Investigation of the Relationship Between Psychological Capital Perception, Psychological Well-Being and Job Satisfaction of Teachers

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Abstract

The aim of this research is to determine the relationship between psychological capital, psychological well-being and job satisfaction of teachers. The research is a descriptive study in relational screening model. The research model includes three variables; one independent variable (psychological capital) and other two dependent variables (job satisfaction and psychological well-being). In the structural model, job satisfaction variable may also be expressed as mediator variable. The study population consists of 12714 teachers working in official secondary schools in seven central districts in Ankara Province in 2017-2018 academic year. Sample of the population is selected by multi-stage sampling method. Stratified sampling method is used in the first stage and simple random sampling method is used in the second stage. Sample size is calculated as at least 384 teachers. In the research, Psychological Capital Scale developed by Luthans, Youssef & Avolio (2007b); Minnesota Satisfaction Questionnaire developed by Weiss, Dawis, Lofquist & England (1967) and Psychological Well-Being Scale developed by Ryff (1989) were used as data collection tools. Scales which are pre-implemented within the scope of the research yielded valid and reliable results. Data analysis was done with SPSS 23.0 and LISREL 8.87 statistics software packages. According to the results obtained from the research, it was determined that teachers' psychological capital perception was "good" and their job satisfaction and psychological well-being are "high". According to the results of the analysis by means of structural equality modelling, it was determined that teachers' psychological capital perception affects their job satisfaction and psychological well-being levels positively and predicts them significantly; and it was also determined that job satisfaction has a partial mediator role in the relationship between teachers' psychological capital perception and their psychological well-being.

Keywords: psychological capital, psychological well-being, job satisfaction, teacher

1. Introduction

It is supported with various researches that psychological capital, psychological well-being and job satisfaction facts have important roles in terms of human resources of organizations (Terjesen, Jacofsky, Froh, & Digiuseppe, 2004; Seligman, Steen, Park, & Peterson, 2005; Ryff, 1989; Keleş, 2011; Luthans, & Youssef-Morgan, 2017). In addition to this, some national and international reports presented data in relation to the importance of people's happiness and having a healthy psychology (GNH, 2015; APA, 2015; PISA, 2015; TEDMEM, 2018). As a reflection of the recent discussions on the transformation in education paradigms, a "human" oriented education perception is emphasized (Şimşek, 1997; Özden, 2002, p. 69-81; Rosovsky, 1994; Aksit & Sands, 2006, p. 253; Turan & Şişman, 2013). On the other hand, the importance of making education and society suitable to the needs of the human is emphasized rather than offering the human to the service of education and society (Aydın, Yılmaz, & Altınkurt, 2013). The happiness and healthy psychology of each teacher who has important roles in making education and society suitable to the human's needs are in fact in the main axis of all these discussions. Psychological capital aims that strengths and superiorities of the individuals are revealed and healthy people are made stronger and more productive (Seligman, 1998). Each component of the psychological capital is considered as elements which are measurable, improvable and also manageable for a more effective work performance in organizations (Luthans, Luthans, & Luthans, 2004; Luthans, Avolio, Walumbwa, & Li, 2005;

Luthans & Youssef-Morgan, 2017).

It is seen that studies on psychological well-being generally focus on understanding the underlying causes of employees' psychological health. It is seen that studies on psychological health state of teachers are mostly associated with contexts containing negations such as stress and exhaustion (Spilled, Koomen, & Thijs, 2011). However, in addition to studies which are discussed with psychopathologic concepts, it is stated that teachers' health should be analysed in its own and with a positive perspective (Collie, Shapka, Perry, & Martin, 2015). Especially in recent years, researches which directly discuss the teachers' psychological well-being (Konu, Viitanen, & Lintonen, 2010; Collie et al., 2015) stands out. In addition, it is seen that studies on psychological well-being are mostly based on Ryff's (1989) multi-dimensional psychological well-being model (Akın & Akın, 2015). In relation to psychological well-being, in his model Ryff (1989) mentions the individual's positive assessments about himself and his past, continuous growth and development, the belief that his life is meaningful and purposeful, having qualified relationships and his capacity to manage his life and the world around him effectively and his ability to make decisions independently from others (Ryff, 1989; Ryff & Keyes, Shmotkin & Ryff, 2002; Ryff & Singer, 2006). In addition, it was presented that academic achievements, degree of satisfaction with achievements and level of coping with stressful situations are high in individuals with high psychological well-being levels (Trucchia, Lucchese, Enders, & Fernández, 2013). On the other hand, positive relationships were also found between individuals' psychological well-being and their social skills (Nair, Ravindranath, & Thomas, 2013), job performances (Robertson & Cooper, 2010) and job satisfactions (Lin, MacLennan, Hunt, & Cox, 2015).

Job satisfaction is defined as a positive, relaxing and calming affection that the individual tries to get from his working environment (Cribbin, 1972, p.155); general attitude towards the job (Rue & Byars, 1995, p. 363); reaction to the working environment (Porter, Lawyer, & Hackman, 1975; Berry, 1997); how people feel the different aspects of their jobs (Spector, 1997, p. 2); degree of positive-negative feelings about the job (Schermerhorn, Osborn, Uhl-Bien, & Hunt, 2012, pp. 63-67); satisfaction or dissatisfaction felt by the employees (Bakan & Büyükbeşe, 2004) and the job's level of satisfying the employee's requirements during or after the work (ILO, 1998). Job satisfaction is born from the harmony between individual's needs and work organizations' expectations (Weiss, Dawis, England, & Lofquist, 1967). While *internal factors* which affect job satisfaction are discussed as gender, age, service time, marital status, education level, personality, motives, knowledge, skill and abilities; *external factors* are expressed as salary, physical conditions, working conditions (heat, light, noise, etc.), promotion conditions, hierarchic relations, relations with the co-workers, creativity, occupational safety, organizational structure, organizational culture and organizational climate (Telman & Ünsal, 2004). In this research, job satisfaction is discussed in two sub-dimensions as internal and external satisfaction.

Studies conducted indicate that psychological capital is associated with individuals' psychological well-being and having high psychological capital affects their psychological well-being positively (Avey, Luthans, Smith, & Palmer, 2010; Choi & Lee, 2014; Luthans & Youssef-Morgan, 2017). In the study of Youssef and Luthans (2007) on the subject, it was concluded that hope, optimism and resilience which are the components of psychological capital have positive impact on the performance, job satisfaction, working happiness and job commitment of the employee. This situation shows that managers who create a positive climate in their organizations and expect highest productivity from their employees have to understand strengths or weaknesses and positive or negative behaviour variables of their employees depending on their personalities, evaluate what could be done for more devotion by determining its impact on their work; in other words invest in their "psychological capital" (Seligman, Steen, Park, & Peterson, 2005; Keles, 2011; Luthans & Youssef-Morgan, 2017). On the other hand, it is thought that psychological well-being and psychological capital are associated with employees' job satisfaction. Pointing out the individuals' internal reactions that they develop in relation to their perceptions of job and working conditions (Schneider & Snyder, 1975) and their inner peace (Mercer, 1997) through individuals' norms, values and expectations system; job satisfaction also gives information about their general attitudes in relation to their jobs (Bakan & Büyükbese, 2004). It was reported that increase in job satisfaction has a positive impact on overall life satisfaction, mental-physical health and behaviours at individual level and on productivity and organizational commitment at organizational level; however, decrease in job satisfaction leads to some outcomes such as being late for work, absence and quitting job (Gürsoy, 2013). The results of the research indicate that hopeful, optimistic, self-confident and resistant employees are more dynamic and have higher job satisfaction than other employees (Luthans et al., 2007b; Luthans et al., 2007a; Youssef & Luthans, 2007).

Psychological capital and psychological well-being of teachers have a significant place in education organizations' achieving their objectives. In the APA (2015) report "Top 20 Principles from Psychology for

Prek-12 Teaching and Learning", it is suggested that teachers' psychological well-being is an integral part of successful operation of the class every day and it affects academic performance and learning. It is thought that psychological capital perception of teachers, who have important roles in teaching and learning process, is important and teachers' psychological capital perception also has a predictive role on their job satisfaction and psychological well-being. On the other hand, it was stated that teachers, who are the designer of school and class environment, should have a positive psychology to provide positive contributions in education system (Cakmak & Arabaci, 2017). At this point, it is necessary to focus on teachers' psychological well-being which expresses their self-acceptance, purpose in life, interpersonal positive relationships, personal growth, capacity of managing themselves and their environment effectively and autonomy; their psychological capital which expresses their state of being self-efficacious, optimistic, hopeful and resilient and their job satisfaction which expresses their internal and external satisfaction. For this purpose, the research emphasizes the psychological capital, psychological well-being and job satisfaction of secondary school teachers. Therefore, this research aims to test the accuracy of a three-dimensional model which shows the relationship of psychological capital, psychological well-being and job satisfaction of secondary school teachers. The study is considered important in that it discusses the teacher, which is the most important element of the education system, with especially positive psychology approach. It is expected that the study provides general data on teachers in the context of positive psychology and contributes in creating anticipations and policies in relation to happy teachers and happy educational organizations of the future. It is also expected that limited number of studies on this subject conducted with educational organizations in the national field will make the study important. No study was found on to what extent the psychological capital of secondary school teachers predicts their psychological well-being and whether job satisfaction with both internal (for example; personality, autonomy) and external (for example; management, salary) features has a mediator impact in this relationship. For that reason, this study aims to identify the relationship between teachers' psychological capital and their psychological well-being and job satisfaction. Within the framework of this objective, answers will be sought for the following questions:

- a) What are the psychological capital perception, psychological well-being and job satisfaction levels of secondary school teachers?
- b) Does job satisfaction level have a mediator role in the relationship between psychological capital perception and psychological well-being of secondary school teachers?

2. Research Method

The research is a descriptive study in relational screening model. The research model includes three variables; one independent variable (psychological capital) and other two dependent variables (job satisfaction and psychological well-being). However, job satisfaction variable may also be expressed as mediator variable in the structural model. The research is designed as a correlational study which shows the direct and indirect predictive impacts of the independent variable on dependent variables. It is stated that correlational studies do not provide any evidence for causality, but a cause and effect relationship may be obtained at a certain level by means of implementing advanced statistical methods (Fraenkel & Wallen, 2009). In this study, a structural equality model is established to define direct or indirect predictive factors based on the literature. On the other hand, defining mediator variable between the predictive variable and predicted variable is expressed as one of the most important advantages of path analyses (Çokluk, Şekercioğlu, & Büyüköztürk, 2014, p. 340).

3. Population and Sample

The study population consists of 12714 teachers working in official secondary schools in seven central districts in Ankara Province. Sample of the population is selected by multi-stage sampling method. Stratified sampling method is used in the first stage and simple random sampling method is used in the second stage. Sample size is calculated as at least 384 teachers. With the purpose of minimizing the impact of difficulties to be encountered during implementation and increasing the validity of the sample, it was targeted to reach over 400 people. Of the 415 questionnaires collected, 21 were excluded before analysis as they were not filled in properly and analyses of the main implementation were conducted with remaining 394 questionnaires. Table 1 gives distribution of the teachers who participated in the research according to their demographic features.

Demographic Variables	Categories	n	%	
Gender	Female	308	78.2	
	Male	86	21.8	
Marital Status	Married	316	80.2	
	Single	78	19.8	
Seniority (years)	1-5	93	23.6	
	6-10	73	18.5	
	11-15	70	20	
	16-20	79	20	
	21-26	39	10	
	26 (+)	31	7.9	
Branch	Numeric	130	33	
	Verbal	145	36.8	
	Culture-Arts	60	15.2	
	Foreign Language	59	15	
Working time in the school (years)	1-5	315	80	
	6 (+)	79	20	
Education Level	Undergraduate	335	85	
	Postgraduate	59	15	
Syndicate	Member	198	50.25	
-	Non-member	196	49.75	
Total		394	100	

Table 1. Distribution of teachers who participated in the research according to their demographic features

In Table 1, approximately four fifths (78.2%) of the teachers who participated in the research are female and one fifth (21.8%) are male teachers. 80.2% of the sample are married and 19.8% are single. It is seen that the participants are distributed as 33% in numeric field, 36.8% in verbal field, 15.2% in culture and arts field and 15% in foreign language field according to their branches. 80% of the teachers worked for 1-5 years in the school they are currently working and 20% worked for 6 years and more. While 85% of the participant teachers have undergraduate and 15% have postgraduate education, the number who are or are not members to a syndicate is quite close.

4. Data Collection Tools

Validity and reliability studies were conducted for the scales used as data collection tools in this research. In the analysis process, first the assumptions of confirmatory factor analysis (CFA), which is one of the multivariate statistical techniques, were tested (Karagöz, 2016). After the suitability of the sample size, lost data, single and multivariate extreme value, single and multivariate normality, linearity and multicollinearity assumptions are examined, it was decided that CFA could be done for all scales used.

Psychological Capital Scale (PCS): Developed by Luthans, Youssef and Avolio (2007b, p. 237-218) and Luthans, Avolio, Avey and Norman (2007a), Psychological Capital Scale consists of 24 items. This scale includes optimism, hope, self-efficacy and resilience sub-dimensions each of which consists of six items. The scale was adapted to Turkish and validity-reliability analyses were conducted by Çetin and Basım (2012). Results obtained by Çetin and Basım (2012) indicated that reliability coefficients of the sub-dimensions of the scale are between 0.67 and 0.85 and test-retest values vary between 0.70 and 0.77. Then, validity study of the scale was conducted. According to these results, the rate of chi-square statistics of the scale to degree of freedom is $\chi 2/df = 2.07$ ($\chi 2=509.4$; df=246); root mean square error of approximation (RMSEA) is 0.058; Tucker-Lewis index (TLI) value is 0.88 and comparative fit index (CFI) value is 0.87 (Çetin & Basım, 2012). CFA was conducted with the purpose of investigating the construct validity of PCS in the sample of secondary school teachers. According to the results obtained; it can be stated that the value obtained corresponds to good fit as $\chi 2/df$ value (2.84) is between 2 and 3 (Kline, 2011; Sümer, 2000). In addition, Cronbach's Alpha reliability coefficient is 0.88 for the PSC used within the scope of this research.

Psychological Well-being Scale (PWS): Developed by Ryff (1989), PWS is adapted to Turkish by Akın (2008). In Akın's (2008) study, the Cronbach's Alpha Coefficient of the scale is determined as (.94) for autonomy sub-scale, (.97) for environmental dominance, (.97) for individual development, (.96) for positive relationships with others, (.96) for life goals and (.95) for self-acceptance. Test-retest reliability coefficients of the scale which are made in four weeks interval vary between (.78) and (.97). Total item correlations of the scale are listed between (.32) and (.90) (Akın, 2008). In the exploratory factor analysis conducted within the scope of Akın's (2008) study, it was seen that 68% of total variance of the items were explained and collected in 6 factors. The factor loads vary between .30 and .94. In the confirmatory factor analysis, fit index values are calculated as RMSEA= .07, NFI= .97, CFI= .98, GFI= .93 and SRMR= .06. According to the validity study conducted within

the scope of this research, it can be stated that the value obtained corresponds to good fit as χ^2/df value (3.51) is between 3 and 5 (Kline, 2011; Sümer, 2000). In addition, Cronbach's Alpha reliability coefficient is 0.75 for the PWS used within the scope of this research.

Minnesota Job Satisfaction Questionnaire (MJSQ): Validity and reliability studies were made for MJSQ which was developed by Weiss, Dawis, Lofguist and England (1967) and adapted to Turkish by Baycan (1985) and Cronbach's Alpha reliability coefficient was found as .77. Reliability and validity of this scale, which has features for determining the internal, external and overall satisfaction level and which is a 5-point Likert scale consisting of 20 items, was evidenced with a number of studies (Özdayı, 1990; Martins & Proença, 2012). Within the scope of this study, confirmatory factor analysis (CFA) and validity and reliability study of the scale were conducted on the sample which consists of secondary school teachers in accordance with the internal and external satisfaction sub-dimensions of the scale. Model-data fit indexes (RMSEA, AGFI, GFI, CFI, NFI, NNFI), chi-square (χ 2), degree of freedom and χ 2/df values obtained as a result of CFA conducted using Likelihood estimation method are given in Table 2. According to the CFA results within the scope of validity study of MJSQ; it can be stated that the value found corresponds to good fit as χ 2/df value (2.99) is between 2 and 3 (Kline, 2011; Sümer, 2000). In addition, Cronbach's Alpha reliability coefficient is 0.90 for MJSQ within the scope of this research. Confirmatory factor analysis (CFA) results of all scales used in the research are given in Table 2.

Table 2. Model-data fit indexes in CFA result for scales

Scales	χ^2	df	χ²/df	RMSEA	SRMR	AGFI	GFI	CFI	NFI	NNFI
PCS	704.88	248	2.84	0.068	0.065	0.81	0.84	0.95	0.93	0.95
PWS	449.43	128	3.51	0.080	0.087	0.83	0.87	0.86	0.81	0.83
MJSQ	496.85	166	2.99	0.071	0.066	0.82	0.86	0.96	0.94	0.95

Model-data fit indexes in the CFA result for all scales are shown in Table 2. According to the values given in Table 2 and Cronbach's Alpha values given above, it can be stated that each scale used within the scope of the research gives valid and reliable results.

5. Data Analysis

To determine construct validity of the scales used within the scope of research, confirmatory factor analysis was conducted (Hair, Anderson, Tatham, & Black, 1998). One of the multivariate statistics techniques, CFA requires fulfilling some assumptions (Cokluk, Sekercioğlu, & Büyüköztürk, 2010). First, suitability of the sample size for analysis was checked and it was concluded that the sample is at least 16 times the number of items in each scale. After it is determined that there are no loss values in the dataset, standard z values were examined for univariate extreme value and it was seen that these values are in limit value range (-3, +3). To determine if there is a multivariate extreme value, Mahalanobis distance was calculated and values obtained for each scale were compared with the critical value on χ^2 table on 0.001 significance level and it was concluded that there are not extreme values which deviate significantly from the sample. To test univariate normality assumption, descriptive statistics of the scores obtained from each scale and their sub-dimensions were calculated and histogram graphics were drawn. As a conclusion, it was concluded that distributions are close to normal (Tabachnick & Fidell, 2013). Linearity and multivariate normality assumptions were examined with scatter diagram and Barlett globality test. The results obtained indicate that there is a linear relationship between the variables and the data meets the multivariate normality assumption (Taysancıl, 2005). With the purpose of investigating whether there is multiple connectivity problem between variables, calculated VIF (variance increase factors) value was found below 10, tolerance value was found below 1.00 and condition index values were found below 30. In addition, correlations between variables were examined and results indicated that there is no multiple connection problem (Kalaycı, 2014). To improve model-data compatibility, modifications were made between maximum three item couples which are theoretically suitable for modification and provide a significant decrease in χ^2 value (Jöreskog & Sörbom, 1993).

Likert codes of the scales were used in the evaluation of the first sub-problem and various fit indexes of structural equality model were used in the evaluation of the second sub-problem. Structural Equality Modelling (SEM) is a technique based on covariance which can be observed and define the causality and relationship among latent variables based on a certain theory (Kalaycı, 2014). Structural equality models are accepted as the main method in researches especially which involve multiple relationships between dependent and independent variables (Şimşek, 2007). The main goal here is to test a theoretical model statistically with the data obtained and

determine to what extent the theory and research results match (Tabachnick & Fidell, 2013).

6. Results

The scales used within the scope of the research are; Psychological Capital Scale (PCS) which is a six-point Likert Scale and Psychological Well-being Scale (PWS) and Minnesota Job Satisfaction Questionnaire (MJSQ) which are five-point Likert scales. Table 3 shows descriptive statistics on secondary school teachers' level psychological capital perception, psychological well-being and job satisfaction as well as their sub-dimensions and standard deviation values.

Scales	Lowest	Highest	\overline{X}	S
PCS	2.37	5.53	4.02	0.62
Optimism	2.50	5.66	3.91	0.49
Норе	2.16	5.16	4.01	0.43
Self-efficacy	2.50	5.83	4.20	0.59
Resilience	2.33	5.50	3.99	0.50
PWS	2.72	4.67	3.83	0.35
Self-acceptance	1.67	5	3.89	0.56
Personal Growth	2	5	4.08	0.55
Purpose in Life	2	5	3.78	0.59
Positive Relations	2.33	5	4.01	0.62
Environmental Dominance	1.67	5	3.58	0.54
Autonomy	2	5	3.61	0.50
MJSQ	2.2	5	3.67	0.49
Internal Satisfaction	2.17	5	3.87	0.51
External Satisfaction	1.63	5	3.39	0.57

Table 3. Secondary school teachers' psychological capital, psychological well-being and job satisfaction levels

According to the values given in Table 3, the highest average score in PCS was found in *self-efficacy* (\overline{X} =5.83), the lowest average score was found in *hope* (\overline{X} =2.16) sub-dimension. In PWS; the lowest score was found in *environmental dominance* and *self-acceptance* sub-dimensions (\overline{X} =1.67). In MJSQ; the average score of external satisfaction dimension (\overline{X} =1.63) was found to be less than internal satisfaction (\overline{X} =2.17). The average scores that teachers get from scales are calculated as \overline{X} =4.02 from PCS; \overline{X} =3.83 from PWS and \overline{X} =3.67 from MJSQ. This indicates that teachers' psychological capital perception is *good* and their psychological well-being and job satisfaction are *high*. When the standard deviation values of sub-dimensions of the scales are examined in Table 3; it was seen that the most homogenous distribution is in *hope* sub-dimension (S=0.43) and the most heterogeneous distribution is in *self-efficacy* sub-dimension (S=0.59) in PCS; the most homogenous distribution is in *positive relations* sub-dimension (S=0.62) in PWS. In MJSQ, *internal satisfaction* sub-dimension (S=0.43) has a more homogenous distribution compared to *external satisfaction* sub-dimension (S=0.62).

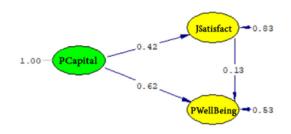
Path analysis was conducted to determine to what extent and in which direction the job satisfaction has a mediator role in the relationship between psychological capital perception and psychological well-being of teachers. In general, path analysis aims to reveal the direct and indirect impacts of predicting variables on predicted variables (Kline, 2011, p. 311). With this purpose, it was determined that the dataset meets the multivariate normality assumption before the analysis (p > 0.05). Within the scope of the research, independent variable is psychological capital; dependent variable is psychological well-being and mediator variable is job satisfaction.

Results regarding statistical fit of the structural equality model established within the scope of this research are examined. Kline (2011, p. 204) recommends that χ^2 /df rate in which χ^2 value is examined together with df is used as a criterion for competence during evaluation of model fit. In this research, χ^2 /df value is obtained as 3,03. In other words, dataset has a perfect fit with the model (Kline, 2011, p. 204). Later, alternative fit indexes in relation to the model were examined. Results regarding path analysis of the research model are given in Table 4.

Table 4 Fit	values regarding	nath analysis	of research model

χ^2	df	χ^2/df	RMSEA	SRMR	AGFI	GFI	CFI	NFI	NNFI
154.68	51	3.03	0.072	0.057	0.91	0.94	0.97	0.95	0.95
p <.05.									

According to Table 4, it is seen that the research model has good fit values in general, these values are acceptable and verified as a model. Results regarding structural model of the research are shown in Figure 1.



Chi-Square=154.68, df=51, P-value=0.00000, RMSEA=0.072

Figure 1. Structural model of the research

Cohen (1988) states that coefficients around 0.10 can be interpreted as small, coefficients around 0.30 can be interpreted as medium and coefficients over 0.50 can be interpreted as big impacts for standardized path coefficients. According to Figure 6, it is seen that there is a moderate level, positive and significant relationship between psychological capital and job satisfaction when the structural model of the research is examined (y = .42). This value means that 1-point increase in psychological capital will cause .42-point increase in job satisfaction and vice versa 1-point increase in job satisfaction will cause .42-point increase in psychological capital. In other words, as the teachers' psychological capital levels increase, their job satisfaction levels increase. A low level, positive and significant relationship was found between job satisfaction and psychological well-being ($\beta = .13$). This value means that 1-point increase in job satisfaction will cause .13-point increase in psychological well-being and vice versa 1-point increase in psychological well-being will cause .13-point increase in job satisfaction. In other words, as the teachers' job satisfaction increases, their psychological well-being levels increase. A high level, positive and significant relationship was found between psychological capital and psychological well-being ($\gamma = .62$). This value means that 1-point increase in psychological capital will cause .62-point increase in psychological well-being and vice versa 1-point increase in psychological well-being will cause .62-point increase in psychological capital. In other words, as the teachers' psychological capital perception increases, their psychological well-being levels increase.

According to research results; it is understood that psychological capital (γ =0.62) and job satisfaction (β =0.13) together explain 47% of psychological well-being. This result can be interpreted as that 47% of the total change in psychological well-being variable can be explained by the direct impact of psychological capital and job satisfaction variables and also by the indirect impact of job satisfaction variable on psychological capital variable. According to these results, it can be said that job satisfaction has a partial mediator role in the relationship between psychological capital perception and psychological well-being of teachers.

7. Discussion, Conclusion and Suggestions

According to the results of the analysis conducted within the scope of first sub-problem of the research, teachers' *psychological capital* perceptions ($\overline{X} = 4.02$) are found on a good level. This result is in parallel with the research results of Çakmak and Arabacı (2017), Li and He (2011), Wang, Chen and Hsu (2014). The fact that teachers, who have important roles in educational organizations, have a good psychological capital perception indicated that they find themselves on a good level in general in terms of self-efficacy, optimism, hope and resilience. It

was reported by different researchers that performance increase can be achieved by activating individuals' positive aspects and strengthening their psychological capital which has improvable features (Luthans et al., 2007a; Youssef & Luthans, 2007; Avey et al., 2009; Hefferon & Boniwell, 2014, p. 82). In addition to teachers' own perception, in-depth information can be obtained about their psychological capital status by taking the context into consideration. According to the results obtained and investigations carried out, psychological capital affects both job satisfaction and psychological well-being of teachers. In that respect, self-efficacy, optimism, resilience and hope levels of each teacher can be improved by means of in-service trainings, seminars, improving work life conditions, etc.

As a result of the research, teachers' *psychological well-being* (\overline{X} =3.82) is found high. This result matches with the results of the researches by Mehdinezhad (2012); Konu, Viitanen and Lintonen (2010). In his study, Özen (2010) stated that psychological well-being is effective in development of personal responsibility behaviour. Trucchia, Lucchese, Enders and Fernández (2013) reported that individuals whose psychological well-being levels are high have high academic success, high level of satisfaction with the achievements and high level of coping with stressful situations. Gibbs and Miller (2014) reported that resilience loss in teachers may affect psychological well-being negatively. Seligman (2002) and Post (2005) reported that happy people are more giver for others. Similarly, Barker and Martin (2009) reported that high well-being in teachers contributes in creative teaching in the class and Noddings (2005) reported that it contributes in creation of a positive classroom climate.

According to the results of the study, teachers' *job satisfaction* (\overline{X} =3.67) was found high. This result matches with the results of the researches by Taşdan and Tiryaki (2008); Bota (2013); Karataş and Güleş (2010). However, job satisfaction of teachers was found 'moderate' in various researches (Şahin, 2013; Taşdan, 2008). According to Telman and Ünsal (2004), the employee finds the job more meaningful and takes more responsibility about the job and an increase is seen in the employee's motivation and performance when the job satisfaction is high. One of the sub-dimensions of psychological capital is self-efficacy. As a result of the research by Klassen and Chiu (2010), it was found that job satisfaction is high in teachers who have high self-efficacy.

In researches, it is seen that psychological well-being is associated with many variables on individual and organizational level in general. Choi and Lee (2014) and Avey, Luthans, Smith and Palmer (2010) reported that psychological well-being of the employee is associated with their psychological capital. Jacobsson, Åkerlund, Graci, Cedstrand and Archer (2016) investigated the relationship between the efficiency of teacher teams and their well-being. Research results indicate that there is a strong relationship between teachers' team work and well-being in terms of job satisfaction levels. On the other hand, Luthans et al., (2007); Luthans, Avolio, Avey and Norman (2007a); Luthans, Norman, Avolio and Avey (2008); Youssef and Luthans (2007) identified positive relationships between job satisfaction and psychological capital. Within the scope of this research, the relationship of secondary school teachers with psychological capital, job satisfaction and psychological well-being variables is investigated.

The second sub-problem of the research is "Does job satisfaction level have a mediator role in the relationship between psychological capital perception and psychological well-being of secondary school teachers?" According to the results of the structural equality model established for the research, it is seen that the best indicator of psychological capital is *self-efficacy* and *hope*; the best indicator of job satisfaction is *internal* satisfaction; the best indicator of psychological well-being is self-acceptance. According to results of the research, psychological capital levels of teachers predicts approximately one fifth (19%) of their job satisfaction. In other words, psychological capital levels of teachers affect their job satisfaction levels positively. This result matches with the results of the researches by Luthans and Youssef (2007); Luthans, Avolio, Avey and Norman (2007a); Luthans, Norman, Avolio and Avey (2008); Youssef and Luthans (2007) and Akçay (2012). However, as a result of the research by Topçu, Oğuzhan and Beğenirbaş (2017), Çakmak and Arabacı (2017), no impact of psychological capital on job satisfaction was found. In the research of Akçay (2012) who found a significant and positive relationship between psychological capital and its components and job satisfaction, it was determined that psychological capital scale is a factor which has a higher explanation level in determining job satisfaction as a whole compared to the separate impact of its four components; the results obtained support other research results. Byrd-Blake (2010) reported that teachers are recently demoralized and highly worried. Parthi and Gupta (2016) stated that job satisfaction of employees should be increased; Keles (2011) stated that employees should anticipate opportunities with high performance and try many ways and increase their job satisfaction to overcome barriers; Klassen and Chiu (2010) stated that teachers' self-efficacy, optimism, hope and resilience levels should be increased by investing in their psychological capital to enable them to maintain their jobs.

According to the data obtained within the scope of the second sub-problem of the research, there is a low (12%),

positive relationship between the job satisfaction variable and teachers' psychological well-being. In the research by Lin, MacLennan, Hunt and Cox (2015), positive relationships were found between individuals' job satisfaction and psychological well-being. On the other hand, psychological capital variable predicts approximately half (45%) of teachers' psychological well-being. In the literature, there are studies which identify relationships between psychological capital and psychological well-being in the same direction (Cole et al., 2009; Avey et al., 2010; Roche Haar & Luthans, 2014; Laschinger & Fida, 2014). In addition, in the studies by Avey et al. (2010), Luthans et al. (2007), Choi and Lee (2014), Luthans et al. (2007) and Akçay (2012) the structure of the relationship between psychological capital and psychological well-being is investigated on different samples and with different variables. In general, it is seen that psychological well-being is associated with the psychological capital infrastructure that individuals have. Researches on the matter indicate that having high psychological capital affects psychological well-being positively (Avey, Luthans, Smith and Palmer, 2010; Choi & Lee, 2014; Luthans & Youssef-Morgan, 2017).

As a result of this research, it is understood that psychological capital perception and job satisfaction variables together predict approximately half of the psychological well-being variable. This result can be interpreted as that approximately half of the total change in psychological well-being variable is explained by the direct impact of psychological capital and job satisfaction variables and also by the indirect impact of job satisfaction variable. According to this, psychological capital variable affects psychological well-being of teachers both directly and indirectly by means of job satisfaction. As a conclusion, it can be stated that job satisfaction has a partial mediator role in the relationship between the psychological capital perceptions and psychological well-being of teachers.

As a result of this research, some suggestions were made for researchers and implementers. With the experimental study by Luthans, Avey and Patera (2008), it was shown that a short (two hours) web-based training which is implemented for strengthening psychological capital infrastructure is effective. In that respect, experimental studies may be conducted for increasing psychological capital and theories may be put into practice by researchers. Work may be carried on new models which show the precursors and results which will enable teachers' psychological well-being together. In addition to teachers' psychological well-being, overall well-being of teachers in more comprehensive aspects such as subjective, social and physical well-being and its reflections on education outcomes may be investigated. When this study which is prepared according to quantitative research techniques is implemented with qualitative or mixed research techniques, more comprehensive results may be obtained. In relation to implementers, psychological capital levels of teachers may be increased by giving short term trainings by experts. Similarly, it is suggested that policies developed for teachers should be more motivating and support strengthening their self-efficacy, hope, optimism and resilience levels. In general, it can be said that increasing psychological capital, job satisfaction and psychological well-being of teachers will contribute in using their existing potential on the maximum level.

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