Impact of Psychological Capital on Employee Engagement: A Study of IT Professionals in Indian Context

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Received 28 August 2014, Accepted 10 September 2014

ABSTRACT:

Psychological Capital (PsyCap) construct is a core concept of positive psychology consisting of the positive psychological resources of self-efficacy, hope, optimism, and resilience. Previous studies confirmed link of PsyCap with employee attitude, behavior, workplace outcomes and job performance. In today's competitive environment, it is a challenging task for all organizations to enhance the level of engagement of employees. Employee engagement (EE) contribute positively to different workplace outcomes and performance level of employees. The current study focuses on the relationship between PsyCap and employee engagement. Data from 420 middle level IT professionals (working in different IT industries in Indian context) were collected for current study. Regression analysis, basic descriptive analysis, Confirmatory factor analysis, model fit analysis etc. analysis were performed. Results revealed positive impact of PsyCap on Employee Engagement. Moreover a fit model was also identified between PsyCap and EE with both construct's factors. Results of current study demonstrated that employee with higher level of PsyCap (in terms of hope, confidence level, bounce back capability and optimistic view) show higher level of work engagement at workplace in IT industries.

Keywords: Psychological capital, Employee engagement, Feedback, Hope, Teamwork, Optimism

INTRODUCTION

In current organizational environment which characterized high competition, by challenging and regularly changing environment, all organizations are now days more focused to develop and maintain human capital rather than focusing more on financial capital and physical capitals. Human capital can be defined as "The stock of competencies, knowledge, habits, social and personality attributes, including creativity, cognitive abilities, embodied in the ability to perform labor so as to produce economic value". Therefore, human capital stands for "the value that each employee brings to the table, according to his/her studies, knowledge, capabilities and skills". Psychological Capital (PsyCap) is one of part of human capital of employees. Psychological Capital (PsyCap) is one of the positive personal resource to enhance an individual's success at workplace. PsyCap is one of the important concept of emerging field "positive psychology" and "Positive Organizational Behavior (POB)". Seligman (1999) stated that "positive psychology is a new science which is focused on improving the lives of people".

Luthans (2002a, 2002b) introduced the POB concept and found that all state-like concepts of POB can be effectively and validly "developed, measured and managed to improve performance of employees at workplace". Hope (Snyder,

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2000), Self-efficacy (Bandura, 1997; Stajkovic and Luthans, 1998b), Resilience (Masten, 2001) and optimism (Scheier and Carver, 1985) etc. all four psychological resource capacities meet POB criteria and these capacities also major components of psychological capital of an individual. Luthans et al. (2007a) defined Psychological Capital (or PsyCap) as: "an individual's positive psychological state of development that is characterized by: (1) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems with adversity, sustaining and bouncing back and even beyond (resiliency) to attain success".

To get employees engaged fully at workplace is a challenging task for today's organizations. Therefore Employee engagement has turn into a hot issue in recent years. The thought "personal engagement" at place of work was introduced by Kahn in 1990. He defined Employee Engagement as "the harnessing employees to their work roles and to express themselves physically, cognitively and emotionally during their role performance" (as cited in Saks, 2006). Kahn built up an engagement model which recognized three psychological conditions: availability, meaningfulness and safety. Based on Kahn's engagement model, May et al. (2004) found role fit and job enrichment as positive antecedents of Meaningfulness; supportive supervisor relations and rewarding coworkers as positive antecedents of Safety: consciousness and adherence to co-worker norms as negative predictors of Safety; resources positive antecedents of psychological availability and participation in outside activities as negative antecedent of psychological availability. Taken as a whole, meaningfulness was identified as strongly related with different outcomes of employees in terms of their engagement levels.

The presences (psychologically and physically) during performing and occupying an organizational role, is basically engagement of an employee (Kahn, 1990). Rothbard (2001, cited in Saks, 2006) demonstrated employee

engagement as psychological presence, and also showed two critical components (attention and absorption) of employee engagement. Schaufeli et al. (2002b) explained work engagement "as a positive, satisfying, work-related state of mind that is characterized by vigor, dedication, and absorption.

Literature Review Psychological Capital (PsyCap)

Psychological Capital or PsyCap was defined by Luthans et al. (2007) as "the individual's positive psychological state of development characterized by hope, optimism, resiliency and self-efficacy". Luthans et al. (2004) also stated that Hope, Optimism, Resilience and Selfefficacy (i.e. four positive psychological capacities or components) are characterized by for development and measurable, open manageable. Self-efficacy was defined by Bandura (1997) as "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments". A widely accepted definition of self-efficacy was provided by Stajkovic and Luthans (1998b) as " 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". In several meta-analysis Self-efficacy and work-related reports. performance were found strongly and positively related with each other (Sadri and Robertson, 1993; Stajkovic and Luthans, 1998a; Judge et al., 2007).

Hope was defined 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 et al., 1991). Hope has been found associated with job performance (Peterson and Byron, 2007), satisfaction and retention (Peterson and Luthans, 2003), profitability (Adams et al., 2002; Peterson and Luthans, 2003), performance, job satisfaction, work happiness, and organizational commitment (Youssef and Luthans, 2007), leadership and supervisor-rated performance and (Luthans et al., 2005), and management (Snyder, 1995), and at workplace.

Seligman (1998a) gave the definition of optimism as "An attributional style that explains

positive events in terms of personal, permanent, and pervasive causes and negative events in terms of external, temporary, and situationspecific ones". Scheier and Carver (1985) introduced the expectancy-value theory of optimism. Optimism has been found to linked with several workplace outcomes like job satisfaction. performance, organizational commitment and work happiness (Luthans et al., 2005; Youssef and Luthans, 2007). Luthans stated that resilience is "the capacity to rebound or bounce back from adversity, conflict, failure, or even positive events, progress, and increased responsibility" (Luthans, 2002a). researchers studied the positive relationship between Resilience and workplace performance (Doe, 1994; Horne and Orr, 1998; Mallak, 1998; Zunz, 1998; Coutu, 2002; Waite and Richardson, 2004; Harland et al., 2005; Luthans et al., 2005; Luthans et al., 2006; Youssef and Luthans, 2007).

PsyCap with the combination of Hope, Resilience, self- efficacy and Optimism capacities, exhibited as a core factor and effective predictor of performance and satisfaction (Luthans et al., 2007).

Employee Engagement (EE)

Employee engagement is a broad and complex construct that includes many sound ideas such researched as profitability, commitment, OCB, satisfaction, employee retention, loyalty and in and extra role behavior outcomes. Kahn (1990) defined engagement and also proposed the model of personal engagement. The Social Exchange Theory (SET) explained the reasons of question that "why employees choose to become more or less engaged in their work and organization?" and also provided a theoretical base to explain employee's engagement. Brown (2006) defined engagement as "a progressive combination of satisfaction, motivation, commitment and advocacy resulting from employees' movement up the engagement pyramid". Employee engagement can be understood as cognitive, emotional and behavioral aspects. According to Lockwood (2007) Cognitive engagement aspect is "employees' beliefs about the company, its leaders and the workplace culture. The emotional aspect is "how employees feel about the company, the leaders and their colleagues".

The behavioral factor is "the value added component reflected in the amount of effort employees put into their work". EE is also defined as "a condition of employee who feels involved, committed, passionate, and empowered and demonstrates those feelings in work behavior" (Mone and London, 2010).

A Gallup Inc. study (2009) in U.S. based employees showed the impact of feedback styles on employee's engagement level and they found positive feedback style was strongly related to higher level of engagement in employees. Positive feedback behave as an important predictor of employee engagement, this finding was highlighted in several researches conducted in year 2011. The study of SHRM/Globoforce also stated that "while an overwhelming majority (94%) of organizations believe positive feedback has an impact on improving employee performance, many companies still do not use these tactics".

Towers Perrin (2003a) found supporting teamwork as one of the major predictor of engagement in his research. employee According to Development Dimensions (DDI, 2005), International engagement is "The extent to which people value, enjoy, and believe in what they do". According to DDI, to create a highly engaged workforce, a leader must focus on five drivers (such as empowerment of people, promote and encourage teamwork and collaboration, alignment of efforts with strategy, help employees to develop and grow and provide recognition and appreciations) of employee Organizational engagement. environment and conditions also affect the level of engagement of employees, so by providing safe and healthy working environment, the level of engagement can be improved (Attridge, 2009).

According to an article published by The Conference Board in 2006 (which was based on the findings of major studies conducted by Towers Perrin, Gallup, The Corporate Leadership Council, Blessing White and others), Good teamwork relationship with coworkers, Effective and positive feedback system and healthy work environment were also found as key drivers to enhance employee engagement. Bevan (2010) stated that "the employees who

feel demotivated with or disengaged from their work, or who find their work stressful are more likely to resign from their posts". The findings of Aon Hewitt (2012) was that "28% of employees experienced a high level of job related stress in 'high engagement' companies (65% engagement and over) versus 39% of employees in low engagement companies i.e. employees in high engagement companies reported significantly less workplace stress".

Psychological Capital (PsyCap) and Employee Engagement (EE)

The positive relationship between PsyCap and work engagement were found by many research studies (Bakker et al., 2006; Xanthopoulou et al., 2007a; Bakker et al., 2008; Hodges, 2010; Simons and Buitendach, 2013).

Xanthopoulou et al. (2007a) identified the role of PsyCap (a slightly different operationalization with self-efficacy, self-esteem, and optimism—these elements are known as personal resources) to predict work engagement. The similar study was further repeated and expended with the findings that "self-efficacy, organizational-based self-esteem, and optimism make a unique contribution to explaining variance in work engagement over time, over and above the impact of job resources" by Xanthopoulou et al. (2009a).

Avey et al. (2008) found that positive emotions mediate the relationship between

psychological capital (hope, efficacy, optimism, and resilience) and employee's attitude (engagement and cynicism). Othman, N. and Nasurdin (2011) found hope and resilience as two important factors to determine and improve work engagement and the government delivery health care system for public hospital staff nurses. Larson et al. (2013) also confirmed the positive relationship between leader's PsyCap and follower's engagement level of working adults in U.S.

RESEARCH METHOD

The present study involves a proposed model of research to identify the relationship between PsyCap and employee engagement and between factors/ predictors and related constructs (i.e. PsyCap and EE) which is shown in figure 1. After conducting pilot study, the factors of both constructs were selected on the basis of CFA (confirmatory factor analysis) results with high factor loading values. Final factors of PsyCap were Hope, Optimism, Self-efficacy and Resilience, and factors of EE were Workplace and Resources, Feedback, Teamwork and Stress and Work-pace. The hypothesis of study was that PsyCap positively related to Employee Engagement of IT professionals in Indian context.

H1: Psychological Capital (PsyCap) will be positively related to Employee Engagement (EE).

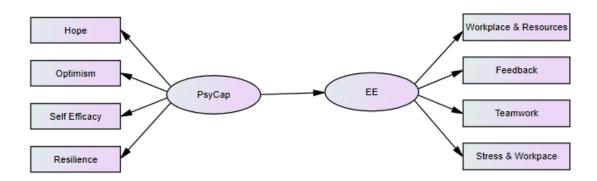


Figure 1: Proposed model of research

Proposed Model (figure 1) shows all hypothesized associations which includes the relationships among factors-constructs and PsyCap- EE.

Sample and Procedure

The respondents in present study comprised of Middle level IT professional (example Software developers, designing engineers, programmers and analysts etc.) from various IT industries located in India. To observe the level of engagement of employees (EE), a self designed and pilot tested questionnaire was used to collect data from target population. To examine the level of psychological capital of psychological employees, the questionnaire or PCQ (Luthans et al., 2007) was used and PCQ has confirmed high reliability and construct validity (Luthans et al., 2007). A total of 500 questionnaires were distributed by email, online survey questionnaire and manually in various IT industries. The distribution and collection of the full and completed questionnaires took period of about two months. Out of 500 distributed questionnaires, 420 usable and fully filled questionnaires were received, with a response rate of 84% from IT professionals.

Constructs, Instruments and Measurement

PsvCap was measured by using PCQ (Psychological Capital Ouestionnaire). developed by Luthans et al. (2007) and included the questions/ statements from Hope, Resilience, Self-efficacy and Optimism factors to observe four positive psychological capacities. PCQ was firstly pilot tested and resized after performing reliability analysis and factor analysis (by using SPSS 20), and final PCQ with $(\alpha) = 0.721$ i.e. satisfactory internally reliable and consistent instrument was taken to measure PsyCap of target samples. Employee Engagement (EE) was examined by using a self-designed questionnaire which was at first pilot tested. The questionnaire to measure EE was finalized after conducting reliability analysis and factor analysis to collect data from IT industries located in India. Several questions were asked from Workplace and Resources, Feedback, Teamwork and Stress and Work-pace etc. factors to evaluate the level of engagement of employees. The value of cronbach's alpha (α) for EE's questionnaire was

found 0.715 i.e. showed satisfactory internal reliability and consistency (According to Nunnally and Berstein (1994) criteria $\alpha > 0.7$). To measure PsyCap and EE, All the respondents were reported on a seven point Likert scale ranging from 0 = "strongly disagree" to 6 = "strongly agree".

Analysis Methods

In our study, we performed descriptive parameters analysis (like correlation coefficient, mean and standard deviation etc.). Factor analysis, regression analysis and SEM (structural equation modeling) have been done by using SPSS 20 and AMOS 20 software. To test the study hypothesis (H1) and all proposed relationships between factors-construct (figure 1), regression analysis was performed. To identify highly loaded or important factors of related construct, Confirmatory Factor analysis (CFA) was executed. Structural Equation Modeling (SEM) and all fit indices for model were identified by using AMOS 20 software.

RESULTS AND DISCUSSION

All types of analysis like reliability and validity analysis, regression analysis, factor analysis and fit indices analysis were shown separately below for Proposed Model and Modified Model.

Results of Proposed Model Reliability and Validity Analysis

Cronbach's alpha (α) values were found more than 0.7 for both the instruments/ questionnaire to measure PsyCap and Employee Engagement i.e. both instruments can be said acceptably internally reliable and consistent according to proposed threshold criteria for α of Nunnally and Berstein's (1994). Convergent validity was also identified for both instruments. Convergent validity (CV) can be defined "the extent to which factors (to measure a single construct) be in agreement with each other".

Fornell and Larcher's (1981) proposed three proofs or conditions to measure convergent validity of psychometric instruments which are as following:

- i. The standardized factor loads > 0.5,
- ii. The CR (composite/construct reliability) 0.6 < CR < 0.8 and

iii. AVE (Average Variance Extracted) value > 0.5.

Our model (shown in figure 2) and instrument's satisfied all criteria for internal reliability and construct reliability (shown in table 1), standard factor loading values (Figure 2) and AVE values were found close to threshold criteria to met convergent validity criteria (table 1).

PsyCap and Employee Engagement (EE) individually showed internal reliability or consistency i.e. cronbach's alpha (α) > 0.7 and Construct/ composite reliability (0.06 < CR < 0.08) which are significant and acceptable values (table 1).

All standardized regression coefficients/

factor loading values were found > 0.5 (excluding EE-Stress and work-pace relationship) so second criteria of Fornell and Larcher's, 1981 for model's convergent validity also met fully in our Proposed Model (value of standardized factor loading are shown in figure 2).

To verify convergent validity of constructs, the third criteria (given by Fornell and Larcher's, 1981) i.e. AVE valve should more than 0.5 was not fully satisfied but the criteria for CV (given by Mark and Sockel's, 2001) i.e. the Bentler-Bonett Normed Fit Index (NFI) for model should be more than 0.9, was fully met and the value of NFI for our proposed model was 0.91. Hence proposed model had significant and acceptable internal reliability and convergent validity.

Table 1: Reliability and convergent validity parameters for proposed model's constructs

| | S. No. | Constructs | No. of Items | Cronbach's alpha (α) | AVE | CR | Remarks |
|---|--------|------------|--------------|----------------------|-------|-------|---------------------------|
| • | 1 | PsyCap | 4 | 0.721 | 0.416 | 0.739 | Reliable (α>0.7 & CR<0.8) |
| | 2 | EE | 4 | 0.715 | 0.450 | 0.754 | Reliable (α>0.7 & CR<0.8) |

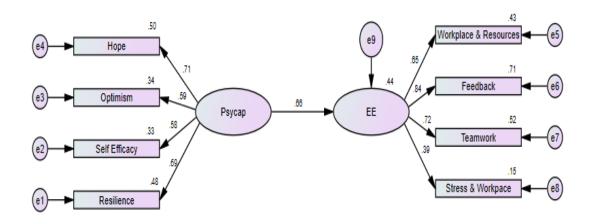


Figure 2: Standard factor loading and R-square values for proposed model

Effect Analysis

Regression analysis was performed to identify the significance of all relationships in model. All the relationships i.e. Hope - PsyCap, Resilience - PsyCap, Self-efficacy - PsyCap, Optimism - PsyCap, Workplace and resources-EE, Feedback-EE and Teamwork - EE etc. (except stress and work-pace-EE) were found significantly related with each other with significant and acceptable p values (i.e. All pvalues were found < 0.01) and standard regression estimates/ factor loading values (i.e. all standard regression coefficients were found > 0.5) for each association (shown in table 2 and figure 2). PsyCap also found positively contributed to employee engagement with 0.66 standard regression weight and acceptable pvalue. So our research hypothesis (i.e. H 1) was accepted that showed PsyCap was positively related to employee engagement for IT professionals.

The unstandardized regression weights (Estimate), standard error (S.E.), Critical Ration (C.R.) and p-values are shown in above table 2 for all relationships of proposed model.

Fit Indices Analysis

Proposed Model's fitness was assessed by

estimating various fit indices by using AMOS 20 software (table 3).

The null hypothesis of model was tested by chi- square test. "Proposed Model is not a fit model", null hypothesis was accepted on the basis of chi-square test's p-value (which was <0.05), so the model was rejected. Likewise the RMESA and RFI values were found in mediocre fitness range. RMR fit index's value was found in not acceptable range. Based on above results (of chi-square test, RMESA, RFI and RMR etc.), the proposed model was rejected fully.

Modified Model (figure 3) was designed by making some modifications in old Proposed Model. These modifications were done on the basis of analysis of Modification indices, Standardized residual covariance values and standardized regression weights/factor loads between proposed model's factors and related constructs. After performing above analysis, Optimism and self-efficacy factors were eliminated from PsyCap construct and Stress and Work-pace factor was eliminated from Employee engagement construct. Modified Model again showed relationship between PsyCap and Employee engagement with their factors (shown in figure 3).

Table 2: Un-standardized regression weights for proposed model

| · | | | Estimate | S.E. | C.R. | P | Label |
|---------|---|--------|----------|-------|--------|-----|-------|
| EE | < | Psycap | 0.711 | 0.088 | 8.064 | *** | |
| RS_PYCP | < | Psycap | 1.000 | | | | |
| SE_PYCP | < | Psycap | 0.861 | 0.095 | 9.039 | *** | |
| OP_PYCP | < | Psycap | 0.801 | 0.088 | 9.137 | *** | |
| HP_PYCP | < | Psycap | 1.095 | 0.116 | 9.402 | *** | |
| WPR_EE | < | EE | 1.000 | | | | |
| FB_EE | < | EE | 1.445 | 0.115 | 12.514 | *** | |
| TW_EE | < | EE | 1.116 | 0.094 | 11.821 | *** | |
| SWP_EE | < | EE | 0.797 | 0.113 | 7.054 | *** | |

(The C R (Critical Ratio) is used to test statistical significance of SEM components, Principle: If C R values > ± 2.58 test significance of estimates at p <0.01 level. Three asterisks (***) indicate significance smaller than 0.001).

Table 3: Fit indices of proposed model

| S. No. | Fitness Indices | Measure of Index for Full model | Principle | Remarks for Full model | |
|--------|--|------------------------------------|------------------------------|------------------------|--|
| 1 | Chi- Square value | 80.04 | p-value > 0.05 | Reject the model | |
| 1 | p-value | 0.000 | p-value > 0.03 | | |
| 2 | Root Mean Square Error of Approximation (RMSEA) | 0.088 | $<0.05^a; <0.08^b$ | Mediocre fit | |
| 3 | Normed Fit Index (NFI) | 0.910 | $\geq 0.90^{a}$ | Acceptable Fit | |
| 4 | CMIN/DF | 4.232 | $\leq 2^a$; $\leq 5^b$ | Acceptable Fit | |
| 5 | Comparative Fit Index (CFI) | 0.929 | $\geq 0.90^{\rm a}$ | Good Fit | |
| 6 | Incremental Fit Index (IFI) | 0.930 | 0 < IFI < 1 | Acceptable model | |
| 7 | Relative Fit Index (RFI) | 0.868 | $\geq 0.90^{a}$ | Mediocre fit | |
| 8 | Goodness of Fit Index (GFI) | 0.956 | $\geq 0.90^a; \ \geq 0.80^b$ | Good Fit | |
| 9 | Adjusted Goodness of Fit Index (AGFI) | 0.916 | $\geq 0.90^a$ | Good Fit | |
| 10 | Akaike Information Criterion (AIC) | 114.4 | Relative measure | Used to compare models | |
| 11 | Root mean square residual (RMR or RMSR) | 0.084 | $< 0.05^a; < 0.08^b$ | Not Acceptable | |
| 12 | Tucker-Lewis index (TLI) | 0.896 | $\geq 0.90^{a}$ | Mediocre fit | |

^a Acceptability: Acceptable. ^b Acceptability: Marginal.

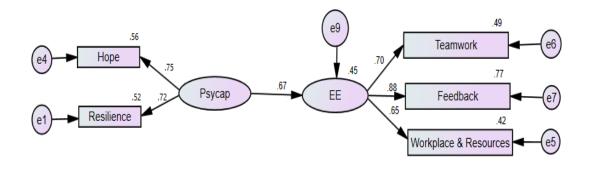


Figure 3: Modified model

Results of Modified Model Reliability and Validity Analysis

Cronbach's alpha (α) for Internal reliability, CR-for Composite/construct reliability and Average Variance Extracted (AVE) and composite/construct reliability (CR)-both for convergent validity etc. parameters were estimated with the help of SPSS 20 and all values are shown below in table 4.

Both constructs (i.e. PsyCap and EE) of Modified Model showed acceptable and satisfactory values of cronbach's alpha (α), CR and AVE. Additionally the value of NFI fit index was found 0.986 for this Modified Model, which satisfied Mark and Sockel's (2001) criteria (NFI > 0.9) for Convergent validity of model. As a result Modified Model can be said internally consistent and reliable and Valid (convergent validity) for study.

Effect Analysis

The results Regression of analysis demonstrated the positive relation between PsyCap and EE with 0.67 standardized regression coefficient and p-value < 0.001 in Modified Model therefore H1 (Hypothesis 1) was again accepted because of having significant and acceptable p-value. It confirmed the positive relation between PsyCap and Employee Engagement for IT professionals (shown in figure 3 and table 5). Hope and Resilience were found strongly and positively related with PsyCap construct with standard regression weights >0.7 (shown in figure 3) and p-values < 0.001 (shown in table 5). In the same way all three predictors of EE i.e. Workplace and resources, Teamwork and Feedback etc. were also found significantly and strongly related with Employee Engagement with standard regression weights >0.6 (shown in figure 3) and p-values < 0.001 (table 5).

Table 4: Reliability (α and CR) and validity (AVE) parameters for modified model's constructs

| S. No. | Constructs | No. of Items | Cronbach's alpha (α) | AVE | CR | Remarks |
|--------|------------|--------------|----------------------|-------|-------|---------------------------|
| 1 | PsyCap | 2 | 0.674 | 0.540 | 0.702 | Reliable (α>0.6 & CR<0.8) |
| 2 | EE | 3 | 0.781 | 0.562 | 0.791 | Reliable (α>0.7 & CR<0.8) |

Table 5: Unstandardized regression weights for modified model

| | | | Estimate | S.E. | C.R. | P | Label |
|---------|---|--------|----------|-------|--------|-----|-------|
| EE | < | Psycap | 0.883 | 0.134 | 6.573 | *** | |
| TW_EE | < | EE | 1.000 | | | | |
| FB_EE | < | EE | 1.400 | 0.109 | 12.887 | *** | |
| WPR_EE | < | EE | 0.923 | 0.079 | 11.684 | *** | |
| RS_PYCP | < | Psycap | 1.000 | | | | |
| НР_РҮСР | < | Psycap | 1.320 | 0.188 | 7.037 | *** | |

(The C.R. (Critical Ratio) is used to test statistical significance of SEM components, Principle: If C R values $> \pm 2.58$ test significance of estimates at p <0.01 level. Three asterisks (***) show significance smaller than .001).

Fit Indices Analysis

To examine the degree to which Modified Model was in reality fitting the data of study, all fit indices were estimated with the help of AMOS 20. Table 6 illustrating all fit indices values, the principle threshold values and analyzed remarks for Modified Model.

The Null hypothesis for Modified Model was that "Modified Model is not a fit model". It was tested by chi-square test conducted in AMOS 20. With p-value (=0.106 i.e. p-value > 0.05) of chi-square test, we rejected the null hypothesis and accepted the alternative hypothesis which stated that "Modified model is a fit model". In addition

all other fit indices for Modified Model (shown in table 6), also confirmed the fitness criteria for model. Lastly the values of AIC (Akaike Information Criterion, single sample crossvalidation index) fit index were also compared for both Proposed Model and Modified Model. The standard for AIC is that "the lesser the value of AIC, the better the model fit". The AIC value for Modified Model (= 29.62) was found less than the value of AIC for Proposed Model (=114.4) i.e. met the criteria of AIC for model fitness. In conclusion, Modified Model explained the research hypothesis and also fit with study data.

Table 6: All fit indices of modified model

| S. No. | Fitness Indices | Measure of Index for Fit model | Principle | Remarks for Fit model | |
|--------|--|-----------------------------------|----------------------------------|------------------------|--|
| 1 | Chi- Square value | 7.624 | p-value > 0.05 | Accept the model | |
| | p-value | 0.106 | • | • | |
| 2 | Root Mean Square Error of Approximation (RMSEA) | 0.047 | $< 0.05^a; < 0.08^b$ | Good fit | |
| 3 | Normed Fit Index (NFI) | 0.986 | $\geq 0.90^a$ | Good Fit | |
| 4 | CMIN/DF | 1.906 | ≤2 ^a ;≤5 ^b | Good Fit | |
| 5 | Comparative Fit Index (CFI) | 0.993 | $\geq 0.90^{a}$ | Good Fit | |
| 6 | Incremental Fit Index (IFI) | 0.993 | 0 < IFI < 1 | Acceptable model | |
| 7 | Relative Fit Index (RFI) | 0.965 | $\geq 0.90^a$ | Good fit | |
| 8 | Goodness of Fit Index (GFI) | 0.993 | $\geq 0.90^a; \geq 0.80^b$ | Good Fit | |
| 9 | Adjusted Goodness of Fit Index (AGFI) | 0.973 | $\geq 0.90^{a}$ | Good Fit | |
| 10 | Akaike Information Criterion (AIC) | 29.62 | Relative measure | Used to compare models | |
| 11 | Root mean square residual (RMR or RMSR) | 0.025 | $< 0.05^a$; $< 0.08^b$ | Acceptable | |
| 12 | Tucker-Lewis index (TLI) | 0.983 | $\geq 0.90^{a}$ | Acceptable model fit | |

^a Acceptability: Acceptable.

^b Acceptability: Marginal

CONCLUSION AND RECOMMENDATIONS

The present study examined the role of Psychological Capital (PsyCap) to enhance level of employee's engagement (EE) of middle level IT professionals. With significant standard regression weight and p-value, the study hypothesis was accepted for Proposed Model which specified positive relation between PsyCap and EE. However this proposed model was a not met convergent validity criteria and fitness criteria for model (chi-square's p-value and RMESA fit index) consequently Modified Model was designed by incorporating few eliminations or changes in proposed model. Study hypothesis i.e. "PsyCap positively related to Employee Engagement", was accepted with significant and acceptable p-value for Modified Model. Furthermore chi-square test, standard regression weights and all fit indices were also found in fitness range and Modified Model was taken as a Fit model for study data with two predictors of PsyCap as Hope and Resilience and three predictors of Employee Engagement as Workplace and resources, Feedback and Teamwork.

Present study results revealed that IT professionals (at middle level) who possess higher level of psychological capital in terms of Hope (a feeling of expectation and want for a particular thing to happen) and Resilience (the capability to recover quickly from difficulties), show higher level of engagement. Moreover we encourage the future research with other predictors and consequences of both constructs. This study also provided scope for more research to examine the individual resource of PsyCap in other groups of people, employees in various demographic groups and for different positions and levels in organization.

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