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Life Skills as a Predictor of Psychological Well-Being of Pre-Service Pre-School Teachers in Turkey*

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Abstract

This study aims to investigate the relationship between pre-service pre-school teachers' life skills and psychological well-being and to determine whether or not various variables related to pre-service pre-school teachers (gender, age, grade level, type of instruction, cumulated grade point average, status of taking course about life skills) and their life skills significantly predict their psychological well-being. In this quantitative study with correlational design, data were gathered from 391 pre-service pre-school teachers studying at a state university, with 5-point Likert-type Life Skills Scale developed by Bolat and Balaman (2017); 7-point Likert-type Psychological Well-being Scale developed by Diener, Wirtz, Tov, Kim-Prieto, Choi, Oishi and Biswas-Diener (2010) and adapted into Turkish by Telef (2013). Data were analyzed through descriptive statistics, canonical correlation and hierarchical regression. It is concluded that pre-service pre-school teachers' psychological well-being levels are relatively high and that the life skill they developed most is communication and interpersonal relationships. Canonical correlation results indicate that there is a medium-level relation between life skills and psychological well-being and that psychological well-being is significantly predicted by gender, age, and the following life skills: "empathy and self-awareness", "decision-making and problem-solving", "creative and critical thinking".

Key words: Pre-school curriculum, Pre-service pre-school teacher, Psychological well-being, Life skills.

Introduction

Nowadays, curricula are being reviewed and developed in a way that individuals can adapt to different circumstances, think differently, flexibly and originally (Akbiyık & Seferoğlu, 2006). Development of children's life skills in pre-school curriculum is emphasized as one of the basic principles of pre-school education (Ministry of National Education [MoNE], 2013). Life skills are positive and adaptive behavioral skills that make people cope effectively with the challenges and needs of daily life (World Health Organization [WHO], 1994). There are five basic life skills, including "decision-making and problem-solving, creative thinking and critical thinking, communication and interpersonal relationships, self-awareness and empathy, coping with emotions and stressors" (WHO, 1994: 3). Individuals with these life skills can succeed when life gets hard.

Pan American Health Organization (2001) treated decision-making and problem-solving skills as cognitive skills. Most of the researchers define the problem solving / decision making process as a process that begins with a perception of emptiness and ends with implementing and evaluating a solution to fill this emptiness (Huitt, 1992). Most decision-making and problem-solving models consist of at least four stages (Huitt, 1992): (1) the input phase where the problem or situation is perceived and attempted to be understood; (2) the processing phase where alternatives are produced, evaluated, and a solution was selected; (3) an output phase where the solution is formulated and enacted; and (4) the review phase that includes the evaluation of the solution and, if necessary, amendment of it. Decision-making is the process of selecting one of the different options that meets particular criteria (Baysal, 2009). Individuals who can make effective decisions are satisfied with life, whereas individuals who cannot make effective decisions face difficulty in their daily lives (Uygur,

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2018). Problem-solving is defined as “the process of moving toward a goal when the path to that goal is uncertain” (Martinez, 1998: 605). In this process, a gap is perceived and resolved between the current situation and the target blocked either by definite or indefinite reasons (Huitt, 1992). In this process, metacognitive strategies that work under different conditions are developed rather than a routine which works under any and all circumstances (Dede, 2010). The steps that are followed in the process of problem solving include (Güner, 2000: 63): General orientation, defining the problem, determining the primary problems, selecting the target, producing alternatives, evaluating alternatives, making decisions, applying, and evaluating the results. Individuals who can make decisions and solve problems do learn not to give up immediately to become resilient.

In creative thinking process which is identified with the problem solving process, there are new ways to solve problems, new solutions are produced, new ideas are put forward, and new inventions are made (Yenilmez & Çalışkan, 2011: 51). The creative thinking that is defined as analytical, synthetic and evaluative thinking leading to creative expression (Collins & O'Brien, 2011) is the capacity to produce new, valuable and useful ideas (Sak, 2009). In other words, creative thinkers achieve this by thinking to higher levels. Critical thinking is “the art of analyzing and evaluating thinking with a view to improving it” (Paul & Elder, 2006: 4). It can be said that critical thinkers evaluate their own lives according to appropriate criteria. Within critical thinking process which must be taught for each subject matter and discipline (Dede, 2010) (1) important questions and issues are clearly and precisely introduced and formulated; (2) the relevant information is collected, evaluated and effectively interpreted by abstract ideas; (3) well-justified results and solutions are reached by comparing this information with appropriate criteria and standards; (4) by evaluating the assumptions, implications and results in practice if needed, alternative ideas are put forward open-mindedly; (5) others are communicated effectively to find solutions to complex problems (Paul & Elder, 2006).

Communication skills, which mean to much more than mutual conversations and dialogues, are related to what is (and, is not) said, why, when, and how (Canel, 2012). Communication defined as “the process of generating, transferring and interpreting information” (Dökmen, 2003: 19) is “a psycho-social process that puts two people into a relationship” (Cüceloğlu, 2002: 13). Individuals with communication skills which are important for the arrangement of interpersonal relations (Kılıçaslan, 2011) can establish healthy interpersonal relationships (Büyükciliz, 2016) and be satisfied with these relationships (Koç, Terzi, & Gül, 2015). Thus, individuals can feel happy. Interpersonal communication is defined as “a psycho-social process where at least two individuals share their knowledge, feelings, thoughts and experiences in a particular way” (Kaya, 2018: 5). Individuals who establish interpersonal communication are aware of each other and this awareness connects each other and shapes each other's words (Oğuz, 2012). Thus, they can establish positive relationships or terminate their relationship constructively (Kumar & Chhabra, 2014: 182-183). Namely, interpersonal communication enables individuals to socialize.

The self-awareness skill, which is deemed as the prerequisite for communication, interpersonal relations and empathy, is recognizing one's self, character, strong and weak points, likes and dislikes. Self-awareness enables individuals to realize when they are stressed (WHO, 1994). Self-awareness can be thought of as a SWOT analysis individuals carry out on themselves. High self-awareness ensures high self-acceptance (Ryff, 1989b). Self-acceptance is the positive evaluation of one's self and past life, to recognize and accept his/her different aspects (Yeşiltepe, 2011). Empathy, which is divided into two as cognitive and affective (Jolliff & Farrington, 2006), is the ability to conceptualize what another human being's life is all about, and helps us understand and accept others even in a case that is not familiar to us (WHO, 1994). Empathy is both feeling what someone else feels and thinking what someone else thinks. When developing empathy, the individual senses feeling and thinking of the counterpart and conveys them to the counterpart properly (Rogers, 1970, 1975 cited in Dökmen, 1988).

Coping with emotions is that an individual recognizes his/her own and others' feelings, is aware of how behavior is affected by emotions, and reacts to them in proper ways. Intense feelings, such as anger or grief, may adversely affect health if not reacted properly (WHO, 1994). Coping with stress is the ability of the individual to identify the stress sources in life, to know how stress affects him/herself and to behave in a way that can control the level of stress. This could mean, for example, changing our physical environment or lifestyle, taking action to reduce sources of stress, or learning how to relieve in order inevitable stress not to cause health problems (WHO, 1994). Emotion management skills include managing anger, coping with grief and anxiety, dealing with loss, abuse, and trauma, while stress management skills include managing time, thinking positive, and techniques of relaxing (WHO, 2003: 9). Coping with stress can be considered as a more cognitive process than coping with emotions.

Enuring the life-long skills such as problem solving, communication etc. to children in pre-school period enables these skills to be learned more permanently (Akgün, Yazar, & Dinçer, 2011). Pre-service pre-school teachers who will enure life skills to children when they start the profession shall also be expected to have these skills and be equipped with these skills. It is emphasized that in order to enable students to learn and transfer one of the life skills, for example critical thinking skill, teachers should provide experiences and evaluate this skill and should give feedback (Huit, 1998), and that it can only be possible with the critical thinking of teachers (Şenşekerci & Bilgin, 2008). Therefore, it is suggested that teachers should have both pre- and in-service training (Walsh & Paul, 1986). Pre-school teachers who develop empathy and can communicate effectively with their students will enable their students to create positive self-perception, develop a compatible personality, become more successful and maintain self-actualization (Çelik & Çağdaş, 2010).

It is suggested that life skills foster physical, mental and social well-being, that is, psycho-social competence (WHO, 1994). Well-being focuses on the avoidance of pain, satisfaction and happiness (subjective well-being) according to the hedonic approach, while focusing on meaning, self-actualization, and functioning of an individual in all his/her aspects according to the eudaimonic approach (psychological well-being) (Ryan & Deci, 2001). Ryff and Singer (2008) suggested that eudaimonia is the highest point of good that human beings can reach beyond happiness. Psychological well-being, conceptualized as emotional, physical, cognitive, spiritual, personal and social well-being (Rothman, Kirsten, & Wissing, 2003) is a perceived development against existential difficulties of life (e.g. to pursue meaningful goals, to grow and develop individually, to establish qualified links with others) (Keyes, Shmotkin, & Ryff, 2002). Individuals who feel psychologically well do not only survive, but also thrive. Psychological well-being, which is a micro-level structure, is about how an individual assesses him/herself and his/her life's quality (Ryff, Magee, Kling, & Wing, 1999). Human well-being is also described as living and doing well (Forgeard, Jayawickreme, Kern, & Seligman, 2011). Psychological well-being consists of many aspects such as individuals' life goals, relationships, and levels of awareness about their own potential, the quality of their relations with others, and their feelings about life (Ryff & Keyes, 1995). Psychological well-being of an individual is pertaining to looking for and realizing his/her own thoughts, evaluating him/herself according to his/her own standards, advocating his/her own values and making choices according to his/her values and putting an effort to reach his/her goals (Akin, 2009). Psychological well-being is becoming what you are throughout your survival in real life. In terms of psychological well-being, it is crucial that the individual has a purpose in life (Ryff, 1989c). However, not every purpose of the individual affects the level of psychological well-being equally. The objectives of an individual, which meet his/her primary needs, affect the level of well-being more than the non-primary objectives (Hamurcu, 2011). In other words, the priority of the needs is important in terms of well-being. Psychological well-being based on self-realization has a multidimensional structure (Ryan & Deci, 2001; Ryff, 1989a, Ryff, 2014). People with high psychological well-being evaluate themselves and their past lives positively, establish good quality relationships with the people around them, act autonomously, manage their lives and environment, believe that their lives have a meaning and purpose and they develop personally (Ryan & Deci, 2001; Ryff, 2014; Ryff & Singer, 2008). Individuals who feel psychologically well have better interpersonal relationships (Corsano, Majorano, & Champretavy, 2006) and social support systems (Chu, Saucier, & Hafner, 2010), with higher levels of intrinsic motivation and life satisfaction (Kaya & Çenesiz, 2016) and are more receptive of innovation and development (İkiz & Asıcı, 2017). On the contrary, people with low levels of psychological well-being perceive more stress (Cripps & Zyromski, 2009; Moeini, Shafii, Hidarnia, Babaii, Birashk, & Allahverdi-pour, 2008) and they feel more alone (Corsano, Majorano, & Champretavy, 2006). High or low levels of psychological well-being affect socialization of individuals. Psychological well-being requires not having a psycho-pathological disorder but this alone is not enough (Ryff, 1989a). Individuals who can establish good relations with others trust and respect others, want them to be happy, empathize with them, take care of them, do not act selfish and are satisfied with their relations with others; while individuals who cannot make good relations with others cannot get comfortable with others, distance themselves from others, cannot open him/herself, can hardly handle a relationship, even interrupts relationships with others just because of problems he/she faced in particular cases, and not only does not want to establish a relationship with others, but also prevents other people from establishing such relationship (Yılmaz, 2013).

The pre-school curriculum requires the pre-school teacher to develop "a safe and consistent relationship with the child" in terms of child's development (MoNE, 2013, p. 13). In other words, it can be said that the pre-school curriculum attaches importance to the psychological well-being of the pre-school teacher. Therefore, there is a need to investigate to what extent pre-service pre-school teachers have necessary life skills and whether their psychological well-being and life skills are related to each other or not. In the literature, there exist several studies suggesting that psychological well-being of pre-service teachers are affected by gender and socioeconomic level of the family (Kumcağız & Gündüz, 2016), parental attitude (Demirci & Şar, 2017; Kumcağız & Gündüz, 2016) and social skills education program (Gülaçtı, 2009). However, the results of some

studies indicate that psychological well-being of pre-service teachers did not significantly differ depending on gender, age, program in which they are enrolled (Öz tan Ulusoy & Konaklı, 2017), grade level and academic achievement (Kumcağız & Gündüz, 2016) variables. Yet, some studies found that personality traits and self-understanding (Saricaoglu, 2011), various values (hedonism, universalism and self-transcendence) (Telef, Uzman, & Ergün, 2013), fear of happiness (Sarı & Çakır, 2016), self-consciousness (Demirci & Şar, 2017), self-discrimination (Karababa, Mert, & Çetiner, 2018) and perceived social competence and assertiveness (Ateş & Çelik, 2018) significantly predicted pre-service teachers' psychological well-being. Some studies detected significant relations between psychological well-being of pre-service teachers and some variables such as smart phone addiction (Kumcağız & Gündüz, 2016), physical and emotional abuse (Bozgün & Pekdoğan, 2017). It is another finding in the literature that psychological well-being of pre-service teachers is one of the positive predictors of attitudes toward teaching profession (İkiz, Asıcı, & Kaya, 2018). Despite the fact that there is at least one study which examines the relationship between life skills and psychological well-being (Sujatha & Jayakumar, 2017), there are no studies found in Turkey examining the relationship between these two. The aim of this research, which is expected to complete the gap in literature, is to (1) examine the relationship between pre-service pre-school teachers' life skills and psychological well-being, (2) determine whether various variables related to pre-service pre-school teachers (gender, age, grade level, type of instruction, cumulated grade point average (CGPA), status of taking course about life skills) and life skills significantly predict the psychological well-being of pre-service pre-school teachers.

Method

Research Design

This research aims to examine the relation between pre-service pre-school teachers' life skills and psychological well-being, and determine whether various variables related to pre-service pre-school teachers (gender, age, grade level, type of instruction, cumulated grade point average, and status of taking course about life skills) and life skills significantly predict the psychological well-being of pre-service pre-school teachers. The design of this quantitative research, which aims to determine the relation between variables, is correlational design (Creswell, 2013). The dependent variable of the study is psychological well-being, while the independent variables are gender, age, grade level, type of instruction, CGPA, status of taking course about life skills, and life skills (coping with emotions and stress, empathy and self-awareness, decision-making and problem-solving, creative and critical thinking and communication and interpersonal relations).

Participants

Data collection tools were administered to all pre-service pre-school teachers studying at a state university. No sample was selected. 391 pre-service pre-school teachers provided feedback. The information about the pre-service pre-school teachers is depicted in Table 1.

Table 1. Characteristics of participants

		<i>f</i>	<i>%</i>
Gender	Female	338	86.4
	Male	53	13.6
Grade	Freshman	87	22.3
	Sophomore	81	20.7
	Junior	129	33.0
	Senior	94	24.0
Type of instruction	Morning instruction	202	51.7
	Evening instruction	189	48.3
Status of taking course about life skills	Yes	116	29.7
	No	272	69.6
		<i>M</i>	<i>SD</i>
Age		21.01	1.82
Cumulated grade point average		3.09	0.31

Data Collection Tools

Data were collected with 5-point Likert-type Life Skills Scale (LSS) consisting of five factors with coefficients of Cronbach's alpha ranging from 0.66 to 0.82, developed by Bolat and Balaman (2017) and 7-point Likert-type Psychological Well-being Scale (PWBS) consisting of eight-item, single-factor, Cronbach's alpha reliability coefficient of 0.80, developed by Diener, Wirtz, Tov, Kim-Prieto, Choi, Oishi and Biswas-Diener (2010) and adapted into Turkish by Telef (2013). The results of confirmatory factor analysis are shown in Table 2.

Table 2. Confirmatory factor analysis results

CFA	PWBS	Conformity	LSS	Conformity
X ² /sd	2.75	Excellent	1.85	Excellent
RMSEA	0.07	Good	0.047	Excellent
GFI	0.97	Excellent	0.89	Weak
AGFI	0.94	Good	0.87	Weak
RMR	0.05	Excellent	0.03	Excellent
NNFI	0.98	Excellent	0.98	Excellent
CFI	0.99	Excellent	0.98	Excellent

Based on the RMSEA values calculated, it can be suggested that the single factor structure of the PWBS has a good conformity to the scale, while the five-factor structure of the LSS has an excellent conformity to the scale (Kline, 1998). In addition, demographic information form was used to obtain data on various variables related to pre-service pre-school teachers (gender, age, grade level, type of instruction, CGPA, and status of taking course about life skills). Table 3 shows the coefficients of Cronbach's alpha calculated for the whole scales and sub-dimensions of each.

Table 3. Coefficients of Cronbach's alpha calculated for whole and sub-dimensions of scales

Scales and sub-dimensions	Cronbach's alpha
PWBS	.87
LSS	.92
Coping with emotions and stress (CES)	.74
Empathy and self-awareness (ESA)	.80
Decision-making and problem-solving (DMPS)	.82
Creative and critical thinking (CCT)	.81
Communication and interpersonal relations (CIR)	.76

Data Analysis

The quantitative data were analyzed through descriptive statistics, canonical correlation and hierarchical regression using a statistical package program. The significance level was assumed as .05.

Results and Discussion

The mean interval values were calculated to interpret the calculated mean values for each scale and its sub-dimensions (5-1 = 4; 4:5=0.8 for the 5-point Likert-type LSS; 7-1=6; 6/7=0.86 for the 7-point Likert-type PWBS). Based on these interval values, from 5.00 to 4.21 is interpreted as "Totally Agree", from 4.20 to 3.41 as "Agree", from 3.40 to 2.61 as "Neutral", from 2.60 to 1.81 as "Disagree", from 1.80 to 1.00 as "Totally Disagree", and, from 7.00 to 6.17 as "Certainly Agree", from 6.16 to 5.31 as "Agree", from 5.30 to 4.45 as "Slightly Agree", from 4.44 to 3.59 as "Neutral", from 3.58 to 2.73 as "Slightly Disagree", from 2.72 to 1.87 as "Disagree", and from 1.86 to 1.00 as "Certainly Disagree".

Life Skills of Pre-service Pre-school Teachers

According to Table 4, pre-service pre-school teachers' life skills including communication and interpersonal relationships ($M=4.15$, $SD=.56$), creative and critical thinking ($M=4.08$, $SD=.50$), empathy and self-awareness ($M=4.04$, $SD=.50$), decision making and problem solving ($M=4.03$, $SD=.50$) and coping with emotions and stress ($M=3.58$, $SD=.57$) appears to be at high level. It is also possible to suggest that pre-service pre-school

teachers' communication and interpersonal relations skills are at the highest ($M=4.15$, $SD=.56$), and coping with emotions and stress skills ($M=3.58$, $SD=.57$) are at the lowest level.

Table 4. Mean and standard deviation values calculated for whole and sub-dimensions of scales

	<i>M</i>	<i>SD</i>
PWBS	5.64	0.88
CES	3.58	0.57
ESA	4.04	0.50
DMPS	4.03	0.50
CCT	4.08	0.50
CIR	4.15	0.56

Psychological Well-being of Pre-service Pre-school Teachers

As indicated in Table 4, pre-service pre-school teachers were found to agree with the items of the Psychological Well-being Scale ($M = 5.64$, $SD = .88$). In other words, it is concluded that pre-service pre-school teachers' psychological well-being levels are high.

The Relationship between Pre-service Pre-School Teachers' Life Skills and Psychological Well-Being

Considering the relationship between life skills and psychological well-being, two canonical variates exist in this study. The canonical variate of psychological well-being consists of one continuous variable, and the canonical variate of life skills includes five continuous variables, namely, coping with emotions and stress, empathy and self-awareness, decision-making and problem-solving, creative and critical thinking, communication and interpersonal relationships. Before canonical correlation analysis, the following assumptions were checked (Tabachnick & Fidell, 2007): absence of outliers, missing data, multivariate normality, homoscedasticity, linearity, and multicollinearity.

As the number of variables in the psychological well-being variable set is one, the canonical correlation analysis generated one canonical pair. The canonical pair had a canonical correlation coefficient ($R_c = .58$) greater than .30 (Tabachnick & Fidell, 2007), which explained a 34% of the overlapping variance and a significant relation between two canonical variates (Wilk's $\lambda = .66$, $\chi^2(5) = 160.76$, $p < .05$). The canonical loadings and correlation coefficients are displayed in Table 5.

Table 5. Results of canonical correlation analysis

Variables	First Canonical Pair	
	Correlation	Standardized canonical coefficients
<i>Life Skills variables</i>		
Coping with emotions and stress	.65	.15
Empathy and self-awareness	.88	.37
Decision-making and problem-solving	.89	.32
Creative and critical thinking	.84	.26
Communication and interpersonal relations	.70	.10
Percent of Variance	.64	
Redundancy	.22	
<i>Psychological Well-being variable</i>		
Percent of Variance	1.00	1.00
Redundancy	.34	
Canonical correlation	.58	

As can be seen from Table 5, the relationship between two canonical variates is significant because the canonical loadings are greater than .30 (Tabachnick & Fidell, 2007). Since the canonical loadings of the psychological well-being variable and the variables included in the life skills set have the same sign, the relationship between them is positive. Namely, the higher the life skills of pre-service pre-school teachers, the higher their psychological well-being levels.

100% of the variance in the canonical pair is explained by the psychological well-being variable set and 64% by the set of life skills variables. Furthermore, the psychological well-being variable set explains 34% of the

variance in the life skills variable set, and the life skills variable set explains 22% of the variance in the psychological well-being variable set.

Life Skills as a Predictor of the Psychological Well-being of Pre-service Pre-school Teachers

Hierarchical regression analysis was conducted to determine whether gender, age, grade level, and CGPA of pre-service pre-school teachers, type of instruction, and status of taking course about life skills are predictors of psychological well-being. The dependent variable is psychological well-being, while the independent variables are gender, age, grade level, type of instruction, CGPA, status of taking course about life skills, and life skills (coping with emotions and stress, empathy and self-awareness, decision-making and problem-solving, creative and critical thinking and communication and interpersonal relations). Before the hierarchical regression analysis, “female” for gender, “senior” for grade level are determined as reference category out of dummy variables. Since the grade level variable has four levels, three new dummy variables are created and these variables are named as “Freshman-Senior”, “Sophomore-Senior”, and “Junior-Senior.”

Table 6. Results of hierarchical regression analysis

Variables	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>Partial r</i> ²	ΔR^2	ΔF
Model 1						.04	2.07*
Gender	-.33	.14	-.13	-2.34*	-.12		
Age	.07	.03	.14	2.09*	.11		
Freshman-Senior	.05	.17	.02	.30	.02		
Sophomore-Senior	.11	.15	.05	.74	.04		
Junior-Senior	.00	.12	.00	-.003	.00		
Type of instruction	-.01	.09	-.006	-.13	-.006		
CGPA	.11	.16	.04	.66	.03		
Model 2						.00	.36
Course of Life Skills	.06	.10	.03	.60	.03		
Model 3						.34	39.84*
CEs	.15	.08	.10	1.94	.10		
ESA	.39	.11	.22	3.53*	.18		
DMPS	.33	.12	.19	2.71*	.14		
CCT	.27	.12	.15	2.25*	.12		
CIR	.09	.09	.05	.95	.05		

* $p < .05$

According to Table 6, it was observed that the gender and age tested in the first model explained 4% of the variance as significant predictors, and that male and older pre-service pre-school teachers had better psychological well-being, with $\Delta R^2 = .04$, $\Delta F(7, 378) = 2.07$, $p < .05$. In the second stage, it was found that the status of taking course about life skills added to the model was not a significant predictor, with $\Delta R^2 = .00$, $\Delta F(1, 377) = .36$, $p > .05$. In the last stage, it was seen that life skills explained a variance of 34%, with $\Delta R^2 = .34$, $\Delta F(5, 372) = 39.84$, $p < .05$. Among these skills, empathy and self-awareness ($\beta = .22$), decision making and problem solving ($\beta = .19$) and creative and critical thinking ($\beta = .15$) were found to be significant predictors and contributed to the explained variance. On the other hand, it was found that coping with emotions and stress and communication and interpersonal relations skills were non-significant predictors. The tested model accounted for 38% of the total variance.

Conclusion

The aim of this research was to examine the relationship between pre-service pre-school teachers' life skills and psychological well-being and to determine whether various variables related to pre-service pre-school teachers (gender, age, grade level, type of instruction, cumulated grade point average, and status of taking course about life skills) could significantly predict their psychological well-being or not. It is concluded that pre-service pre-school teachers' communication and interpersonal relations skills are at the highest level, but their skills to cope with emotions and stress are at the lowest level.

It can be suggested that the reason behind the high level of communication and interpersonal skills of pre-service pre-school teachers might be their high self-efficacy perceptions of communication skills. In other

words, pre-service pre-school teachers might feel highly self-efficacious about their own communication and interpersonal skills. Communication, one of the variables that significantly predicts pre-service pre-school teachers' self-efficacy (Kesicioğlu & Güven, 2014), is also one of the special field competencies of the pre-school teacher (General Directorate of Teacher Training and Development, 2017). It was concluded that pre-service pre-school teachers also perceived their competence related to this specific field as high (Ekinçi & Kaya, 2016). Billheimer (2006) found out that pre-service early childhood teachers' levels of self-efficacy for creating positive climate in the classroom as well. However, pre-service pre-school teachers' self-efficacy beliefs about communication skills are not as high as those of pre-school teachers (Yoldaş, Yetim, & Küçüköğlü, 2016). Significant and positive relationships were detected between pre-school teachers' skills to communicate with children and self-efficacy beliefs and pre-school teachers' self-efficacy beliefs were found to be the best predictor of teacher-child communication skills (Ata, 2015).

It is challenging that pre-service pre-school teachers are at the lowest level for coping with emotions and stress, although they are at the highest for communication and interpersonal relations skills. It can be expressed that pre-service pre-school teachers cannot develop appropriate ways to cope with their feelings and they are not aware of their own feelings (Kuyumcu & Güven, 2012). There exists a positive correlation between pre-service teachers' coping with stress levels and emotional intelligence levels (Önen, 2012). Additionally, there are also studies which found that pre-service teachers' approaches to cope with stress and self-esteem were significantly correlated (Parmaksız, 2011) and that self-esteem significantly predicted the approaches to cope with stress (Karakuş & Dereli, 2011). It can be assumed that the participating pre-service pre-school teachers either did not have quite high emotional intelligence or self-esteem levels. Pre-service pre-school teachers should learn to cope with their emotions and stress because they might experience it in their professional journey due to lack of time, needs of children, non-teaching tasks, educational philosophy and practice, individual needs, problems with parents, interpersonal relations, attitudes toward and perceptions of early childhood programs (Kelly & Berthelsen, 1995) and give up this profession (Clipa & Boghean, 2015).

Psychological well-being levels of pre-service pre-school teachers were found as high. Parallel to this finding of the study, Bozgün and Pekdoğan (2017) too concluded that pre-service primary school and pre-school teachers have high psychological well-being. Besides, Royer and Moreau (2016) found out that overall well-being levels of early childhood teachers were high. But, as the Psychological Well-being Scale used in this current research is a self-report psychological well-being measure, the scores obtained from this measure should be cautiously interpreted.

The results of the canonical correlation analysis conducted in order to examine the relationship between pre-service pre-school teachers' life skills and psychological well-being indicate that there is a moderate relation between life skills and psychological well-being. The higher the life skills of pre-service pre-school teachers, the higher their psychological well-being levels. In line with this finding, Sujatha and Jayakumar (2017) found a significant correlation between female university students' life skills and psychological well-being. Considering that 86.4% of the sample of this study included female pre-service pre-school teachers, the significant relation between life skills and psychological well-being can be evaluated as an expected finding of the research.

According to the results of hierarchical regression analysis conducted to determine whether various variables related to pre-service pre-school teachers (gender, age, grade level, type of instruction, cumulated grade point average, status of taking course about life skills) and life skills predict pre-service pre-school teachers' psychological well-being, it was found that gender, age, empathy and self-awareness, decision-making and problem-solving and creative and critical thinking skills significantly predicted, while grade level, type of instruction, cumulated grade point average, status of taking course about life skills, skills of coping with emotions and stress and of communication and interpersonal relations were not significant.

Although there are studies investigating the significant effect of gender on the psychological well-being (Roothman, Kirsten, & Wissing, 2003; Akhter, 2015) of university students (Chraif & Dumitru, 2015; Geçgin & Sahranç, 2017; Karabeyeser, 2013; Karaca & Yerlisu Lapa, 2016; Ulu, 2018), studies concluding that it significantly affects psychological well-being of pre-service teachers (Kumcağız & Gündüz, 2016) are relatively few in number. Although it is emphasized in the literature that the significance is in favor of females, it is concluded that male pre-service pre-school teachers feel psychologically much better than female pre-service pre-school teachers. One of the possible reasons can be explained by the fact that in societies with a patriarchal family structure, men are freed more in their decisions, and the expectation of social success towards them is relatively lower (Christopher, 1999). Another reason could be that 86.4% of the sample consists of female pre-service pre-school teachers, while 13.6% of the sample includes male ones.

Although there are studies that conclude that there is no significant effect of age on the psychological well-being of university students (Aydın, Şahan Birol, & Temel, 2018) and pre-service teachers (Öztan Ulusoy & Konaklı, 2017), this research indicated that age of pre-service pre-school teachers predicted their psychological well-being significantly. Ryff and Keyes (1995) found age differences in varied dimensions of well-being as well. Güler Edwards (2008) found that age was the predictor of psychological well-being and that young and middle-aged individuals determined more goals for themselves than older individuals. As pre-service pre-school teachers, whose average age is 21.01 years, have particular goals, it can be thought to enable their psychological well-being.

It has been concluded that decision-making and problem-solving skills significantly predict pre-service pre-school teachers' psychological well-being. Decision-making is found as the significant predictor of psychological well-being (Miller, 2001; Venkatesan & Rohatgi, 2018) as well as problem-solving (Miller, 2001). Dilmaç and Bozgeyikli (2009) found a significant relation between pre-service teachers' decision-making styles and their subjective well-being, even though not for psychological well-being specifically. It is a finding in the related literature that subjective well-being is significantly correlated with psychological well-being (Bilgin, 2017; Sarı & Çakır, 2016). From this viewpoint, it can be considered as an expected finding that pre-service pre-school teachers' decision making skills is a significant predictor of their psychological well-being. Given the fact that pre-school teachers' reasonable and independent decision-making skills negatively predict their test anxiety (Dereli & Acat, 2011); and their rational decision-making styles negatively predict their academic procrastination (Balkıs, 2007), it could be expected that pre-service pre-school teachers who have the ability of decision-making would have less procrastination and less anxiety and feel psychologically much better. The relation between psychological well-being and stress is found to be mediated by social problem-solving (Chang, D'Zurilla, & Sanna, 2009). Considering the fact that pre-service pre-school teachers had higher psychological well-being levels although their coping with emotions and stress skills were at the lowest level, levels of social support perceived by pre-service pre-school teachers can be considered to be high. Yiğit (2013) found that subjective well-being of pre-service teachers predicted social problem-solving skills significantly, and that pre-service teachers with high subjective well-being had positive and rational orientations to social problems and they did not avoid these problems and they carefully focused on the problems. Based on this finding, it can be expected that pre-service pre-school teachers' psychological well-being can be significantly predicted by problem solving skills. As a matter of fact, Traş, Arslan and Mentiş Taş (2011) found that pre-service teachers who approached problems more positively developed higher self-esteem and sense of humor with a higher level of self-development. As the emotional intelligence levels of pre-service pre-school teachers in this study are thought to be not very high, significant prediction of the psychological well-being by problem solving skills can be considered as an expected finding because there was not any significant relation between problem solving skills and emotional intelligence levels of pre-service pre-school teachers (except compatibility) (Ekinci Vural, 2010). This finding of the research should be interpreted with due consideration, regarding that pre-service teachers (Ekinci Vural, 2010; Samancı & Uçan, 2015) and in-service ones (Çınar, Hatunoğlu, & Hatunoğlu, 2009) have problem solving skill perception higher than the average, which means, in other words, a higher self-efficacy. Indeed, teacher self-efficacy was found as the best predictor of in-class social problem-solving (Ulaş Marbouti, 2015).

As a result of this research, it was found out that creative thinking and critical thinking predicted significantly the psychological well-being of pre-service pre-school teachers. In other words, pre-service pre-school teachers feel psychologically better as they think more critically and creatively. Although there was no significant relation between creativity and psychological well-being (Bilgin, 2017), it was concluded that the teaching of creative and critical thinking skills not only improved the focus of internal control, but also increased psychological well-being (Rezaei Kargar, Ajilchi, Kalantar Choreishi, & Zohoori Zangene, 2013).

It was also found out that pre-service pre-school teachers' empathy and self-awareness skills significantly predict their psychological well-being. Pre-service teachers' self-knowledge is a positive predictor of their psychological well-being (Demirci & Şar, 2017). In other words, as the level of self-knowledge of pre-service pre-school teachers increases, the levels of psychological well-being will also increase. In addition, Deniz, Erus, and Büyükebeci (2017) found that emotional intelligence is the full mediator in the relation between conscious awareness and psychological well-being. Based on this finding, it can be said that pre-service pre-school teachers' emotional intelligence may develop with the increase of conscious awareness and this may then increase the level of their psychological well-being. Since emotional intelligence levels of pre-service pre-school teachers are thought to be not very high, so the level of empathy and self-awareness is not expected to be very high. Hence, pre-service pre-school teachers' empathy and self-awareness skills are not as high as communication and interpersonal relationships and creative and critical thinking skills. Correspondingly, In-Sook and Yu-Mi (2018) concluded that pre-service early childhood teachers had high empathetic ability and that

their empathetic ability had a significant effect on and was positively related to their efficacy. Regarding this, it can be said that pre-service pre-school teachers' beliefs of self-efficacy might mediate the relation between their empathy skills and psychological well-being.

In this study, it was found that the grade level did not significantly predict the psychological well-being of pre-service pre-school teachers. This is an expected finding because pre-service pre-school teachers of different ages might be enrolled in the same grade level. Thus, their ages, but not grade levels significantly predicted their psychological well-being. This is consistent with the findings of the studies that reveal that the grade level does not have any significant effect on psychological well-being of university students (Aydın, Şahan Birol, & Temel, 2018) and pre-service teachers (Kumcağız & Gündüz, 2016). Yet, some studies that support the fact that the grade level has a significant influence on university students' psychological well-being (Aydın, Kahraman, & Hiçdurmaz, 2017; Tabe Bordbar, Nikkar, Yazdani, & Alipoor, 2011; Walker, 2009), though few in number, exist.

In this study, it was found that the type of instruction did not significantly predict the psychological well-being of pre-service pre-school teachers. Whether pre-service pre-school teachers are exposed to the morning instruction or evening one does not significantly predict their psychological well-being.

Although academic achievement of university students was found to be significantly predicted by their psychological well-being (Ateş, 2016), this research found out that pre-service pre-school teachers' cumulated grade point average did not significantly predict their psychological well-being. Pre-service pre-school teachers' cumulated grade point averages were relatively high, but their being academically successful may not guarantee their feeling psychologically better. Supporting this result, Kumcağız and Gündüz (2016) stated that academic achievement of pre-service teachers has no significant effect on their psychological well-being. On the other hand, the related literature also reveals that academic performance significantly predicts psychological well-being (Punia & Malaviya, 2015; Turashvili & Japaridze, 2012) and academic performance is correlated with psychological well-being of university students (Trucchia, Lucchese, Enders, & Fernández, 2013).

As a result, it was found out that status of taking course about life skills did not significantly predict the psychological well-being of pre-service pre-school teachers. This is because pre-service pre-school teachers might perceive a course about life skills as a course that gives them an easy passing grade, but does not teach too much.

It was found that skills of coping with emotions and stress and communication and interpersonal relationships did not significantly predict pre-service pre-school teachers' psychological well-being. Contrary to this finding of the research, Freire, del Mar Ferradás, Valle, Núñez and Vallejo (2016) found out that psychological well-being of university students significantly predicted their strategies of coping with stress. In addition, Kuyumcu and Güven (2012) concluded that the university students' emotional awareness and expressions significantly predict their psychological well-being, and that emotional awareness facilitated developing the strategy of coping with emotions and defining the situation. However, the psychological well-being of pre-service pre-school teachers was not predicted by their coping with emotions and stress skills. This can be attributed to the fact that pre-service pre-school teachers' skills of coping with emotions and stress are at the lowest level. In addition, it was found that strategies for coping with stress of university students, including pre-service teachers, are significant predictors of happiness levels and that there is a positive relation between coping with stress strategies and happiness levels (Kaya & Demir, 2017). Considering this finding, it can be suggested that the level of happiness of pre-service pre-school teachers who have the lowest level of coping with emotions and stress skills is accordingly low. It has been stated that people with high emotional awareness levels pay more attention to others and set goals around them (Dizen, Berenbaum, & Kerns, 2005). Although the skills of coping with emotions and stress were at the lowest level, communication and interpersonal relations skills of pre-service pre-school teachers were at the highest level. However, the psychological well-being of pre-service pre-school teachers was not significantly predicted by their communication and interpersonal relations skills. This finding might be explained by the high self-efficacy perceptions of pre-service pre-school teachers regarding their communication and interpersonal relations skills.

Recommendations

Suggestions can be derived from this study in order for practice including; training programs that enable pre-service pre-school teachers gain the skills of coping with emotions and stress might be developed and implemented; happiness levels of pre-service pre-school teachers might be increased; creative and critical

thinking skills can be taught; life skills course can be integrated with the content of the pre-school teacher training program or can be made to form the core of this program's content, rather than imposing it to pre-service pre-school teachers only through a single course. It must be noted that this research is limited with the data gathered from 391 pre-service pre-school teachers. Therefore, the results should be interpreted cautiously. Studying of psychological well-being and life skills in terms of different variables with larger and further samples shall be expected to bring depth to the relevant literature and advance the generalizability of the results. In addition, further studies might be conducted about the reasons of pre-service pre-school teachers' possible high self-efficacy perceptions related to communication and interpersonal relationships and problem solving skills, and pre-service pre-school teachers' emotional intelligence or self-esteem levels. Pre-service pre-school teachers' conscious awareness might be developed in order to increase their emotional intelligence levels. Another area of further investigation could be to search for the reasons for why psychological well-being levels of pre-service pre-school teachers are high. Testing the relationships between pre-service pre-school teachers' subjective well-being, psychological well-being, and decision-making skills with a model could be another area for further research.

References

- Akbıyık, C., & Seferoğlu, S. S. (2006). Eleştirel düşünme eğilimleri ve akademik başarı [Critical thinking dispositions and academic achievement]. *Çukurova Üniversitesi Eğitim Fakültesi Dergisi*, 2(32), 90-99.
- Akgün, E., Yazar, M., & Dinçer, Ç. (2011). Okul öncesi öğretmenlerin sınıf içi etkinliklerde kullandıkları sınıf yönetimi stratejilerinin incelenmesi [The evaluation of classroom management strategies of preschool teachers in classroom activities]. *Pegem Eğitim ve Öğretim Dergisi*, 1(3), 1-9.
- Akhter, S. (2015). Psychological well-being in student of gender difference. *The International Journal of Indian Psychology*, 2(4), 153-161.
- Akın, A. (2009). *Akılci duygusal davranışçı terapi odaklı grupla psikolojik danışmanın psikolojik iyi olma ve öz-duyarlık üzerindeki etkisi [The effect of rational emotive behavioral therapy based group counseling to the psychological well-being and self-compassion]*. Unpublished doctoral dissertation, Sakarya University, Sakarya.
- Ata, A. (2015). *Factors effecting teacher-child communication skills & self-efficacy beliefs: An investigation on preschool teachers*. Unpublished master's thesis, Middle East Technical University, Ankara.
- Ateş, B. (2016). Üniversite öğrencilerinde akademik başarının yordayıcısı olarak psikolojik iyi oluş ve sosyal yetkinlik [Psychological well-being and social competence as a predictor of academic success of university students]. *Elektronik Sosyal Bilimler Dergisi*, 15(59), 1203-1214.
- Ateş, B., & Çelik, O. (2018). Öğretmen adaylarında psikolojik iyi oluşun yordayıcısı olarak algılanan sosyal yetkinlik ve güvengenlik [Perceived social competence and assertiveness as a predictor of psychological well-being in pre-service teachers]. *Erzincan Üniversitesi Eğitim Fakültesi Dergisi*, 20(2), 444-460.
- Aydın, A., Kahraman, N., & Hiçdurmaz, D. (2017). Hemşirelik öğrencilerinin algılanan sosyal destek ve psikolojik iyi olma düzeylerinin belirlenmesi [Determining the levels of perceived social support and psychological well being of nursing students]. *Psikiyatri Hemşireliği Dergisi*, 8(1), 40-47.
- Aydın, E., Şahan Birol, S., & Temel, V. (2018). Üniversite takımlarında oynayan sporcuların psikolojik iyi oluş düzeylerinin belirlenmesi [The determining of psychological well-being levels of athletes playing in university teams]. *Journal of Human Sciences*, 15(3), 1541-1550. doi:10.14687/jhs.v15i3.5236
- Balkıs, M. (2007). Öğretmen adaylarının davranışlarındaki erteleme eğiliminin, karar verme stilleri ile ilişkisi [The relationships between student teachers' procrastination behaviors, and decision making styles]. *Pamukkale Üniversitesi Eğitim Fakültesi Dergisi*, 1(21), 67-83.
- Baysal, Z. N. (2009). Demokrasi eğitimi için karar verme modelinin kullanılması: İlköğretim üçüncü sınıf Hayat Bilgisi dersi örnekleme [An application of the decision-making model for democracy education: A sample of a third grade social sciences lesson]. *Kuram ve Uygulamada Eğitim Bilimleri*, 9(1), 53-84.
- Bilgin, D. (2017). *Understanding the relationship between happiness and creativity in terms of the dimensions of psychological and subjective well-being*. Unpublished master's thesis, Istanbul Bilgi University, Istanbul.
- Billheimer, B. C. (2006). Teacher self-efficacy in early childhood settings: Differences between early childhood and elementary education candidates. Unpublished master's thesis, East Tennessee State University, Johnson City, Tennessee.
- Bolat, Y., & Balaman, F. (2017). Yaşam becerileri ölçeği: Geçerlik ve güvenirlik çalışması [Life skills scale: Validity and reliability study]. *İnsan ve Toplum Bilimleri Araştırmaları Dergisi*, 6(4), 22-39.
- Bozgün, K., & Pekdoğan, S. (2017). Öğretmen adaylarının çocukluk çağı orselenmeleri ile psikolojik iyi olmaları arasındaki ilişkinin incelenmesi [The examination of the relationship between childhood abuse

- and psychological well-being of preservice teachers]. *Turkish Studies – International Periodical for the Languages, Literature and History of Turkish or Turkic*, 12(4), 111-126.
- Büyükfiliz, B. (2016). *18-25 yaş arası genç yetişkinlerde problemlı İnternet kullanımı ve iletişim becerileri arasındaki ilişki [Relationship between communication skills and problematic Internet usage in 18-25 ages young adults]*. Unpublished master's thesis, Uskudar University, Istanbul.
- Canel, A. N. (2012). *Aile yaşam becerileri* (2. baskı) [*Life skills of a family* (2nd ed.)]. Istanbul: Nakış Ofset.
- Chang, E. C., D'Zurilla, T. J., & Sanna, L. J. (2009). Social problem solving as a mediator of the link between stress and psychological well-being in middle-adulthood. *Cognitive Therapy and Research*, 33(1), 33-49.
- Chraif, M., & Dumitru, D. (2015). Gender differences on wellbeing and quality of life at young students at psychology. *Procedia-Social and Behavioral Sciences*, 180, 1579-1583.
- Christopher, J. C. (1999). Situating psychological well-being: Exploring the cultural roots of its theory and research. *Journal of Counseling and Development*, 77(2), 141-152.
- Chu, P. S., Saucier, D. A., & Hafner, E. (2010). Meta-analysis of the relationships between social support and well-being in children and adolescents. *Journal of Social and Clinical Psychology*, 29(6), 624-645.
- Clipa, O., & Boghean, A. (2015). Stress factors and solutions for the phenomenon of burnout of preschool teachers. *Procedia-Social and Behavioral Sciences*, 180, 907-915.
- Collins, J. W., & O'Brien, N. P. (2011). *The Greenwood dictionary of education*. Westport, CT: Greenwood Press.
- Corsano, P., Majorano, M., & Champretavy, L. (2006). Psychological well-being in adolescence: The contribution of interpersonal relations and experience of being alone. *Adolescence*, 41(162), 341-353.
- Creswell, J. W. (2013). *Araştırma deseni, nitel, nicel ve karma yöntem yaklaşımları* (S. B. Demir, Çev.) [*Research design, qualitative, quantitative and mixed methods approaches* (S. B. Demir, Trans.)]. Ankara: Eğiten Kitap.
- Cripps, K., & Zyromski, B. (2009). Adolescents' psychological well-being and perceived parental involvement: Implications for parental involvement in middle schools. *RMLE Online*, 33(4), 1-13.
- Cüceloğlu, D. (2002). *Yeniden insan insana* (27. basım) [*To human again* (27th ed.)]. Istanbul: Remzi Kitabevi.
- Çelik, E., & Çağdaş, A. (2010). Okul öncesi eğitim öğretmenlerinin empatik eğilimlerinin bazı değişkenler açısından incelenmesi [A research regarding the emphatic tendencies of preschool education teachers in terms of some variables]. *Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 23, 23-38.
- Çınar, O., Hatunoğlu, A., & Hatunoğlu, Y. (2009). Öğretmenlerin problem çözme becerileri [Teachers' problem solving skills]. *Erzincan Eğitim Fakültesi Dergisi*, 11(2), 215-226.
- Dede, C. (2010). Comparing frameworks for 21st century skills. In J. Bellanca & R. Brandt (Eds.), *21st century skills: Rethinking how students learn* (pp. 51-75). Bloomington, IN: Solution Tree Press.
- Demirci, İ., & Şar, A. H. (2017). Kendini bilme ve psikolojik iyi oluş arasındaki ilişkinin incelenmesi [Examining the relationship between self-knowledge and psychological well-being]. *İnsan ve Toplum Bilimleri Araştırmaları Dergisi*, 6(5), 2710-2728.
- Deniz, M. E., Erus, S. M. & Büyükcebeci, A. (2017). Bilinçli farkındalık ile psikolojik iyi oluş ilişkisinde duygusal zekanın aracılık rolü [Relationship between mindfulness and psychological well-being: The mediating role of emotional intelligence]. *Türk Psikolojik Danışma ve Rehberlik Dergisi*, 7(47), 17-31.
- Dereli, E., & Acat, M. B. (2011). Okulöncesi öğretmenliği bölümü öğrencilerinin karar verme stratejileri ile sınav kaygıları arasındaki ilişki [The relationships between decision making strategies and test anxiety of pre-school education teacher department students]. *Eskişehir Osmangazi Üniversitesi Sosyal Bilimler Dergisi*, 12(2), 77-87.
- Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D.-W., Oishi, S., & Biswas-Diener, R. (2010). New well-being measures: Short scales to assess flourishing and positive and negative feelings. *Social Indicators Research*, 97, 143-156.
- Dılmaç, B., & Bozgeyikli, H. (2009). Öğretmen adaylarının öznel iyi olma ve karar verme stillerinin incelenmesi [A research on subjective well-being and decision making of teacher candidates]. *Erzincan Eğitim Fakültesi Dergisi*, 11(1), 171-187.
- Dizen, M., Berenbaum, H. & Kerns, J. G. (2005). Emotional awareness and psychological needs. *Cognition and Emotion*, 19(8), 1140-1157.
- Dökmen, Ü. (1988). Empatinin yeni bir modele dayanılarak ölçülmesi ve psikodrama ile geliştirilmesi [A new measurement model of the empathy and developing empathy by using psychodrama]. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi*, 21, 155-190.
- Dökmen, Ü. (2003). *İletişim çatışmaları ve empati* (22. baskı) [*Communication conflicts and empathy* (22nd ed.)]. Istanbul: Sistem Yayıncılık.
- Ekinci Vural, D. (2010). Okul öncesi öğretmen adaylarının duygusal zekaları ile problem çözme becerileri arasındaki ilişki [The correlation between emotional intelligence and problem solving skills of teacher candidates]. *e-Journal of New World Sciences Academy*, 5(3), 972-980.

- Ekinci, N., & Kaya, D. (2016). Okul öncesi eğitimi öğretmen adaylarının özel alan yeterlik algılarının incelenmesi: İletişim, yaratıcılık ve estetik [An examination of special field competency perceptions of prospective preschool teachers: Communication, creativity and esthetics]. *Sakarya University Journal of Education*, 6(1), 141-157.
- Forgeard, M. J. C., Jayawickreme, E., Kern, M. L., & Seligman, M. E. P. (2011). Doing the right thing: Measuring wellbeing for public policy. *International Journal of Wellbeing*, 1(1), 79-106.
- Freire, C., del Mar Ferradás, M., Valle, A., Núñez, J. C., & Vallejo, G. (2016). Profiles of psychological well-being and coping strategies among university students. *Frontiers in Psychology*, 7. doi: 10.3389/fpsyg.2016.01554
- Geçgin, F. M., & Sahraç, Ü. (2017). Belirsizliğe tahammülsüzlük ile psikolojik iyi oluş arasındaki ilişki [The relationships between intolerance of uncertainty and psychological well-being]. *Sakarya University Journal of Education*, 7(4-special issue), 739-755.
- Gülaçtı, F. (2009). *Sosyal beceri eğitimine yönelik programın üniversite öğrencilerinin, sosyal beceri, öznel ve psikolojik iyi olma düzeylerine etkisi [The effects of group guidance program based on social skill training on the levels of students' social skill, subjective and psychological well-being]*. Unpublished doctoral dissertation, Atatürk University, Erzurum.
- Güler Edwards, A. (2008). *Relationship between future time orientation, adaptive self-regulation, and well-being: Self-type and age related differences*. Unpublished doctoral dissertation, Middle East Technical University, Ankara.
- Güner, P. (2000). Sorunlarla etkili baş etme yolu: Problem çözme [The effective coping strategy: Problem solving]. *Atatürk Üniversitesi Hemşirelik Yüksekokulu Dergisi*, 3(1), 62-67.
- Hamurcu, H. (2011). *Ergenlerin yetişkinlik inançları ve psikolojik iyi oluşlarını yordamada psikolojik ihtiyaçlar [Psychological needs on regression of adolescents' competence beliefs and psychological well-being]*. Unpublished doctoral dissertation, Selçuk University, Konya.
- Huitt, W. (1992). Problem solving and decision making: Consideration of individual differences using the Myers-Briggs Type Indicator. *Journal of Psychological Type*, 24, 33-44.
- Huitt, W. (1998). *Critical thinking: An overview*. Educational Psychology Interactive. Valdosta, GA: Valdosta State University. Retrieved February 25, 2019 from, <http://www.edpsycinteractive.org/topics/cognition/critthnk.html> [Revision of paper presented at the Critical Thinking Conference sponsored by Gordon College, Barnesville, GA, March, 1993.]
- In-Sook, C., & Yu-Mi, P. (2018). The influence of pre-service early childhood teacher's empathetic ability and interpersonal competence on teacher's efficacy. *Journal of the Korea Academia-Industrial Cooperation Society*, 19(11), 454-462.
- İkiz, F. E., & Asıcı, E. (2017). The relationship between individual innovativeness and psychological well-being: The example of Turkish counselor trainees. *International Journal of Progressive Education*, 13(1), 52-63.
- İkiz, F. E., Asıcı, E., & Kaya, Z. (2018). Yaşam amaçları ve psikolojik iyi oluşun öğretmenlik mesleğine yönelik tutumu yordayıcı rolü [The predictive roles of life goals and psychological wellbeing on attitudes towards teaching profession]. *Bayburt Eğitim Fakültesi Dergisi*, 13(25), 7-26.
- Jolliffe, D., & Farrington, D. P. (2006). Development and validation of the basic empathy scale. *Journal of Adolescence*, 29(4), 589-611.
- Karababa, A., Mert, A., & Çetiner, P. (2018). Üniversite öğrencilerinde psikolojik iyi olmanın bir yordayıcısı olarak benlik ayırma [Self-differentiation as a predictor of psychological well-being among university students]. *Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi*, 19(2), 1235-1248.
- Karabeyeser, M. (2013). *Üniversite öğrencilerinin anne-baba tutumları ve stresli yaşam olaylarına göre psikolojik iyi oluşu [Psychological well-being of university students according to parental attitudes and stressful life events]*. Unpublished master's thesis, Hacettepe University, Ankara.
- Karaca, A. A., & Yerlisu Lapa, T. (2016). Serbest zaman katılımı, psikolojik iyi olma ve serbest zaman engelleri ile baş etme stratejilerinin üniversite öğrencileri üzerinde incelenmesi [Examining of leisure time participation, psychological well-being and leisure negotiation of university students]. *Journal of Human Sciences*, 13(2), 3293-3304. doi:10.14687/jhs.v13i2.3778
- Karakuş, Ö., & Dereli, E. (2011). Öğretmen adaylarının benlik saygısı ve stresle başa çıkma stillerinin incelenmesi [Examination of teachers candidates' self-esteem and stress coping styles]. *E-International Journal of Educational Research*, 2(4), 89-104.
- Kaya, A. (2018). İletişime giriş: Temel kavramlar ve süreçler [Introduction to communication: Basic concepts and processes]. A. Kaya (Ed.), *Kişilerarası ilişkiler ve iletişim* (12. baskı, s. 5) içinde [In A. Kaya (Ed.), *Interpersonal relations and communication* (12th ed., p. 5)]. Ankara: Pegem Akademi.
- Kaya, Ö. S., & Demir, E. (2017). Kendini toparlama gücü ve stresle başa çıkma stratejilerinin mutluluk düzeyini yordama gücü [The power of resilience and coping strategies with stress to predict happiness]. *Sakarya Üniversitesi Eğitim Fakültesi Dergisi*, 33, 18-33.

- Kaya, Z., & Çenesiz, G. Z. (2016, September 5-7). *Öğretmen adaylarının içsel ve dışsal motivasyonları ile psikolojik iyi oluş ve yaşam doyumları arasındaki ilişki* [The relationship among internal and external motivations, psychological well-being and life satisfaction of teacher candidates]. Paper presented at the 19th National Psychology Congress, Izmir.
- Kelly, A. L., & Berthelsen, D. C. (1995). Preschool teachers' experience of stress. *Teaching and Teacher Education, 11*(4), 345-357.
- Kesicioğlu, O. S., & Güven, G. (2014). Okul öncesi öğretmen adaylarının özyeterlik düzeyleri ile problem çözme, empati ve iletişim becerileri arasındaki ilişkinin incelenmesi [Investigation of the correlation between preservice early childhood teachers' self-efficacy levels and problem solving, empathy and communication skills]. *Turkish Studies - International Periodical For The Languages, Literature and History of Turkish or Turkic, 9*(5), 1371-1383.
- Keyes, C. L. M., Shmotkin, D., & Ryff, C. D. (2002). Optimizing well-being: The empirical encounter of two traditions. *Journal of Personality and Social Psychology, 82*(6), 1007-1022.
- Kılıçaslan, E. (2011). *İletişim kurma becerileri* [Communication skills]. Istanbul: Kriter Yayınevi.
- Kline, R. B. (1998). *Methodology in the social sciences. Principles and practice of structural equation modeling*. New York, NY: Guilford Press.
- Koç, B., Terzi, Y., & Gül, A. (2015). Üniversite öğrencilerinin iletişim becerileri ile kişilerarası problem çözme becerileri arasındaki ilişki [The relationship between university students' communication skills and their interpersonal problem solving skills]. *Uluslararası Türkçe Edebiyat Kültür Eğitim Dergisi, 4*(1), 369-390.
- Kumar, J., & Chhabra, A. (2014). Life skill education for adolescents: Coping with challenges. *Scholarly Research Journal for Humanity Science & English Language, 1*(2), 181-190.
- Kumcağız, H., & Gündüz, Y. (2016). Relationship between psychological well-being and smartphone addiction of university students. *International Journal of Higher Education, 5*(4), 144-156.
- Kuyumcu, B., & Güven, M. (2012). Türk ve İngiliz üniversite öğrencilerinin duygularını fark etmeleri ve ifade etmeleri ile psikolojik iyi oluşları arasındaki ilişki [The relationship between the emotional awareness expression of emotion and psychological well-being of Turkish and English university students]. *Gazi Üniversitesi Gazi Eğitim Fakültesi Dergisi, 32*(3), 589-607.
- Martinez, M. E. (1998). What is problem solving? *The Phi Delta Kappan, 79*(8), 605-609.
- Miller, L. S. (2001). *Psychological well-being among university students: Problem solving, career-decision-making attitudes, and program commitment*. Unpublished doctoral dissertation, University of Ottawa, Canada.
- Milli Eğitim Bakanlığı [Ministry of National Education]. (2013). *Okul öncesi eğitimi programı* [Pre-school curriculum]. Ankara: Temel Eğitim Genel Müdürlüğü.
- Moeini, B., Shafii, F., Hidarnia, A., Babaii, G., Birashk, B., & Allahverdipour, H. (2008). Perceived stress, self-efficacy and its relations to psychological well-being status in Iranian male high school students. *Social Behavior and Personality: An International Journal, 36*, 257-266.
- Oğuz, T. (2012). Bireylerarası iletişim [Interpersonal communication]. In E. N. Orhon & U. Eriş (Eds.), *İletişim bilgisi* [Knowledge of communication]. Eskişehir: Anadolu Üniversitesi Açıköğretim Fakültesi Yayınları.
- Öğretmen Yetiştirme ve Geliştirme Genel Müdürlüğü [General Directorate of Teacher Training and Development]. (2017, November 6). *Okul öncesi öğretmeni özel alan yeterlikleri* [Special field competencies of pre-school teachers]. Retrieved February 25, 2019 from http://oygm.meb.gov.tr/meb_iys_dosyalar/2017_11/06160307_5-YYretmen_Yeterlikleri_KitabY_okul_Yncesi_YYretmeni_Yzel_alan_yeterlikleri_ilkYYretim_parYa_8.pdf
- Önen, A. S. (2012). Öğretmen adaylarının kişilik özellikleri ve duygusal zekâ düzeylerinin stresle başa çıkma durumlarına etkileri [The effects of student teachers' personality traits & EQ levels on stress coping]. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, 42*, 310-320.
- Öztan Ulusoy, Y., & Konaklı, T. (2017). Relationship between psychological well-being and happiness levels of students trained in different departments. In R. Efe, I. Koleva, E. Atasoy, & V. Kotseva (Eds.), *Current trends in educational sciences* (pp. 527-535). Sofia: St. Kliment Ohridski University Press.
- Pan American Health Organization. (2001). *Life skills approach to child and adolescent healthy human development*. Washington, DC: Adolescent Health and Development Unit, Division of Health Promotion and Protection.
- Parmaksız, İ. (2011). Öğretmen adaylarının benlik saygısı düzeylerine göre iyimserlik ve stresle başa çıkma tutumlarının incelenmesi [The research for teacher candidates, about their optimism and their style of coping with stress according to their self-esteem levels]. Unpublished master's thesis, Selçuk University, Konya.

- Paul, R., & Elder, L. (2006). *The miniature guide to critical thinking: Concepts and tools*. Retrieved January 8, 2019 from https://www.criticalthinking.org/files/Concepts_Tools.pdf
- Punia, N., & Malaviya, R. (2015). Psychological well-being of first year college students. *Indian Journal of Educational Studies: An Interdisciplinary Journal*, 2(1), 60-68.
- Rezaei Kargar, F., Ajilchi, B., Kalantar Choreishi, M., & Zohoori Zangene, Z. (2013). The effect of teaching critical and creative thinking skills on the locus of control and psychological well-being in adolescents. *Procedia-Social and Behavioral Sciences*, 82, 51-56.
- Roothman, B., Kirsten, D. K., & Wissing, M. P. (2003). Gender differences in aspects of psychological well-being. *South African Journal of Psychology*, 33(4), 212-218.
- Royer, N., & Moreau, C. (2016). A survey of Canadian early childhood educators' psychological wellbeing at work. *Early Childhood Education Journal*, 44(2), 136-146.
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52, 141-166.
- Ryff, C. D. (1989a). Happiness is everything, or is it? Explorations on the meaning of psychological wellbeing. *Journal of Personality and Social Psychology*, 57, 1069-1081.
- Ryff, C. D. (1989b). In the eye of the beholder: Views of psychological well-being among middle-aged and older adults. *Psychology and Aging*, 4(2), 195-210.
- Ryff, C. D. (1989c). Beyond ponce de leon and life satisfaction: New directions in quest of successful aging. *International Journal of Behavioral Development*, 12(1), 35-55
- Ryff, C. D. (2014). Psychological well-being revisited: Advances in the science and practice of eudaimonia. *Psychotherapy and Psychosomatics*, 83, 10-28.
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69(4), 719-727.
- Ryff, C. D., & Singer, H. B. (2008). Know thyself and become what you are: A eudaimonic approach to psychological well-being. *Journal of Happiness Studies*, 9, 13-39.
- Ryff, C. D., Magee, W. J., Kling, K. C., & Wing, E. H. (1999). Forging macro-micro linkages in the study of psychological well-being. In C. D. Ryff and V. W. Marshall (Eds.), *The self and society in aging processes* (pp. 247-278). New York: Springer.
- Sak, U. (2009). *Üstün yetenekliler eğitim programları [Curriculum for the gifted]*. Ankara: Maya Akademi.
- Samancı, O., & Uçan, Z. (2015). Sınıf öğretmeni adaylarının sosyal sorun çözme beceri düzeylerinin incelenmesi [A research on classroom teacher candidate's abilities about solving social problems]. *Bartın Üniversitesi Eğitim Fakültesi Dergisi*, 14. Uluslararası Katılımlı Sınıf Öğretmenliği Eğitimi Sempozyumu Özel Sayısı, 152-162.
- Sarı, T., & Çakır, S. G. (2016). Mutluluk korkusu ile öznel ve psikolojik iyi oluş arasındaki ilişkinin incelenmesi [The relationships of fear of happiness with subjective and psychological well-being]. *Eğitim ve Öğretim Araştırmaları Dergisi*, 5(Özel Sayı), 222-229.
- Sarıcaoğlu, H. (2011). *Üniversite öğrencilerinin psikolojik iyi olma düzeylerinin kişilik özellikleri ve öz-anlayış açısından incelenmesi [Investigating psychological well-being, personality traits and self compassion levels of university students]*. Unpublished master's thesis, Selçuk University, Konya.
- Sujatha, & Jayakumar, K. N. (2017). Relationship between psychological well-being and life skills among students of Women College. *International Journal of Indian Psychology*, 4(4), 56-62.
- Şenşekerci, E., & Bilgin, A. (2008). Eleştirel düşünme ve öğretimi [Critical thinking and its teaching]. *Uludağ Üniversitesi Fen Edebiyat Fakültesi Sosyal Bilimler Dergisi*, 9(14), 15-43.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Boston, MA: Allyn & Bacon/Pearson Education.
- Tabatabaie, F., Nikkar, M., Yazdani, F., & Alipoor, A. (2011). Comparing the psychological well-being level of the students of Shiraz Payame Noor University in view of demographic and academic performance variables. *Procedia-Social and Behavioral Sciences*, 29, 663-669.
- Telef, B. B. (2013). Psikolojik iyi oluş ölçeği: Türkçeye uyarlama, geçerlik ve güvenilirlik çalışması [The adaptation of psychological well-being into Turkish: A validity and reliability study]. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 28(3), 374-384.
- Telef, B. B., Uzman, E., & Ergün, E. (2013). Öğretmen adaylarında psikolojik iyi oluş ve değerler arasındaki ilişkinin incelenmesi [Examine the relation between psychological wellbeing and values in teacher candidates]. *Turkish Studies - International Periodical For The Languages, Literature and History of Turkish or Turkic*, 8(12), 1297-1307.
- Taş, Z., Arslan, C., & Mentiş Taş, A. (2011). Öğretmen adaylarında mizah tarzları, problem çözme ve benlik saygısının incelenmesi [Analysis of humor styles, problem solving and self-esteem of prospective teachers]. *Uluslararası İnsan Bilimleri Dergisi*, 8(2), 716-732.

- Trucchia, S. M., Lucchese, M. S., Enders, J. E., & Fernández, A. R. (2013). Relationship between academic performance, psychological well-being, and coping strategies in medical students. *Revista de la Facultad de Ciencias Médicas/Universidad Nacional de Córdoba*, 70(3), 144-152.
- Turashvili, T., & Japaridze, M. (2012). Psychological well-being and its relation to academic performance of students in Georgian context. *Problems of Education in the 21st Century*, 49, 73-80.
- Ulaş Marbouti, J. (2015). *In-class social problem solving abilities of classroom teachers: A self-determination theory based study*. Unpublished doctoral dissertation, Middle East Technical University, Ankara.
- Ulu, M. (2018). İlahiyat Fakültesi öğrencilerinin psikolojik iyi oluşları ile değer yönelimleri arasındaki ilişki [On the relationship between psychological well-being and value orientations of students of Theology Faculty]. *Journal of Sakarya University Faculty of Theology*, 20(37), 183-215.
- Uygur, S. S. (2018). Lise öğrencilerinde problem çözme becerilerinin akılcı olmayan inanç düzeyi ve karar verme stillerine göre yordanması [Predicting the problem solving skills of high school students according to irrational beliefs and decision making styles]. *Elektronik Sosyal Bilimler Dergisi*, 17(67), 1014-1026.
- Venkatesan, M., & Rohatgi, A. (2018). Personality dispositions, resilience, and decision making and their impact on psychological well-being of management graduates. *Prabandhan: Indian Journal of Management*, 11(1), 22-38.
- Walker, C. J. (2009, August 6-9). *A longitudinal study on the psychological well-being of college students*. Poster presented at the 117th Annual Convention of the American Psychological Association, Toronto, Canada.
- Walsh, D., & Paul, R. W. (1986). *The goal of critical thinking: From educational ideal to educational reality*. Washington, D.C.: Amerikan Federation of Teachers Educational Issues Department.
- World Health Organization. (1994). *Life skills education for children and adolescents in schools: Introduction and guidelines to facilitate the development and implementation of life skills programmes*. Geneva, Switzerland: Department of Mental Health and Substance Abuse, World Health Organization.
- World Health Organization. (2003). *Skills for health. Skills-based health education including life skills: An important component of a child-friendly/health-promoting school*. Geneva, Switzerland: World Health Organization. Retrieved February 14, 2019 from https://www.who.int/school_youth_health/media/en/sch_skills4health_03.pdf
- Yenilmez, K., & Çalışkan, S. (2011). İlköğretim öğrencilerinin çoklu zeka alanları ile yaratıcı düşünme düzeyleri arasındaki ilişki [Relationship between multiple intelligences and creative thinking of secondary school students]. *Dicle Üniversitesi Ziya Gökalp Eğitim Fakültesi Dergisi*, 17, 48-63.
- Yeşiltepe, S. S. (2011). *Öğretmenlerin evlilik uyumlarının psikolojik iyi oluş ve bazı değişkenler açısından incelenmesi [Investigation of teacher's marital adjustment terms of psychological well being and some of variables]*. Unpublished master's thesis, Çukurova University, Adana.
- Yılmaz, M. F. (2013). *Üniversite öğrencilerinin psikolojik iyi oluşlarının problemleri İnternet kullanımı ve bazı demografik değişkenler açısından incelenmesi [Investigation of psychological well-being of university students in terms of problematic Internet use and various demographic variables]*. Unpublished master's thesis, Anadolu University, Eskişehir.
- Yiğit, R. (2013). Öğretmen adaylarının öznel iyi oluşu ile sosyal problem çözme becerileri arasındaki ilişkinin incelenmesi [Examination of relationship between well-being of teacher candidates and levels of social problem solving skill]. *İlköğretim Online*, 12(2), 550-560.
- Yoldaş, C., Yetim, G., & Küçüköğlü, N. E. (2016). Okul öncesi öğretmen ve öğretmen adaylarının özyeterlik inançlarının karşılaştırılması [Pre-school teachers and teachers' self-efficacy beliefs comparison]. *Dumlupınar Üniversitesi Sosyal Bilimler Dergisi*, 48, 90-102.