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# Prediction of job engagement of teachers based on psychological capital and psychological hardiness

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## ABSTRACT

The present research was carried out with the objective of predicting job engagement based on psychological capital and hardiness. This was a descriptive and correlational research. Research population consisted of all primary school teachers of Javanroud city and 195 samples were selected based on Cochran's formula and with the use of stratified random sampling. Findings showed that there is a significant positive relation between psychological capital and hardiness and job engagement of employees. Also the results of multiple regression analysis revealed that about 55 percent of total job engagement of employees is predictable based on psychological capital and hardiness in which psychological variable had greater share in prediction.

**KEYWORDS:** job engagement; psychological capital; psychological hardiness; teachers.

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## *Predicción del compromiso laboral de los maestros basados en el capital psicológico y la resistencia psicológica*

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### RESUMEN

La presente investigación se llevó a cabo con el objetivo de predecir el compromiso laboral basado en el capital psicológico y la resistencia. Esta fue una investigación descriptiva y correlacional. La población de investigación consistió en todos los maestros de escuela primaria de la ciudad de Javanroud (Irán) y se seleccionaron 195 muestras, basados en la fórmula de Cochran, y con el uso de muestreo aleatorio estratificado. Los resultados mostraron que existe una relación positiva significativa entre el capital psicológico y la resistencia y el compromiso laboral de los empleados. Además, los resultados del análisis de regresión múltiple revelaron que aproximadamente el 55 por ciento de la participación laboral total de los empleados es predecible en función del capital psicológico y la resistencia en la que la variable psicológica tiene una mayor participación en la predicción.

**PALABRAS CLAVE:** compromiso laboral; capital psicológico; resistencia psicológica; docentes.

### Introduction

In recent years, attention to occupational enthusiasm as a psychological component in organizations has created many discussions and studies. Job engagement is a concept which is the result of recent tendency to positive psychology which is related to positive aspects of good experiences of employees and focuses on optimized performance and positive experiences of them at work (Schaufeli, Bakker, 2004) which has been considered by leaders and managers of organizations as a vital element in effectiveness of the organization (Bedarkar, Pandita, 2013). MacLeod, Clarke (2009) believe that employees' occupational enthusiasm is one of the new paradigms of human resources and has various definitions and because of the various ways to exploit it. Hallberg and Schaufeli (2006) consider engagement as a positive psychological concept and know it as an indicator of well-being and mental health in the workplace. Gibbons (2006) knows occupational enthusiasm an emotional relationship that employees have with their jobs, organizations,

managers, colleagues, and also influences their strenuous efforts. Sweetman and Luthans (2010) at consider job engagement as a psychological phenomenon which has cognitive - emotional form.

Fleming and Asplund (2007) have defined job engagement as the ability to conquer the mind, heart, and soul of employees to gradually induce desire and passion for excellence. Based on definition of Schoufeli and Bakker (2004), job engagement a positive motivational - emotional status during work which is determined with three aspects of strength, dedication and absorption. Absorption refers to the degree of concentration and drowning person at work. In this case, because the person is working hardly that work experience is very enjoyable for him. People are also willing to pay for being in such circumstances. In a virility dimension, a person has made a significant effort to do his job, and insists on difficult situations. Highly skilled workers are more likely to be driven by their work and show greater resistance in the event of problems and interpersonal conflicts (Salanova, Agut, Peiro, 2005). The third dimension of occupational enthusiasm is dedication to work, which is characterized by intense psychological involvement of employees in the work and a combination of meaningful sensation, passion and challenge. This dimension has many meanings with the concept of occupational attachment and refers to the degree to which a person is mentally related to his or her job (Carmeli, Freund, 2005). According to Schaufeli, Bakker (2004), it refers to high levels of energy and mental stability during work; dedication means to meaningfulness, seriousness, inspiration, pride and challenge in work, and absorption means full concentration and busy happiness at work.

Job engagement is a concept which has direct and positive relation with positive outcomes such as job performance, enhanced organizational citizenship behaviors and job satisfaction and has negative relation with turnover intention (Hakanen, Hakanen, Bakker, Demerouti, 2005). Occupational enthusiasm has been supposed in opposite of occupational burnout. Unlike those who suffer from occupational burnout, employees have occupational enthusiasm and a strong feeling and effective communication with their work and are capable of fulfilling their job responsibilities (Schaufeli, Salanova, Gonzalez-Romá, Bakker, 2002). Therefore, occupational enthusiasm is characterized by a high level of energy and strong identity, and on the other hand, job burnout is known by low energy level and poor identity at work (Schaufeli, Bakker, 2004). Individuals who are achieved high marks in occupational enthusiasm dimensions not only have high job performance but also receive positive feedback from supervisors and consumers (Schoufeli, Bakker, Salanova, 2001). There are many evidences which show mere existence of motivated employees provides organizational goals in absence of other sources. Based on the study of Bakker and Leiter(2010), enthusiastic employees are completely fascinated by their jobs and positively fulfill their job assignments. Employees with high job engagement use creativity and innovation at work (Salanova, Agut, Peiro, 2005) and react to actions and

their efficacy increases and this helps organization reach its goals (Lorens, Bakker, Schaufeli, Salanova, 2007).

Occupational enthusiasm not only plays a critical role in understanding positive organizational behaviors but also plays a role in directing human resource management and organization policies (Schaufeli, Salanova, Gonzalez-Romá, Bakker, 2007). Hence job engagement might lead to a positive cycle of resources and positive effects as a desirable resource (Hobfoll, Shirom, 2001). Which its result will be apparent in correct fulfillment of assigned job duties or behaviors beyond it based on positive effects of job engagement, identification of factors affecting it is essential. Palo(2015) and Simons, Buitendach(2010) have pointed to relation between psychological capital and job engagement. Psychological capital is a concept usually obtained from theory and research in the field of positive psychology and has been used in the workplace (Avey, Reichard, Luthans, Mhatre, 2011). This structure is one of the new concepts which has been raised as a positive structure and it can be used to effectively manage emotional, motivational, attitudinal, cognitive and behavioral aspects related to individuals at work (Luthans, Youssef, Avolio, 2007). And it is a relatively new concept that enters into the school of organizational behavior from the field of psychology and it is considered as the advantage of organizational competition (Luthans, Youssef, Avolio, 2007).

Psychological capital is one of the indicators of positive psychology that is defined by characteristics such as individual belief in his abilities to succeed, having perseverance in pursuing goals, creating positive attributes about him and enduring problems (Lutans, Norman, Hughes, 2006). Positive assessment of conditions and the probability of access to success, based on motivation-driven and diligent efforts, are called as positive psychological capital (Avey, James, Patera, Jaime, West, 2010). In fact, psychological capital is a positive aspect of human life, based on personal understanding, having a goal to achieve success and sustainability against problems (Seligman, 2002). Psychological capital is an important method to increase competitiveness power of organizations and maintain competitive advantages of those which play an important role in organizational changes (Wang, 2015). Psychological capital in fact means “Who are you (the real self) and who you want to be (the possible self) based on development and growing” (Luthans, Norman, Hughes, 2006). Psychological capital can be a status consisting of four components of self-efficacy / confidence (one’s belief in his/her abilities to mobilize motivational and cognitive resources and strategies needed for success in specific tasks), hope (cognitive status or thinking which enables individuals to form real but challenging and predictable goals and then achieve those goals using self-determination, energy and understanding of internal control) (Snyder, 1994), Optimism (rendition style which relates positive happenings to permanent, pervasive and personal causes and relates negative happenings to external, temporary causes and specific conditions)

(Seligman, 1998) and flexibility (a psychological capacity using which people can successfully face change, crisis and risk and their problems) (Luthans, Youssef, Avolio, 2007). These components give meaning to individual's life in an interactive and evaluative process and give sustaining to individual's effort to change the stressful situations and makes ready him to enter the stage of action and ensures his resistance and hardiness to achieve the goals (Judge, Bono, 2001).

Many studies show that psychological capital has a higher added value in employee performance than demographic characteristics, self-assessment features, and personality dimensions (Avey, James, Luthans, Smith, Palmer, Noel). Luthans, Youssef, Avolio (2007) believe that psychological capital, by relying on positive psychological variables such as hope and self-efficacy, leads to the promotion of human capital and their relationships. Psychological capital is an intrinsic source of effort, activity, and orientation toward the world around, and whatever the amount of self-efficacy, optimism, hope and optimism be higher, the person feels a more reliable and more durable psychological source for living and moving towards his life and work goals (Peterson, Byron, 2007, Ucol, 2012). In the psychological capital has considerable emphasis on ability to achieve the objectives, needs and wishes, hope in achieving the goals and the having perseverance and flexibility in achieving the goals and values with adopting optimistic and positive approach in dealing with issues (Mac Gee, 2011).

Studies have shown that psychological capital also affect individual and organizational variables such as citizenship behavior, organizational commitment, job satisfaction, job stress, employee well-being, job performance, pessimism, the intention of leaving the organization, deviant behavior, job engagement, absenteeism (Sridevi, Srinivasan, 2012). Employees, who have higher psychological capital, perform better. Therefore, considering the ability of teaching and developing psychological capital and its relationship with the desirable individual and organizational variables, psychological capital should be part of employee development and training programs (Saks, Alan, Jamie, Gruman, 2010). Another factor which can affect the level of job engagement of employees is psychological hardiness (Goyal, Ajawani, 2016). Psychological hardiness means patience, and ability to handle difficult situations and in fact refers to performance of individuals based on cognitive functions (Woodard, 2004). Hardiness is a personality trait which might adjust the method of dealing with stressful situations which means it might help those in successful analysis of stressful situation. Khoshaba (1979) believed that this feature is a group of personality traits that provide a source of resistance in the face of stressful life events. Stubborn people have the power to control life events, and instead of avoiding problems, they evaluate them as an opportunity for progress (Sheard Golby, 2007). High psychological hardiness leads to a positive feeling in stressful situations and a sense of confidence in controlling more stress in life situations and increases

the severity of risks and the feeling of confidence in controlling stress in life and work situations (Maddi, 2006). Kobasa (1979) considers hardiness as a complex personality characteristic which consists of three components of commitment, control and facing challenges. Commitment means that an individual prefers to maintain presence on the scene instead of leaving the scene in difficult circumstances and tries to help people involved in that situation to solve the problems. Those who have a high-level of commitment are fully engaged in activities and feel the sense of purpose and self-awareness which create this feeling in them that they and their activities are worthwhile (Crowley, Hayslip, Hobdy, 2003). And on the same basis they are capable of finding meaning and doing their own curiosity about anything they do (Maddi 2006). Control means that the individual believes in his/her ability to affect the outcomes of events and individuals with a high level of commitment believe that they can influence what surround them (Crowley B, Hayslip, Hobdy, 2003). Those who enjoy high control of life events are predictable and controllable, and believe that they are able to influence everything that is happening around them, such individuals on resolving problems emphasize on their role more than others' role. People emphasize (Maddi, 2006). Facing challenges is also believing that individuals are looking to develop themselves and others in the face of challenges instead of blaming fate (Maddi, Khoshaba, 2005). Those who have high level in facing challenges emphasize on changes and comply with situations instead of relying on static aspects of life (Crowley, Hayslip, Hobdy, 2003). These people believe that the change is a natural aspect of life, and the positive and negative situations that need to readaptation are considered as an opportunity for learning and growth (Maddi, 2006).

Researches have been carried out in relation to research variables. Bue, Salvatore, Mylle, Martin(2013) concluded in their research entitled relation between psychological hardiness, job engagement and job burnout that there is a significant positive relation between psychological hardiness and job engagement. Goyal, ajawani(2016) concluded in their research entitled the role of hardiness in job engagement of male and female workers that there is a significant positive relation between psychological hardiness and job engagement. Paek, Markus Schuckert, Kim, Lee (2015) concluded in their research entitled the effect of psychological capital on job engagement and ethics of employees that psychological capital affects employees' job engagement. Simons, Buitendach(2010) concluded in their research entitled psychological capital, job engagement and organizational commitment that there is a significant positive relation between psychological capital and job engagement. Palo (2015) concluded in his research entitled job engagement and psychological capital that there is a significant positive relation between psychological capital and job engagement. Educational system as one of the most important organizations plays a key role in the development and progress of society. Teachers as the human resources of the educational system are one of the most important factors affecting the effectiveness and

realization of the goals that their job attitudes are of particular importance to their job. Nowadays, job engagement is considered as one of the variables affecting organizational performance improvements and concluded researches have shown their positive consequences for the organization. Reviewing researches in the field of job engagement of teachers shows that job engagement variable has been neglected in this organization. Based on positive effects of job engagement for today's organizations, identification of factors it is extraordinary important. Hence, this research was carried out with the goal of predicting job engagement based on psychological hardiness and psychological capital.

## 1. Research methodology

This is an applied research in terms of goal and a descriptive correlational research in terms of research method. The statistical population of this research consisted of all primary school teachers in Javanroud City (390 individuals) and 195 individuals (114 males and 81 females) were selected as sample using Cochran's formula and stratified random sampling. Salanova and Schoufeli's questionnaire of job engagement (2001) has been used to collect data on job engagement. This questionnaire has 17 questions and it is in three dimensions of ability, dedication and absorption. Validity of the questionnaire has been approved and its reliability in this study was obtained to be 0.88 using Cronbach's alpha. Psychological capital questionnaire of Luthans et al (2007) has been used to evaluate psychological capital. This questionnaire has 24 questions in four subscales of self-efficacy, hope, resilience and Optimism. Validity of the questionnaire has been approved by professors and also its reliability in this study was obtained to be 0.86 using Cronbach's alpha. Psychological hardiness questionnaire of Kiamarsi Najaraian and Mehrabi Zadeh Honarmand (1998) was used to evaluate psychological hardiness. This questionnaire has 27 questions and three dimensions of commitment, control and challenge. Validity of the questionnaire has been approved and its reliability in this study was obtained to be 0.91 using Cronbach's alpha. Spss software and descriptive statistic methods (mean, standard deviation) and inferential statistic methods (Pearson correlation and simultaneous multiple regression) were used for data analysis.

## 2. Results

In this research, 195 (114 males and 81 females) of primary school teachers of Javanroud city were evaluated. Results of data analysis at descriptive level showed that mean and standard deviation of psychological hardiness are respectively 82.23 and 9.01, mean and standard deviation of psychological capital are respectively 55.46 and 8.47 and mean and standard deviation of psychological hardiness are respectively 51.45 and 9.78.

Table 1: Correlation coefficients between psychological capital and its components and job engagement

	1	2	3	4	5	6
1. psychological capital	1					
2. self-efficacy	0/85**	1				
3. resiliency	0/89**	0/26**	1			
4. hope	0/90**	0/32**	0/19**	1		
5. optimism	0/79**	0/23**	0/28**	0/31**	1	
6. job engagement	0/73**	0/67**	0/64**	0/54**	0/62**	1

As it can be seen in table 1, there is a significant and positive relation between psychological capital and job engagement ( $p < 0.01$ ,  $r = 0.73$ ), component of self-efficacy and job engagement ( $p < 0.01$ ,  $r = 0.67$ ), component of resiliency and job engagement ( $p < 0.01$ ,  $r = 0.64$ ), component of hope and job engagement ( $p < 0.01$ ,  $r = 0.54$ ) and component of optimism and job engagement ( $p < 0.01$ ,  $r = 0.62$ ).

Table 2: Correlation coefficients between psychological hardiness and its components and job engagement

	1	2	3	4	5
1. psychological hardiness	1				
2. control	0/90**	1			
3. challenge	0/92**	0/23**	1		
4. commitment	0/87**	0/35**	0/28**	1	
5. job engagement	0/65**	0/51**	0/70**	0/57**	1

As it can be seen in table 2, there is a significant and positive relation between, psychological hardiness and job engagement ( $p < 0.01$ ,  $r = 0.65$ ), component of control and job engagement ( $p < 0.01$ ,  $r = 0.51$ ), component of challenge and job engagement ( $p < 0.01$ ,  $r = 0.70$ ) and component of commitment and job engagement ( $p < 0.01$ ,  $r = 0.57$ ).

**Table 3: results of regression analysis to predict job engagement based on psychological capital and psychological hardiness**

Model	R	Adjust	F	Sig		
1	0/74	0/55	0/53	21/10	0/01	
Beta coefficients and T Significancy test for predictor variables						
		B	Std.error	B	t	Sig
	(Constant)	16/05	4/39	-	3/65	0/01
job engagement	psychological capital	0/37	0/08	0/28	4/26	0/01
	psychological hardiness	0/23	0/10	0/16	2/30	0/05

As it can be seen in table 3, Almost 55 percent of job engagement is predictable based on psychological capital and psychological hardiness. F ratio also indicates that regression of job engagement is significant based on psychological capital and psychological hardiness. Psychological Capital with beta of 0.28 ( $P < 0.01$ ,  $t = 4.26$ ) and psychological hardiness with beta of 0.16 ( $P < 0.01$ ,  $t = 2.30$ ) positively and significantly predict job engagement. Also, obtained betas show that psychological capital has more predictive power.

**Table 4: results of regression analysis to predict job engagement based on the components of psychological capital**

Model	R	Adjust	F	Sig		
1	0/65	0/48	0/46	19/51	0/01	
Beta coefficients and T Significancy test for predictor variables						
		B	Std.error	B	t	Sig
	(Constant)	13/20	4/21	-	3/13	0/01
	self-efficacy	0/32	0/13	0/29	2/46	0/05
job engagement	resiliency	0/21	0/08	0/14	2/62	0/05
	hope	0/38	0/15	0/32	2/53	0/05
	optimism	0/24	0/11	0/19	2/18	0/05

As it can be seen in table 4, almost 48 percent of the variance in job engagement is predictable based on the components of psychological capital. F ratio also indicates that regression of job engagement is significant based on psychological capital components. Self-Efficacy component with beta of

0.29 ( $p < 0.05$ ,  $t = 2.46$ ), resiliency component with beta of 0.14 ( $p < 0.05$ ,  $t = 2.62$ ), hope component with beta of 0.32 ( $p < 0.05$ ,  $t = 2.53$ ) and optimism component with beta of 0.19 ( $p < 0.05$ ,  $t = 2.18$ ) have the ability to predict job engagement. Also, obtained betas show that component of hope has higher predictive power.

Table 5: results of regression analysis to predict job engagement component based on psychological hardiness

Model	R	Adjust	F	Sig		
1	0/48	0/23	0/21	12/15	0/01	
Beta coefficients and T Significance test for predictor variables						
		B	Std.error	B	t	Sig
	(Constant)	17/19	4/88	-	3/52	0/01
job engagement	Control	0/24	0/11	0/17	2/18	0/05
	challenge	0/21	0/05	0/15	4/02	0/01
	commitment	0/37	0/08	0/21	4/62	0/01

As it can be seen in table 4, almost 23 percent of the variance in job engagement is predictable based on the components of psychological hardiness. F ratio also indicates that regression of job engagement is significant based on psychological hardiness components. Control component with beta of 0.17 ( $p < 0.05$ ,  $t = 2.18$ ), challenge component with beta of 0.14 ( $p < 0.05$ ,  $t = 4.02$ ) and commitment component with beta of 0.37 ( $p < 0.05$ ,  $t = 4.61$ ) have the ability to predict job engagement. Also, obtained betas show that component of commitment has higher predictive power.

### 3. Discussion and conclusion

This research was carried out with the aim of predicting job engagement based on psychological capital and hardiness among primary school teachers of Javanroud city. Results of data analysis showed that there is a significant positive relation between psychological capital and its components and job engagement and components of psychological capital have the ability to predict job engagement. This result is in line with results of researches by Paek, Markus Schuckert, Kim, Lee(2015), Paulo (2015) and Simons, Buitendach(2013) in terms of positive relation between psychological capital and job engagement. It can be said in terms of above results that Psychological capital can act as mental capacity of individuals which consists

of aspects such as resilience, optimism, efficacy and hope to increase source of motivation of individuals to deal with problems and obstacles arising on the job and their desire and commitment and passion. Resilience aspect of psychological capital helps individuals to have greater resistance against problems and obstacles at work. Hope and optimism aspects help individuals to have more positive attitude toward the organization and co-workers and optimistically look at events at work which in themselves can be a source of responsibility, enthusiasm and willingness of employees in jobs and staying in the organization. Also self-efficacy aspect which is defined in form of perception and attitude of individuals toward their abilities can help individuals to have positive attitude toward themselves and their abilities to perform job duties and be in organization with more confidence. The combination of these four aspects in a variable known as psychological capital can be effective in increasing the level of job engagement in employees. Employees with high psychological capital are characterized by their firmness and sustainability, as well as their belief in future success. In addition, they maintain their hope of achieving the goal, even in the face of new challenges and problems, and expect that good things will happen to them. In short, enthusiastic employees have a psychological capital that helps them to control and influence their work environment successfully. The teachers' passion for work increases the sense of power and energy as well as their interest in the work. Teachers are more enthusiastic about their job and as well as are more involved in work and enjoy the time they spend, so that they consider their job as part of their lives, and they can convey this enthusiasm to students who are not interested in their energy for more learning. Therefore, considering the importance of job enthusiasm and its impact on positive organizational consequences such as organizational commitment, organizational citizenship behavior and performance and job satisfaction, and more important, the impact on the learning environment, the students' passion also, according to the results of this research, planners and managers in the education system, with regard to the ability to grow and expand the positive psychological capital, act to improve their education and improve it in teacher empowerment programs.

Results of the second hypothesis of research showed that there is a significant and positive relation between psychological hardiness and its components and job engagement. This is in line with results of researches of Goyal, ajawani(2016) and Bue, Salvatore, Mylle, Martin(2013).

Psychological hardiness has been taken into consideration as personal resistant making attribute to face mental stresses and many people believe that it leads to more strength and coping with challenges at workplace. Psychological hardiness in fact refers to individual performance based on cognitive evaluation and people who have high psychological hardiness have high self-esteem and focus more on positive events. These individuals ignore problems in life and work situations and actively face problems and try to

solve them. Psychologically hardened teachers can overcome all sorts of adverse effects and physical and emotional exhaustion due to occupational activity and maintain their mental health. These teachers maintain their psychological and adaptive health and stress situations, feel more confident in the face of accidents and situations, and feel themselves bound to be persevered and committed to their organization and work. They also often struggle with job challenges to succeed in life and work and will be more likely to attend the school.

We should not ignore the effect of psychological hardiness aspects in determination of this positive relation. Individuals who are strong in commitment aspect of psychological hardiness have confident in their ability to change job experiences and challenges in their work environment and so will be presented at their work with more enthusiasm. On the other hand, those with high control believe that they are able to affect and control things that happen around them. These individuals insist to take their responsibilities and act independently in their life and career. Also, individuals who are at a high level in terms of taking challenges focus on changes and comply with conditions instead of relying on static aspects of life. In fact, these individuals are ready to fight any challenges in work environment in every respect and perform their job duties with high enthusiasm.

In general, the results of this research showed that psychological capital has a significant positive relation with job engagement of employees as a positive structure and its components predict a part of changes of job engagement. Employees with high psychological capital have high hope, resiliency, optimism and efficacy which helps them achieve more positive experiences and have more success in doing their job duties and effectively deal with failures. These successes help them to have more positive attitude toward the organization and their jobs and be in organization more eagerly.

Also, psychological hardiness has a significant positive relation with job engagement of employees as a positive structure and its components predict a part of changes of job engagement. Individuals with high psychological hardiness are at a high level in terms of components of commitment, control and challenge and always believe that they have the power to face challenges and obstacles in the organization and control and deal with these challenges and will be presented in organization with more enthusiasm and will experience a high job engagement. Hence, it is recommended that managers of Education organization can focus on teaching psychological capital and psychological hardiness as two variables affecting the enthusiasm of teachers.

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