journal of Happiness Studies*, 16(3), 745-766.
- Chirkov, V. I., & Ryan, R. M. (2001). Parent and teacher autonomy- support in Russian and U.S. adolescents: Common effects on well-being and academic motivation. *Journal of Cross Cultural Psychology*, 32(5), 618-635.
- Chirkov, V., Ryan, R. M., Kim, Y., & Kaplan, U. (2003). Differentiating autonomy from individualism and independence: a self-determination theory perspective on internalization of cultural orientations and well-being. *Journal of Personality and Social Psychology*, 84(1), 97-110.
- Cihangir Cankaya, Z. (2009a). Ozerklik destegi, temel psikolojik ihtiyaclarin doyumu ve oznel iyi olma: Oz-belirleme kurami [Autonomy support, basic psychological need satisfaction and subjective well-Being: self-determination theory]. *Turkish Psychological Counseling and Guidance Journal /Turk Psikolojik Danisma ve Rehberlik Dergisi*, 4(31), 23-31.
- Cihangir Cankaya, Z. (2009b). Ogretmen adaylarinda temel psikolojik ihtiyaclarin doyumu ve iyi olma [The satisfaction of basic psychological needs and subjective wellbeing of teacher candidates]. *The Journal of Turkish Educational Science /Turk Egitim Bilimleri Dergisi*, 7(3), 691- 711.
- Cihangir-Cankaya, Z., & Meydan, B. (2018). Ergenlik doneminde mutluluk ve umut [Happiness and hope in adolescence]. *Electronic Journal of Social Sciences /Elektronik Sosysl Bilimler Dergisi*, 17(65), 207-222.
- Coleman, P. (2000). Aging and the satisfaction psychological needs. *Psychological Inquiry*, 11(4), 291-294.



- Deci, E., & Ryan, R. M. (1985a). *Intrinsic motivation and self-determination in human behavior*. New York, NY: Plenum Press.
- Deci, E., & Ryan, R. M. (1985b). The general causality orientations scale: Self determination in personality. *Journal of Research in Personality*, 19(2), 109-134.
- Deci, E. L., & Ryan, R.M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268.
- Deci, E. L., & Ryan, R. M. (2002). *Handbook of self-determination research*. Rochester, NY: University of Rochester Press.
- Deci, E. L., & Ryan, R. M. (2008). Facilitating optimal motivation and psychological well-being across life domains. *Canadian Psychology*, 49(1), 14-23.
- Deci, E.L., & Ryan, R.M. (2011). Level of analysis, regnant causes of behaviour and well- being: The role of psychological needs. *Psychological Inquiry*, 22(1), 17-22.
- Deci, E., & Vansteenkiste, M. (2004). Self-determination theory and basic need satisfaction: understanding human development in positive psychology. *Psychology Research /Ricerche Di Psicologia*, 27(1), 23–40.
- Demirli, A., Turkmen, M., & Arik, R. S. (2015). Investigation of dispositional and state hope levels' relations with student subjective well-Being. *Social Indicators Research*, 120(2), 601–613.
- 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., Oishi, S., & Lucas, R. E. (2003). Personality, culture, and subjective well-being: emotional and cognitive evaluations of life. *Annual Review of Psychology*, 54(1), 403-425.
- Diener, E., Scollon, C. N., & Lucas, R. E. (2004). The evolving concept of subjective well-being: The multifaceted nature of happiness. In P. T. Costa & I. C. Siegler (Eds.), *Advances in cell aging and gerontology: Vol. 15* (pp. 187-219). Amsterdam, The Netherlands: Elsevier.
- Diener, E., & Seligman, M. E. P. (2002). Very happy people. *Psychological Science*, 13(1), 81–84.
- Diener, E., Suh, E., & Oishi, S. (1997). Recent findings on subjective well-being. *Indian Journal of Clinical Psychology*, 24(1), 25-41.
- Dogan, T., & Eryilmaz, A. (2013). An examination of the relationships between two-dimensional self-esteem and subjective well-being. *Pamukkale University Journal of Education*, 33(1), 107–117.
- Dogan, T., & Sapmaz, F. (2012). Examination of psychometric properties of the Turkish version form of the oxford happiness questionnaire in university students. *The Journal of Psychiatry and Neurological Sciences*, 25(4), 297-304.
- Eryilmaz, A., & Ercan, L. (2010). An analysis of the relationship between subjective well-being and perceived control. *Elementary Education Online*, 9(3), 952-959.
- Gallagher, M. W., & Lopez, S. J. (2009). Positive expectancies and mental health: Identifying the unique contributions of hope and optimism. *The Journal of Positive Psychology*, 4(6), 548–556.
- Grossmann, K., Grossmann, K. E., Fremmer-Bombik, E., Kindler, H., Scheurer-Englisch, H., & Zimmerman, P. (2002). The uniqueness of the child-father attachment relationship: Fathers' sensitive and challenging play as a pivotal variable in a 16-year longitudinal study. *Social Development*, 11(3), 307-331.
- Gulacti, F. (2010). The effect of perceived social support on subjective well-being. *Procedia Social and Behavioral Sciences*, 2(2), 3844-3849.
- Gunaydin, G., Selcuk, E., Sumer, N., & Uysal, A. (2005). The psychometric evaluation of the short form of inventory of parent and peer attachment, *Turkish Psychological Articles*, 8(16) 13-23.
- Hui, C. H., & Villareal, M. J. (1989). Individualism-collectivism and psychological needs, their relationships in two cultures. *Journal of Cross-Cultural Psychology*, 20(3), 310–323.
- Iyengar, S. S., & Lepper, R. (1999). Rethinking the value of choice: a cultural perspective on intrinsic motivation. *Journal of Personality and Social Psychology*, 76(3), 349–366.
- Ingledeu, D. K., Markland, D., & Sheppard, K. E. (2004). Personality and self determination of exercise behaviour. *Personality and Individual Differences*, 36(8), 1921-1932.
- Ilhan, T., & Ozbay, Y. (2010). The predictive role of life goals and psychological need satisfaction on subjective well-being. *Turkish Psychological Counseling and Guidance Journal*, 4(32), 109-118.

- Jiang, X. U., Huebner, E. S., & Hills, K. J. (2013). Parent attachment and early adolescents' life satisfaction: The mediating effect of hope. *Psychology in the Schools, 50*(4), 340-352.
- Kermen, U., & Sari, T. (2014). Need satisfaction and subjective well-being among university students. *Abant Izzet Baysal University Journal of Faculty of Education, 14*(2), 175-185.
- Kagitcibasi, C. (1996). The autonomous-relational self: A new synthesis. *European Psychologist, 1*(3), 180-186.
- Kasser, T., & Ryan, R. (1999). The relations of psychological needs for autonomy and relatedness to vitality, well-being and mortality in a nursing home. *Journal of Applied Social Psychology, 29*(5), 935-954.
- Kindap, Y., Sayil, M., & Kumru, A. (2008). The relationships among type of perceived maternal control, psychosocial adjustment, and friendship in adolescence: the mediator role of self-esteem. *Turkish Journal of Psychology, 23*(61), 92-107.
- Koruk, S. (2017). The effect of gender and attachment styles on the relationship between marital adjustment and psychological symptoms. *European Journal of Educational Research, 6*(1), 69-77.
- Kowal, J., & Fortier, M. (1999). Motivational determinants of flow: Contributions from self determination theory. *Journal of Social Psychology, 139*(3), 355-369.
- La Guardia, J. G., Ryan, R. M., Couchman, C., & Deci, E. (2000). Within-person variation a security of attachment: a self-determination theory perspective on attachment, need fulfillment and well-being. *Journal of Personality and Social Psychology, 79*(3), 367-384.
- Leech, N. L., Barrett, K. C., & Morgan, G. A. (2015). *IBM SPSS for intermediate statistics: Use and interpretation* (5th ed.). New York, NY: Routledge.
- Layous, K., & Lyubomirsky, S. (2012). The how, why, what, when, and who of happiness: Mechanisms underlying the success of positive interventions. To appear in J. Gruber & J. Moskowitz (Eds.), *The light and dark side of positive emotions*. New York, NY: Oxford University Press.
- Levesque, C., Zuehlke, A. N., Stanek, L. R., & Ryan, R. M. (2004). Autonomy and competence in German and American university students: a comparative study based on self-determination theory. *Journal of Educational Psychology, 96*(1), 68-84.
- Lopez, F. G., & Brennan, K. A. (2000). Dynamic processes underlying adult attachment organization: Toward an attachment theoretical perspective on the healthy and effective self. *Journal of Counseling Psychology, 47*(3), 283-300.
- Lyness, J., Lurie, S., Ward, D., Mooney, C., & Lambert, D. (2013). Engaging students and faculty: implications of self-determination theory for teachers and leaders in academic medicine. *BMC Medical Education, 13*(1), 151.
- Ma, C. Q., & Huebner, E. S. (2008). Attachment relationships and adolescents' life satisfaction: Some relationships matter more to girls than boys. *Psychology in the Schools, 45*(2), 177-190.
- Magaletta, P. R., & Oliver, J. M. (1999). The hope construct, will and ways: their relations with self efficacy, optimism, and general well-being. *Journal of Clinical Psychology, 55*(5), 539-551.
- Mallinckrodt, B. (2000). Attachment, social competencies, social support and interpersonal process in psychotherapy. *Psychotherapy Research, 10*(3), 239-266.
- Marques, S. C., Lopez, S. J., & Mitchell, J. (2013). The role of hope, spirituality and religious practice in adolescents' life satisfaction: Longitudinal findings. *Journal of Happiness Studies, 14*(1), 251-261.
- Marques, S. C., Lopez, S. J., & Pais-Ribeiro, J. L. (2011). Building hope for the future: A program to foster strengths in middle-school students. *Journal of Happiness Studies, 12*(1), 139-152.
- Milyavskaya, M., Gingras, I., Mageau, G. A., Koestner, R., Gagnon, H., Fang, J., & Boiche, J. (2009). Balance across contexts: importance of balanced need satisfaction across various life domains. *Personality and Social Bulletin, 35*(8), 1031-1045.
- Nisbett, R. E. (2003). *The geography of thought: How asians and westerners think differently...and why*. New York, NY: The Free Press.
- Ozdemir, Y. (2012). Ergenlerin oznel iyi oluslarinin ozerk, iliskisel ve ozerk-iliskisel benlik kurgulari acisindan incelenmesi [Examination of adolescent's subjective well-being in terms of autonomous, relational and autonomous-relational self-construals]. *Turkish Psychological Counseling and Guidance Journal /Turk Psikolojik Danisma ve Rehberlik Dergisi, 4*(38), 188-198.
- Pallant, J. (2016). *SPSS survival manual: A step by step guide to data analysis using SPSS program* (6th ed.). London, UK: McGraw-Hill Education.

- Park, N. (2004). The role of subjective well-being in positive youth development. *The Annals of the American Academy of Political and Social Science*, 591(1), 25–39.
- Peterson, C. (2000). The future of optimism. *American Psychologist*, 55(1), 44-55.
- Peterson, C., & Seligman, M. E. P. (2004). *Character strengths and virtues: A handbook and classification*. Washington, DC: APA Press and Oxford University Press.
- Reis, H., Sheldon, K. M., Gable, S. L., Roscoe, J., & Ryan R. M. (2000). Daily well-being: The role of autonomy, competence and relatedness. *Personality and Social Psychology Bulletin*, 26(4), 419-435.
- Ryan, R. M. (1995). Psychological needs and the facilitation of integrative processes. *Journal of Personality*, 63(3), 397–427.
- Ryan, R. M., Deci, E. L., Grolnick, W. S., & La Guardia, J. G. (2006). The significance of autonomy and autonomy support in psychological development and psychopathology. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental psychopathology: Theory and method* (p. 795–849). Hoboken, NJ: John Wiley & Sons Inc.
- Ryan, R., & Deci, E. (2000a). Self-determination theory and the facilitation of intrinsic motivation, social development and well-being. *American Psychologist*, 55(1), 68-78.
- Ryan, R., & Deci, E. (2000b). The darker and brighter sides of human existence: basic psychological needs as a unifying concept. *Psychological Inquiry*, 11(4), 319-338.
- Ryan, R., & Deci, E. (2001). On happiness and human potentials: a review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52(1), 141-167.
- Satici, A., S. (2016). Psychological vulnerability, resilience, and subjective well-being: The mediating role of hope. *Personality and Individual Differences*, 102, 68–73.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55(1), 5–14.
- Sheldon, K., & Elliot, A. J. (1999). *Goal striving, need satisfaction and longitudinal well-being: the self-concordance model*. *Journal of Personality and Social Psychology*, 76(3), 482-497.
- Sheldon, K. M., & Ryan, R. M. (2011). *Positive psychology and self-determination theory: A natural interface*. In V. I. Chirkov, R. M. Ryan & K. M., Sheldon (Eds.), *Human autonomy in cross-cultural context: Perspectives on the psychology of agency, freedom, and well-being* (pp. 33-44). Dordrecht, The Netherlands: Springer.
- Sheldon, K. M., Ryan, R. M., & Reis, H. R. (1996). What makes for a good day? Competency and autonomy in the day and in the person. *Society for Personality and Social Psychology*, 22(12), 1270-1279.
- Shorey, H. S., Snyder, C. R., Yang, X., & Lewin, M. R. (2003). The role of hope as a mediator in recollected parenting, adult attachment, and mental health. *Journal of Social and Clinical Psychology*, 22(6), 685-715.
- Simmons, B.L., Gooty, J., Nelson, D.L., & Little L.M. (2009). Secure attachment: implications for hope, trust, burnout, and performance. *Journal of Organizational Behavior*, 30, 233–247.
- Snyder, C. R., Harris, C., Anderson, J.R., Holleran, S.A., Irving, L.M., Sigmon, S.T., ... & Harney, P. (1991). The will and the ways: development and validation of an individual differences measure of hope. *Journal of Personality and Social Psychology*, 60 (4), 570-585.
- Snyder, C. R., Hoza, B., Pelham, W. E., Rapoff, M., Ware, L., Danovsky, M., ... & Stahl, K. (1997). The development and validation of the Children's Hope Scale. *Journal of Pediatric Psychology*, 22(3), 399-421.
- Snyder, C. R. (2002). Hope theory: Rainbows in the mind. *Psychological Inquiry*, 13(4), 249-275.
- Steel, P., Taras, V., Uggerslev, K. L., & Bosco, F. A. (2018). The happy culture: A theoretical, meta-analytic and empirical review of the relationship between culture and wealth and subjective well-being. *Personality and Social Psychology Review*, 22, 128-169.
- Suldo, S. M., & Huebner, E. S. (2004). Does life satisfaction moderate the effects of stressful life events on psychopathological behavior during adolescence? *School Psychology Quarterly*, 19(2), 93-105.
- Sahin, M., Aydin, B., Sari, S. V., Kaya, S., & Pala, H. (2012). The role of hope and the meaning in life in explaining subjective well-being. *Kastamonu Education Journal*, 20(3), 827-836.
- Tabachnick, B.G., & Fidell, L.S. (2013) *Using Multivariate Statistics*. Boston, MA: Pearson.
- Tarhan, S., & Bacanlı, H. (2015). Surekli Umut Olcegi'nin Turkce'ye uyarlanmasi: Gecerlik ve guvenirlik calismasi [Adaptation of dispositional hope scale into Turkish: Validity and reliability study]. *The Journal of Happiness & Well-Being*, 3(1), 1-14.

- Terzi, S., & Cihangir Cankaya, Z. (2009). Baglanma stillerinin oznel iyi olmayi ve stresle basa cikma tutumlarini yordama gucu [The predictive power of attachment styles on subjective well being and coping with stress of university students]. *Turkish Psychological Counseling and Guidance Journal/Turk Psikolojik Danisma ve Rehberlik Dergisi*, 4(31), 1-11.
- Toprak, H. (2014). *Ergenlerde mutluluk yasam doyumunun yordayicisi olarak psikolojik saglamlık ve psikolojik ihtiyac doyumunu* [Psychological resilience and satisfaction of psychological needs as predictors of subjective well-being and life satisfaction in the adolescents] (Unpublished master's thesis). Sakarya University, Sakarya, Turkey
- Torquati, J. C., & Raffaelli, M. (2004). Daily experiences of emotions and social contexts of securely and insecurely attached adults. *Journal of Adolescent Research*, 19(6), 740-758.
- Tuzgol-Dost, M. (2006). Subjective well-being among university students. *Hacettepe University Journal of Education*, 31(31), 188-197.
- Van Buren, A., & Cooley, E. L. (2002). Attachment styles, view of self and negative affect. *North American Journal of Psychology*, 4, 417-430.
- Vansteenkiste, M., & Ryan, R. M. (2013). On psychological growth and vulnerability: Basic psychological need satisfaction and need frustration as a unifying principle. *Journal of Psychotherapy Integration*, 23(3), 263-280.
- Véronneau, M. H., Koestner, R. F., & Abela, J. R. Z. (2005). Intrinsic need satisfaction and well-being in children and adolescents: an application of the self-determination theory. *Journal of Social and Psychology*, 24(2), 280-292.
- Wearden, A. J., Lambertson, N., Crook, N., & Walsh, V. (2005). Adult attachment, alexithymia, and symptom reporting: An extension to the four-category model of attachment. *Journal of Psychosomatic Research*, 58(3), 279-288.
- Wei, M., Liao, K., Ku, T., & Shaffer, A. P. (2011). Attachment, self-compassion, empathy, and subjective well-being among college students and community adults. *Journal of Personality*, 79(1), 191-221.
- Williams, G. C., Grow, V. M., Freedman, Z., Ryan, R. M., & Deci, E. L. (1996). Motivational predictors of weight loss and weight-loss maintenance. *Journal of Personality and Social Psychology*, 70(1), 115-126.
- Williams, G., Gagne, M., Ryan, R., & Deci, E. (2002). Facilitating autonomous motivation for smoking cessation. *Health Psychology*, 21(1), 40-50.
- Wong, S. S., & Lim, T. (2009). Hope versus optimism in Singaporean adolescents: Contributions to depression and life satisfaction. *Personality and Individual Differences*, 46(5), 648-652.