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# **Creativity at Workplace: Proposing Some Contributors**

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#### Abstract:

The business world is more competitive than earlier days. Ancient day's business organizations were focusing on consumer satisfaction rather than employee performance, later it has been found that employees' innovative and creative performance are also very important in achieving the expected heights of success. Now every organization is trying to maintain their standards high in their business by using different strategies to empower the creative and innovative contributions of the employees. Workplace creativity is one of the critical factors in maintaining employment competitiveness. There are lots of factors which predict creativity in the workplace. The main objective of this paper is to analyse the factors related to workplace creativity using Meta analysis. To achieve this objective of the study the researcher reviewed numerous studies which have been published in different literatures related to workplace creativity. After reviewing the numerous studies in the area, researchers posit that motivation both intrinsic and extrinsic, self efficacy, social support in organization, job autonomy and cognitive styles are the predictors of employees' workplace creative performance. And more, workplace creativity is the product of good employer rather than a good employee because workplace creativity will arise only in a facilitating working environment.

**Keywords:** Workplace creativity, cognitive style, employee motivation, job autonomy

#### 1. Introduction

In the present competitive business environment, all organizations are to stand high in their business. In order to maintain their standards and qualities they should update their technical skill and knowledge in the changing world. Novel approaches are needed to survive in the competitive world. So organizations should encourage employees' creative and innovative performance for accomplishing their targets. Workplace creativity is one of the critical factors in maintaining organizational competitiveness. Any organization should focus on adapting to changing environment and advancing technologies. Workplace creativity is generally framed in the context of organizational products, services, processes, and procedures and focuses on the production of new and useful ideas (Amabile, 1996; Oldham & Cummings, 1996; Zhou, 1998).Innovative behaviour involves both the generation and implementation of creative ideas within the work environment (Zhou & George, 2001). In this paper we focus on the role of some of the major antecedents of workplace creativity. This paper deals with predicting the role of employee's motivation, cognitive style, job autonomy, self efficacy, and social support in organization towards employees' creative performance.

## 2. Employee Motivation

The hallmark of outstanding creative achievement is a passionate motivation to generate creative thinking. It requires the determination and intensity that arise from strong motivation (Amabile, 1996). Employees' motivation is one of the main components in their creative and innovative work performances. Motivation is one of the leading factors for organizational growth. If motivation managed effectively, it will influence employees all organizational performance (Pareek, 2010).

Intrinsic motivation refers to motivation stemming from the individual's engagement in the task. When employees are intrinsically involved in their work, they are more likely to give their attention to the problems they encounter. Such attention lead the employees to engage in creative process through self-regulation (Kanfer,1990). The high degree of intrinsic motivation can influence employees creative performance (Amabile,1988; Shalley, 1995; Gupta,Singh,Kumar,Bhattacharya,2012). In effect, although abilities determine what a person is capable of doing in his or her work, intrinsic motivation is the cause of what he or she really does. It determines the degree to which an individual commits abilities and expertise to achieve a creative result (Dweck, 1986). Intrinsic motivation affects

the employee's decision to start and maintain the effort needed to be creative through the course of time (Tierney, Farmer, Graen, 1999). A great deal of creativity research has been taken up on an intrinsic motivation framework where it has been proposed that individuals are most creative when they are excited about their work and interested in engaging in it for the sake of the activity itself (Amabile, 1996; Shalley & Perry-Smith, 2001:Zhou, 1998). The belief here is that creativity is more likely to appear when individuals are intrinsically motivated by their work. Thus most of the current theories that have considered the role of motivation in creativity agree that intrinsic motivation is beneficial to creativity. The study by Gupta (2011) indicates that people will be most creative when they are primarily intrinsically motivated, rather than extrinsically motivated by expected evaluation or the promise of rewards. Creative employees are more motivated by intrinsic factors such as interesting work, equitable pay, independence and responsibility and achievement. The appropriate motivational orientation for employees will help to enhance the emergence of innovative and creative ideas (Gupta, 2011).

Certainly, creative efforts may be extrinsically motivated; extrinsic motivation refers to motivation stemming from factors outside the task, such as rewards or compensation (Amabile, 1996). Signal theory suggests that attention is given to what is rewarded and valued; therefore, if creativity is shown to be valued through rewards, it will follow. When innovative work processes is rewarded by the organisation through monetary or other extrinsic means, individuals may be more motivated to be actively involved in such processes. Extrinsic motivation has an incremental effect on creativity (Eisenberger & Rhoades, 2001). This can be explained in terms of learned industriousness theory (Eisenberger, 1992), in which individuals learn which performance dimension lead to rewards and are motivated to perform them accordingly. Extrinsic motivation can moderate the relationship between creativity and self efficacy and also creativity and perseverance (Prabhu, Sutton, & Sauser, 2008).

- Proposition 1 a: Intrinsic motivation is positively correlated with employee's workplace creative performance.
- Proposition 1 b: Extrinsic motivation is positively correlated with employees creative work performance.

## 3. Self Efficacy

Bandura (1997) defines self-efficacy as a person's belief that he or she can perform success-fully in a particular setting. The concept of self-efficacy falls along a continuum from general to specific. Self-efficacy refers to an individual's beliefs in his or her capabilities to organize and execute the courses of action required to produce the desired results in a variety of circumstances. The generalized form of self-efficacy represents a judgment of how individual can perform across a variety of conditions. Self efficacy appears to significantly influence employee creativity. As a major element in the social learning theory of Bandura (1977, 1978), self-efficacy refers to an individual's belief in one's competency to perform a specific task. According to social cognitive theory, achieving a high level of self-efficacy requires that an individual can visualize an excellent performance in a given situation. Additionally, self-efficacy may influence employee creativity .Self-efficacy lead employees' initial preference of actions and thus high self-efficacious individuals will likely to take on more challenging activities involving new and creative practices. Individuals with high self-efficacy are able to enhance the motivation, cognitive resources, and courses of action needed to face situational demands. They use most of their time on creative cognitive processes in problem recognition as well as the idea generation, and they make greater efforts to seek sponsorship for ideas and produce prototypes. Therefore, they are able to perform specific tasks successfully and achieve organizational innovation goals in the face of obstacles. (Bandura, 1994, 1997). The subjective relational experiences create the motivational force for self-efficacy that fosters engagement in innovative behaviours at work. The employees with stronger selfefficacy engage in higher levels of creative work, and they exhibit more creativity in their work .Innovativeness requires constant sense of efficacy to carry out creative performance when they demand prolonged investment of time and effort, progress is discouragingly slow, the outcome is highly uncertain, and creations are socially devalued when they are too incongruent with preexisting ways. Bandura and Schunk (1981) state, that "a sense of personal efficacy in mastering challenges is apt to generate greater interest in the activity than is self-perceived inefficacy in producing competent performances". Their test results indicated that selfefficacy is positively related to intrinsic motivation. Moreover, intrinsic motivation is essential for employee creativity (Amabile, 1988; Amabile, Hennessey, Tighe, 1994; Tierney, Farmer Graen, 1999).

Employees psychological capabilities, especially, self efficacy carries major role in employees' creative performance (Gupta, 2012; Jain & Sharma, 2012; kumar & Cevahir, 2010). Similarly, Tierney and Farmer (2002) explain that creative efforts require an internal, sustaining force that drives individuals to persist in the face of challenges of creative work. Ford (1996) includes self-efficacy beliefs as a major motivational element in his model of individual creativity. Self- efficacy focuses on how individual can produce creative outcomes and its relation with one's psychological need for competence. The research conducted by Tang and Chang (2010) reveals that self efficacy positively affects employees' creativity and it also enhances their confidence which is necessary to maintain creative performance. So individuals' capabilities, confidence, and expectations of outcomes are affected by their self efficacy. Individuals who have high level of self efficacy feel more confident, which in turn influence their creative performance. The research conducted by Hsu & Fan( 2001) reveals that self efficacy has an impact on employees' innovative behaviour. Especially in the service setting, employees' innovative behaviour is the result of customer interactions; they need to creatively solve customers' problems and complaints. Employees with a high level of self-efficacy demonstrate a high level of innovative behaviour at work. Self-efficacy is an effective predictor of creative outcomes across different settings, such as manufacturing (Tierney&Farmer, 2002), information systems development (Yan & Cheng, 2009), schools (Beghetto, 2006; Kumar & Lal), and insurance sector (Gong, Huang, & Farh, 2009).

Proposition 2: Employees self-efficacy is positively correlated with employees creative work performances.

#### 4. Cognitive Style

Cognitive style involves stable individual differences in organizing and processing information and experiences, and has been found to be consistent across time and situations, and independent of abilities, skills, and intelligence (Messick, 1984). Cognitive style determines the degree of flexibility and imagination that people have to face up to their problems. It is the product of an individual's genetic inheritance and the experiences and interactions of the individual in the external environment. Creativity can be associated with cognitive style in a way that, creativity is an expression of ways in which information in the environment is processed and manipulated. Cognitive style most conducive to creativity is characterised by the facility to understand complex problems and the ability to break away from mental schemes while resolving a problem (Amabile, 1988; Ford, 1996; Woodman, Sawyer, & Griffin, 1993). A cognitive style oriented towards pursuing "new cognitive pathways" (Amabile, 1988) or divergent thinking (Woodman et al., 1993), is necessary for creative production. It was noted that individuals with more innovative and creative cognitive styles would enjoy approaching tasks in different, original and undisciplined ways (Kirton, 1976; Miron, Erez, & Naveh, 2004). Creative thinkers have a strong preference for thinking originally and coming up with new ideas. Thus employees with creative cognitive styles would be more likely to be creative at work. (Miron et al., 2004).

According to Kirton (1976), individuals prefers to solve problem in different ways. He introduced two different styles of problem solving approach namely innovative style and adaptive style. The adaptive style individuals remain concerned about norms of the group and they like to work within the structure. The innovative style individuals seek and integrate diverse information, redefine the problems and generate ideas likely to deviate from the group. The findings of Martinsen (1994) suggest that both cognitive style and probability of success can jointly lead to produce motivation for the creative performance. The systematic and intuitive problem solving style may directly influence employees' workplace innovative performances (Scott & Bruce, 1994). In organizational context, there exist so many processes involving judgment, decision making, and problem solving. So organizations should encourage the employees to perceive the old problems in novel and different ways, which in turn can help to produce innovative outcomes (Das, 2003).

Proposition 3: Employees cognitive style is positively correlated with their creative performance.

#### 5. Job Autonomy

Job autonomy can be defined as the extent to which employees have a major say in scheduling their work, selecting the equipment they will use, and deciding on procedures to be followed (Hackman & Lawler, 1971). Autonomy refers to the extent to which employee can determine the pace, sequence, and methods to accomplish his/her tasks .Job autonomy provides employees with the essential freedom and empowerment for tasks, thus creating the intrinsic motivational state needed for creative tasks (Hennessey & Amabile, 2010; Shalley, Gilson, & Blum, 2000). It facilitates to explore new opportunities and to plan so as to be innovative, and is prerequisite for generating ideas. Managers therefore have to ensure that employees have the necessary degree of autonomy for innovation to emerge (Lee, 2008).

Autonomy is positively related both to the generation and testing of ideas (Krause, 2004) and innovation implementation (Axtell et al., 2000). Jobs with little discretion in how, when, or where work is accomplished may stifle an employee's job creativity (Liu&Chen, 2010). Innovation is positively related with employee's participation in decision making. If employees get provision to express their views and ideas related with new product and services, it can help to make more creative outcomes in the organization. Decentralization in workplace can positively influence employee's creative performance (Prakash & Gupta, 2008). Providing freedom, independence and discretion in carrying out the tasks of the job to the employee results with increased self confidence, motivation and will that ultimately leads to higher levels of creativity and performance (Gunduz & Gunsel, 2011). Autonomy helps employees to tackle problems related with their job in innovative manner (Das, 2003).

Amabile's (1988, 1996) componential theory of creativity traditionally emphasized the role of work environment autonomy in improving one's creativity. These findings are consistent with self- determination theory, which maintains that employees become more creative in an autonomy-supportive environment that incorporates employees' perspectives, recognizes their feelings, provides job-related choices and information, and minimizes the use of pressure and demands (Deci &Ryan, 2000).

Both self-determination theory (Deci & Ryan, 2008) and componential theory of creativity (Amabile, 1988) identify autonomy as conducive to employee creativity. Oldham, and Cummings (1996) and Zhou (1998) demonstrated that the non controlling (autonomy supportive) supervisory style, characterized by the absence of close monitoring and provision of developmental feedback, encourages employees to be more cognitively flexible and persistent in identifying creative ideas and solutions.. Amabile and Gryskiewicz (1989) showed that autonomy is the most important aspect of the work environment that fuels individual creativity.

Perceived autonomy facilitates creative performance, as it helps improve individual adaptability and proclivity in the creative process (Ryan & Deci, 2000). Creativity researchers have established that creativity increases when employees experience high autonomy in the process of fulfilling their job responsibilities or when they develop a sense of control over their work processes and outcomes (Amabile & Mueller, 2007). The organization like 'boundary less' brainstorming culture help to generate creative ideas, which means organization should be favourable and effective for gathering creative ideas and implementing selected ideas efficiently. (Khandwalla & Mehta 2004). Gecas (1989) reviewed a series of studies of precursors of self-efficacy: a general finding was that the greater the freedom experienced at work, the more likely the employee was to value individual freedom and self-direction, to be more intellectually flexible and to have greater self-efficacy which leads to creative outcome. Through decentralisation, employees can get freedom in their decision making process, which directly facilitates innovations (Sahay & Gupta 2011).

Proposition 4: Employees job autonomy will be positively correlated with employees creative work performance.

Social support in organization carries important role in employee's creative behaviour. Caplan (1974) suggests that social support

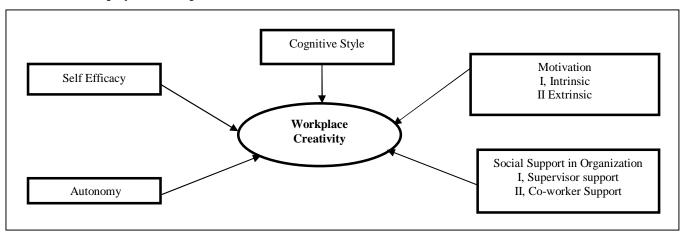
### 6. Social Support in Organization

systems consist of continuing social aggregates that provide individuals with opportunities for feedback about themselves and validations of their expectations of others. Organizational social support can be defined as the degree to which individuals perceive that their well-being is valued by workplace sources, such as supervisors and the broader organization in which they are embedded (Eisenberg, Singhalber, Vandenberghe, Sucharski, & Rhodes, 2002 Ford, Heinen, & Langkamer, 2007). General work support is the degree to which employees perceive that supervisors or employers care about their global well-being on the job through providing positive social interaction or resources (Kossek, Colquitt, & Noe, 2011). House (1981) defines social support as an interpersonal transaction involving one or more of the following: aspects namely emotional concern (liking, love, and empathy), material aid (goods or services), information (about the environment), and appraisal (information relevant to self-evaluation). Finally we may summarize social support in organization as, individual perceives support from supervisors, coworkers or any authorities at needed situations. Supervisor support and coworker support have frequently been considered as source of workplace social support (Israel, House, Schurman, Heaney, & Mero, 1989). Supervisor support influences to increase creative behaviour by increasing employee's interest at work (Oldham & Cummings, 1996). It is a predictor of employee's creative behaviour, through intrinsic motivation. Perceived support for individual creativity from leaders or supervisors or from the organization in general appears to increase the likelihood of creative outputs. The social settings characterized by support for creativity encourage idea generation by receiving ideas in an attentive and receptive way, evaluating ideas in a fair and supportive way, and being willing to try out new ideas (Egan, 2005). When a supervisor interacts as a good role model, facilitates for the goal setting process, giving values to employees contributions, and thus enhance confidence in their work group (Deliello, Houghton,&Dawley, 2011). Leadership and employees creativity are positively correlated (Gupta ,2012). Transformational leadership qualities like maintaining good communication and interaction with subordinates would positively affect employees' creativity. The supervisor's everyday interactions and better understanding of their subordinates can influence employees' creative performance (Gupta, Kumar, & Bhattacharya, 2012).

The support from co-workers may positively influence the level of individual creativity. In addition, when individuals experience mutuality in their relationships with their co-workers, they are able to learn from each other and fulfil their needs for personal growth and development (De Rue & Morgeson, 2007), which are essential in reinforcing the beliefs they hold about their capability to complete tasks in creative and innovative ways (Park, 2002). The work relationships among employees within the organization are strongly related to their creative performance. Supportive co worker relationships also involve helping each other, showing smart solutions and ideas, thereby encouraging vicarious experiences which lead to creative performance. The perception of creative support from co-workers may increase the extent to which individuals identify a creative role for themselves in the workplace (Kossek et al, 2011). When employees believe they have the ability to be creative and have an expectation of creativity, they are more likely to engage in creative behaviours (Farmer et al., 2003). The support from other individuals in the workplace generally lead to employee creativity. The mere presence of creative co-workers may enhance individual creativity (Diliello, 2011). The supervisor and subordinate interaction is the key factor of organization's growth and development. The support and sincerity in supervisorsubordinate and peer-related relationships enhance employee's job satisfaction and it may influence employees creative work performance (Biswas, 2011). The study of Vedamanickam (2001) found positive correlation between decentralization and workplace innovativeness. This indicates that flexible organization structure and good interpersonal relationship in the organization will influence employees creative work performance. These studies reveal that both supervisor and co workers support are important for employee's creative performance.

- Proposition 5 a: Supervisor's support will contribute to employees' workplace creative performance.
- Proposition 5 b: Co- workers support will contribute to employees' workplace creative performance.

#### 7. Contributors of Employee's Workplace Creative Performance



#### 8. Implication

In the present study, we tried to focus on the importance of some major contributors of employee creativity. These predictive factors consist of both individual and organizational factors such as self efficacy, autonomy, cognitive style, motivation and social support in the organization .Apart from these, other factors may also influence employee's workplace performance. The individual factors like self efficacy, cognitive style and motivation may have a direct influence on the creative performance of the individual. When the employee realizes own potential, it makes him/her to think of new ways while facing problems. So organization should provide necessary circumstances for realising employee's potentials and skills in the workplace. Ideas and performance result in task performance. Specific thinking style may help to solve problems creatively and help in judgment and decision making process. If employees get freedom to express their ideas and opinions before the authorities, it would be helped to employees creative work performance. The surveillance of the authorities may negatively affect employees' creative performance. The organization should provide appropriate freedom for employees on their performance and accomplishment of their task. Individual's internal motivation or interest leads to creative behavior. Employees work motivation and job commitment can be enhanced through recognition from the authorities and effective appraisal for their achievements. The emotional, informational and appraisal support from the supervisors and coworkers can help the individuals to enhance their creative work motivation. Creating a supportive environment at work can facilitate employee's creative performance. The employee-supervisor relationship in the organization carry important role in maintaining organizational growth and success. The internal communication between employees and supervisors is highly relevant in successful survival of the organization especially in the current competitive business environment. The organization should provide proper opportunities to build up well supportive and understanding relationship among the employees. The mutual respect and recognition from the co workers also significantly influence employees creative work performance. This article explicates the importance of creativity as a tool to build a settled and competitive organization. Future researches may be carried out to identify predictors of creative performance as well as to explore the processes related to creativity and performance.

#### 9. References

- i. Amabile, T. M.(1983). The social psychology of creativity: A componential conceptualization. Journal of Personality and Social Psychology, 45(2), 357–376.
- ii. Amabile, T.M. (1988). A model of creativity and innovation in organization. In B. M. Staw and L. L. Cumming (Eds.). Research in organizational behaviour. pp. 123-126. CT: JAI Press.
- iii. Amabile, T. M., and Gryskiewicz, N.D., (1989). The Creative Environment Scales: Work Environment Inventory. Creativity Research Journal, 4(2), 231-253.
- iv. Amabile, T.M, Hill, K.G., Hennessey, B.A., and Tighe, E.M.(1994). The work preference inventory: Assessing intrinsic and extrinsic motivational orientations. Journal of Personality and Social Psychology, 66(5), 950-967.
- v. Amabile, T. M. (1996). Creativity in context: Update to 'the social psychology of creativity'. Boulder, CO: West view Press.
- vi. Amabile, T.M. (1997). Motivating creativity in organizations: On doing what you love and loving what you do. California Management Review, 4(1), 39-58.
- vii. Amabile, T. M., and Mueller, J. S. (2007). Studying creativity, its processes, and its antecedents: An exploration of the componential theory of creativity. In J. Zhou & C. Shalley (Eds.), Handbook of organizational creativity. (pp. 33–64). New York: Lawrence Erlbaum Associates.
- viii. Axtell, C. M., and Parker, S. K. (2003). Promoting role breadth self-efficacy through involvement, work redesign and training. Human Relations, 56(1), 112–131.
- ix. Bandura, A. (1977) .Social Learning Theory. Englewood Cliffs, NJ: Prentice-Hall.
- x. Bandura, A. (1978). The self system in reciprocal determinism. American Psychologist. 33(4), 344-358.
- xi. Bandura, A., and Schunk, D.H. (1981). Cultivating competence, self-efficacy, and intrinsic interest through proximal self motivation. Journal of Personality and Social Psychology, 41(3) 586-598.
- xii. Bandura, A. (1997). Self-efficacy: The exercise of control. New York: Freeman.
- xiii. Beghetto, R. A. (2006). Creative self-efficacy: Correlates in middle and secondary students. Creativity Research Journal, 18(4), 447-457.
- xiv. Biswas,S.(2011).Psychological climate as an antecedent of job satisfaction & job involvement. Indian Journal of Industrial Relations.46 (3).465-477.
- xv. Caplan,G. (1974). Support systems and community mental health: Lectures on concept development. New York: Behavioural Publications.
- xvi. Das, G.S. (2003). Preparedness for innovation: An Indian perspective. Global Business Review. 4 (1), 27-38.
- xvii. Deci, E.L.,and Ryan,R,M.(2000).Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. American Psychologist, 55(1), 68–78.
- xviii. Deci, E. L., and Ryan, R. M. (2008). The 'what' and 'why' of goal pursuits: Human needs and the self-determination of behaviour. Psychological Inquiry, 11(4), 227–268.
- xix. De Rue, D., Scott., Frederick, P., and Morgeson. (2007). Stability and change in person-team and person-role fit over time: The effects of growth satisfaction, performance, and general self-efficacy. Journal of Applied Psychology, 92(5), 1242-1253.
- xx. Diliello, C.T, Houghton, D.J., and Dawley, D. (2011). Narrowing creativity gap: The moderating effects of perceived support for creativity. Journal of Psychology: interdisciplinary and Applied. 145(3), 151-172.

- xxi. Dutton, J. E. (2003). Energize your workplace: How to build and sustain high-quality relationships at work. San Francisco, CA: Jossey-Bass.
- xxii. Dweck, C.E. (1986). Motivational processes affecting learning. American Psychologist, 41(10), 1040-1048.
- xxiii. Egan, T. M. (2005). Creativity in the context of team diversity: Team leader perspectives. Advances in Human Resources Developing, 7(2), 207-225.
- xxiv. Eisenberger, R. (1992).Learned industriousness. Psychological Review, 99(2), 248-267.
- xxv. Eisenberg,R.,Singhalber,F.,Vandenberghe,C,.Sucharski,I, and Rhodes,L.(2002).Perceived supervisor support: Contributions to perceived support and employee retention. Journal of Applied Psychology, 87(2), 565-573.
- xxvi. Farmer,S.M., Tierney,P,P., and Kung-McIntyre,k.(2003). Employee creativity in Taiwan: An application of role identity theory. Academic Management Journal, 46(5), 618-630.
- xxvii. Ford,C.M. (1996). A theory of individual creative action in multiple social domains. Academy of Management Review, 21(4), 1112-1142.
- xxviii. Ford, M.T., Heinen, B.A., and Langkamer, K.L.(2007). Work and family satisfaction and conflict: A meta-analysis of cross-domain relations. Journal of Applied Psychology, 92(1), 57–80.
- xxix. Gecas, V. (1989). The social psychology of self efficacy. Annual Review of Sociology, 15,291-316.
- xxx. Gunduz,H.,and Günsel,A.(2011).Promoting creativity among employees of mature industries: The effects of autonomy and role stress on creative behaviours and job performance. Procedia Social and Behavioural Sciences, 24,889-895.
- xxxi. Gupta,B.(2001).Understanding the preferences of creative & non-creative employees. Indian Journal of Industrial Relations, 45(2), 289-301.
- xxxii. Gupta,V.(2012).Psychological capital as a mediator of the relationship between leadership and creative performance behaviours: Empirical Evidence from the Indian R&D Sector. Indian Institute of Management Culcutta .Working paper series, wps no .711.
- xxxiii. Gupta,V., Singh,S.,Kumar,S.,and Bhattacharya,A.(2012).Linking leadership to employee creativity: A study of Indian R&D laboratories. Indian Journal of Industrial Relations.48 (1), 120-136.
- xxxiv. Gong, Y. P., Huang, J. C., and Farh, J. L. (2009). Employee learning orientation, transformational leadership, and employee creativity: The mediating role of employee creative self-efficacy. Academy of Management Journal, 52(4), 765-778.
- xxxv. Hackman, J. R., and Lawler, E. E.(1971). Employee reactions to job characteristics. Journal of Applied Psychology Monograph, 55(3), 259–286.
- xxxvi. Hackman, J. R., and Oldham, G. R. (1975). Development of the job diagnostic survey. Journal of Applied Psychology, 60(6), 159–170.
- xxxvii. Hennessey, B. A., and Amabile, T. M. (2010). Creativity. Annual Review of Psychology, 61(1), 569-598.
- xxxviii. House, J.S. (1981). Work stress and social support. Reading, MA: Addison-Wesley. Hunter J, Schmidt F. (1990). Methods of meta-analysis: Correcting error and bias in research findings. Newbury Park, CA: Sage.
- xxxix. Hsu,M. L. A., and Fan, H. L. (2010). Organizational innovation climate and creative outcomes: Exploring the moderating effect of time pressure. Creativity Research Journal, 22(4), 378-386.
  - xl. Israel,B.A.,House.,J.S.,Schurman.,S.J.,Heaney,C.A.,and Mero,R.P.(1989). The relation of personal resources, participation, influence, interpersonal relationships and coping strategies to occupational stress, job strains and health: A multivariate analysis. Work & Stress: An International Journal of Work, Health & Organisations, 3(2), 163-194.
  - xli. Jain, R.,and Sharma, P. (2012). Innovation promotion of Indian managers: An empirical study. Indian Journal of Industrial Relations, 47(3), 527-542.
  - xlii. Kanfer, R. (1990). Motivation theory and organizational psychology. In M. D. Dunnette & L. Hough (Eds.), Handbook of industrial and organizational psychology, 2(1), 75–170. Palo Alto, CA: Consulting Psychologists Press.
  - xliii. Khandwalla, P. N. and Mehta, K. (2004), "Design of corporate creativity. Vikalpa, 29 (1), 13-28.
  - xliv. Kirton, M. (1976) "Adaptors and innovators: a description and measure", Journal of Applied Psychology, 61(5), 622–629.
  - xlv. Kossek, E.E., Colquitt, J., and Noe, R. (2001). Care giving decisions, well-being and performance: The effects of place and provider as a function of dependent type and work-family climates. Academy of Management Journal, 44(1), 29–44.
- xlvi. Krause, D.E. (2004). Influence-based leadership as a determinant of the inclination to innovate and innovation-related behaviours: An empirical investigation. Leadership Quarterly,b15(1),79-102.
- xlvii. Kumar, R. ,Lal, R.(2006).The role of self-efficacy and gender difference among the adolescents'. Journal of the Indian Academy of Applied Psychology, 32(3), 249-254.
- xlviii. Kumar, R., and Cevahir,H.(2010).Investigating the effects of self efficacy on innovativeness and the moderating impact of cultural dimensions. Journal of International Business & Cultural Studies; 4,(2), 1-15.
- xlix. Lee, J. (2008). Effects of leadership and leader-member exchange on innovativeness. Journal of Managerial Psychology, 23(6), 670-687.
  - 1. Liu, D., and Fu, P. (2007). Motivating learning in the organization: Effects of autonomy support and autonomy orientation. In academy of management annual meeting proceedings: Best Papers Proceedings [CD]. Briarcliff Manor, NY: Academy of Management.
  - li. Martinsen,O.(1994). The effect of individual differences in cognitive style and motives in solving insight problems. Scandinavian Journal of Educational Research, 38(2), 83-85.

- Messick,S.(1984). The nature of cognitive styles: Problems and promise in educational practice. Educational Psychology, 19(2), 59–74.
- liii. Miron, E., Erez, M., and Naveh, E. (2004). Do personal characteristics and cultural values that promote innovation, quality, and efficiency compete or complement each other? Journal of Organizational Behaviour, 25(2), 175–199.
- liv. Oldham, G. R., and Cummings, A.(1996). Employee creativity: Personal and contextual factors at work. Academy of Management Journal, 39(3), 607-634.
- lv. Pareek, U. (2010). A motivational paradigm of development. Journal of Social Issues, 24(2), 115-122.
- lvi. Park, K.O (2002). The effects of social support at work on job demands, job control, depression, job performance, and absenteeism. Ph.D dissertation. The Ewha Womans University, South Korea.
- lvii. Prabhu, V., Sutton, C, and Sauser, W. (2008). Creativity and certain personality traits: Understanding the mediating effect of intrinsic motivation. Creativity Research Journal. 20(1), 53–66.
- lviii. Prakash, Y., and Gupta. M. (2008). Exploring the relationship between organization structure and perceived innovation in the manufacturing sector of India. Singapore Management Review, 30(1), 55-76.
- lix. Scott,G.,and Bruce,R,.(1994). Determinants of Innovative Behaviour: A path model of individual innovation in the workplace. The Academy of Management Journal, 37 (3), 580-607.
- lx. Sahay,P.,and Gupta ,M.(2011).Role of organization structure in innovation in the bulk drug industry .Indian Journal of Industrial Relations.46(3), 450-464.
- lxi. Shalley, C.E,.(1995). Effects of coactions, expected evaluation, and goal setting on creativity and productivity. Academy of Management Journal, 38(2), 483–503.
- lxii. Shalley, C. E.,and Perry-Smith, J. E.(2001). Effects of social-psychological factors on creative performance: The role of informational and controlling expected evaluation and modelling experience .Organizational Behaviour and Human Decision Processes, 84(1), 1–22.
- lxiii. Tang.Y.T.,and Chang.H.C,(2010).Impact of role ambiguity and role conflict on employee creativity. African Journal of Business Management, 4(6), 869-881.
- lxiv. Tierney, P., Farmer, S.M., and Graen, G.B. (1999). An examination of leadership and employee creativity: The relevance of traits and relationships. Personal Psychology, 52(3), 591-620.
- lxv. Tierney, P. and Farmer, S.M. (2002) Creative self-efficacy: Its potential antecedents and relationship to creative performance. Academy of Management Journal, 45(6), 1137–1148.
- lxvi. Vedamanickam, J. (2001), Study of workplace innovativeness in manufacturing, Ph.D. Thesis, Sailesh J. Mehta School of Management, Indian Institute of Technology, Bombay.
- lxvii. Woodman,W.R., Sawyer,J.E., and Griffin,W.R.(1993). Toward a theory of organizational creativity. The Academy of Management Review, 18(2), 293-321.
- lxviii. Yang,H,L.,and Cheng,H.H.(2009).Creative self-efficacy and its factors: An empirical study of information system analysts and programmers. Computers in Human Behaviour, 25(2), 429-438.
- lxix. Zhou, J. (1998). Feedback valence, feedback style, task autonomy, and achievement orientation: Interactive effects on creative performance. Journal of Applied Psychology, 83(2), 261–276.