



THE EFFECT OF SELF-CONSTRUAL, HOPEFUL THINKING AND PROBLEM-SOLVING ON LIFE SATISFACTION IN TEACHER CANDIDATES

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Abstract

Increasing life satisfaction has become a quite topical subject today with the effect of positive psychology trend. Psychological studies try to determine the factors which are related to life satisfaction. This study aims to examine the effect of self-construal, hopeful thinking and problem solving on life satisfaction. To that end, multiple regression analysis was performed to determine the variables that predict life satisfaction. Then, stepwise regression analysis was performed with variables that predict life satisfaction. When the regression coefficients for predictor variables of research findings, R^2 and F values were examined, in predicting life satisfaction, it is seen that agency thinking is the first, autonomous self in the second, relational self in the third, autonomous relational self in the fourth, and problem solving in the fifth rank effective.

Keywords: Life satisfaction, self-construals, dispositional hope, stepwise regression

INTRODUCTION

Humankind has struggled for a more satisfying life since the first day of its existence. Particularly psychology, various disciplines such as, philosophy, business, health, and tourism examine the concept of life satisfaction in line with their own paradigms, conduct research and obtain findings. As a matter of fact, it is inevitable that psychological studies aimed at understanding human beings are also concerned with life satisfaction. Psychological studies provide data on to what extent life satisfaction is related to which factors and what the determinants of life satisfaction are.

Life satisfaction is one of the components of subjective well-being (Diener, 1984; Huebner & Dew, 1996). It has been evaluated as the cognitive dimension of subjective well-being in addition to positive and negative affect components. Thus, life satisfaction is a cognitive process that evaluates both the quality of the individual's life as a whole (Pavot & Diener, 2008) and their feelings and attitudes towards their life (Özmete, 2011). It has been observed that life satisfaction (Dolan, Peagood, & White, 2008), which is one of the basic indicators of individual well-being, plays an important role in psychological health (Proctor, Linley, & Maltby, 2009), good social relations, productivity at work and long life expectancy (Lyubomirsky, King, & Diener, 2005). Since subjective well-being is an important component of quality of life, both the reasons for well-being and the consequences of well-being are among the subjects that are frequently researched. There are consistent findings that subjective well-being significantly improves life in the areas of social relationships, work and income, healthy and longevity, and social benefit (Lyubomirsky, King, &



Diener, 2005). Besides, life satisfaction is related to optimism, less behavioral problems, and higher cognitive functions (Proctor, Linley, & Maltby, 2009). In order to determine the factors affecting life satisfaction, the relationship of demographic characteristics such as gender, marital status, education, and employment with life satisfaction was examined. When the findings were analyzed, it was seen that there was no consistency in the findings related to the variables of gender, education and age that could create a relationship. On the other hand, it was observed that it was associated with variables such as income level and marital status. Since life satisfaction is closely related to human psychological health, numerous studies have been conducted on it in different groups and different cultures. Many studies point to the effects of culture on subjective well-being (Diener & Ryan, 2009). In addition to culture, personality and temperament are also among the factors that affect individual differences in life satisfaction (Emmons & Diener, 1985).

Emerging adulthood, which is the transition period of individuals from adolescence to adulthood and includes university students, is frequently investigated in terms of life satisfaction due to its characteristics. Socioeconomic status / Financial security (Simons, Aysan, Thompson, Hamarat, & Steele, 2002); self-image and values (Chow, 2005; Kirişođlu, 2016); academic performance and achievement (Cheung, 2000); personality / self-building (Kaya-Şen, 2019; Yetim, 2003), family structure (Kirişođlu, 2016); Self-sufficiency (Peker, 2018) are some of the variables related to life satisfaction. Schoenecker (2010), in his comprehensive research to determine the factors affecting the life satisfaction of university students and their order of importance, identified fifteen factors including factors such as economic security / stability, success, family, self-image and values, acceptance and belonging, independence / ownership (Schonecker, 2010). Proctor et al. (2009) state that personality and temperament variables explain a significant part of individual differences in well-being.

In this study, self-construal, hope level and problem solving skill were taken as predictive variables of life satisfaction. The emerging adulthood, which emerges as a developmental transition period in which university students are in, is determined by cultural standards (Santrock, 2014). One of these cultural standards is self-construal. Since the self reflects the self-perception of the individual, it has a cognitive and insightful aspect and at the same time, it is a social product since it is the result of a social interaction and also a culturally shared model of the person (Kađıtçıbaşı, 2000). Markus and Kitayama (1991) express the self-construal as the effect of both relationships with other individuals and individuality on the process of structuring the knowledge of the self. In self-construal, there is a structure formed by the sum of feelings, thoughts and actions belonging to the relationship and the self (Singelis, 1994). In other words, every culture shapes its own human model. The most known distinction in the relationship between culture and self-construal is independent self-construal and interdependent / relational self-view. Independent self-construal is more associated with Western culture, and people define themselves with their own inner thoughts, feelings and actions, not the feelings, thoughts and actions of others. In the relational / interdependent self-construal which is mostly associated with Asian and non-Western cultures, it is possible to define oneself with the actions of others (Aronson, Wilson, & Akert, 2010). Kađıtçıbaşı (2000), as a result of his long years of research in Turkish society, revealed a third self-structure in addition to these two types of self. This self-structure, which is called the autonomous-relational self-type, is relational in terms of the continuation of emotional attachments and autonomous due to the decrease in material relations between generations. According to Kađıtçıbaşı (2000), the coexistence of these two structures is not a contrast, but an indicator of harmony with the environment and functionality. On the other hand, Ryan and Deci (2001), state that both autonomy and relationality need are not specific to culture but universal, while Sinha and Tripathi (1994) state that both individualist and collectivistic features can be together (as cited in Kađıtçıbaşı, 2010). Self-structures of individuals are related to emotions (Kuyumcu, 2011), life satisfaction and subjective well-being (Koydemir & Schütz, 2014; Özdemir & İlhan, 2013) and psychological help seeking behavior (Yalçın, 2016). Positive experiences can also be seen in individuals with dependent self-construal. However, individuals with independent



self-construal keep their positive emotion levels high in the face of difficult situations as their self-esteem increases while individuals with dependent self-construal can only have this positive emotional state with family support (Lam, 2005).

One of the factors related to life satisfaction in university students is hope. Hope is one of the important protective factors for continuing to live and quality of life (Sarı & Tunç, 2016). Hope was sometimes seen as cognitively based, sometimes emotionally based, and in some models both its cognitive and emotional aspects were emphasized (Tarhan & Bacanlı, 2016). Besides, according to Snyder and Pedrotti (2003), conceptualizations about hope also emphasize the individual's thoughts and feelings about the future in general, as well as the individual's thoughts and feelings about the capacity to make the future better (Lopez, (cited in Reichard, Avey, Lopez and Dollwet, 2013). In this study, hope, as defined by Snyder (1994), was accepted as a cognitive and motivational structure that reflects individuals' perceptions of their capacities. This structure has three dimensions; "having clearly conceptualized goals", "pathways thinking" and "having the motivation to use and maintain these strategies, in other words, agency thinking" (Snyder, 2002). Although almost all of the twenty-four character strengths in positive psychology are related to traits such as life satisfaction and competence, in several studies love, hope, curiosity, gratitude and sense of pleasure are character strengths that are observed to be highly associated with life satisfaction (Peterson, Ruch, Beermann, Park and Seligman, 2007). In the study conducted by Magaletta and Oliver (1999), hope predicted life satisfaction much better than the other two variables in the study, self-efficacy and optimism. Studies show that positive characteristics such as hope, life satisfaction, self-efficacy, and optimism are related to each other, and the coexistence of these features will provide positive life outcomes such as higher psychological well-being (Jones, 2011). Permanent hope was discovered to be related to subjective and psychological well-being (Bailey & Synder, 2007) high academic achievement and high graduation levels (Curry, Synder, Cook, Ruby, & Rehm, 1997; Rand, 2009) (Muyan-Yilik, 2017; Kocaman, 2019; Önder & Mukba, 2017).

In this study, another variable to be examined in relation to life satisfaction of university students was chosen as problem solving skills. Problems almost constitute an inevitable part of life. A problem is defined as; in a situation or task (present or expected) that requires a response for an adaptive functioning, situations where, due to the existence of one or more obstacles, an appropriate behavior that will help those facing this situation in any way is not accessible or visible (D'Zurilla, Nezu, & Maydeu-Olivares, 2002). Problem solving skill is defined in different ways in the sources (Kabasakal & Uz Baş, 2013). The common point of these definitions is to think about alternative ways to overcome an obstacle, and to choose and implement one of these ways. While the sources of the problems are sometimes our experiences in our daily lives, sometimes they can be related to the developmental periods we are in. The period of university students who constitute the sample of this study is the emerging adulthood period, which is a transition period (Atak, Tatlı, Çokamay, Büyükpabuşçu, & Çok, 2016). As stated above, emerging adulthood is a developmental period of transition from adolescence to adulthood. According to Arnett (2006), the emerging adulthood period is characterized by the search for identity, instability, self-focus, feeling in-between (unable to see themselves as full adolescents or full adults) and having the opportunity to transform their lives (cited in Santrock, 2014). The ability of individuals to solve both their daily problems and the problems they encounter in relation to the developmental period they live in affect their life satisfaction. Research findings show that there is a relationship between problem-solving skills, psychological well-being, competence, productivity and optimism (D'Zurilla & Chang, 1995; Kabasakal & Uz Baş, 2013). To be able to solve a problem is directly related to the individual's psychology and adaptation (Ferah, 2000). Some studies have shown that individuals who use cognitive and intellectual processes more in problem solving have higher life satisfaction (Khan, Tehmina, & Ashraf, 2016; Jung, Youn, & Kim, 2007).

In this study, self-construal, problem solving skills, and hope level were taken as predictive variables of life satisfaction. Despite the fact that there are many studies in the literature that examine the



variables related to life satisfaction of university students, studies examining the effects of both a culture-influenced structure like self-construal and individual differences like hope and problem-solving on life satisfaction are limited. Furthermore, it is significant to what extent self-construal, hope and problem solving skills predict life satisfaction in terms of the developmental period of the study sample. Determining the factors that contribute to individuals' high life satisfaction in this period will make them more willing to transform their lives. From this point of view, it is thought that the study will contribute to the field. The purpose of this study is to examine the effect of self-construal, hopeful thinking and problem solving on life satisfaction.

METHODS

Data Collection Tools

Dispositional Hope Scale: The DHS was developed by Snyder et al. (1991) and consists of 12 items and two sub-dimensions. Each of the sub-dimensions called Pathways Thinking and Agency Thinking is measured with four items. The Turkish adaptation of the scale was done by Tarhan and Bacanlı (2015). It was determined that the scale explains 61% of the total variance. As a result of the confirmatory factor analysis, the fit indices were calculated as GFI = .96, AGFI = .92, RMR = .08, NNFI = .94, RFI = .90, CFI = .96 and RMSEA = .077. It was found that the relationship between Life Satisfaction Scale and DHS is ($r = .33$; $p < .001$), the relationship between the UCLA Loneliness Scale and the DHS is ($r = -.40$; $p < .001$), the relationship between Trait Anxiety Scale and DHS is ($r = -.17$; $p < .001$) and the relationship between Beck Hopelessness Scale and DHS is ($r = -.40$; $p < .001$). Retest Reliability: It was found that the relationship between the first and last application of the items related to the Agency Thinking dimension in the DHS is ($r = .81$; $p < .001$), the relationship between the first and last application of the items related to the Pathways Thinking dimension is ($r = .78$; $p < .001$), and the correlation calculated using the total score obtained from the scale is ($r = .86$; $p < .001$).

Problem Solving Skills Perception Scale: The scale consists of 35 items. The original form was created by Heppner and adapted into Turkish by Şahin, Şahin, and Heppner (1993). The internal consistency of the original form ranges between .72 and .90, while the test-retest ranges between .83 and .89. The cronbachs alpha of the Turkish form is .88, and the sub-dimensions vary between .69 and .78. The correlation between items varies between -.46 and .52. There is a .33 correlation with the Beck Depression Scale and a .45 correlation with the trait anxiety scale. The scale consists of the sub-dimensions of impatient approach, thinking approach, avoidant approach, evaluative approach, self-confident approach, and planned approach.

Autonomous-Relational Self in the Family Scales: The scale was developed by Kağıtçıbaşı (2007). Its form for high school students was prepared by Özdemir and Çok (2011). The internal consistency coefficient of the autonomous self-scale in the family is (.69), the internal consistency coefficient of the relational self-scale in the family is (.77) and the internal consistency coefficient of the autonomous-relational self-scale in the family is (.73) which was found to be acceptable.

Life Satisfaction Scale: It was developed by Diener, Emerson, Larsen, and Griffin (1985) in order to measure the satisfaction of individuals with their lives. The adaptation of the scale to Turkish was made by Köker (1991) and the internal consistency coefficient of Cronbach alpha was found to be .85. The scale has a 7-point Likert type structure ranging from "1 = strongly disagree" to "7 = strongly agree". High scores on the scale indicate high life satisfaction.

Study Group

A total of 331 university students, 52 (15.7%) male and 279 (84.3%) female, participated in this study. The average age of the students is 22.19 ($sd = 2.65$) and the highest age is 40 and the lowest is 20. 105 (31.7%) 1st grade students, 108 (32.6%) 2nd grade students, 72 (21.8%) 3rd grade students, 41 (12.4%) 4th grade students participated in the study. 5 (1.5%) people did not state which grade they attended.



Process

The application of the data collection tools used in the research was carried out directly by the researcher during the course hours. In every class where the application would be held, information about the application was given before. In the study which was based on voluntariness, extra points were given to each student participating in the application. Incomplete and carelessly filled forms were included in the study.

Analysis of Data

Data obtained from data collection tools were analyzed using SPSS 20.00 for Windows package program. Kolmogorov-Smirnov Test was used to test whether the variables show normal distribution or not and according to the test results, it was seen that the variables ($p>.05$) showed normal distribution. In the study, Pearson Product-Moment Correlation Coefficient was used to determine the direction and level of the relationship between variables, multiple regression analysis and stepwise regression analysis to determine the variables that predict life satisfaction.

RESULTS

Table 1. Descriptive data on the variables

	n	Mean	Std.Dev.
1.Life Satisfaction	331	22.94	6.34
2.DHS Pathways	331	26.52	3.70
3.DHS Agency Thinking	331	24.08	4.21
4.SCS Autonomous Self	331	21.98	3.72
5.SCS Relational Self	331	38.23	3.34
6.SCS Autonomous-Relational Self	331	15.63	1.22
7. PSS Avoidant	331	10.45	3.69
8. PSS Impatient	331	28.07	6.41
9. PSS Thinking	331	11.93	3.99

As seen in Table 1, the average of life satisfaction scores of the whole group was found to be 22.94 (sd = 6.34). In addition, the pathways average score is 26.52 (sd = 3.70),agency thinking mean score is 24.08 (sd = 4.21), autonomous self-score average is 21.98 (sd = 3.72), relational self-score average is 38.23 (sd = 3.34), autonomous relational self-score average is 15.63 (sd = 1.22), avoidant problem solving score average is 10.45 (sd = 3.69),impatient problem solving score average is 28.07 (sd = 6.41), and the thinking problem solving score average is 11.93 (sd = 3.99).

Table 2. Table of relationship between variables

	1	2	3	4	5	6	7	8	9
1. Life Satisfaction	-	.31**	.56**	-.23**	.24**	-.13*	-.25**	-.24**	-.28**
2. .DHS Pathways	.31**	-	.70**	.15**	.04	.12*	-.39**	-.46**	-.50
3. DHS Agency Thinking	.56**	.70**	-	.03	.09	.01	-.35**	-.41**	-.45
4. SCS Autonomous Self	-.23**	.15**	.03	-	-.27**	.07	-.08	-.08	-.15
5. SCS Relational Self	.24**	.04	.09	-.27**	-	.12*	.24**	-.02	.02
6. .SCS Autonomous-Relational Self	-.13*	.12*	.01	.07	.12*	-	-.05	.02	-.21**
7. PSS Avoidant	-.25**	-.39**	-.35**	-.08	-.02	-.05	-	.60**	.34**
8. PSS Impatient	-.24**	-.46**	-.41**	-.08	.02	.02	.60**	-	.36**
9. PSS Thinking	-.28**	-.50**	-.46**	-.15**	-.05	-.21**	-.34**	.36**	-

Life satisfaction has a significant relationship at the $r = .31$ level with pathways, at the $r=.56$ level with agency thinking, at the $r = -.23$ level with autonomous self, at the $r=.$ 24 level with relational self, at the $r = -. 25$ level with avoidant problem solving, at the $r = -. 24$ level with impatient problem



solving, at the $r=-.28$ $p<.001$ level with thinking problem solving, and at the $r=-.13$ $p<.05$ level with autonomous relational self. Pathways has a significant relationship at the $r=.70$ level with agency thinking, at the $r=.15$ level with the autonomous self, at the $r=-.39$ level with avoidant problem solving, at the $r=-.46$ level with impatient problem solving, at the $r=-.50$ $p<.001$ level with thinking problem solving and at the $r=-.12$ $p<.05$ level with autonomous relational self while it doesn't have a significant relationship at the $r=.04$ $p>.05$ level with the autonomous self. While agency thinking has a significant relationship at the $r=-.35$ level with avoidant problem solving, at the $r=-.41$ level with impatient problem solving, and at the $r=-.46$ $p<.001$ level with thinking problem solving, its relationship is insignificant at the $r=.03$ level with autonomous self, at the $r=.09$ level with the relational self and at the $r=.01$ $p>.05$ level with the autonomous relational self. Autonomous self has a significant relationship at the $r=-.27$ level with the relational self and at the $r=-.15$ $p<.001$ with thinking problem solving, while its relationship is insignificant at the $r=-.07$ level with the autonomous relational self, at the $r=-.08$ level with the avoidant problem solving and at the $r=-.08$ $p>.05$ level with the impatient problem solving. Relational self has a significant relationship at the $r=.12$ $p<.05$ level with the autonomous relational self, while its relationship is insignificant at the $r=-.02$ level with the avoidant problem solving, at the $r=.02$ level with the impatient problem solving, and at the $r=-.05$ $p>.05$ with the thinking problem solving. Avoidant problem solving has a significant relationship at the $r=.60$ level with impatient problem solving and at the $r=-.34$ $p<.001$ level with thinking problem solving. Impatient problem solving has a significant relationship at the $r=.36$ $p<.001$ level with the thinking problem solving.

Before proceeding with the regression process, it was examined whether the assumptions were met for the regression process. It was determined that the distribution is normal and linear. Skewness and kurtosis values vary between ± 1 . Durbin Watson was found to be .04. VIF values were calculated below 10. VIF values vary between 2.30 and 1.10. Tolerance statistics are also above 0.2. Tolerance statistics range between .91 and .43. 6 residual values were found. Since it is less than 10% of the data, it seems that it does not pose a problem. None of the Cook's Distance values are greater than 1.

Table 3. Dispositional hope scale & self-construal scale sub-dimensions' predictive power on life satisfaction

Predicted Variable	Predictive Variable	B	St. Error	β	R	R ²	t
Life Satisfaction Scale	Fixed	19.951	6,062				3.291**
	DHS	-.234	.109	-.136			-2.140*
	Pathways						
	DHS Agency	.866	.092	.576	.658	.433	9.376**
	Thinking						
	SCS	-.339	.076	-.199			-4.441**
	Autonomous						
	Self						
	SCS	.289	.084	.152			3.437**
	Realtional						
	Self						
	SCS	-.762	.229	-.147			-3.334**
Autonomous							
Realtional							
Self							
PSS	-.154	.092	-.090			-1.677	
Avoidant							
PSS	.011	.055	.011			.203	
Impatient							
PSS	-.173	.082	-.109			-2.111**	
Thinking							

Note: R² for model = .43 (p <.001)



Regression analysis results about variables examined as predictors of life satisfaction are given in the table. It is observed that life satisfaction is significantly predicted by pathways ($t = -2.140, p < .05$), agency thinking ($t = 9.376, p < .001$), autonomous self ($t = -4.441, p < .001$), relational self ($t = 3.437, p < .001$), autonomous relational self ($t = -3.334, p < .001$), and problem solving thinking sub-dimension ($t = -2.111, p < .001$). It is seen that avoidant problem solving ($t = -1.677, p > .05$) and impatient problem solving ($t = .203, p > .05$) don't significantly predict. Agency thinking has the highest regression coefficient (.866) while the problem solving scale has the lowest regression coefficient (-.173). As a result, 8 variables explain 43% of life satisfaction ($R^2 = .43, F_{(8,322)} = 30.73, p < .001$). Since avoidant problem solving and impatient problem solving, which are two sub-dimensions of the PSS, did not significantly predict life satisfaction, they were not included in the stepwise regression analysis.

Table 4. Stepwise regression results

Predictive Variable	B	St. Error	β	R	R ²	t	R ² change	F change	Df1	Df2
Dependant Variable Life Satisfaction	2.500	1.675								
Step 1: DHS Agency Thinking	.849	.069				1.493				
	11.411	2.250	.564	.564	.318	12.392**	.318	153.552**	1	329
Step 2: DHS Agency Thinking	.862	.066				5.073**				
	-4.19	.074	.572	.615	.379	13.142**	.060	31.822**	2	328
SCS Autonomous Self	.834	4.182	-.246			-5.641**				
Step 3: DHS Agency Thinking	.841	.065				.199				
	-3.57	.076	.559	.628	.395	12.907**	.016	8.918**	3	327
SCS Autonomous Self	.254	.085	-.209			-4.685**				
SCS Relational Self	9.898	5.017	.134			2.986**				
Step 4: DHS Agency Thinking	.839	.064				1.973*				
	-3.32	.076	.557	.643	.413	13.055**	.018	10.073**	4	326
SCS Autonomous Self	.293	.085	-.195			-4.394**				
SCS Relational Self	-.707	.223	.155			3.455**				
SCS Relational Autonomous Self	15.698	5.750	-.136			-3.174**				
Step 5: DHS Agency Thinking	.769	.073				2.730**				
	-3.55	.076	.511	.648	.421	10.606**	.007	4.137*	5	325
SCS Autonomous Self	.291	.084	-.208			-4.661**				
SCS Relational Self	-.811	.228	.153			3.441**				
SCS Relational Autonomous Self	-.160	.079	-.156			-3.564**				
PSS Thinking	2.500	1.675	-.101			-2.034*				

In the first step of the stepwise regression, the standardized regression coefficient in life satisfaction of the agency thinking was found to be = .564. Agency thinking predicts life satisfaction at a significant level. In the first step, agency thinking explains 32% of life satisfaction ($R^2 = \Delta.32, F_{(1, 329)} = 153.552, p < .001$). In the second step, while the regression coefficient of the agency thinking in



predicting life satisfaction is the highest with $\beta = .572$, the regression coefficient of the autonomous self, the second variable, is $\beta = -.246$. In the second step, variables explain 8 of life satisfaction ($R^2 = \Delta.38$, $F_{(2,328)} = 31.822$ $p < .001$). In the second step, the regression coefficient of the agency thinking in predicting life satisfaction is the highest with $\beta = .559$, the regression coefficient of the autonomous self, the second variable, is $\beta = -.209$, and the regression coefficient of relational self, the third variable, is $\beta = .134$. The variables in the third step explain 9 of life satisfaction ($R^2 = \Delta.39$, $F_{(3,327)} = 8.918$, $p < .001$). In the fourth step, the regression coefficient of the agency thinking is $\beta = .557$, the regression coefficient of the autonomous self is $\beta = -.195$, the regression coefficient of the relational self is $\beta = .155$, and the regression coefficient of the autonomous relational self is $\beta = -.136$. In the fourth step, variables explain the 41% of life satisfaction ($R^2 = \Delta.41$, $F_{(4,326)} = 10.073$ $p < .001$). In the fifth step, the regression coefficient of agency thinking is $\beta = .511$, the regression coefficient of autonomous self is $\beta = -.208$, the regression coefficient of the relational self is $\beta = .153$, the regression coefficient of the autonomous relational self is $\beta = -.156$, and the regression coefficient of thinking problem solving is $\beta = -.101$. In the fifth step, the variables explains the 41% of life satisfaction ($R^2 = \Delta.41$, $F_{(5,325)} = 4.137$ $p < .001$). When the regression coefficients, R^2 and F values for the predictive variables are examined, it is seen that the agency thinking, autonomous self, relational self, autonomous relational self and thinking problem solving are respectively effective in predicting life satisfaction.

DISCUSSION and CONCLUSIONS

This study examines whether teacher candidates' life satisfaction is significantly predicted by hope self-construal and problem solving variables. The first finding of the study is that hope self-construal, and problem solving together explain life satisfaction with 43% variance percentage. When the variables that contribute significantly to the model are examined. It is seen that the variable that most predicts life satisfaction is the agency thinking, which is the sub-dimension of hopeful thinking. The findings show that life satisfaction is predicted firstly by agency thinking and then by the autonomous self, relational self, and autonomous-relational self sub-dimensions, respectively, and finally by the thinking problem solving sub-dimension, which is one of the components of problem solving. The first finding of the research is that agency thinking explains 32% of life satisfaction. The fact that dispositional hope predicts life satisfaction is compatible with the literature. In the literature, it is seen that hope is associated with positive forces such as life satisfaction, self-efficacy, and optimism. The coexistence of these positive strengths is also associated with positive life outcomes such as higher psychological well-being (Jones, 2011). Studies show that the level of dispositional hope increases individuals' well-being and problem solving skills (Gülten, 2014). Also, individuals with high levels of hope can perform their planning more effectively and display the ability to put them into action to increase their satisfaction (Reichard, Avey, Lopez, & Dollwet, 2013). In African American adolescents, hope not only facilitates academic and long-term life goals, but also makes it easier to tackle difficulties such as racial discrimination and procrastination (McClintock, 2015). When the research findings were examined, it was seen that pathways were highly related to agency thinking, as stated in the literature (Tarhan & Bacanlı, 2016). However, in this study, it was found that the important variable in determining life satisfaction is the agency thinking. In other words, participants' life satisfaction increases not when they seek for pathways but when they are motivated to do something. Agency develops as they learn to achieve goals, especially with the praise and support they receive while trying to accomplish their developmental tasks (McDermott & Snyder, 2000; cited in Grewal & Porter, 2007). People are goal oriented; they create a cognitive analysis through the idea of pathways and agency thinking in order to think about their goals (Snyder, 1995). Positive beliefs and assumptions about goal setting are related to the self and positive feelings about the whole of life (Snyder, 2002). In this study, the fact that agency thinking is the most predictive variable of life satisfaction is consistent with the literature as stated above. Likewise, seeing one's competence in self-fulfillment creates a positive emotional state and this perspective that the person looks at ensures that their perceptions towards life are also from the same positive perspective. Specific to this study, the



reason that agency thinking is the variable that most predicts life satisfaction may be due to the characteristics of the participants' emerging adulthood. As stated above, instability and being in-between are characteristic features of the period. Having the motivation to take action in such a period may increase life satisfaction.

The second finding of the study is that self-construal is related to life satisfaction. According to the findings, autonomous self, which is one of the sub-dimensions of agency thinking and self-construal, explains life satisfaction with 38% variance, while agency thinking, autonomous self and relational self-explain it with 41% variance. When autonomous relational self-variable is added next to these three variables, it explains 41% of life satisfaction. While the relational self-type is in a positive relationship with life satisfaction, the autonomous self and autonomous relational self-types are in a negative relationship with life satisfaction. At every stage, the power of agency thinking to predict life satisfaction is higher than that of the autonomous self. In this study, it was found that autonomous self-construal negatively predicted life satisfaction. This situation is not in line with the findings of studies conducted with emerging adults in the literature. In the literature, it is stated that individuals with autonomous self-construal take part in an active and independent process of self-management, organizing their own behavior, making their own decisions and putting them into action (Feldman & Rosenthal, 1991; Sessa & Steinberg, 1991). Therefore, since autonomous individuals initiate their behavior internally and perceive themselves as an output of their regulation it is stated that their self-esteem and well-being levels are high (Luyckx, Schwartz, Soenens, Vansteenkiste & Goossens, 2010). In addition, in another study, while it is observed that individuals who grow up in an environment where autonomy is supported have high levels of internal motivation, subjective well-being, self-esteem and life satisfaction, it is concluded that the self-regulation and internalization mechanisms of individuals who grow up in an environment where autonomy is not supported do not function effectively (Soenens, Park, Vansteenkiste, & Mouratidis, 2012). In the studies carried out in Turkey, autonomous relational self, relational self and autonomous self were found to be related to subjective well-being (Dönmezoğul in 2014; Garner, 2015; Karatekin, 2013; Koydem and Egypt, 2015; Koydem and Schütz, 2014; Ozdemir and Ilhan, 2013; Zorlu and Bacanlı, 2019).

In this study, the relational self was found to be positively associated with life satisfaction, unlike the autonomous self. Relational self-construal appears as an expression that is used to describe the situation in which individuals around a person are part of their self and care about close relationships, and is mostly used to describe individuals living in Eastern societies (Kağıtçıbaşı, 2007; Markus & Kitayama, 1991). In this study, it was found that life satisfaction increases as individuals' level of seeing themselves as a part of their groups and close environment increases. When the literature is examined, it is seen that the relational self in collectivist cultures can be a predictor for life satisfaction as much as the autonomous self (Kwan et al., 1997; Suh et al., 1998). Beydoğan (2008) found that relational self-orientation predicts life satisfaction in his study, in which he examined perceived work environment and well-being according to differences in self-type, Kwan et al. (1997: 1049), in their research, discovered that life satisfaction can be predicted by emotions (an intrinsic private life) in individualist cultures and by adherence to social norms in collectivist cultures. Similarly, Suh et al. (1998: 510) showed that life satisfaction for people with high autonomous self can be predicted only by emotions (such as the balance of positive and negative effects), not by being evaluated by others that are important to them. For people with a stronger relational self, it was stated that both social values and emotions have an effect on life satisfaction (Suh et al., 1998). Morsünbül's (2013) study with adolescents between the ages of 14-17 shows that individuals with relational self-construal have higher life satisfaction than individuals with autonomous self-construal. These individuals with high life satisfaction are vulnerable to depression. However, in the autonomous relational self-construal that includes both autonomy and relationality, both individuals' life satisfaction is high and they are more resistant to depression. Özdemir (2012) discovered in his research that adolescents with relational and autonomous self-construal have higher life satisfaction than autonomous adolescents. In this study, the reason that relational self-construal is related to life



satisfaction, unlike other types of self-construal may be that the number of participants attending the 1st and 2nd grades of the university is higher compared to the participants attending the 3rd and 4th grades of the university. Individuals who freshly start university and who are between adolescence and emerging adulthood may not yet be able to fully develop a self-construct that differs from their family and immediate environment. Although the relational self-structure is interpreted as unhealthy in terms of personality theories. Kağıtçıbaşı (2007) stated that the relational self is a structure that is as significantly related to life satisfaction as the autonomous self.

In this study, it was seen that the fourth variable, which predicts life satisfaction and has a negative relationship with life satisfaction is the autonomous relational self. Kağıtçıbaşı (2007) expresses that this self-construal structure, which includes both autonomy and relationality, is healthier than the autonomous and relational self. In our study, it was found that individuals with autonomous relational self-construal have higher life satisfaction than individuals with relational or autonomous self-construal. This finding contradicts the findings of the study conducted by Özdemir and İlhan (2013) with the participation of university students. While Özdemir and İlhan (2013) could not find a relationship between autonomous self-construal, relational self-construal and subjective well-being, they found that there was a positive relationship between autonomous relational self-construal and subjective well-being. Also in the study conducted by Zorlu and Bacanlı (2009), it is seen that the autonomous relational self is in a positive relationship with life satisfaction. In the study of Morsünbül (2013), it was found that autonomous relational individuals are both higher in life satisfaction and more resistant to depression compared to individuals with other self-construal. It was stated that the reason for this situation is that the autonomous relational self-construal is to meet two basic needs; autonomy, and relationality. It is thought that the fact that relationality is positively associated with life satisfaction in this study may be related to the participants of the study. The fact that the number of first and second year university students is relatively higher than the upper grades may have caused the relationality to be positively associated with life satisfaction. The study of Morsünbül (2013) mentioned above shows that although relational individuals have low resistance to depression their life satisfaction is high. This situation was interpreted as the fact that the participants of the study could not make their own decisions yet and their acting in line with their parents' opinions would make them happier.

The fifth and last one of the findings of the study is that thinking problem solving, one of the sub-dimensions of problem solving, predicts life satisfaction. The thinking problem solving sub-dimension was found to be negatively related to life satisfaction. Problem solving, which is defined as approaching the situation by using mental functions (Arkonaç, 1990) in the face of a situation that a person cannot solve based on previous experiences, is seen as one of the social-emotional competences (Frey, Hirschgstein, & Guzzo, 2000). In line with other studies in the literature, this study shows that positive characteristics such as hope, life satisfaction, self-efficacy, and optimism are related to each other, and the coexistence of these characteristics will provide positive life outcomes such as higher psychological well-being (Jones, 2011).

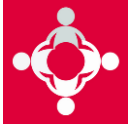
In conclusion, it was seen that various variables that were discussed in this study and predicted life satisfaction predicted life satisfaction at a high rate of 43%, variables were presented according to the prediction priority of life satisfaction. The research has some limitations, one of these limitations is that the number of male participants is less than the number of female participants. For this reason, the study can be repeated by increasing the number of male participants. Another limitation is that the participants of the research are university students who continue to the education faculty. It is thought that comparisons can be made with participants from different faculties. The fact that the age group covers university students can also be seen as a limitation. Therefore, the relationships of variables in advanced age groups and different occupational groups can be investigated. Undoubtedly life satisfaction is an important issue that will continue to be researched and its relationship with different variables will be evaluated.

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