



The Role of Leader-Member Exchange and Promotion Focus on Innovative Work Behavior: Mediational Effect of Work Engagement

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ABSTRACT Human resources in organizations play a significant role in the creation and implementation of innovative outputs. The objective of the study is to deepen the understanding that Innovative Work Behavior (IWB) of an employee when predicted by the quality of Leader-Member Exchange (LMX) and the employees' promotion focus and whether the relationship is facilitated by Work Engagement (WE). Applying the Regulatory Focus (RF) and LMX theories the researchers have developed and tested a model involving the relationships between promotion focus, LMX, WE and IWB. This study used the cross-sectional research design and a sample of 603 employees working in the information technology sector from India was analysed by Structural Equation Modeling (SEM). The results confirmed the partial mediation effect of WE between promotion focus and IWB. A full mediation effect of WE between LMX and IWB was also established. The proposed and tested model exhibited a good fit. The findings help in establishing the role of WE in contributing to IWB of employees who are promotion focused and in a LMX relationship. Scope for future research and implications of the results are discussed.

INTRODUCTION

The growing competition and radical change in business scenarios, make innovation a necessity for organizations to survive and flourish in the global economy (Eldor 2016; Gupta et al. 2017). The Indian IT sector contributes in a major way to the economic growth of India (NASSCOM Report 2014) with estimated revenue comprising of \$19.9 billion by exports. This growth is essentially due to the outcome of the innovative capacities of its manpower who promote competitive power to boost individual and organizational performances (Sharma and Kamalabhan 2014). The extent of an individual's attachment to the job-role which produces higher performance depends on the measure of engagement at work of an individual. This passion, energy and willingness to exhibit discretionary effort of an engaged employee translates into higher levels of extra-role performances as innovativeness (Agarwal et al. 2012). Caniels et al. (2018) called for integrative frameworks so as to broaden the understanding of employee innovation. To address this, the researchers integrated Regulatory Focus (RF) and Leader-member exchange (LMX) theory to explain how the self-regulation characteristic of employees and the

social exchange relationship with their supervisors together promote work engagement and provide opportunities for IWB. Self-regulation is a dispositional characteristic of an employee that aids and directs the goal-directed behavior. Employees seldom perform their duties at work in isolation but often interact with their supervisors. Thus this research has implications for contemporary leadership and organizational psychology research and in particular attempts to understand how both individual characteristics and LMX as a contextual factor contribute to IWB.

Objective

The objective of this paper is to investigate if the employees' innovative behavior can be explained in terms of their promotion focus, WE and LMX and to determine the mediating effect of WE in the relationships between promotion focus and LMX on IWB.

Theoretical Framework

Promotion Focus

Regulatory focus theory proposes that people at work and in general align their behavior

towards goal attainment according to their preferred standards and goals. This goal pursuit motivates an employee to approach desired positive outcomes (promotion focus) in the work task. Because of its relevance in performance domains, the role of promotion focus has been investigated in work organizations (Johnson et al. 2015). An employee when promotion focused is inspirational, growth-oriented with a motivation for experimentation and change. At work they apply an eager, risk-seeking work strategy and are motivated by achievement needs.

Leader-Member Exchange

A subordinates' immediate manager represents the organization and they shape employee' attitudes and behaviors (Bhatnagar 2007). LMX theory explains the quality of relationships between supervisors and subordinates. Each employee establishes unique social exchange relationships with his or her supervisor that reflects high or low quality mutual trust, respect and loyalty (Morrow et al. 2005). LMX is related to follower outcomes as leaders form resourceful work environments that foster higher individual and organizational job performances.

Work Engagement

WE is a positive organizational behavior concept that reflects a positive mindset in an employee towards the work tasks in an organization. Schaufeli et al. (2002) define WE as a positive and fulfilling work related state of mind comprising of three components namely: vigor, dedication, and absorption. Vigor is high energy towards the task with resilience and persistence, dedication is to like the work with a sense of challenge, significance and pride. Absorption is to be fully engrossed with concentration in ones' work. Engaged employees invest more psychic energy that is vital to improve productivity and well-being of the employees (Agarwal 2014).

Innovative Work Behavior

High technology enterprises lay emphasis on the development of unique products and processes, by the employees, to convert them to profitable implementations in business scenarios (Nirjar and Tylecote 2005). Employees

often deal with the frontline customers and look-out for opportunities for change and improvement to create a competitive advantage through innovations, for survival and growth of the organizations. IWB is defined as the "behavior directed towards the initiation and application (within a work role, group or an organization) of new and useful ideas, processes, products or procedures" (De Jong and Den Hartog 2007). IWB of employees includes studying the business environment processes for intentional searching (Idea Generation), developing (Idea Promotion) coupled with applying new ideas and problem solving techniques (Idea Realization), through gathering resources for current situation (Janssen 2000; Scott and Bruce 1994).

Hypotheses Development

According to Bakker (2008), self-regulation is a goal –directed behavior which is facilitated in engaged individuals. WE is characterized by high levels of energy with intrinsic motivation to pursue goals of higher performance. An engaged employee is psychologically attached to his work and strive to excel in the work task (Kahn 1990). Promotion focus of an employee is driven by the eagerness to perform the tasks better, for a higher achievement in performances, to reach the desired goals (Brenninkmeijer et al. 2010). It can be understood that promotion focus fosters engagement at work due to the same underlying motives. Prior study (Lanaj et al. 2012) has shown that promotion focus will contribute to WE. Therefore the researchers posited the following hypotheses.

Hypothesis 1: Promotion focus positively influences work engagement

Leaders provide resources that facilitate accomplishment of work goals, stimulate personal development, and increase work engagement among employees (Bhatnagar 2007). Accordingly, it is likely that employees feel more engaged when they have a high-quality exchange relationship, because their leader facilitates their job performance, and also expects high job performance in return. This reciprocation is explained using the Social Exchange Theory (SET). A recent study by Agarwal (2014) found a positive correlation between LMX and IWB. Based

on these arguments and in line with the literature, the researchers propose:

Hypothesis 2: LMX positively influences work engagement

Adopting innovation brings in resistance from employees because it involves risk-taking and insecurity (Janssen 2004), so organizations depend on engaged employees who are proactive to change (Schaufeli and Salanova 2007). Such employees willingly put in extra effort beyond their assigned work tasks to accomplish innovative solutions. The broadening of the thought processes in an engaged employee is triggered by positive emotions (Fredrickson 2001) that aids in exploring and seizing opportunities, generates better decision making and fosters innovativeness in work tasks (Li et al. 2016). Empirical studies have proved a positive relationship between WE and IWB (Agarwal et al. 2012; Gupta et al. 2017). Hence, the researchers hypothesized:

Hypothesis 3: Work Engagement positively influences IWB

Promotion focused individuals exhibit exploratory behavior at work which is triggered by positive emotions that reshape an individual's thinking process (Higgins 1998). Positive emotions help in experimentation and implementation of novel ideas (Fredrickson 2001) that aids IWB (Lanaj et al. 2012). This indicates that when employees are promotion focused they are more involved in their work, thrive and exhibit more of IWB. Organizations require engaged employees, to go the extra mile for decision making under risk or during innovation uncertainties (Shuck 2013). The inner force and activated energy of an engaged employee aids in challenging situations faced during innovation and this also helps in IWB (Gupta et al. 2017). Based on this understanding the researchers hypothesized:

Hypothesis 4: WE mediates the relationship between promotion focus and IWB

From a social exchange perspective, high-quality LMX relationships contribute to employees' intrinsic motivation that enables higher job performances and engagement at work. When

the supervisors give their followers more intrinsic (empowerment, praise) and extrinsic (salary raise) rewards it results in positive attitudes towards work (Breevaart et al. 2015) and makes work more meaningful and interesting. The subordinates look to the leader for direction and security as the leader displays confidence and positivity in solving problems during critical times (Akinloye et al. 2017). This fulfills the psychological needs of the employees and creates a sense of obligation to return them by engaging at work and display IWB. Thus, the researchers proposed that:

Hypothesis 5: WE mediates the relationship between LMX and IWB

In summary, the conceptual model tested the relationship between promotion focus, LMX, WE and IWB proposed in this paper as shown in Figure 1.

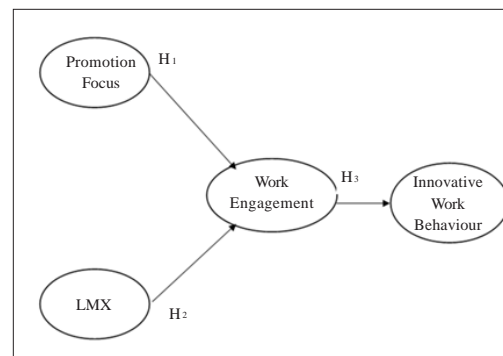


Fig. 1. Conceptual framework
Source: Author

MATERIAL AND METHODS

Data Collection

The respondents for the study were chosen from employees working in Information Technology (IT) organizations in India. A questionnaire survey method was used for the data collection. The researchers chose fifteen Information technology (IT) companies listed in the NASSCOM's web portal. A purposive sampling procedure was adopted to collect responses from the employees in person at the operational, tactical and strategic levels. The respondents were requested to complete the structured questionnaire which contained questions about the con-

structs and demographic details. Out of the distributed 700 questionnaires, 603 completed and error-free responses were collected. A cross-sectional research design was adopted in this study. Out of 603 respondents 60 percent were male. The age of the respondents varied from 21 to 57 years with an average of 29.57 years and a standard deviation of 6.12. Age, skill variety and work hours per week were used as control variables in this study. SPSS and AMOS were the statistical software package techniques used for data analysis. Confirmatory factor analysis was carried out to test the measurement properties of the items used. Maximum likelihood estimation was used to estimate the hypothesized structural model. The mediation analysis was performed using bootstrapping with 5000 bootstrap samples.

Methods

All constructs were measured using well established and valid scales from published literature. The response format was a 7-point Likert scale ranging from (1=never) to (7=always) for all the scales in this study.

Measures

To measure promotion focus a nine item scale by Neubert et al. (2008) has been used in this study. WE was measured with the nine-item version of the Utrecht Work Engagement Scale (UWES) by Schaufeli et al. (2006). The three dimensions of WE are measured as second order constructs consisting of three dimensions with three items in each; vigor, dedication and absorption. The researchers employed the nine-item scale developed by Janssen (2000). This scale consists of three dimensions namely idea generation, idea promotion and idea realization. In this study the above three dimensions of IWB were measured as an aggregate. The respon-

dents were asked to indicate their innovative activities in the three dimensions. LMX was assessed using seven items based on the member versions developed and used in prior research (Janssen and Van Yperen 2004). Skill variety was assessed by three items of job diagnostic survey by Hackman and Oldham (1975).

RESULTS

In the present study, to test the proposed hypotheses, the researchers have used the structural equation model (SEM) technique based on Moment of Structures (Amos Version 21).

Measurement Model

The descriptive statistics, reliability and inter-correlation analysis results are presented in Table 1.

In Table 1 the correlations among the constructs and its reliability values are reported. All the reported Cronbach alpha values are $> .7$ fulfilling the reliability criteria. In the present study the researchers have followed the Anderson and Gerbing (1988) two step approach to test the measurement and the structural model. In the first step, confirmatory factor analysis was carried out to test the measurement properties of the items used. During the confirmatory factor analysis an item in vigor dimension (at my work, I feel bursting with energy) was removed due to poor loading. The confirmatory factor analysis has obtained adequate model fit. The indices are: $\chi^2 = 1856.70$, $df = 830$, $p \text{ value} = .000$, $\chi^2/df = 2.236$, $NFI = .902$, $CFI = .943$, $RMSEA = .045$. In the present study all AVE values for the constructs are above the cut off limit > 0.5 , (Hair et al. 2009) except for that of promotion focus which has a value close to .5 (.48). All the first order factor loadings were significant at .001. In the

Table 1: Mean, standard deviation, reliability and correlations of the study variables

	Mean	S.D.	α	1	2	3	4	5	6	7	8
1. Hours of work per week	46.87	7.28	-	1							
2. Age	29.57	6.12	-	-.022**	1						
3. Skill variety	5.15	1.32	.72	.006	.068	1					
4. Promotion focus	5.24	1.02	.90	.044	.071	.471**	.579**	1			
5. Work engagement	5.35	1.04	.88	.056	.224**	.483**	.458**	.482**	1		
6. Innovative work behavior	5.07	1.12	.93	.160	.117**	.498**	.418**	.551**	.573**	1	
7. Leader-member Exchange	5.06	1.23	.93	0.076**	0.148**	0.388**	0.406**	0.439**	0.560**	0.495**	1

Note: **- $p < .01$, S.D.-Standard Deviation, α -Cronbach alpha.

present study WE and IWB are treated as second order factors in the model. All relationships between second and first-order factors are significant at 0.001. The measurement of second order loadings for WE, that of vigor is .98 ($p < .001$), dedication is .92 ($p < .001$) and absorption is .93 ($p < .001$). Similarly, the loadings for the dimensions of IWB are, idea generation with .91 ($p < .001$), idea promotion .95 ($p < .001$) and idea realization with .89 ($p < .001$). Table 2 shows the discriminant validity of the theoretical model. To check for common method bias, we have performed Harman's single factor test using SPSS. In the factor analysis results, the first factor explained 39.59 percent of the variance. Since the explained variance in the first factor is less than 50, the problem of common method variance may not exist (Podsakoff et al. 2003).

Table 2: Discriminant validity

Constructs	CR	AVE	1	2	3	4
WE	0.962	0.895	0.946			
Promotion focus	0.892	0.483	0.589	0.695		
IWB	0.940	0.838	0.658	0.626	0.916	
LMX	0.937	0.680	0.623	0.505	0.520	0.825

Structural Model

The structural model was tested using Maximum likelihood estimation along with 5000 bootstrap estimations. The results show support for all the direct hypotheses proposed in the present study. The relationship between promotion focus and WE is significant ($\beta = .39$, $p < .001$), thus H1 is accepted. Similarly the relationship between LMX and WE is significant ($\beta = .42$, $p < .001$), thus H2 is supported. The relationship between WE on IWB ($\beta = .43$, $p < .001$) is significant. So H3 is supported. Table 3 shows the standardized regression weights (β) along with the p values of the above .

Table 3: Standardized Direct effects with β values

Relationships	β	S.E.	t value	Decision
H ₁ : Promotion to work engagement	0.396***	0.06	7.366	Supported
H ₂ : LMX to work engagement	0.426***	0.049	8.107	Supported
H ₃ : Work engagement to innovative work behavior	0.439***	0.057	8.019	Supported

Mediation Analysis

To test the mediation role of WE, the researchers used the causal step approach and bias corrected bootstrap estimation method with 5000 resamples. The indirect effect values are given in Table 4.

In this study, the researchers tested the mediation effect through two models, a full and a partial mediation model. Both models have shown adequate fit and the researchers obtained similar results for both the models. The parameters of the full mediation model are: $\chi^2 = 1412.09$, $df = 601$, p value = .000, $\chi^2/df = 2.34$, $NFI = .90$, $CFI = .95$, $GFI = .89$, $RMSEA = .04$, $SRMR = .047$ and that of the partial mediation model are: $\chi^2 = 1391.04$, $df = 599$, p value = .000, $\chi^2/df = 2.32$, $NFI = .91$, $CFI = .95$, $GFI = .89$, $RMSEA = .04$, $SRMR = .047$. While testing the partial mediation model, the researchers found a significant relationship in the direct effect path between promotion focus and IWB ($\beta = .42$, $p < .001$) and the researchers found an insignificant relationship in the direct effect path between LMX and IWB. This indicates that WE partially mediates the relationship between promotion focus on IWB proving (H4) and the other mediation path between LMX and IWB is fully mediated by WE supporting (H5). Thus, the mediation tests offer support for the proposed two mediation hypotheses. In the mediation

Table 4: Standardized indirect effects with lower and upper bound limits

Indirect paths	Indirect effect value	Bias corrected percentile method		Decision
		CI	p value	
H ₄ : Promotion focus \rightarrow WE \rightarrow IWB	0.174	[.116, .247]	.000	Supported
H ₅ : LMX \rightarrow WE \rightarrow IWB	0.187	[.134, .252]	.000	Supported

model, promotion focus and LMX have explained 51 percent of the variance on WE. With the inclusion of WE as a mediator the explanatory power of the model increased to 56 percent.

DISCUSSION

Organizations increasingly need energetic employees who go beyond their job descriptions and who are engaged (Macey and Schneider 2008). In trying to examine the concerted effect of contextual factor in the organization (LMX) and individual characteristics (Promotion focus) in contributing to higher job performances (Bakker et al. 2018), this study gives a better understanding of Information Technology employees' goal orientation and leader-member exchange in promoting engagement leading to IWB. Consistent with the tenets of RF theory (Higgins 1998) and LMX theory this paper helps in studying people's behavior at workplace. Testing these relationships by integrating these constructs, show the partial mediation effect of WE on the relationship between promotion focus and IWB. This proves that WE facilitates a promotion focused employee's IWB. WE is a conglomeration of energies (cognitive, emotional and physical) with a positive affect that amplifies the proactive achievement focus potential of a promotion focused employee (Lanaj et al. 2012). Although cumulative research shows that an individual's dispositional characteristic of promotion focus predicts innovation (Lanaj et al. 2012), the mechanism of occurrence of this effect has not been examined much. In fact, there are few empirical studies that have directly tested the meditational effect of LMX to performance outcomes (Martin et al. 2016). The results in this study, therefore, explain how WE serves as an explanation mechanism. In this study, LMX contributes to IWB only when an employee is engaged at work, through the full mediation effect. Even if organizations exhibit supportive practices, IWB depends on how engaged the employees are at work. The findings suggest that Information Technology employees who are engaged to their work in the organizations and who exhibit IWB, do so based on their promotion focus and social exchange with their supervisors. The relationships of promotion focus and LMX to WE are also consistent with the earlier study of (Agarwal et al. 2012). As expected, the positive contribution of WE to IWB (Agarwal 2014) finds relevance in this study too. Finally the media-

tion analysis showed a variance of 56 percent which proves the increase in the explanatory power of WE on IWB among the employees who are promotion focused and in LMX relationships.

CONCLUSION

In conclusion, the results in this study provide both theoretical and practical implications to researchers and practitioners. Findings uncover the following arguments. Firstly, an individual's promotion focused goal oriented along with the quality of social exchange relationship has a role in contributing to employee innovation in organizations. Secondly, a work environment that enables WE provides a solution for complex innovative outputs. Since work engagement contributes to higher job performances like extra-role behavior of IWB, firms must concentrate to create and sustain the passion that an employee shows towards the work.

RECOMMENDATIONS

The importance of engaging an employee to his work tasks for alignment to one's goal orientation and the promotion of good social exchange relationship had not been considered in earlier research. Managers need to provide an encouraging and supportive work environment that helps employees to be innovative at work. Managers can formulate strategies to make work more meaningful and promote optimal well-being of employees' to enhance engagement at work and innovativeness.

LIMITATIONS AND SCOPE FOR FURTHER RESEARCH

All variables in the study were measured by self-reports. Future studies may adopt other ratings and multiple assessment methods to avoid the risk of bias. Organizational characteristics of job autonomy as mediator and job level as moderator may be included to further explain the variance in IWB thus expanding the scope of the study. This study is a cross-sectional study and the sample consists only of IT employees in India, thus it would be interesting to test the model in other industries and also by experimental and longitudinal methods.

REFERENCES

- Agarwal Upasna A 2014. Examining the impact of social exchange relationships on innovative work behaviour: Role of work engagement. *Team Performance Management*, 20(3/4): 102-120.
- Agarwal Upasna A, Datta Sumita, Blake-Beard Stacy, Bhargava Shivganesh 2012. Linking LMX, innovative work behaviour and turnover intentions: The mediating role of work engagement. *Career Development International*, 17(3): 208-230.
- Akinloye Gbadegesin Mutairu, Adu Emmanuel O, Adu KO 2017. Leadership and strategy development for goal attainment in the 21st century educational institutions. *The Anthropologist*, 29(2-3): 157-169.
- Anderson James C, Gerbing David W 1988. Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3): 411.
- Bakker Arnold 2008. 3 Building engagement in the workplace. *The Peak Performing Organization*, 50.
- Bakker Arnold, Albrecht Simon 2018. Work engagement: Current trends. *Career Development International*, 23(1): 4-11.
- Bhatnagar Jyotsna 2007. Talent management strategy of employee engagement in Indian ITES employees: Key to retention. *Employee Relations*, 29(6): 640-663.
- Breevaart Kimberley, Bakker Arnold B, Demerouti Evangelia, van den Heuvel Machteld 2015. Leader-member exchange, work engagement, and job performance. *Journal of Managerial Psychology*, 30(7): 754-770.
- Brenninkmeijer Veerle, Demerouti Evangelia, le Blanc Pascale M, Hetty van Emmerik IJ 2010. Regulatory focus at work: The moderating role of regulatory focus in the job demands-resources model. *Career Development International*, 15(7): 708-728.
- Caniëls Marjolein CJ, Semeijn Judith H, Renders Irma HM 2018. Mind the mindset! The interaction of proactive personality, transformational leadership and growth mindset for engagement at work. *Career Development International*, 23(1): 48-66.
- De Jong Jeroen PJ, Den Hartog Deanne N 2007. How leaders influence employees' innovative behaviour. *European Journal of Innovation Management*, 10(1): 41-64.
- Eldor Liat 2016. Work engagement toward a general theoretical enriching model. *Human Resource Development Review*, 1534484316655666.
- Fredrickson Barbara L 2001. The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56(3): 218.
- Gupta Vishal, Singh Shailendra, Bhattacharya Abhijit 2017. The relationships between leadership, work engagement and employee innovative performance: Empirical Evidence from the Indian R&D context. *International Journal of Innovation Management*, 21(07): 1750055.
- Hackman J Richard, Oldham Greg R 1975. Development of the job diagnostic survey. *Journal of Applied Psychology*, 60(2): 159.
- Hair Joseph F, Black William C, Babin Barry J, Anderson Rolph 2009. *Multivariate Data Analysis*. 6th Edition. Upper Saddle River, New Jersey, USA: Pearson Prentice Hall.
- Higgins E Tory 1998. Promotion and prevention: Regulatory focus as a motivational principle. *Advances in Experimental Social Psychology*, 30: 1-46.
- Janssen Onne 2000. Job demands, perceptions of effort reward fairness and innovative work behaviour. *Journal of Occupational and Organizational Psychology*, 73(3): 287-302.
- Janssen Onne, Van Yperen Nico W 2004. Employees' goal orientations, the quality of leader-member exchange, and the outcomes of job performance and job satisfaction. *Academy of Management Journal*, 47(3): 368-384.
- Johnson Paul D, Smith Mickey B, Wallace J Craig, Hill Aaron D, Baron Robert A 2015. A review of multi-level regulatory focus in organizations. *Journal of Management*, 41(5): 1501-1529.
- Kahn William A 1990. Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4): 692-724.
- Lanaj Klodiana, Chang Chu-Hsiang, Johnson Russell E 2012. Regulatory focus and work-related outcomes: A review and meta-analysis. *Psychological Bulletin*, 138(5): 998.
- Li Mingjun, Liu Ya, Liu Lu, Wang Zhenhong 2016. Proactive personality and innovative work behavior: The mediating effects of affective states and creative self-efficacy in teachers. *Current Psychology*, 1-10.
- Macey William H, Schneider Benjamin 2008. Engaged in engagement: We are delighted we did it. *Industrial and Organizational Psychology*, 1(1): 76-83.
- Martin Robin, Guillaume Yves, Thomas Geoff, Lee Allan, Epitropaki Olga 2016. Leader-member exchange (LMX) and performance: A meta-analytic review. *Personnel Psychology*, 69(1): 67-121.
- Morrow Paula C, Suzuki Yoshinori, Crum Michael R, Ruben Robert, Pautsch Gregor 2005. The role of leader-member exchange in high turnover work environments. *Journal of Managerial Psychology*, 20(8): 681-694.
- NASSCOM 2014 Strategic Review Report. 2014NASSCOM. From <http://www.nasscom.in/sites/default/files/researchreports/SR14-Exec_Summary.pdf> (Retrieved on 9 September 2014).
- Neubert Mitchell J, Kacmar K Michele, Carlson Dawn S, Chonko Lawrence B, Roberts James A 2008. Regulatory focus as a mediator of the influence of initiating structure and servant leadership on employee behavior. *Journal of Applied Psychology*, 93(6): 1220.
- Nirjar Abhishek, Tylecote Andrew 2005. Breaking out of lock-in: Insights from case studies into ways up the value ladder for Indian software SMEs. *Information Resources Management Journal*, 18(4): 40.
- Podsakoff Philip M, MacKenzie SB, Lee JY, Podsakoff Nathan P 2003. Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5): 879-903. doi: 10.1037/0021-9010.88.5.879
- Schaufeli Wilmar B, Bakker Arnold B, Salanova Marisa 2006. The measurement of work engagement with a short questionnaire a cross-national study. *Educational and Psychological Measurement*, 66(4): 701-716.

- Schaufeli Wilmar B, Salanova Marisa, González-Romá Vicente, Bakker Arnold B 2002. The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3(1): 71-92.
- Schaufeli Wilmar, Salanova M 2007. Work engagement. *Managing Social and Ethical Issues in Organizations*, 135: 177.
- Scott Susanne G, Bruce Reginald A 1994. Determinants of innovative behavior: A path model of individual innovation in the workplace. *Academy of Management Journal*, 37(3): 580-607.
- Sharma Neha, Kamalanabhan TJ 2014. IT employees' brand attitudes and the role of internal corporate communication: A survey of Indian IT industry. *International Journal of Business Excellence*, 7(1): 52-75.
- Shuck Brad 2013. Invited reaction: Further observations on the relationship between work engagement and performance: A review of empirical literature and a proposed research agenda. *Human Resource Development Review*, 12(3): 277-283. 15344843 12470804.

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