

MODERATING ROLE OF PSYCHOLOGICAL WELL-BEING ON THE RELATIONSHIP BETWEEN PSYCHOLOGICAL CAPITAL AND JOB SATISFACTION

Emel ESEN

*Yıldız Technical University, Davutpaşa Kampüsü, Esenler, 34220 İstanbul, Turkey
emeloz@yildiz.edu.tr*

Gülsüm Elik BESDİL

*Yıldız Technical University, Davutpaşa Kampüsü, Esenler, 34220 İstanbul, Turkey
gulsumelik@gmail.com*

Turhan ERKMEN

*Yıldız Technical University, Davutpaşa Kampüsü, Esenler, 34220 İstanbul, Turkey
terkmen@yildiz.edu.tr*

Abstract

Psychological well-being has been defined as the result of managing situations related to one's existence throughout his life. At the same time, it is a phenomenon that occurs as a result of the well-being of life, feeling good, and efficient behavior. The main purpose of this research is to explore the moderating role of psychological well-being on the effect of psychological capital on job satisfaction. Based on that, a survey is conducted on 141 participants who work in the energy sector in Turkey. The psychological capital scale was developed by Luthans et al. (2007) was used to measure psychological capital. The scale developed by Hackman and Oldman (1975) was used to measure job satisfaction. For the measurement of psychological wellbeing, the scale developed by Ryff (1989) and consisting of 84 items was used, which was later reduced to 18 items by Ryff and Keyes (1995). According to the results of the analysis, while there was a relationship between psychological capital and job satisfaction, it was revealed that psychological well-being did not have a moderating role between these two variables. When the relationship between the variables is examined, it was observed that there is a significant relationship between psychological well-being and psychological capital, psychological well-being and job satisfaction, and psychological capital and job satisfaction. With a positive organizational behavior perspective, this study is valuable to examine the positive resources of engineers and their psychological wellbeing levels.

Keywords: Psychological capital, job satisfaction, psychological wellbeing, engineers

1. INTRODUCTION

The number of companies appearing in the national and international business arena dramatically increases with a growing number of populations in demand. While such companies were providing goods and services to a smaller environment in the past, they've grown bigger with a greater effect on a much broader environment nowadays. The companies that cannot cope with this new trend of rapid growth are isolated from the current business environment. In different terms, companies with weak financial and human capital lose their competitive advantage while others' market share rises.

With the increase in competition, companies start to challenge each other to dominate the market. Under these competitive circumstances, although high productivity was prior to employee value in the past, employees have become more valuable recently as a strategic advantage. Human resources are no longer costs for companies but rather valuable resources. In times when human resources have first become the center of attention, several kinds of research have been conducted to analyze how to alter employees' negative attributes. However, growing awareness about the importance of human capital and how human resources can be valuable and productive in business organizations by the use of their actual potential, triggered studies in positive psychology. Positive psychology focuses on employees' positive characteristics in order to develop them better, instead of focusing on correcting negative characteristics of employees. Such positive emotions and intentions are generally for the sake of employees. Organizations with happy and satisfied employees can also adapt themselves to the competition. Positive psychology has influenced organizational perspectives, procedures and management philosophies ever since it has arisen. With this new growth approach of positive

psychology, improving positive attributes of employees both for the sake of employees as valuable human capital and for the success of companies have become even a more important issue for academics as well as for practitioners.

Inspired by positive psychology, this study was conducted to determine the moderator role of psychological well-being on the relationship between psychological capital and job satisfaction. In different terms, it is aimed to find out if psychological well-being moderates psychological capital's effect on job satisfaction. Consequently, it will be concluded whether employees' contribution to work arises as they are more satisfied with their jobs. Following the conceptual work of the study, the analysis of data collected from 141 participants will be discussed.

As a result, this research proposes that the relation between psychological capital and job satisfaction is moderated by psychological well-being.

2. THEORETICAL BACKGROUND

2.1. Psychological Capital

POB is defined as "the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement" (Luthans, 2002a, p. 59). Psychological capital has emerged from the positive organizational behavior movement as an important construct (Luthans, Avolio, Avey, & Norman, 2007). Psychological capital lies beyond traditional economic capital (what you have), human capital (what you know) and social capital (who you know) and consists of "who you are" with self-efficacy, hope, optimism and resilience (Luthans et al. 2004). Self-efficacy (confidence), hope, optimism and resilience dimensions of psychological capital are measurable, open to development, and managed for more effective work performance (Luthans, 2002b). Luthans, Youssef, and Avolio (2007) described PsyCap as "characterized by (a) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (b) making a positive attribution (optimism) about succeeding now and in the future; (c) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and (d) when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success" (pp. 3).

Self-efficacy is first based on Albert Bandura's extensive research and social cognitive theory (Youssef, Luthans, 2015). It has been shown that self-efficacy, which is a positive psychological capital capacity, has a strong positive relationship with performance (Luthans, et.al, 2004). People with high self-efficacy increase their motivation to use their strengths and skills to meet and overcome difficulties. At the same time, it encourages and energizes the achievement of its goals and allows investing in the time and hard work that may be required to achieve them (Luthans, Youssef, Avolio, 2007).

Although initially defined as applying to a very specific field of activity, there is a growing acceptance that individuals can have a "generalized" level of self-efficacy within a common task area such as the workplace (Luthans, Youssef, Avolio, 2007). In relation to hope, self-efficacy can be interpreted as believing in a person's skills of producing more than one path, taking actions towards the goal, and ultimately achieving the goal (Avey, Wernsing, Luthans, 2008).

The structure of hope in positive psychology offers significant theoretical development and research support and is generally regarded as an "empowering way of thinking" (Luthans et al., 2010, 5). Snyder (1991) states hope as a positive motivational situation based on a successful emotion, consisting of two components, "agency" (ability to make decisions for the purpose) and "pathway" (ability to find ways to reach the goal).

Scheir and Carver (1985) defined optimism as "generalized expectations that good things will happen". It is an important determinant of the way people achieve their goals, and it assumes that optimists' expectation that good things will happen leads them to approach the goal through striving rather than giving up and returning. In addition, optimism is interpreted as a stable personality trait that is not limited to a specific environment (Snyder et al., 1991).

Optimism is a qualitative style that explains positive events as personal, permanent and common causes and negative events as external, temporary and situational (Luthans, Youssef, Avolio, 2007). Some studies show that optimistic change is possible by revealing 'learned optimism'. Thus, if a person has more or less optimism, it can be said that there is a potential that can be developed through intervention (Luthans et al., 2010).

Psychological resiliency, which is one of the most important elements of the ability to recover when faced with high stress situations, is a feature of the personality that can be called a source of resistance. Also, self-efficacy, hope, and optimism tend to be proactive in nature while resilience is often expressed as reactive in response to a downturn (Avey et al., 2010).

2.2. Job Satisfaction

Job satisfaction began to gain great interest towards the end of this century (Rukh et al., 2015). Job satisfaction is a concept that defines how people feel about their job and the different aspects of their job, and to what extent these people like (are satisfied) or dislike (unsatisfied) their jobs. Previously, job satisfaction was approached by some researchers in terms of whether it meets physical or psychological needs in terms of benefits provided by work, such as wages. However, most researchers nowadays tend to focus on conceptual processes rather than essential needs (Spector, 1997).

Spector (1997) mentioned three important features of job satisfaction. These can be listed as follows: First, he stated that organizations should be managed according to human values. Organizations managed with such values will be careful about treating their employees respectfully and fairly. In such cases, the evaluation of job satisfaction can be presented as an indicator of the effectiveness of the employees. It is stated that a high level of job satisfaction, emotional and mental states of the employees are good. As a second feature, the functioning and activities of institutions will be affected by the behavior of employees as a result of their job satisfaction levels. In other words, it is concluded that if an employee's job satisfaction level is high, this leads to positive behaviors, if the job satisfaction level is low, that is, if there is a dissatisfaction, this leads to negative behaviors. Finally, he said that job satisfaction can be an indicator of organizational activities. By evaluating the job satisfaction levels in organizations, different levels of satisfaction can be determined in different organizational units, and thus, it will be concluded about what organizational unit changes should be made in order to increase performance.

Job satisfaction is a factor affected by the nature of the job, advancement opportunities, wages, management, working conditions and groups. These factors are also thought to lead to job dissatisfaction (Aziri, 2011). It is said that these factors affecting job satisfaction constitute the dimensions of job satisfaction.

2.3. Psychological Wellbeing

Employee wellbeing, often defined in academic literature as "subjective well-being" (Diener, 1994) or "psychological well-being" (Wright, Cropanzano, & Bonett, 2007). Psychological well-being studies have been thought to be guided by two basic understandings for a long time. In the first of these, a distinction has been made between positive and negative effects and happiness has been determined as a balance between these two. According to another understanding that comes from the sociologists, life satisfaction is considered as the main indicator of well-being. Thus, it has been stated that life satisfaction completes happiness and gives a more effective dimension to positive functioning (Ryff, Keyes, 1995).

In our study, we used Ryff propose a model that each of the dimension examine what it means to be healthy, well, and fully functioning (Ryff and Singer, 2008). Ryff's model of psychological wellbeing consists of six distinct dimensions as: self-acceptance, environmental mastery, positive relations with others, purpose in life, personal growth, autonomy (Ryff and Keyes, 1995). People with high self-acceptance have a positive attitude toward the self, his/her past experiences, accept his/her good and bad qualifications. Maslow described people with self-actualization that have close relationship with other people (Ryff and Singer, 2008). Environmental mastery is the ability to manage one's life and personal growth is being open to new experiences (Abbott et al, 2010).

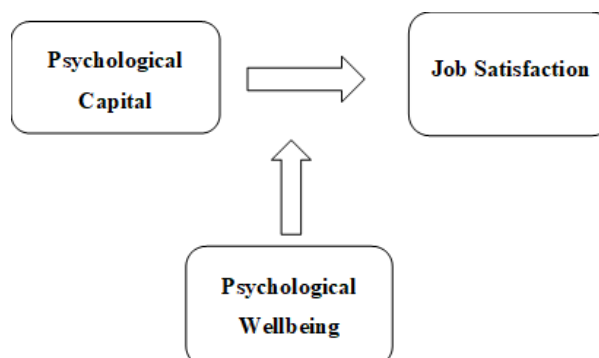


FIGURE 1 - RESEARCH MODEL

Figure 1 represents the research model and hypothesized relations between the psychological capital, job satisfaction and psychological wellbeing.

2.4. Psychological Capital and Job Satisfaction

The relationship between PsyCap and various employee attitudes were tested and analyzed in many studies. Avey et al. (2011) conducted a meta-analysis to support the relationship between psychological capital and desirable/undesirable outcomes. They found that employees with high levels of PsyCap have greater job satisfaction, organizational commitment, show desirable work attitudes, behaviors and perform better at work. On the other hand, psychological capital was negatively related to undesirable attitudes and behaviors as cynicism, turnover, stress and deviance (Avey et al., 2011; Luthans and Youssef-Morgan, 2017).

Badran and Youssef-Morgan (2013) tested the relationship between the psychological capital composed of hope, efficacy, resilience and optimism and employees' job satisfaction, proposed that psychological capital can lead to job satisfaction through several positive mechanisms. According to the results of the study of Jung and Yoon (2015), psychological capital is an important predictor in determining employees' attitudes and behaviors. Specifically, hope and optimism are significantly related to job satisfaction. People with high hope are more adaptive to challenging conditions, they can have goals and ways to accomplish them in their organizations, therefore they are more likely to feel positive about their job and perform high job satisfaction (Kwok et al. 2015). Optimistic people explain positive events based on internal, permanent and pervasive factors, on the other hand interpret negative events as external, temporary and situation-specific (Youssef and Luthans, 2007).

Based on the previous studies on the effect of psychological capital on job satisfaction, the following hypothesis was formulated:

H1: Psychological capital will be positively related to job satisfaction.

2.5. Moderating Role of Psychological Wellbeing

The concept of psychological well-being is a subjective term that expresses different meanings for different people, as well as a situation within the experience of the individual. However, psychological capital is said to shape psychological well-being (Singh, 2009, 233). Psychological well-being is a derivative of the field of positive psychology and requires the development of positive emotions to ensure the optimal functioning and experience of the individual. In addition, psychological capital helps to trigger cognitive, conceptual and social mechanisms as well as leads to the formation of psychological well-being. In addition, it facilitates the field-specific experiences and interpretation processes in satisfaction in order to have a lasting effect on psychological well-being (Manzano-Garcia, Ayala, 2017). Luthans et al. (2007) stated that the dimensions of psychological capital can be better predicted when evaluating individual resources as a whole rather than independently.

Well-being is a combination of emotional, psychological and social well-being. In addition, it helps to identify how stress is handled, how we relate to others, and choices are made. It has been proven that there is a

positive correlation between well-being and psychological capital, along with significant work attitudes, behaviors, and performances (Nafees, Jahan, 2017).

There are some overlaps between efficacy dimension of PsyCap and Ryff's environmental mastery (Culbertson, Fullagar and Mills, 2010). Self-efficacy can be conceptualized as personal psychological capacities and resources and it may serve to support or guide individuals in how they conceptualize life experiences. On the other hand, eudaimonic well-being is best thought of as optimal positive functioning.

It is thought that the subjects that attract the most attention of people are the pursuit of well-being and happiness. In general, when the term happiness is used, it is mostly associated with the psychological or subjective well-being of the person (Diener et al., 1999). In addition, psychological well-being has three defining features. First, well-being is when people are happy when they subjectively accept themselves as they are. Second, well-being includes some emotional conditions. People who are particularly psychologically well are more likely to experience positive emotions and less likely to experience negative emotions. Thirdly, well-being refers to a person's life as a whole. According to the hypothesis; 'Happy' workers show higher levels of job-related performance behaviors than 'unhappy' workers. This hypothesis establishes a relationship between employees' performance classifications and job satisfaction assessments (Wright, Cropanzano, 2000). Job satisfaction usually includes conceptual-based evaluation of work-related objects, while happiness refers to the broader emotional well-being. While happiness expresses the individual's feeling, job satisfaction shows the aspects of an individual's job evaluation. Thus, job satisfaction and happiness have become closely linked for many researchers (Wright, Doherty, 1998).

The most obvious way to functionalize the happiness component of the happy-productive worker hypothesis in organizational studies has been to measure job satisfaction. In order to equate a happy worker, that is, a psychologically good worker, with a satisfied worker, it is necessary to make two assumptions. The first assumption is that job satisfaction does not include aspects of one's life outside of work, as it is specific to one's job. This relatively narrow scope stands in contrast to psychological well-being research, which is considered to be a broader structure than job satisfaction. The second accepted assumption involves how job satisfaction is typically measured in organizational research (Wright, Cropanzano, 2000).

Based on the related literature, the following second hypothesis was formulated.

H2: Psychological wellbeing will moderate the relation between psychological capital and job satisfaction.

3. METHOD

3.1. Sample and Data Collection

The study was conducted with 141 (98 engineers) employees who are working in the energy sector in Turkey. Table 1 represents the demographic characteristics of participants. The majority of the participants were men. 102 of the employees are between 26-35 ages. 123 employees have graduate and master degree. 98 employees were graduated from engineering degree. 121 of the participants are working in electric area. Convenience sampling method and snowball sampling methods were used for the reason of convenience and accessibility of the participants.

TABLE 1: Demographic Characteristics

Gender	Women	34	Man	107			
Age	20-25	12	26-35	102	36-45	22	46 and above 5
Education Level	High school	7	Associate degree	11	Bachelor	100	Master 23
Graduate	Engineering	98	Administrative Sciences	29	Other	14	
Tenure	0-5	64	6-10	58	11-15	12	16 and above 7
Working area	Electric	121	Natural gas	21	Petroleum	3	LPG 3
Position	Assistant Specialist	23	Specialist	64	Supervisor	34	Manager 20

3.2. Measurement

The theoretical model in this research consists of three variables: Psychological capital, job satisfaction and psychological wellbeing. The scales of these variables were adapted from the relevant literature. The scale items were translated to Turkish by researchers in English language; then back translated again.

3.2.1. Job Satisfaction Scale

In the study, the job satisfaction scale was developed by Hackman and Oldman (1975) and adapted to Turkish by Basım and Şeşen (2009) was applied. This scale consists of 5 statements. 6-point likert scale was applied to the participants, ranging from disagree (1) to completely agree (6). The total reliability of the scale was calculated as 0.78 by Basım and Şeşen (2009).

3.2.2. Psychological Capital Scale

The Psychological Capital Scale was developed by Luthans et al. (2007) and adapted to Turkish by Çetin and Basım (2012) was used to measure the participants' psychological capital levels. The sub-dimensions of this scale are "psychological resilience", "optimism", "hope" and "self-efficacy". There are 24 items in the scale applied to the participants. In addition, a 6-point likert scale ranging from disagree (1) to completely agree (6) was applied to the participants.

3.2.3. Psychological Wellbeing Scale

In the study, 18-item psychological well-being scale developed by Ryff and Keyes (1995) was applied to the participants. This study, which is a shortened version of the psychological well-being scale, was adapted into Turkish by İmamoğlu (2004). This scale was first shortened by Ryff (1989) in a study with 84 questions, each sub-dimension consisting of 14 items and 6 sub-dimensions. The scale has "autonomy", "environmental dominance", "purpose of life", "self-acceptance", "positive relations with others" and "individual development" sub-dimensions. A 6-point likert scale, ranging from agree (1) to completely agree (6), was applied to participants.

4. FINDINGS

The results of the relationship between the research variables will be examined in this section. First, factor analysis and reliability test results will be presented. Hypothesis testing results are shown at the end.

4.1. Factor Analysis

In first step, Bartlett's Test was used in order to test the compatibility of factor model and the relationships among variables in sample. The KMO is used to measure of sampling adequacy (Ghauri, et al, 1995). According to results of the factor analysis, KMO test value was found above ,50 and Bartlett's test value was significant. Principle component factor analysis was applied to all variables by varimax rotation.

4.1.1. Factor Analysis of Psychological Capital

Psychological Capital test consists of 24 items, at the end of the factor analysis, 20 items remained and 4 factors appeared. These factors were named as hope, psychological resiliency, optimism and pessimism. Four factors explained 61,345% of the variance. Cronbach alpha values were , 861; , 799; , 706; ,607. Factor loadings, variances, cronbach alpha values, Bartlett test result and KMO value are shown in Table 2.

TABLE 2 - PSYCHOLOGICAL CAPITAL FACTOR ANALYSIS AND RELIABILITY ANALYSIS RESULTS

Factor name	Items	Factor Loading	Explained Variance	α
F1: Hope	I can think of many ways to reach my current work goals.	,762	34,337	0,861
	I feel confident helping to set targets/goals in my work area.	,725		
	I feel confident contributing to discussions about the company's strategy	,701		
	At the present time, I am energetically pursuing my work goal	,700		
	There are lots of ways around any problem	,646		
	At this time, I am meeting the work goals that I have set for myself.	,643		
	Right now I see myself as being pretty successful at work.	,573		
F2: Psychological resiliency	I can get through difficult times at work because I've experienced difficulty before.	,776	12,050	0,799
	I usually manage difficulties one way or another at work.	,773		
	If I should find myself in a jam at work, I could think of many ways to get out of it.	,666		
	I feel I can handle many things at a time at this job.	,639		
	I feel confident presenting information to a group of colleagues.	,574		
	I feel confident in representing my work area in meetings with management.	,500		
	I can be "on my own," so to speak, at work if I have to	,427		
F3: Optimism	I always look on the bright side of things regarding my job.	,702	10,551	0,706
	I approach this job as if "every cloud has a silver lining."	,692		
	I'm optimistic about what will happen to me in the future as it pertains to work.	,670		
	When things are uncertain for me at work, I usually expect the best.	,638		
F4: Pessimism	In this job, things never work out the way I want them to	,779	4,405	0,607
	If something can go wrong for me work-wise, it will.	,738		
		Total variances	61,345	
Kaiser-Meyer Olkin	,873			
Barlett test of sphericity	Approx. Chi-Square	1150,327		
	df	190		
	p value	,000		

4.1.2. Factor Analysis of Psychological Well-being

Psychological well-being instrument consists of 18 items. However, as a result of the factor analysis, 15 items remained, and 2 factors emerged. These factors were named as purpose, self-acceptance. Two factors explained 52.455% of variance. Cronbach alpha values were ,691; ,617.

TABLE 3 - FACTOR ANALYSIS AND RELIABILITY ANALYSIS RESULTS OF PSYCHOLOGICAL WELL-BEING

Factor name	Items	Factor Loading	Explained Variance	α
F1: Purpose	I find it difficult to really open up when I talk with others.	,743	38,123	0,691
	In many ways I feel disappointed about my achievements in life.	,624		
	I have not experienced many warm and trusting relationships with others.	,596		
	I live life one day at a time and don't really think about the future.	,553		
	I gave up trying to make big improvements or changes in my life a long time ago.	,540		
	I sometimes feel as if I've done all there is to do in life.	,533		
	The demands of everyday life often get me down	,484		
F2: Self-acceptance	I like most parts of my personality.	,652	14,332	0,617
	I am good at managing the responsibilities of daily life.	,565		
	When I look at the story of my life, I am pleased with how things have turned out so far.	,562		
	For me, life has been a continuous process of learning, changing, and growth.	,559		
	I judge myself by what I think is important, not by the values of what others think is important.	,555		
	Some people wander aimlessly through life, but I am not one of them.	,546		
	I have confidence in my own opinions, even if they are different from the way most other people think.	,360		
I think it is important to have new experiences that challenge how I think about myself and the world.	,346			
		Total variances	52,455	
Kaiser-Meyer Olkin	,647			
Barlett test of sphericity	Approx. Chi-Square	384,396		
	df	105		
	p value	,0		

4.1.3. Factor Analysis of Job Satisfaction

The job satisfaction instrument consists of 5 items. As a result of the factor analysis, a single factor emerged and cronbach value was stated as ,855. In Table 3, factor loadings, internal consistency value, Bartlett sphericity test result and KMO value for each statement are given.

TABLE 4 - FACTOR ANALYSIS AND RELIABILITY RESULTS OF JOB SATISFACTION

Items	Factor loading	α
I enjoy my job	,901	0,855
All in all, I am very satisfied with my job	,858	
I think I am happier at my job than most other people.	,830	
I think my current job is more interesting than any other job I could find.	,746	
My job is like a hobby for me.	,671	
Kaiser-Meyer Olkin	,827	
Barlett test of sphericity	Approx. Chi-Square	343,34
	df	10
	p value	,0

4.2. Descriptive statistics and correlation analysis

Correlation analysis was performed to examine the interactions between research variables. Table 5 presents means, standard deviations, and correlations for all the variables.

TABLE 5 - MEANS, STANDARD DEVIATIONS AND CORRELATIONS AMONG VARIABLES

Variables	M	sd	1	2	3	4	5	6	7	8	9
1-PsyCap	4,73	0,45	1								
2- Hope	5,12	0,54	,803**	1							
3- Resiliency	4,76	0,69	,868**	,618**	1						
4- Optimism	4,75	0,48	,630**	,491**	,630**	1					
5- Pessimism	4,31	0,67	,680**	,311**	,476**	,404**	1				
6-Psychological wellbeing	4,50	0,48	,542**	,402**	,486**	,280**	,430**	1			
7- Purpose	4,58	0,73	,223**	,195*	,219**	,470**	,150	,470**	1		
8-Self-acceptance	4,16	0,69	,534**	,384**	,496**	,155	,501**	,470**	,161	1	
9- Job satisfaction	4,24	0,99	,550**	,377**	,654**	,189*	,373**	,570**	,090	,434**	1

Note: * $p < 0.05$; ** $p < 0.01$

As shown in Table 5, results showed that before taking the interactions into account, psychological capital composing of four dimensions has a significant and positive correlation with psychological wellbeing and its dimensions. Also, it is positively correlated with job satisfaction ($p = ,550$).

4.3. Regression Analysis

Regression analysis was conducted in order to test the model of the research and to determine the effect of psychological capital on job satisfaction. The results are shown in Table 6.

TABLE 6 - REGRESSION ANALYSIS OF THE EFFECT OF PSYCHOLOGICAL CAPITAL ON JOB SATISFACTION

Dependent Variable			
Job Satisfaction			
Independent variable	Beta	t value	p value
PsyCap	0.55	7.763	,000
R=,550; R ² :,302; F value=60,259; p value=,000			

The effect of independent variable (job satisfaction), on dependent variable (psychological capital) were tested by regression analysis. The result of regression analysis (Table 6) show that job satisfaction has significant effect on psychological capital ($p=.000$).

Table 7 shows to test the moderating role of psychological wellbeing on the relationships between PsyCap and job satisfaction, 3-step hierarchical regression analyses were conducted. To calculate the interaction between independent and moderating variables, raw scores are subtracted from the mean score, which is repeated for each variable. The output scores of one variable are multiplied by the output scores of the other, forming an interaction variable (PsyCap X PWB) and this interaction variable is added to analysis.

TABLE 7 - REGRESSION ANALYSIS FOR THE MODERATOR ROLE OF PSYCHOLOGICAL WELLBEING BETWEEN PSYCHOLOGICAL CAPITAL AND JOB SATISFACTION

Independent variable	R ²	ΔR ²	Adjusted R ²	df	F	(p)	β	t	(p)	VIF
1. Step	,302	,302	,297	1	60,259	,00				
PsyCap							,55	7,763	,00	1.000
2. Step	,304	,001	,293	2	30,07	,00				
PyCap							,528	6,25	,00	1.416
PWB							,04	,468	,64	1.416
3. Step	,307	,003	,291	3	20,185	,00				
PsyCap							,545	6,24	,00	1.506
PWB							,017	,196	,845	1.579
PsyCap X PWB							,058	,769	,443	1.122

Dependent variable: Job satisfaction

In the first step, psychological capital has effect on job satisfaction ($\beta=.550$ and $p<.001$). But the interaction variable has no effect on job satisfaction. So, psychological wellbeing doesn't have any moderating effect on job satisfaction. Therefore, H2 hypothesis is rejected. The same analysis is conducted with sub-dimensions of psychological capital and again it is found that psychological wellbeing doesn't have any moderating effect on job satisfaction.

5. FINDINGS AND DISCUSSION

The purpose of this study is to investigate if psychological well-being moderates psychological capital's effect on job satisfaction. It is also analyzed to see if variables of the study are differed according to the demographic characteristics of the participants. This quantitative study was conducted among 141 employees and the data was collected by a questionnaire composed of four sections and 54 items.

5.1. The Effect of Psychological Capital on Job Satisfaction

Psychological state of a person is an important factor that is influential on his behavior. A person's psychological state is also connected to his work life. If someone's psychological state of mood is good, he feels fine, confident and satisfied at work. When a person is satisfied with his job, his satisfaction also may spread to his social life and environment. A person with psychological capital acquires such characteristics as self-efficacy, optimism, resilience and hope. In this sense, the person has self-confidence in achieving goals and in his own abilities. At the same time, he is stable, he attributes positive actions and believes good things will happen. He is also good at handling challenges, conflicts, problems, risks, danger and threats. Above all, a person with psychological capital has willpower in achieving goals, overcoming obstacles, sustaining hope and well-being during times of crisis and change. The higher employees acquire psychological capital, the more satisfied they are with their jobs.

Psychological capital can be improved in people and this idea may provide insight to managers for leading their subordinates through bringing out their psychological capital. When an employee is well equipped with psychological capital domains, he becomes satisfied with his job. Consequently, he demonstrates a qualified performance with high productivity and motivation. In cases where managers do not give importance to psychological capital, lower job satisfaction and performance as well as distrust to managers can be encountered.

As a result of the study, the hypothesis that "Psychological capital will be positively related to job satisfaction." is supported. Within this study, the subdimensions of psychological capital were analyzed in terms of their relationship with job satisfaction. Optimism has moderately positive correlation with job satisfaction. Hope was highly and positively correlated with satisfaction. Psychological resilience, on the other hand, had a positive but low correlation with job satisfaction. All the results show that employees who believe in good things that may happen or who have willpower in achieving goals or handling challenges and conflicts will have higher job satisfaction.

When the literature is reviewed, it is seen that the relationship between psychological capital and job satisfaction has been approved in many studies. The findings of this study are consistent with the literature (Luthans and Youusef-Morgan, 2016; Badran and Youssef-Morgan, 2015; Kwok et al. 2014; Avey et al., 2011; Youssef and Luthans, 2007). However, the contribution of this study to the literature is caused by the participation of engineers in energy sector. By reviewing the analyses of the study, managers' attention in the energy sector can be drawn to the importance of psychological capital in enhancing employees' job satisfaction which can result in increased service quality, customer satisfaction and employees' commitment to their organizations. Having employees with higher psychological capital in companies may also maximize the company's potential in achieving challenging goals, overcoming conflicts and complications, in growing hopes for future opportunities and building up positive approaches about good things that may appear. All these characteristics are as much important in energy sector as in other sectors since it is a growing dynamic sector that contains risks, challenges, rapid changes and uncertainties. To be able to adopt these changes and difficulties, to have employees equipped with such psychological capital characteristics will be a competitive advantage for the companies.

5.2. The Moderating Role of Psychological Well-Being in Psychological Capital's Effect on Job Satisfaction

Psychological well-being as a concept driven by positive psychology is an influential factor on individual's social life as well as business life. Psychological well-being may result in person's happiness. It is one of the factors that affect job satisfaction (Tortumlu et al., 2020; Olatunde and Odusanya, 2015; Wright and Bonett, 2007; Wright, Cropanzano and Bonett, 2007). A person with psychological well-being has positive relationships with others, has meaning in life and gives importance to personal growth and development. Such a person is motivated by rewarding life events and ready to achieve goals by using his own strength. Therefore, a person with psychological well-being can have higher job satisfaction.

As a result of the analysis in this study, it was found that psychological well-being had no moderating effect on the relationship between psychological capital and job satisfaction. When psychological capital itself was included in the model, it had an effect on job satisfaction. As psychological capital interacting with psychological well-being were put into the test, no significant finding was observed in terms of their effect on job satisfaction. Accordingly, the related hypothesis stating the moderating role of psychological well-being in the relationship between psychological capital and job satisfaction was rejected. The analysis containing the sub-dimensions of psychological well-being's moderating role in the same relationship showed no significant finding either.

According to correlation analysis between psychological well-being and the sub-dimensions of psychological capital, self-efficacy, hope, psychological resilience and optimism were found to be positively and moderately related to psychological well-being. In addition, there is a weak positive relationship between autonomy, environmental mastery, purpose in life, positive relations with others and personal growth dimensions of psychological well-being and job satisfaction. However, there is a moderate positive relationship between self-acceptance dimension of psychological well-being and job satisfaction. Optimism dimension of psychological capital is negatively correlated with the autonomy dimension of psychological well-being.

When overall findings of the study is summarized, it can be said that enhancing psychological capital of employees may help their job satisfaction increase. Along with an increased job satisfaction, employees' commitment to their organization, their performance as well as job engagement may rise. The findings of the study present no significant role of psychological well-being as a moderator in the relationship between psychological capital and satisfaction. Nevertheless, to find a relationship between psychological capital itself and job satisfaction is one of the main findings of the study.

5.3. Research Limitations

This study was conducted among employees in energy sector in Istanbul, Turkey. Therefore, the results cannot be generalized to other sectors or to the overall country. Another limitation of the study is the use of questionnaires to collect data as data is limited to only the items that took place in the form. No further data could be collected in more detail. As convenient sampling was used, the number of the sample is limited and questionnaires were delivered on voluntary bases of the participants.

5.4. Recommendations

As this study draws attention to the fact that psychological capital has an impact on job satisfaction, managers as well as human resources managers should give importance for seeking employees with valuable qualifications as psychological capital. Employees with psychological capital traits will be able to pursue company goals by being aware of their own abilities in order to achieve them successfully. Such employees with high self-esteem will have courage to try and adopt themselves to changes and innovations which may provide strategic alternatives and competitive advantages for the companies. Employees with psychological capital strength will also be able to sustain their hope and goodwill no matter how often they face obstacles, problems and difficulties. They will have the right qualifications to handle and overcome conflicts, risks and threats so that they won't be losing their positive attributes for future opportunities and accomplishments. Above all, people with psychological capital characteristics will be satisfied with several aspects of the job which may result in higher motivation and performance, lower turnover rates and absenteeism and higher company productivity. Considering all these positive, valuable and incomparable outcomes, selecting personnel with such qualifications as psychological capital will become a necessary and challenging task for the companies. Acquiring such personnel may also enhance service quality and enable customer satisfaction. After selecting the qualified personnel, it also becomes a critical issue to maintain them by motivating and increasing their commitment to the company. Assigning challenging tasks, creative projects and providing incentives with career opportunities for successful projects may help managers to motivate such employees. Having such human capital in companies and keeping them satisfied are good for sustainability as well.

Psychological well-being was not found to be a moderator in psychological capital's effect on job satisfaction. Nevertheless, psychological well-being itself affected job satisfaction. Generally, negative aspects and problems related to human behavior at work are taken into consideration in companies in order to change such employee behaviors. Instead, as the findings of this study indicates that positive attributes and qualifications of employees should be examined in order to reinforce and improve such positive characteristics and behaviors of the people for company success.

For instance, giving responsibility and providing effective performance feedback to employees can improve their self-efficacy. Rewarding and promoting successful performance, providing flexible work schedules and autonomy may enable optimism among employees in the company. Presenting possible solutions for difficulties, obstacles and risks that employees may face; setting targets that they can achieve and providing required resources for doing the job may increase their hope and their resilience. Offering training programs that serve employees to develop new skills and supporting career plans that can help them achieve their career goals will also be very influential on company success via employee performance.

Social activities can be organized to build a positive, peaceful and trustworthy climate for improving positive feelings and well-being of employees. Generating opportunities where employees can self-develop themselves as well as creating a spiritual atmosphere where their contributions are supported and valued may increase employees' psychological well-being.

5.5. Future Research

The sample of the study is composed of employees working in energy sector. This sector consists of electricity, petrol, natural gas and liquefied petroleum gas. In future studies, one of these major industries can be selected to see whether each industry makes any difference in terms of the findings of the study in the context of research variables. The research model can also be tested in various other sectors to analyze if there are any sector generated results.

As psychological well-being was not found to be a moderator in the relationship between psychological capital and job satisfaction, other moderating variables' impact in the relationship can be observed such as perceived leadership style, perceived organizational support, big five personality traits, supportive organizational climate, innovative or strong organizational culture, job-personality fit, organizational trust and so on. In addition, along with job satisfaction, other dependent variables can be attached to the model to see how moderating variable's (psychological well-being influence in this study) impact can change from one dependent variable to another. Organizational commitment, job engagement, organizational citizenship behavior or performance can be among the dependent variables that can be added to the research model in future studies.

REFERENCES

- Abbott, R. A., Ploubidis, G. B., Huppert, F. A., Kuh, D., & Croudace, T. J. (2010). "An evaluation of the precision of measurement of Ryff's Psychological Well-Being Scales in a population sample." *Social indicators research*. 97 (3): 357-373.
- Avey, J. B., Reichard, R. J., Luthans, F., & Mhatre, K. H. (2011). "Meta-analysis of the impact of positive psychological capital on employee attitudes, behaviors, and performance." *Human Resource Development Quarterly*. 22 (2): 127-152. doi:10.1002/hrdq.20070.
- Avey, James, B., Wernsing, Tara, S., Luthans, Fred. (2008). "Can positive employees help positive organizational change? Impact of psychological capital and emotions on relevant attitudes and behaviors." *The journal of applied behavioral science*. 44 (1): 48-70.
- Avey, James. B., Luthans, Fred, Smith, Ronda, M., & Palmer, Noel, F. (2010). "Impact of positive psychological capital on employee well-being over time." *Journal of occupational health psychology*. 15 (1): 17.
- Aziri, Brikend. (2011). "Job Satisfaction: A Literature Review." *Journal of Management Research & Practice*. 3 (4): 77-86.
- Badran, M. A., & Youssef-Morgan, C. M. (2015). "Psychological capital and job satisfaction in Egypt." *Journal of Managerial Psychology*, 30, 3, 354-370
- Basım, H. Nejat, Şeşen, Harun. (2009). "The moderating role of job satisfaction in the relationship between the perception of organizational justice and organizational citizenship behavior." National Management and Organization Congress. 21-23 May 2009. Eskişehir: Eskişehir Osman Gazi University, 808-814.
- Culbertson, Satoris, S., Fullagar, Clive, J., Mills, Maura, J. (2010). "Feeling good and doing great: The relationship between psychological capital and well-being." *Journal of occupational health psychology*. 15 (4): 421.
- Çetin, Fatih, Basım, H. Nejat. (2012). "Organizational psychological capital: A scale adaptation study." *Journal of Public Administration*. 45 (1): 121-137.
- Diener, Ed, Suh, Eunkook. M., Lucas, Richard, E., Smith, Heidi, L. (1999). "Subjective well-being: Three decades of progress." *Psychological Bulletin Journal*. 125 (2): 276-302.
- Diener, E. (Ed.). (1994). "Assessing subjective well-being: Progress and opportunities." *Social Indicators Research*. 31 (2): 103-157.
- Ghuri, P., Gronhaug, K. and Kristianslund, I. (1995). *Research Methods in Business Studies: A Practical Guide*. Hemel Hempstead, Prentice Hall.

- Hackman, J. Richard, Oldham, Greg, R. (1975). "Development of the job diagnostic survey." *Journal of Applied Psychology*. 60 (2): 159-170.
- İmamoğlu, E. Olcay. (2004). "Self-Construal Correlates of Well-Being." It is an unpublished study.
- Jung, H. S., & Yoon, H. H. (2015). "The impact of employees' positive psychological capital on job satisfaction and organizational citizenship behaviors in the hotel." *International Journal of Contemporary Hospitality Management*, 27, 6, 1135-1156.
- Kwok, S. Y., Cheng, L., & Wong, D. F. (2015). "Family emotional support, positive psychological capital and job satisfaction among Chinese white-collar workers." *Journal of Happiness Studies*. 16 (3): 561-582.
- Luthans, F. (2002a). "Positive organizational behavior: developing and managing psychological strengths". *Academy of Management Executive*. Vol. 16, pp. 57-72.
- Luthans, Fred. (2002b). "The need for and meaning of positive organizational behavior." *Journal of Organizational Behavior*. 23/6 (September): 695-706.
- Luthans, F., Youssef, C. M., & Avolio, B. J. (2007). "Psychological capital: Developing the human competitive edge." New York, NY: Oxford University Press.
- Luthans, F., & Youssef-Morgan, C. M. (2017). "Psychological capital: An evidence-based positive approach." *Annual Review of Organizational Psychology and Organizational Behavior*. 4: 339-366.
- Luthans, Fred, Avolio, Bruce, J., Avey, James, B., Norman, Steven, M. (2007). "Positive psychological capital: Measurement and relationship with performance and satisfaction. *Personnel psychology Journal*, 60 (3): 541-572.
- Luthans, Fred, Luthans, Kyle, W., Luthans, Brett, C. (2004). "Positive psychological capital: Beyond human and social capital." *Business Horizons Journal*. 47 (1): 45-50.
- Luthans, Fred, Youssef, Carolyn, M., Avolio, Bruce, J. (2007). "Psychological capital: Developing the human competitive edge." Oxford University Press. 1-250.
- Luthans, Fred, Avey, James, B., Avolio, Bruce, J., Peterson, Suzanne, J. (2010). "The development and resulting performance impact of positive psychological capital." *Human resource development quarterly Journal*. 21 (1): 4167.
- Manzano-García, G., & Ayala, J. C. (2017). Relationship between psychological capital and psychological well-being of direct support staff of specialist autism services. The mediator role of burnout. *Frontiers in psychology*, 8, <https://doi.org/10.3389/fpsyg.2017.02277>
- Nafees, N., & Jahan, M. (2017). Psychological capital (PsyCap) and mental well-being among medical students. *The International Journal of India Psychology*, 4(3), 60-68.
- Ryff, C. D., & Singer, B. H. (2008). "Know thyself and become what you are: A eudaimonic approach to psychological well-being." *Journal of happiness studies*. 9 (1): 13-39.
- Ryff, Carol, D. (1989). "Happiness is everything, or is it? Explorations on the meaning of psychological well-being." *Journal of Personality and Social Psychology*. 57 (6): 1069.
- Ryff, Carol, D. Keyes, Corey, L. M. 1995. "The structure of well-being revisited." *Journal of Personality and Social Psychology*. 69 (4): 719-727.
- Rukh, Lala, Choudhary, M. Abbas, Abbasi, S. Akber. (2015). "Analysis of factors affecting employee satisfaction: A case study." Pakistan. *Work Journal*. 52 (1): 137-152.
- Scheier, M. E., & Carver, C. S. (1987). Dispositional optimism and physical well-being: The influence of generalized outcome expectancies on health. *Journal of personality*, 55(2), 169-210.
- Snyder, Charles, R., Harris, Catherine, Anderson, James, R., Holleran, Sharon, A., Irving, Lori, M., Sigmon, Sandra, T., Yoshinobu, Luis, Gibb J. Douglas, Harney, Paul. (1991). "The will and the ways: development

and validation of an individual-differences measure of hope." *Journal of personality and social psychology*. 60 (4): 570.

- Spector, Paul, E. (1997). "Job satisfaction: Application, assessment, causes, and consequences. California: Sage publications." www.books.google.com.tr [02.05.2029].
- Singh, Sandeep. (2009). "Psychological capital as predictor of psychological well being." *Journal of the Indian Academy of Applied Psychology*. 35 (2): 233238.
- Tortumlu, M., A.S. Barutcu, T. Akcakanat, H.H. Uzunbacak (2020). "The Mediating Role of Psychological Well-Being in the Effect of Core Self-Evaluation on Job Satisfaction", *BERJ*, 11 (4): 1147-1162.
- Olatunde, B.E. and O. Odusanya (2015). "Job Satisfaction and Psychological Well-Being among Mental Health Nurses", *International Journal of Translation & Community Medicine*. 3 (3): 64-70.
- Wright, A.T. and D.G. Bonett (2007). "Job Satisfaction and Psychological Well-Being as Nonadditive Predictors of Workplace Turnover", *Journal of Management*. 33: 141-160.
- Wright, T. A., Cropanzano, R., & Bonett, D. G. (2007). "The moderating role of employee positive wellbeing on the relation between job satisfaction and job performance." *Journal of Occupational Health Psychology*. 12 (2): 93-104.
- Wright, Thomas, A., Cropanzano, Russell. (2000). "Psychological well-being and job satisfaction as predictors of job performance." *Journal of occupational health psychology*. 5 (1): 84.
- Wright, Thomas, A., Doherty, Elizabeth, M. (1998). "Organizational behavior' rediscovers' the role of emotional well-being." *Journal of Organizational Behavior*. 19: 481-485.
- Youssef, C. M., & Luthans, F. (2007). "Positive organizational behavior in the workplace the impact of hope, optimism, and resilience." *Journal of Management*. 33: 774-800. doi:10.1177/0149206307305562.
- Youssef, Carolyn, M., Luthans, Fred. 2015. "Psychological capital and well-being." *Stress and health: journal of the International Society for the Investigation of Stres*. 31 (3): 180-188.
- Youssef, Carolyn, M., Luthans, Fred. 2007. "Positive organizational behavior in the workplace: the impact of hope, optimism, and resilience." *Journal of Management*. 33 (5): 774- 800.