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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 & Seferođlu, 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 (Saricaoğlu, 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.

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