© Journal of the Indian Academy of Applied Psychology
Jan 2016, Vol. 42, No. 1, 63-71

An Empirical Study on Psychological Capital, Demography and Employee Happiness: A Relational Perspective

Durba Pal and Priyanka Srivastava
National Institute of Technology (NIT), Durgapur, India

Contemporary empirical research has highlighted on the significant role of the accentuating impact of Positive Psychology in the workplace under the aegis of Positive Organizational Behaviour (POB). Psychological Capital or PsyCap, a derivative of POB, is a core construct comprising Hope, Optimism, Efficacy and Resiliency. In light of this zeitgeist, the present study was an attempt to explore the nature of PsyCap and its impact on Happiness among the Indian employees. Furthermore, the effect of gender and employees' job category as well as their interaction effect on PsyCap was also investigated in the research study. Stratified Random Sampling of 100 employees belonging to a pharmaceutical company located at Kanpur, U.P. was used to collect data. Data were collected from both the male and female employees (including executives as well as non-executives), by administering the adapted versions of the PsyCap Questionnaire and Oxford Happiness Questionnaire. After checking on the normality of the data, analysis was done by computing percentages, and applying Factorial (2x2) Anova and Simple Linear Regression. Results of the present study indicated the existence of a high level of PsyCap among the employees. It further revealed that the effect of gender and job category on PsyCap was insignificant and significant respectively, whereas the interaction effect of both these variables on PsyCap was statistically insignificant. Moreover, it was also found that PsyCap predicted significantly the Happiness of the employees with respect to the present sample. .

Keywords: Psychological Capital, Hope, Optimism, Efficacy, Resiliency, Employee Happiness.

Positive Psychology first described by Seligman (2002), moves away from a traditional focus on the analysis of illness, behavioural dysfunction, and psychopathology and instead looks to build strengths. It is in the work of Luthans that the value of positive psychology to organizations and organizational scholarship is most evident. Building on the foundation laid by Seligman, Luthans (2002) defines Positive Organisational Behaviour (POB) 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" (p. 59).

Extending further the POB framework for organizations, Luthans and Youssef (2004) present an argument for a combined construct, Psychological Capital (PsyCap), as a key contributor to the competitive advantage of organizations. Psychological capital has been defined 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 and adversity, sustaining and bouncing back and even beyond (resilience) to attain success" (Luthans, Youssef, & Avolio, 2007, p.3). Thus, PsyCap represents a multidimensional as well as a core construct that integrates and goes beyond each of the constituent positive psychological resources

of self-efficacy, optimism, hope and resiliency. Luthans and Youssef (2004) have described the four components of PsyCap in a more specified way. Self efficacy indicates a belief in one's ability to mobilize one's cognitive resources in order to obtain a specific set of outcomes. Again, optimism may be explained by an attributable style that links positive events to internal and pervasive causes whereas negative events to external and situation-specific ones. Hope pertains to possessing of one's willpower and strategizing ways to attain one's goals. Lastly, resiliency has been described as the capacity required to bounce back from adversity or even positive changes including increased responsibility.

Luthans' empirical study has shown clearly that each of these four components as well as PsyCap (as a higher order core construct) do bear a significant positive relationship with that of employee performance and satisfaction. It is being supported by an evolving body of research that employees with high levels of psychological capital will be inclined to pursue work goals more effectively, with concomitant benefits in their work sphere (Luthans et al., 2007). Moreover, in order to sustain in terms of competitive advantage, every organization requires adapting its PsyCap development to its own situation, making it organization-specific.

Avey, Nimnicht and Pigeon (2010) have suggested the importance of investigating the link between demographic variables and PsyCap in empirical research. Previous empirical studies have also indicated male-female differences in levels of resilience with the conclusion that men are more resilient than women (Bonanno, 2004). This finding may offer suggestive evidence that there may be gender differences in the levels of PsyCap.

The rise of positive psychology in the past decade has legitimized a veritable exploration of research concerning workplace happiness. As employees spend a significant portion of their daily lives contributing to their organizations, workplaces have become an important source of employees' happiness. Thus, research evidence indicates that Employee Happiness at work appear to have considerable overlap with the broader concept of happiness. In general, happiness is related to emotional states like hopefulness, optimism and contentment. Employee happiness, specifically, may refer to pleasant judgments (under positive attitudes) and pleasant experiences like positive feelings, emotions, moods, and flow states encountered by the employee at his workplace (Fisher, 2010). Moreover, it is aptly pointed out that PsyCap must be considered as a fundamental capacity for human life apart from being a functional variable for performance improvement in the workplace (Wright, 2003). Thus, the benefits of PsyCap may not be limited to work-related outcomes only but, may also be linked to employees' individual happiness. Despite this theoretical significance, it may be stated more specifically that there has been a dearth of intensive research and a very few empirical studies like that of Singh and Khan (2013), Youssef and Luthans (2007) focused on the relationship of Psychological Capital (or its components) with that of Happiness at the workplace.

Most of the empirical studies on PsyCap have been conducted in the U.S. and limited attention has been paid to the exploration of this construct in other cultural contexts. In Indian setting, a limited number of studies conducted by Shahnawaz and Jafri (2009), Sridevi and Srinivasan (2012) concentrated on Psychological Capital and its impact on certain work-related variables like Organizational commitment and Organizational Citizenship Behaviour. Therefore, the present study attempts to understand the contextual applicability of PsyCap in an Indian organization.

Thus, the objectives of the present study have been:

1. to examine the levels of psychological capital (and its components), of the employees belonging to an Indian organization.
2. to determine the effect of gender on psychological capital of the employees.
3. to determine the effect of employee job category on psychological capital of the employees.

4. to find out whether psychological capital can predict the happiness of the employees.

Further, the following hypotheses were formulated based on the objectives of the study:

H_1: The mean scores of PsyCap are towards the higher end of the scale.

H_2: There is a significant main effect for gender on PsyCap of the employees.

H_3: There is a significant main effect for job category on PsyCap of the employees.

H_4: There is a significant gender by job category interaction effect on PsyCap of the employees.

H_5: There is a significant linear relationship between PsyCap and Happiness of the employees.

Method

Sample

The sample for the present study comprised of 100 employees, consisting of both executives and non-executives, drawn from a pharmaceutical company (Biocytes Organics Pvt. Ltd.) based at Kanpur, U.P., India. Data were collected from a stratified random sample consisting of both male (N=55) and female (N=45) employees, drawn from a total sampling population of 400 employees composed of 220 males and 180 females, following proportionate stratified sampling. The proportion of the male employees and female employees were found to be 0.55 and 0.45 respectively. Hence, 55 males and 45 females were included in the stratified random sample of 100 employees, belonging to different departments (accounts; marketing & distribution; purchase & store and personnel & administration) of the organization. The participants were literate (at least diploma holders), permanent employees with a minimum service tenure of two years in the mentioned organization.

Tools

General Information Schedule. This included information on the demographic parameters of the respondents in terms of age, gender, educational qualification, monthly income, organizational tenure and designation.

The Psychological Capital (PsyCap) Questionnaire (PCQ). The Psychological Capital of the employees was measured by administering an adapted version of the 'PsyCap Questionnaire (PCQ)', developed by Luthans et al. (2007). The scale contained in its entirety a set of 24 items, consisting specifically of six items on each of the four subscales of Self-efficacy, Optimism, Hope and Resiliency. Sample items from each of the subscales were "I feel confident helping to set targets/goals in my work area" (Self-efficacy); "I always look on the bright side of things regarding my job" (Optimism); "At the present time, I am energetically pursuing my work goals" (Hope) and "I usually manage difficulties one way or another at work" (Resiliency). All the responses were anchored on a 6-point Likert scale ranging from strongly disagree (1) to strongly agree (6). Scoring was done in accordance to the scoring standard of the original scale. In other words, averages for each of the four subscales were added together and averaged to get a composite average for each subject's PsyCap score. Scores were reversely coded for the negatively worded items. The scoring rationale was – the higher the score the more the degree of prevalence of Psychological Capital and its four components. The Cronbach Alpha of the scale was found to be 0.954 as measure of reliability coefficient with the present sample.

The Oxford Happiness Questionnaire. In order to measure the levels of happiness of the employees, an adapted version of 'The Oxford Happiness Questionnaire', as constructed by Hills and Argyle (2002), was used in the present study. It consisted of 29 items. A sample item was "I always have a cheerful effect on others." Responses were marked on a six-point Likert scale ranging from strongly disagree (1) to strongly agree (6). Scoring was done in accordance to the scoring standard provided in the original scale. In other words, the Happiness Score for each individual was calculated by summing up and averaging all the scores of the 29 items of the scale. Reverse coding was done in case of negatively worded items. The scoring rationale was that a high score indicated greater

happiness of the employees. The reliability of the scale was calculated and the Cronbach Alpha was observed to be 0.934 with respect to the present sample.

Test administration:

The present investigation was conducted in two phases. In Phase-I, preliminarily, prior to conducting the present study, a pilot survey was done on a group of 50 employees encompassing both the executives and non-executives as well as male and female respondents. Burns and Bush (1998) suggested that it is possible to identify problems with a questionnaire from a pre-test of 5-10 respondents. The pilot survey was conducted to prepare the adapted versions of the PsyCap Questionnaire and The Oxford Happiness Questionnaire respectively. Reliability coefficients were also checked for the scales used in the study.

In Phase-II, the present research study focused on measuring the levels of Psychological Capital (along with its four components) and Happiness of the 100 employees (encompassing executives-non executives and male and female) forming the sample. It also attempted to examine the linear (regressional) relationship of Psychological Capital and employee Happiness with respect to the present sample.

In both the phases of this study, data was collected by distributing the questionnaire booklets to the randomly selected employees who had been willing to participate. They were conveyed that the responses would be kept confidential and used only for research purposes. In order to maintain anonymity, the respondents were not asked to disclose their names and Employee ID.

Data analysis:

i. General information characteristics data was procured by determining percentages of different items.

ii. One-sample Kolmogorov-Smirnov test was administered to check the normality of the data.

iii. The Levene's Test of Equality for Variances was conducted to confirm the suitability of using two-way ANOVA for further analysis of data.

iv. The main effects and interaction effect of the two variables, namely, gender and job category with respect to Psychological Capital of the employees, were determined by conducting Two-way ANOVA.

v. The linear relationship between Psychological Capital and Happiness of the employees was examined by using Simple Linear Regression.

vi. In order to check the reliability with the present sample, Cronbach Alpha was determined for the two scales used in the study.

Results

The General Characteristic Features (Table 1) of the employees, who participated in the present investigation, depict that they are enriched in experience and thus, they have been assumed to play an effective role to provide valid information during the collection of data, and their background characteristics' information have effective potential for their participation in the present study.

Table 1. General Characteristic Features of the Employees in the present study

General Characteristic Features	N=100 (in %)
AGE	
1. below 25 years	09
2. 26-35 years	52
3. 36-45 years	36
4. 46-55 years	03
GENDER	
1. Male	55
2. Female	45
MONTHLY INCOME(INR)	
1. Less than 15,000	01
2. 15,001-25,000	51
3. 25,001-35,000	35
4. More than 35,001	13
EDUCATIONAL QUALIFICATIONS	
1. Diploma	18

2. Graduation	52
3. Post Graduation	30
ORGANIZATIONAL TENURE	
1. 0-5 years	62
2. 6-10 years	25
3. 11-15 years	10
4.16-20 years	03
CADRE	
1.Executive	50
2.Non-Executive	50

One-Sample Kolmogorov-Smirnov Test with respect to the two variables, namely, Psychological Capital and Happiness of the employees reveal that both the variables are normally distributed. The Kolmogorov-Smirnov significance values of Psychological Capital (0.184) and Happiness (0.282) are greater than 0.05, indicating that the data is normal and thus ensuring the implementation of parametric tests.

The results (Table-2) explicitly reveal that the employees of the pharmaceutical organization have their mean values quite high in terms of Psychological Capital (4.266) and all its dimensions namely, Self-efficacy (4.421), Hope (4.336), Resiliency (4.063) and Optimism (4.245). In other words, the Psychological Capital (along with its components) is predominant among the employees as evident from their score distribution culminating towards the higher scale continuum. Further, the scrutiny of the results revealed that Self-efficacy and Resiliency have the highest and lowest mean values of 4.421 and 4.063, respectively. Hence, the hypothesis, H_1 which states that 'The mean scores of PsyCap are towards the higher end of the scale.' is accepted.

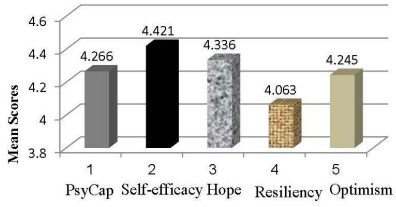

Figure 1: A Graphical representation of the levels of Psychological Capital (and its Components) of the Employees

Table 2. Mean and SD of Psychological Capital & its Components of the Employees

N=100 Psychological Capital & its dimensions ↓	Minimum possible value	Maximum possible value	Mean	Std. Deviation
Self-efficacy Composite Average	1.0	6.00	4.421	0.962
Hope Composite Average	1.0	6.00	4.336	0.799
Resiliency Composite Average	1.0	6.00	4.063	0.874
Optimism Composite Average	1.0	6.00	4.245	0.783
PsyCap Composite Average	1.0	6.00	4.266	0.767

Levene's Test of equality for variances with respect to Psychological Capital shows a significance level of 0.072, which is greater than 0.05 and thus there is a statistical evidence that the variances are equal across the groups and that two-way ANOVA can be conducted.

The cell sizes, means, and standard deviations for the 2x2 factorial design are presented in Table 3. It may be seen from Table 3 that with respect to Psychological Capital, the mean value of male executive (4.721) is greater than the mean value of male non-executive (3.618). On the other hand, the mean of Psychological Capital of the female executive (4.740) tends to be slightly greater than the mean of female non-executive (4.043). Again, the mean of the male employees (4.119) is slightly lower than the mean of female employees (4.446) in terms of Psychological Capital. However, the level of Psychological Capital is comparatively higher in the executives than the non-executives as seen from the mean values of the executives (4.731) and the non-executives (3.783).

The results of the Two-way ANOVA test indicate whether the independent variables (Gender and Job Category) and their interaction have any statistically significant effect on the dependent variable, Psychological Capital.

Table 3. Two-Way ANOVA: Descriptive Statistics of Employees on PsyCap Composite Average Score with respect to gender and job category.

Gender of Respondent	Job Category	Mean	Std. Deviation	N
Male	Executive	4.721	0.430	25
	Non Executive	3.618	0.671	30
	Total	4.119	0.795	55
Female	Executive	4.740	0.579	25
	Non Executive	4.043	0.659	20
	Total	4.446	0.700	45
Total	Executive	4.731	0.507	50
	Non Executive	3.783	0.692	50
	Total	4.266	0.767	100

The main effect of gender is not significant, $F(1,96) = 3.42$, $p = .068$, whereas the main effect of job category is highly significant, $F(1,96) = 56.03$, $p < .001$. However, the interaction of gender and job category is not significant, $F(1,96) = 2.86$, $p = .094$. Hence, the two hypotheses, H_2 and H_4 that state that 'There is a significant main effect for gender on PsyCap of the employees' and 'There is a significant gender by job category interaction on PsyCap of the employees,' respectively are rejected. Based on the results, hypothesis H_3 which states that 'There is a significant main effect for job category on PsyCap of the employees' has been accepted. Figure 2 depicts a crystallizing evidence of the stated results.

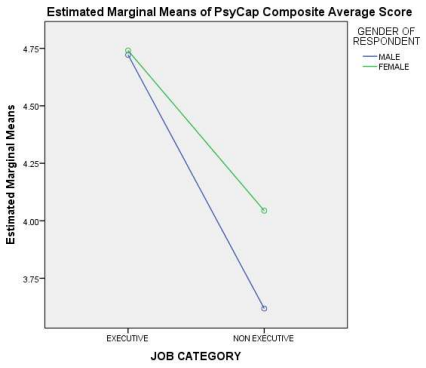

Figure 2: A Graphical representation of the effects of Gender, Cadre and their interaction on Psychological Capital of the Employees

Table 4 shows the value of R and R^2 for the model that has been derived in the present study. R has a value of 0.556 and because there is only one predictor, this value represents the simple correlation between PsyCap and Happiness to be moderate and positive. The value of R^2 is 0.309, which indicates that PsyCap can account for 30.9 percent of the variation in Happiness of the employees.

It can also be seen from Table 4 that $F(1,98) = 43.81$, $p < .001$. In other words, this result reveals that the model accurately explains the variation since the significance value of 0.000 informs us that the probability of the variation explained by the model due to chance is very low.

In addition, Table 4 provides the coefficient values (along with their significance) for the prediction equation. The regression equation for predicting Happiness is created by putting the values of the unstandardized regression coefficients in the following

$$Y' = a + bX$$

Predicted Happiness=1.838+0.537(PsyCap)

Further, the standardized regression coefficient value of Happiness is 0.556 and as the value remains within +1.00 and -1.00, it indicates a linear equation.

In other words, the summary result of Table 4 indicates that there is a significant linear relationship between PsyCap and Happiness

such that a higher level of PsyCap results in increased Happiness of the employees. This leads us to accept the hypothesis H_5, which states that 'There is a significant linear relationship between PsyCap and Happiness of the employees.'

The scattergram (Figure 3) provides a clear graphical representation of the linear relationship of the two mentioned variables.

Table 4. Simple Linear Regression between Psychological Capital (Predictor) and Happiness of the Employees

	Employee Happiness	
Variable		Model 1 *b*
Constant		1.838**
Psychological Capital		0.537**
R	.556	
R^2	.309	
F	43.81**	

**p <.001

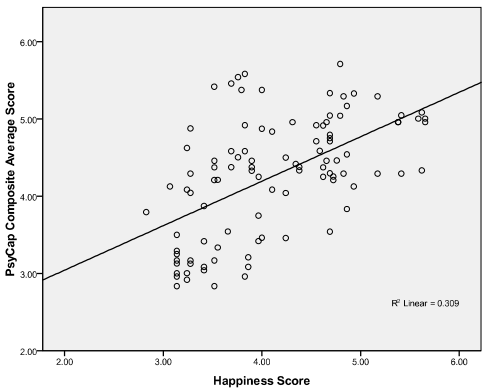

Figure 3: A Scattergram depicting the linear relationship between Psychological Capital and Happiness of the Employees

Discussion

On the basis of the results obtained in the present investigation, it may be seen that the employees of the organization are enriched with high level of Psychological Capital for which there may be a cluster of reasons including a positive work environment, high growth opportunity, etc. in the pharmaceutical sector.

It has also been found that gender does not have a statistically significant effect on Psychological Capital, which corroborate with the findings of an earlier study (McMurray, Pirola-Merlo, Sarros & Islam, 2010). The reason may be that the organization is providing equal growth opportunity, incentives, flexibility for both male and female employees in order to manage a diversified workforce more effectively. The present study has also depicted that there has been a statistically significant effect of job category on Psychological Capital. More specifically, the executives have scored comparatively higher than the non-executives on PsyCap as the executives have been highly confident about their work, optimistic and have been able to cope with difficulties. Possible reasons of this difference may be related to higher pay scale, nature of job and growth opportunities within the organization, etc.

The significant, positive linear relationship of Psychological Capital with that of Happiness of the employees may be explained on account of the state-like and developmental aspect of Psychological Capital, which means that it is not only open to development but, can improve certain work-related variables. In more specified terms, PsyCap is related to employee happiness because it may have enabled the employees to perceive, understand their work experiences positively, achieve positive outcomes and overcome their work-related handicaps in a better way. As indicated in previous research findings, self-confident persons tend to be more satisfied with their lives because of their higher achievements, hopeful persons tend to be more satisfied with their environment in terms of their positive outlook. Even optimistic employees, on account of their tendency to experience more positive emotions, have higher satisfaction in life whereas resilient persons adapt well because of their tendency to bounce back from adverse situations. Thus, PsyCap, as the core construct of these four constituent positive psychological resources, may contribute to employee happiness (Choi & Lee, 2014).The findings also get supported by previous research (Culbertson, Fullagar & Mills, 2010) where it has been revealed that employees' positive

PsyCap leads to subjective happiness (hedonic wellbeing).

Research Implications

The findings of this study provide certain implications for organizations to formulate their policies in terms of employees' PsyCap. However, PsyCap is an extension of the economic notion of capital; it transcends beyond economic capital and differs from human and social capital in valid ways. Nevertheless, being similar to traditional capital forms, it can also be assessed as a return on investment and in creating competitive advantage. One of the most vital characteristics of PsyCap is its 'state-like' nature, which indicates that it can be developed and be amenable to intervention and change. Thus, it becomes imperative for organizations to provide employees with training facilities to develop and manage their PsyCap. Consequently, this accumulated PsyCap may promote the development of positive attitudes among the employees, towards their organizations and society at large. Moreover, contemporary organizations focus on enhancing employee happiness as an initiative to increase work-life balance. The findings of this study indicate that a way to achieve this is to develop PsyCap of the employees so that it may lead to increased employee happiness.

Conclusion

One of the major limitations of this study is related to the issue of common source bias of data collection based on self report questionnaire. Social desirability is one of the response biases that influence the results of studies that use self-report questionnaires (Goodwin, 2004). A limitation of the study could be attributed to the small sample size. Further investigation is also required with other demographic variables as well. However, on the basis of the present study, it may be concluded that the level of Psychological Capital do vary among executives and non-executives. Moreover, the findings of this study show that there is a positive, significant regressional relationship between Psychological Capital and Happiness of the employees. Thus, it is recommended that organizational interventions may aim to increase employees' personal resources, which will in turn increase their Psychological Capital and facilitate enhanced employee happiness.

References

Avey, J. B., Nimnicht, J. L. & Pigeon, N.G. (2010). Two field studies examining the association between positive psychological capital and employee performance. *Leadership and Organization Development Journal, 31*(5), 384 – 401.

Bonanno, G.A. (2004). Loss, trauma, and human resilience: have we underestimated the human capacity to thrive after extremely aversive events?. *American Psychologist, 59*, 20 – 8.

Burns, A. C., and Bush, R. F. (1998). *Marketing Research*. NJ: Prentice Hall.

Choi, Y. & Lee, D. (2014). Psychological capital, big five traits, and employee outcomes. *Journal of Managerial Psychology, 29*(2), 122 – 140.

Culbertson, S. S., Fullagar, C. J., & Mills, M. J. (2010). Feeling good and doing great: The relationship between psychological capital and well-being. *Journal of Occupational Health Psychology, 15*(4), 421–433.

Fisher, C. D., (2010). Happiness at work. International *Journal of Management Reviews, Vol. 12*, 384–412.

Goodwin, C. J. (2004). *Research in psychology: methods and design*. (4th edn.). Hoboken, N.J.: John Wiley & Sons, Inc.

Hills, P., & Argyle, M. (2002). The Oxford Happiness Questionnaire: a compact scale for the measurement of psychological well-being. *Personality and Individual Differences, 33*, 1073–1082.

Luthans, F. (2002). Positive organizational behavior: Developing and managing psychological strengths. *Academy of Management Executive, 16*(1), 57-75.

Luthans, F., & Youssef, C.M. (2004). Human, social, and now positive psychological capital management: investing in people for competitive advantage. *Organizational Dynamics, 33,* 143–160.

Luthans, F., Youssef, C. M., & Avolio, B. J. (2007). *Psychological capital: Developing the human competitive edge*. Oxford, UK: Oxford University Press.

McMurray, A. J., Pirola-Merlo, A., Sarros, J. C., and Islam, M. M. (2010). Leadership, climate, psychological capital, commitment and wellbeing

in a non-profit organization. *Leadership and Organization Development Journal, 31*(5), 436 – 457.

Seligman, M. (2002). *Authentic happiness*. New York: Free Press.

Shahnawaz, M., & Jafri, M. H. (2009). Psychological Capital as Predictors of Organizational Commitment and Organizational Citizenship Behaviour. *Journal of the Indian Academy of Applied Psychology, 35*, 78-84.

Singh, N., & Khan, I. (2013). Psychological capital and happiness among government and private bank employees-a comparative investigation. *Indian Journal of Applied research, 3*(2), 336-338.

Sridevi, G., & Srinivasan, P. T. (2012). Psychological capital: a review of evolving literature. *Colombo Business Journal, 3*(1), 25-39.

Wright, T.A. (2003). Positive organizational behavior: an idea whose time has truly come. *Journal of Organizational Behavior, 24*, 437 - 442.

Youssef, C. M., & Luthans, F. (2007). Positive organizational behavior in the workplace: The impact of hope, optimism, and resilience. *Journal of Management, 33*(5), 774-800.

Manuscript received on 8th July 2015
Final revision received on 26th September 2015
Accepted on 28th September 2015.

Durba Pal, Ph.D, Assistant Professor, Department of Management Studies, National Institute of Technology (NIT), Durgapur. Email: dr.durba.pal@gmail.com

Priyanka Srivastava, Post graduate student, MBA programme (2012-14), Department of Management Studies, National Institute of Technology (NIT), Durgapur.