

Investigating the Relationship between Psychological Capital and Employee Engagement Case study: Isfahan Regional Electronic Company

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Abstract: Psychological capital as an individual's positive psychological state of development is an important factor in organizations. One of the vital factors which it affects on is employee engagement. Employee engagement is a positive attitude held by the employee towards the organization and its values. Improving employee engagement is new challenge for managers. To fill this gap this research has investigated the relationship between Psychological Capital and Employee Engagement by Isfahan Applied Regional Electronic Company through Structural Equivalent Method. 108 employees were chosen as a sample and the hypotheses were analyzed through AMOS by SEM method. This result proved that there is strong relationship between Psychological Capital and Employee Engagement ($\beta=0.86$, $p<0.05$).

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1. Introduction

The mission of psychology in the early 20th century attended to both helping the mentally ill and tapping into the potential of talented and gifted individuals. Following World War II, increased attention and funding encouraged clinical psychologists to focus more on treating the mentally ill. Several decades later, American Psychological Association President Martin Seligman (1999) attempted to renew attention of psychologists on the study of what is right about people (Seligman, 1999; Sin and Lyubomirsky, 2009). Seligman & Csikszentmihalyi (2000) offered a new agenda for psychology in the new millennium. So, Positive psychologists began to unite around a purpose of changing psychology's focus from only repairing the worst things in life to also building positive qualities (Seligman & Csikszentmihalyi, 2000). Therefore, negative psychology change to positive psychology. The new movement in psychology addressed the once-forgotten average person, and began to study what might be possible (Sheldon & King, 2001; Hodges, 2010). As a fact, 'Positive psychology' pays so much on the strengths and optimal functioning of individuals rather than on the negative aspects and weaknesses (Seligman & Csikszentmihalyi, 2000). Emerging positive psychology trend is reflected in

organizational psychology where there is increased attention on the strengths and capacities of human resources intended to increase organizational effectiveness (Luthans, 2002). One of these positive psychological content is known as employee engagement (Schaufeli, Bakker, & Salanova, 2006). At first Kahn (1990) defined personal engagement as "the harnessing of organization members' selves to their work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances" (Kahn, 1990). He further described engagement as the extent to which a person is psychologically present in performing job tasks (kahn, 1990). According to Kahn (1992), people put varying degrees of their selves, physically, cognitively, and emotionally into their work roles (kahn, 1992). According to Kular, Gatenby, Rees, Soane, and Truss (2008), the physical aspect of employee engagement refers to the physical energies exerted by individuals to accomplish their roles. The cognitive aspect concerns the beliefs employees have about the organization, its leadership, as well as conditions of work. The emotional component has to do with employees' feelings, positive or negative, toward the job, organization, and its leadership (Kular et al., 2008; Karen, 2011).

It is obvious that employee engagement can't be emerged spontaneously. It needs content such as Psychological Capital. Psychological Capital as defined by Luthans and Youssef (2004) and Luthans, Avolio, Avey and Norman (2007) is an individual's positive psychological state of development which we investigated in this research (Luthans et al., 2004; Luthans et al., (2007).

Studying the relationship between Psychological Capital and Engagement is the main aim of this study. There are few related studies and there is no previous research which investigates the relationship between these two factors.

In this study the relationship between Psychological Capital and Engagement has been investigated in Isfahan Regional Electric Company (REC).

2. Literature review

2.1. Psychological capital

Positive psychology which its aim is to building positive qualities, focuses on individual attributes and includes the following traits: capacity for love, vocation, courage, interpersonal skills, aesthetics, sensibility, perseverance, forgiveness, originality, future mindedness, spirituality, talent, and wisdom (Seligman & Csikszentmihalyi, 2000). At the group level, positive psychology pertains to the civic virtues of institutions. Civic virtues move individuals toward better citizenship, responsibility, nurturance, altruism, civility moderation, tolerance, and work ethics (Luthans, 2002a; Abdullah, 2009).

Following the premise that "what is good about life is as genuine as what is bad and therefore deserves equal attention" (Peterson & Byron, 2007). Application of positive psychology in organization and management science led to create and develop new paradigm in organizational paradigms which will be explained in the following (Luthans et al., 2007).

Positive Organizational Scholarship(POC), that defined as" study of that which is positive, flourishing, and life-giving in organizations" led primarily by a group of researchers at the University of Michigan's Center for Positive Organizational Scholarship, focuses on dynamics in organizations that lead to "positive deviance" or the ways in which organizations and their members flourish and prosper in extraordinary ways (Cameron & Caza, 2004;Cameron, Dutton & Quinn, 2003; Serwer and Kowitt, 2009).

Another group of scholars have focused on applying positive psychology to the workplace. This work, known as Positive Organizational Behavior (POB), that 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 in today's workplace (Luthans, 2002b; Hogdes, 2010). POB centers its attention on the individual level of analysis and in particular on the development processes that can be leveraged for performance improvement (Hogdes, 2010). We cannot consider each factor for POB because it must be positive and relatively unique to the field of organizational behavior, and most importantly, it must meet the scientific criteria of being theory and research-based, measurable, state-like or developmental, and related to work performance outcomes. According to these features, there are four factors for POB, which are self-efficacy, hope, optimism and resiliency (luthans et al., 2007). Because of their effect on human capital and social capital, they called psychological capital. So, Psychological Capital or (PsyCap) as defined by Luthans and Youssef, (2004) and Luthans et al., (2007) is an individual's positive psychological state of development and is characterized by:

Having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks;

Making a positive attribution (optimism) about succeeding now and in the future;

Persevering towards goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and

When beset by problems and adversity, sustaining and bouncing back even beyond (resilience) to attain success. (luthans et al., 2007)

In the following these four factors will be completely explained.

2.1.1. Self-efficacy

Interest in beliefs about personal control has a long history in psychology (Hodges, 2010). This study of perceived competence was first defined and articulated under the heading "self efficacy" (Bandura, 1977a). More recent conceptualizations of the concept include references to "judgments of how well one can execute courses of action to deal with prospective situations" (Bandura, 1982) and "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997). Self efficacy beliefs are not beliefs about an individual's level or type of skill set, but rather what they can accomplish by utilizing the skills that they do have (Bandura, 1986; Mcnatt & Judge, 2008). They are not concerned with what an individual intends to do, but rather with beliefs about what one has the capacity or ability to do (Maddux, 2009). Related to POB research, a widely accepted definition of self-efficacy references

“an individual's convictions (or confidence) about his or her abilities to mobilize the motivation, cognitive resources, and courses of action needed to successfully execute a specific task within a given context” (Stajkovic & Luthans, 1998b).

2.1.2. Hope

Much of the academic research on hope over the last 20 years has been associated with Rick Snyder (1989), one of the pioneers of the Positive Psychology movement, who introduced his cognitive theory of hope (Snyder, 1989). He defined it as “a positive motivational state that is based on an interactively derived sense of successful (1) agency (goal-directed energy) and (2) pathways (planning to meet goals)” (Snyder, Irving, & Anderson, 1991). So, Hope is described as a motivational state that is based on three primary components: goals, pathways, and agency goal directed thinking (Snyder, 1994). Hope is seen as combination of organizational-based goals and personal goal attainment. Therefore, it consists of organizational (agency) goals, individual goals based on the organization (pathways), and individual goals based on the individual (goal). (Abdullah, 2009; Rand & Cheavens, 2009) On the other hand, hope conceptualized as expectations or feelings about goals and the future (Edwards, 2009).

2.1.3. Optimism

The strong theory and research backup for optimism dates back to the early 20th century expectancy-value theories of motivation (Scheier & Carver, 2009). In the simplest definition, optimists are “people who expect good things to happen to them; pessimists are people who expect bad things to happen to them” (Scheier & Carver, 2009). This difference in expectancies causes optimists and pessimists to differ in how they approach problems and in the manner as well as the success rate with which they deal with adversity. The “expectancy” component of expectancy-value theory reflects the level of confidence in goal attainment and “Value” reflects the importance of the goal to the person (Carver & Scheier, 2002; Rasmussen, Wrosch, Scheier & Carver, 2005).

2.1.4. Resilience

The earliest definition of resilience is as “the capability of individuals to cope successfully in the face of change, adversity, and risk” (Stewart, Reid & Mangham, 1997). For the first time, resilience uses in clinical psychology by Masten and Reed (2002). They defined it as “a class of phenomena characterized by patterns of positive adaptation in the context of significant adversity or risk” (Masten and Reed, 2002; Luthans 2007). More specifically defined for POB researchers, Luthans offered that resilience is “the capacity to rebound or bounce back from adversity, conflict, failure, or even positive events,

progress, and increased responsibility” (Luthans, 2002a). Resilience characterised by 2 elements and they are: Resiliency Assets and Resiliency Risk Factors. Masten and Reed (2002) define a resiliency asset as “a measurable characteristic in a group of individuals or their situation that predicts a positive outcome in the future on a specific outcome criterion.” Masten and Reed (2002) define resiliency risk factors as those that cause an “elevated probability of an undesirable outcome” (Masten and Reed, 2002; Luthans 2007).

2.2. Employee Engagement

In the academic literature, the term engagement was first conceptualized by Khan (1990). The many and varied definitions of engagement are largely derived from Khan's work (Ferrer, 2005). Rothbard (2001) described engagement as being psychologically present (Rothbard, 2001 & Johnson, 2011). Schaufeli and his colleagues (2002) defined employee engagement as a positive, work-related state of fulfillment (Schaufeli et al., 2002). They emphasized that engagement does not refer to a momentary or specific state but is a more persistent and pervasive affective-cognitive state that is not focused on any particular object, event, individual, or behavior (Schaufeli, et al., 2002; 2006). Robinson, Perryman, and Hayday (2004), defined engagement as: a positive attitude held by the employee towards the organization and its values (Robinson et al., 2004). More recently, Macey and Schneider (2008) stated that employee engagement is a “desirable condition has an organizational purpose, connotes involvement, commitment, passion, enthusiasm, focused effort, and energy” (Macey and Schneider, 2008). An employee who is engaged is described as being physically involved, cognitively vigilant, and emotionally connected to the job and organization (Simpson, 2008; Hodges, 2010). Engagement is a positive, fulfilling work-related state of mind that is characterized by vigor, dedication, and absorption (Taipale, Selander and Anttila, 2011). Many researchers constructed the Utrecht Work Engagement Scale (UWES; Schaufeli & Bakker, 2003) to assess these three dimensions (Cole, Walter, Bedeian and Boyle, 2011). The UWES has been used by Schaufeli et al., 2002; Duran et al., 2004; Gan, Yang, Zhou, & Zhang, 2007; Gill, 2007; Koppula, 2008; Sonnentag, 2003, Simpson, 2009; Wollard, 2011; Fairlie, 2011; Jouko, 2011, and has obtained acceptable reliability of scores (Cole et al., 2011; Weidert, 2011).

In the following these three factors will be completely explained.

2.2.1. Vigor

Vigor is characterized as high levels of energy and mental resilience while working, the willingness to

invest effort in one's work and persistence even in the face of difficulties (Schaufeli, et al., 2002; 2006). Taipale et al. (2011), mentioned vigor refers to energetic working; being ambitious enough to work hard, even in difficult situations. So in workplace vigor demonstrated a willing to contribute energy into a task, an ability to avoid fatigue and demonstrating persistence in completing a task (Gonzalez et al., 2006; Weidert, 2011).

2.2.2. Dedication

Dedication refers to being strongly involved in one's work (Schaufeli et al., 2002; Simpson, 2009). It is linked to the experience of meaningful work and dedication in work signals that an individual's pride in his work, finding its content inspiring (Taipale et al. 2011). Based on dedication a person experiences a sense of significance, enthusiasm, inspiration, pride, and challenge by completing his task (Cole et al., 2011).

2.2.3. Absorption

Absorption is characterized by being fully concentrated and happily engrossed in one's work, whereby time passes quickly and one has difficulties with detaching oneself from work (Schaufeli, et al., 2002; 2006; Johnson, 2011). In other words it refers to personal immersion in work, from which one gets pleasure. It also indicates that a person is concentrated on his work and finds it rewarding (Maslach et al., 2001; Selander et al., 2011). Rothbard (2001) regards absorption as a critical component of engagement that characterized by being fully concentrated and happily engrossed in one's work (Rothbard, 2001; Simpson, 2009). Schaufeli and Salanova (2007) note that being fully absorbed in a role comes close to what Csikszentmihalyi (1990) calls "flow" (Schaufeli and Salanova, 2007). They suggest that the distinction lies in the fact that whereas engagement is a persistent work state, flow is a more complex concept that involves momentary peak experiences that can occur outside of work (Gruman and Saks, 2011).

3. Conceptual framework and hypotheses

The main aim of this study is to investigate the relationship between psychological capital and engagement through Regional Electric Company. As the previous studies indicate there is a relationship between these two factors. For example, Hodges (2010) found that initial evidence supporting the presence of a contagion effect where employees reporting to the managers participating in the Psychological Capital intervention experienced an increase in their own Psychological Capital levels over a six-week period.

Therefore in this study we consider employees of Regional Electric Company to investigate this

relationship. In the other hand we consider dimensions of self concept, hope, optimism and resilience for psychological capital and dimensions of vigor, dedication and absorption for employee engagement.

The main hypotheses of this study are:

H1: Self concept is positively related to employee engagement in REC.

H2: Hope is positively related to employee engagement in REC.

H3: Optimism is positively related to employee engagement in REC.

H4: Resilience is positively related to employee engagement in REC.

H5: Psychological capital is positively related to employee engagement in REC.

The figure 1 indicates the conceptual model of research.

4. Research methodology

4.1. Case study

The case study of this research is regional electric company (REC) in Isfahan. The initial stages relating to electrification in Isfahan started in 1925. The deceased Attaolmolk Dahesh started the first electricity factory in Darvazeh Dolat square by purchasing two wood burning generators with a power of 99 kilowatts each, together with a 50 kw generator. At this point in time the electricity generator was only single phase and could only give its services to areas around the power plant, such as Naghsh-e-Jahan square, Alighapu building and Chehell-sotoon which were the only places which had light at that item. In 1945 by increasing demand to electricity from citizens and also to lighting up the streets the Esfahan turbine company was established (erec.co.ir, 2012).

4.2. Sampling

Regional Electric Company has 142 employees, which we consider as statistic population. To determine the sample size, the Morgan table is used which proposes that the proper sample size for more 142 is 108 with 95% level of confidence (Krejcie and Morgan, 1970). These 108 employees were in 5 job title classifications therefore by classified sampling we randomly chose 108 employees from classifications of secretary, expert, consultant, vice-chandler and manager. 31.5% of participants were women and 67.6% of them were men. The average age of them was 39 years old.

4.3. Research measurement

Two measurements were used to assess the relationship between psychological capital and employee engagement. The first measurement which measures psychological capital was conducted by Luthans (2007). This questionnaire includes four

dimensions and 6 questions for each dimension. The second measurement which measures employee engagement was conducted by Schaufeli & Bakker (2003). This measurement has three dimensions and totally 15 questions.

The participants (employees and managers of REC) were asked to rate on a five-point Likert scale (5) from "strongly disagree" (1) to "strongly agree" (5).

To determine the content validity five experts and professors of organizational behaviors assessed and modified the metrics. To determine the reliability of this measurement factor analysis and Cronbach's Alpha were used as shown in table 1. The total Cronbach's Alpha was 0.92 which confirms the scale reliability.

Table 1. Factor loadings and Cronbach's Alpha

| Factors | Factor loadings | Cronbach's Alpha |
|---------------------|-----------------|------------------|
| Self concept | 0.71 | 0.72 |
| Hope | 0.64 | 0.76 |
| Optimism | 0.72 | 0.71 |
| Resilience | 0.73 | 0.74 |
| Vigor | 0.82 | 0.71 |
| Dedication | 0.85 | 0.82 |
| Absorption | 0.84 | 0.75 |

5. Results and Discussion

In this study, we used Structural Equation Modeling (SEM) for data analysis. The conceptualized model of research ran as a structural model to test the hypothesis regarding the relationship between psychological capital and employee engagement in REC.

The method of maximum likelihood estimation in Amos Graphics 18 software was used to analyze data and hypotheses testing.

To assess the fitness of the proposed model, the overall model Cmin or Chi-square, the Tucker – Lewis index (TLI), the comparative fit index (CFI), and the root mean square error of approximation (RMSEA) and goodness of fit index (GFI) were used (Byrne, 2010). After refining the initial structure model, all of the goodness of fit indexes was found within acceptable range indicating that the model of the research has a good fitness (Byrne, 2010). In order to test the hypotheses and casual path, the maximum likelihood methods is used (Table 2).

Table 2. Goodness indicates of the structural model

| Indicators | CFI | GFI | RMSEA | TLI | P |
|------------|-------|-------|-------|-------|-------|
| Values | 0.953 | 0.971 | 0.033 | 0.968 | 0.003 |

In analyzing the results of the structural model, we found that all proposed relationships received strong support. Standard regression weights of all hypothesized paths are presented in Figure 1.

In hypothesis 1, we assumed that there is a positive relationship between self concept, one of the dimensions of psychological capital and employee engagement. As results show ($\beta=0.83$, $p<0.05$) this hypothesis is confirmed. Self concept is implemented when the employee knows and ensures about his/her ability in doing works. By increasing self concept, employee engagement can be improves.

Hypothesis 2 is accepted, too ($\beta=0.73$, $p<0.05$). It means that by improving hope in employees we can

increase employee engagement. Hopeful employee has goals and enough energy to gain his goals. This employee passes few ways to meet his goals. Therefore, because of being hopeful and energized this employee devotes himself for his work to do it best. It just means engagement.

Hypothesis 3 denoted increasing in optimism of employees can positively improve employee engagement and the results show that this hypothesis is accepted ($\beta=0.84$, $p<0.05$). The optimism one expects positive happenings in life and also in work. He is desirable and hopeful about future of his job, and therefore he will try more to improve, learn and empower. He does his best to success in his job.

Considering Hypothesis 4, it was found that resilience in another factor which can influence on employee engagement ($\beta=0.79$, $p<0.05$).

Hypothesis 5, assumed that there is positive relationship between psychological capital and engagement in REC. As we predicted this hypothesis is accepted, too ($\beta=0.86$, $p<0.05$). Considering this relationship can help managers to increase employee engagement by improving psychological capital. Previous researches confirmed such relationships.

Hodges (2010) found that initial evidence supporting the presence of a contagion effect where employees

reporting to the managers participating in the Psychological Capital intervention experienced an increase in their own Psychological Capital levels over a six-week period. Medlin and Green (2011) indicated that Goal setting positively impacts employee engagement, employee engagement positively impacts optimism and optimism positively impacts individual performance. Abdullah (2009) showed that positive leadership behaviors and followers positive psychological capital are mutually exclusive.

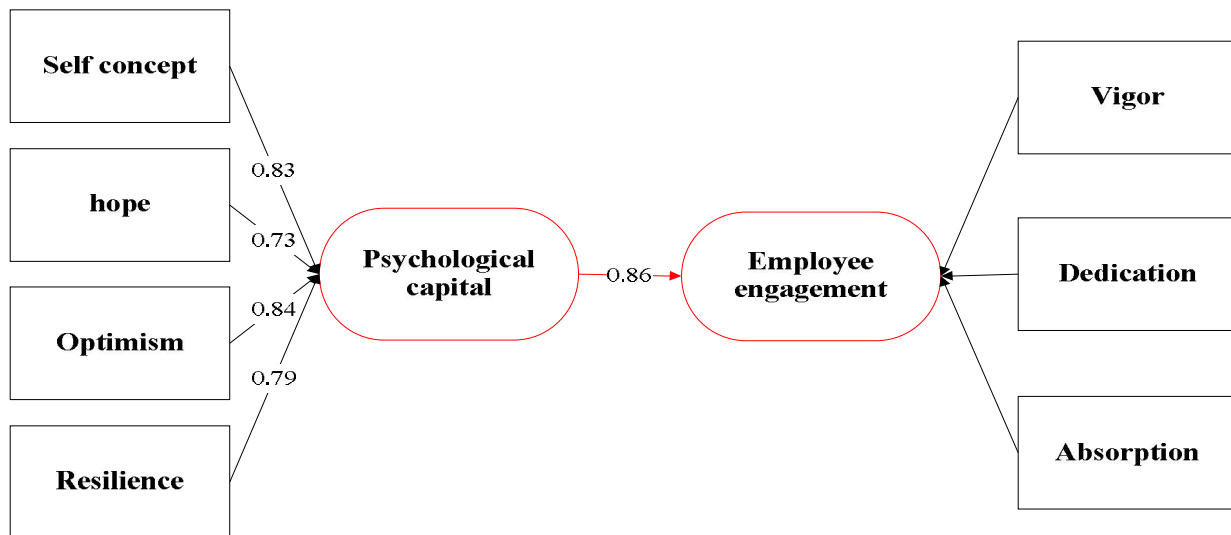


Figure 1. Structural Equation Model

6. Conclusion

The main aim of this research was to investigate the relationship between psychological capital in four dimensions and employee engagement with three dimensions. To gain this goal we applied Isfahan regional electronic company (REC). The nature of this company let us measure these two variables better.

There isn't any previous study which considered these two variables, therefore to fill this gap we suggested a model which examined and confirmed by SEM method. The main hypothesis which mentioned that the relationship between psychological capital and employee engagement is positive and strong, was accepted by AMOS through SEM method ($\beta=0.86$, $p<0.05$). By improving psychological capital, the employee engagement can be increased.

This structural model can be applied and developed by future researchers. Surely, there are

some more variables affecting this relationship, they should be considered and measured.

Determining more affecting related variables can improve the model comprehension and implementation.

Engagement is not only a vital factor for managers to be considered but a new paradigm in the era which ethics in organizations is really important. Future researches can determine more dimensions for this variable can assess it better.

References

1. Abdullah, M. C.(2009). "Leadership and PSYCAP: A study of the relationship between positive leadership behavior and followers' positive psychological capital". A dissertation presented in partial fulfillment of the requirements for the Degree Doctor of Philosophy.
2. Bakker, A. B & Demerouti, E.(2008). "Towards a model of work engagement". Career

- Development International. Vol. 13, No. 3, pp. 209-223.
3. Bakker, A. B & Schaufeli, W. B.(2008). "Positive organizational behavior: Engaged employee in flourishing organizations". *Journal of organizational behavior*. Vol. 29, No. 3, pp. 147-154.
 4. Bandura, A.(1977a). "Self-efficacy: Toward a unifying theory of behavioral change". *Psychological Review*. Vol. 84, No. 2, pp. 191-215.
 5. Bandura, A.(1997). "Self-efficacy: The exercise of control". New York: Freeman.
 6. Bandura, A.(1982). "Self-efficacy mechanism in human agency". *American Psychologist*. Vol. 37, No. 2, pp. 122-147.
 7. Bandura, A.(1986). "Social foundations of thought and action: A social cognitive theory". Englewood Cliffs, NJ: Prentice Hall.
 8. Byrne, B.(2010). "Structural Equation Modeling With AMOS". Taylor & Francis Group, second edition. New York: NY.
 9. Cameron, K. S; Dutton, J & Quinn, R.(2003). "Positive organizational scholarship: Foundations of a new discipline". San Francisco: Berrett-Koehler.
 10. Cameron, K. S & Caza, A.(2004). "Contributions to the discipline of positive organizational scholarship". *American Behavioral Scientist*. Vol. 47, No. , pp. 731-739.
 11. Cole, M. S; Walter, F; Bedeian, A. G & O'Boyle, E. H.(2011). "Job burnout and employee engagement: A meta-analytic examination of construct proliferation". *Journal of management*. Vol. 2, No. 1, pp. 834-848.
 12. Carver, C & Scheier, M.(2002). "positive psychology". Oxford, UK: Oxford University Press.
 13. Duran, A; Extremera, N & Rey, L.(2004). "Engagement and burnout: Analysing their association patterns". *Psychological Reports*. Vol. 94, No. 3, pp. 1048-1050.
 14. Edwards, L. M.(2009). "Hope, The encyclopedia of positive psychology". Oxford: Wiley-Blackwell.
 15. Fairlie, P.(2011). "Meaningful work, employee engagement and other key employee outcomes". *Human Resource Development*. Vol. 13, No. 4, pp. 508-525.
 16. Ferrer, J.(2005). "Employee engagement: Is it organizational commitment renamed? ". *School of Management: Victoria University of Technology*.
 17. Gan, Y; Yang, M; Zhou, Y & Zhang, Y.(2007). "The two-factor structure of future-oriented coping and its mediating role in student engagement". *Personality and Individual Differences*. Vol. 43, No. 4, pp. 851-863.
 18. Gill, D.S.(2007). "Employee selection and work engagement: Do recruitment and selection practices influence work engagement? ". A dissertation presented in partial fulfillment of the requirements for the Degree Doctor of Philosophy.
 19. Gonzalez-Roma, V; Schaufeli, W. B; Bakker, A. B & Lloret, S.(2006). "Burnout and work engagement: Independent factors or opposite poles? ". *Journal of Vocational Behavior*. Vol. 68, No. 1, pp. 165-174
 20. Gruman, J. A & Saks, A.M.(2011). "Performance management and employee engagement". *Human Resource Management*. Vol. 21, No. 2, pp. 123-136.
 21. Hodges, T.(2010). "An experimental study of the impact of psychological capital on performance, engagement, and the contagion effect". A dissertation presented to the Faculty of the graduate college at the University of Nebraska in partial fulfillment of requirements for the Degree of Doctor of Philosophy.
 22. Johnson, K.R.(2011). "The relationships among organizational service orientation, customer service training, and employee engagement". A dissertation submitted to the faculty of the graduate school of the university of Minnesota in partial fulfillment of the requirements for the Degree of Doctor of Philosophy.
 23. Kahn, W. A.(1990). "Psychological conditions of personal engagement and disengagement at work". *Journal of Management*. Vol. 33, No. 4, pp. 692-724.
 24. Kahn, W. A.(1992). "Psychological presences at work". *Human Relations*. Vol. 45, No. 4, pp. 321-349.
 25. Krejcie, R.V. & Morgan, D.W.(1970). "Determining Sample Size for Research Activities", *Educational and Psychological Measurement* 30: 607-610.
 26. Kular, S; Gatenby, M; Rees, C; Soane, E; & Truss, K.(2008). "Employee engagement: A literature review". Kingston Upon Thames: Kingston Business School, Kingston University
 27. Luthans, F.(2002a). "The need for and meaning of positive organizational behavior". *Journal of Organizational Behavior*. Vol. 23, No. 6, pp. 695-706.
 28. Luthans, F. & Youssef, C. M.(2004). "Human, social and now positive psychological capital management: Investing in people for competitive advantage". *Journal of human resource management*. Vol. 33, No. 2, pp. 143-160.

29. Luthans, F; Youssef, C. M & Avolio, B. J. (2007). "Psychological Capital: Developing the Human Competitive Edge". New York: Oxford University Press.
30. Luthans, F.(2002b). "Positive organizational behavior: Developing and managing psychological strengths". *Academy of Management Executive*. Vol. 16, No. 1, pp. 57-72.
31. Ma, H.(2011). "The effect of corporate social responsibility on employee engagement". A thesis presented to the faculty of the USC Graduate School University of Southern California in partial fulfillment of the requirements for the Degree Master of Arts.
32. Macey, W. H & Schneider, B.(2008). "The meaning of employee engagement". *Industrial and Organizational Psychology*. Vol. 1, No. 1, pp.3-30.
33. McNatt, D. B & Judge, T. A.(2008). "Self-efficacy intervention, job attitudes, and turnover: A field experiment with employees in role transition". *Human Relations*. Vol. 61, No. 6, pp. 783-810.
34. Maddux, J. E.(2009). "Self-efficacy, The encyclopedia of positive Psychology". Oxford: Wiley-Blackwell.
35. Masten, A. S & Reed, M. J.(2002). "Resilience in development". Oxford, UK: Oxford University Press.
36. Maslach, C; Schaufelli, W. B & Leiter, M. P.(2001). "Job burnout". *Annual Review of Psychology*. Vol. 52, No. 1, pp. 397- 422.
37. Peterson, S. J & Byron, K.(2007). "Exploring the role of hope in job performance: Results from four studies". *Journal of Organizational Behavior*. Vol. 29, No. 6, pp. 785-803.
38. Rand, K. L & Cheavens, J. S.(2009). "Hope theory, Oxford Handbook of Positive Psychology". Oxford: Oxford University Press.
39. Carver, C. S.(2006). "Self-regulation processes and health: The importance of optimism and goal adjustment". *Journal of Personality*. Vol. 74, No. 6, pp. 1721-1747.
40. Robinson, D; Perryman, S & Hayday, S.(2004). "The drivers of employee engagement". Brighton, UK: Institute for Employment Studies.
41. Rothbard, N. P.(2001). "Enriching or depleting? The dynamics of engagement in work and family roles". *Administrative Science Quarterly*. Vol. 46, No. 4, pp. 655-684.
42. Schaufeli, W. B; Bakker, A. B & Salanova, M.(2006). "The measurement of work engagement with a short questionnaire: A cross-national study". *Educational and Psychological Measurement*. Vol. 66, No. 4, pp. 701-716.
43. Schaufeli, W. B & Bakker, A. B.(2003). "UWES—Utrecht Work Engagement Scale: Test manual". Department of psychology, Utrecht University, Utrecht.
44. Schaufeli, W. B & Salanova, M.(2007). "Efficacy or inefficacy, that's the question: Burnout and work engagement, and their relationship with efficacy beliefs". *Anxiety, Stress & Coping*. Vol. 20, No. 2, pp. 177-196.
45. Scheier, M. F & Carver, C. S.(2009). "Optimism, The encyclopedia of positive psychology". Oxford: Wiley-Blackwell.
46. Seligman, M. E. P.(1999). "The president's address". *American Psychologist*. Vol. 54, No. 2, pp. 559-562.
47. Seligman, M. E. P & Csikszentmihalyi, M.(2000). "Positive psychology". *American Psychologist*. Vol. 55, No. 1, pp. 5-14.
48. Serwer, A & Kowitt, B.(2009). "The decade from Hell and how the next one can be Better". *Time*. Vol. 174, No.22, pp. 30-38.
49. Sheldon, K & King, L.(2001)." Why positive psychology is necessary". *American Psychologist*. Vol. 56, No. 3, pp. 216-217.
50. Simpson, M. R.(2009). "Engagement at work: A review of the literature". *Journal of Nursing Studies*. Vol. 46, No. 7, pp. 1012-1024.
51. Sin, N. L & Lyubomirsky, S.(2009). "Enhancing well-being and alleviating depressive symptoms with positive psychology interventions: A practice-friendly meta analysis". *Journal of Clinical Psychology*. Vol. 65, No. 5, pp. 467-487.
52. Snyder, C. R.(1989). "Reality negotiation: From excuses to hope and beyond". *Journal of Clinical and Social Psychology*. Vol. 8, No. 2, pp. 130-157.
53. Snyder, C. R; Harris, C; Anderson, J. R; Holleran, S. A; Irving, L. M; Sigmon, S. T; Yoshinoubu, L;
54. Gibb, J; Langelle, C & Harney, P.(1991). "The will and the ways: Development and validation of an individual differences measure of hope". *Journal of Personality and Social Psychology*. Vol. 60, No. 4, pp. 570-585.
55. Snyder, C. R.(1994). "The psychology of hope: You can get there from here". New York: Free Press.
56. Sonnentag, S.(2003). "Recovery, work engagement, and proactive behavior: A new look at the interface between nonwork and work". *Journal of Applied Psychology*. Vol. 88, No. 3, pp. 518—528.

57. Stajkovic, A. D & Luthans, F.(1998b). "Social cognitive theory and self-efficacy: Going beyond traditional motivational and behavioral approaches". **Organizational Dynamics**. Vol. 26, No. 4, pp. 62-74.
58. Stewart, M; Reid, G & Mangham, C.(1997). "Fostering children's resilience". **Journal of Pediatric Nursing**. Vol. 12, No. 1, pp. 21-31.
59. Taipale, S; Selander, K; Anttila, T & Natti, A.(2011). "Work engagement in eight European countries: the role of job demands, autonomy and social support". **Journal of Sociology and Social Policy**. Vol. 31, No. 7, pp. 486-504.
60. Weidert, J.M.(2011). "**The physiological measurement of employee engagement**". In partial fulfillment of the requirements for the Degree of Master of Science Colorado State University Fort Collins, Colorado.
60. Wildermuth, C. S & Pauken, P. D.(2008). "Decoding employee engagement. Engaging cultures and leaders". **Industrial and Commercial Training**. Vol. 40, No. 3, pp. 122-128.
61. Wollard, K.(2011). "Another perspective on employee engagement". **Human Resource Development**. Vol. 13, No. 4, pp. 526-537. www.erec.co.ir/latinaffiliated.php, accessed in 2012.

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