# Participative Leadership and Employee Creativity: Moderating Role of Need for Achievement

Dr. Tasneem Fatima\* Samia Safdar\* Dr. Sadia Jahanzeb\*\*

\* International Islamic University, Islamabad

\*\* Brock University, Canada

#### Abstract

This research study aimed to examine the interactive effect of participative leadership and need for achievement on peer reported employee creativity. The proposed theoretical framework employed social cognitive theory to explain the hypotheses. To test the model, data was collected through a survey conducted on banks of Gujrat and twin cities Rawalpindi & Islamabad. Time lagged design was used to collect the data at two intervals of time separated by 6 weeks through self-administered questionnaires. The final sample size after matched responses and discarding incomplete questionnaires was 400. The measures were validated using confirmatory factor analysis. Hierarchical linear regression was used to investigate the moderating role of need for achievement. Results indicated a strong support for our hypotheses. Slope test revealed that the relationship between participative leadership and employee creativity becomes stronger for the people having high need for achievement. Moreover, managerial implications and future research directions have been discussed.

*Keywords:* Participative leadership, creativity, need for achievement, Social Cognitive Theory

### Introduction

Leadership has been considered an effective tool for organizational success in practice and research. There are many leadership styles but nowadays participative leadership is regarded as motivational tool to improve organizational effectiveness. Participative leadership encourages employees to participate in decisions making process which directly influence their work lives (Ardekani & Jahromi, 2011). It is also evidenced that participative leadership style improves employee performance and job satisfaction in the workplace (Tuuli & Rowlinson, 2009). Recent research urged to examine how and when participative leadership can be beneficial in terms of employee work outcomes (Hwang, 2015).

Creativity means to produce a novel idea; it has been considered a main factor for the high performance of organizations those are operating in competitive environments (Oldham & Cummings, 1996). Evidence suggests that organizational creativity and innovation is based on employee's creativity (Amabile, 1996) which can be achieved through participative leadership

(Krause, Gebert, & Kearney, 2007; Somech, 2006). But in practice it is a common observation that all employees could not be proved equal in their creativity even under a participative leadership. The difference may be tied with the individual differences among employees.

Need for achievement (nAch) refers to an individual's desire for considerable achievement. People who have higher nAch are in deliberation to have a desire to chase high performance goals (Jackson, 1974; McClelland, 1965). From the prior researches it has been investigated that the higher need for achievement is very crucial for business expansion (McClelland, 1965; Morris & Fargher, 1974). There is scarce evidence that need for achievement matters a lot to enhance creative performance under a positive leadership style like participative. To address this gap in the literature, this study aims to investigate the interactive effect of participative leadership style and need for achievement of the follower on creativity.

The proposed framework is based on Social Cognitive Theory (Bandura, 1986). The triangular model of this theory describes that environmental events affects our cognition & behavior and operate as interrelated objects and have influence on each other. The theory posits that environmental factors (like culture, communication policies, strategies; influence on others etc.) and personal factors affect our cognition that leads to form a behavior. This theory best describes that how participative leadership as environmental factors have an influence on behaviors. According to this theory if there is a participative environment in an organization then the employees are more creative. Moreover, the personal factors like high need for achievement amplify the positive relationship between participative leadership and employee creativity.

### **Theory and Hypotheses**

## **Participative Leadership and Creativity**

Participative leadership (PL) is a leadership style in which leaders encourage employees to participate in process of making organizational decisions and problem solving (Kahai, Sosik & Avolio, 1997; Somech, 2006). PL is an approach which requires subordinates to take some responsibility in the workplace (Sauer, 2011). Leaders prefer consultation over direction (Amabile, Schatzel, Moneta & Kramer, 2004). Under participative leadership employees feel psychological state of empowerment that increases employee involvement, intrinsic motivation & organizational commitment (Huang, Iun, Liu & Gong, 2010; Jones & George, 2006; Miao, *et. al.*, 2013), organizational citizenship behavior (Jones & George, 2006; Van Yperen, Berg & Willering, 1999) and provide good quality services to the customers (Ahearne, Mathieu, & Rapp, 2005).

Moreover, it is also found that participative leadership decreases the intensity of turnover and absenteeism in organizations (Steinheider, Bayerl & Wuestewald, 2006). All these evidences show that participative leaders have strong impact on employee performance behavior (Somech & Wendrew, 2006).

Creativity is defined as "the generation of novel and potentially useful ideas about organizational products, practices, or procedures" (Amabile, 1997). The construct of creativity is very complex and comprehensive. By using different approaches much of the researchers have tried to unravel the structure of creativity (Amabile, 1988). Prior researches indicate that creativity is rooted in psychology and sociology (Ford, 1996). Resultantly creativity is the generation of unique ideas regarding organizational actions (Amabile, 1997).

Generation of idea and promotion of idea are two constructs of creativity (Khazanchi & Masterson, 2011; Montag, Maertz, & Baer, 2012). There are further three categories in generation of new idea that is recognition of problem, search out information to solve the problem and find out solution or possible alternative options to solve a problem that generate innovative ideas (Zhang & Bartol, 2010).

Problem means well defined problem because when a problem is defined well then it is expected to result in quality solutions. After the completion of first step that is problem definition there is a need of diverse information that must gathered and incorporated regarding problem. After information gathering the third step is solution generating that is the use of existing knowledge and information in generating alternative solutions after that select one of the best suitable solutions by using existing knowledge. The idea promotion behavior is about to convince others that their ideas are creative (Janssen, 2000).

Evidences from prior researches suggest that those organizations are more effective whose employees are creative (Amabile, 1996). Presently, researchers are trying to find out all those conditions that enable employees to be creative at work. It is evidenced that participative leadership encourages employee creativity (Krause, Gebert & Kearney, 2007; Somech, 2006). In today's dynamic and competitive environment, the success of organizations depends on to be creative (Rosing, Frese & Bauch, 2011). Prior literature indicates that participation of employees in organizational problems is necessary for innovation and creativity in problem solving. Moreover, participative leadership style is not very common in organizations because people on higher positions may have fear of losing their position (White 1981). Leaders who encourage the followers to participate in discussion regarding organizational matters including problem solution and processes

improvement, the followers feel more motivated to give their unique ideas (Abraham & Hayward, 1985).

Employing social cognitive theory (Bandura, 1986), this research considers participative leadership as environmental factor (in the form of culture, strategies, communication policies, influence on others etc.) affect the behavior of employees in the form of creativity. According to this theory all those employees who work under participative leadership environment are more creative because their participation in decision making process gives them a sense of ownership they think that their suggestions are valuable for their organization so they try to be more creative & innovative to contribute their organizations to remain competitive in turbulent environment. Based on prior literature, it is hypothesized that:

*H1.* Participative leadership is positively related to employee creativity.

### **Need for Achievement as a Moderator**

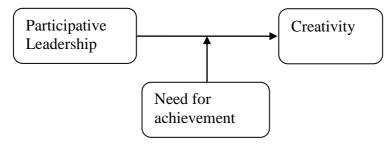
Need for achievement (nAch) was treated as a human aim (Murray, 1938; McClelland, *et al.*, 1989). High nAch employees have deep motivation to exhibit high performance (Robbins, *et al.*, 2004). Need for achievement is constituted on two instruments 1) move toward and 2) an escaping inclination (Elliot & Church, 1997). Move toward means hope for success and escaping inclination means fear of failure (Elliot, 2006).

Modern research on need for achievement depends on a person's desire to achieve their own targets (Ames, 1992). Prior scholars made a comparison of achievement targets and the effects of these targets on cognition and behavior (Ames, 1992; Urdan, 1997). Many researchers acknowledged intrinsic motivation as a central feature in the in the need for achievement domain (Harackiewicz, 1989). Jackson (1974) indicates that employees who score high in need for achievement (nAch) they seek to carry out difficult tasks. Prior researchers predicted a positive relationship between nAch and setting high standards. Present research also assumed that need for achievement will have more positive aspects than negative ones. Need for achievement is used as moderator in various studies but need for achievement is yet to be explored in participative leadership-creativity link. At the one side, high need for achievement arouses the learning process and on the other side it has a strong relationship with the aspiration (Soyer, et al., 1999), working hard and intrinsic motivation (Spence & Helmreich, 1983).

Social Cognitive Theory (Bandura, 1986) explains that environmental factor like culture, communication policies, strategies; influence on others etc. affects our cognition or personal factors like influence on thoughts and actions that leads to form a behavior. As need for achievement comes under personal factors or personal standards then this theory supports the model in a way that when a person has high need for achievement it affects personal standards or

cognition that ultimately affects the relationship of environmental factors (Participative leadership) and behavior (employee creativity). In other words, the individual factor i.e. high need for achievement fosters the relationship between participative leadership and employee creativity. Therefore, it can be hypothesized that:

**H2:** Need for achievement moderates the relationship between participative leadership and creativity such that the relationship is stronger when need for achievement is high.



**Fig1:** Moderating Role of Need for Achievement between Participative leadership and employee creativity

#### Methods

## **Research Design**

This quantitative study is based on a time lagged design of data collection. A survey method was used in non-contrived settings. To address the method bias response was taken at two time lags separated by six weeks on average and creativity was reported by the peers of the main respondent. Responses on participative leadership and need for achievement was taken by employees from three management levels working under some supervisor at least for six months. The target population for this research was the banking sector employees of Gujrat and twin cities; Islamabad & Rawalpindi based on convenience sampling. We tried to opt for 20 responses per item rule instead of rule of 10 (Arrindell & Van Der Ende, 1985; Velicer & Fava, 1998) to achieve an appropriate sample size for model testing.

# **Sample and Data Collection**

Data were collected using self-administered questionnaires and response was taken through professional contacts. At first point of time 700 questionnaires were distributed out of which 630 were received back. For second time response, the peers of those 630 respondents were contacted and received 510 questionnaires back. After discarding unmatched and incomplete responses we remained with 400 questionnaires with final response rate of 57%.

10% data was collected from government sector, 20% from semi-government and 70% from private sector banks. 22% respondents were from lower level management; 68% respondents were from middle level management and 10% from upper level management. The mean age of respondents was 31 years with standard deviation of 8 years. 68% respondents were males. Each respondent was working under current supervisor for at least six months. In the same manner, each peer was working with respondents for at least three months.

## **Measures Reliability and Validity**

Participative leadership and need for achievement was taken from self-reported questionnaire and creativity data was peer-reported. Five points 1 through 5 Likert scale was used to anchor all responses.

**Participative Leadership:** A six-item scale of Arnold *et al.* (2000) has been used to measure participative leadership. Participants rate their immediate supervisor regarding their participative behavior. Sample item was "My supervisor listens to my work group's ideas and suggestions." One item was dropped due to insignificant loading. Reliability of this scale was 0.93. The Cronbach's alpha 0.8 and higher is considered more ideal (Nunnely & Bernstein, 2010). The confirmatory factor analysis proved the construct validity with model fit results CMIN/df = 3.23, CFI = .99, RMR = .01, GFI = .99, AGFI = .93, NFI = .99, TLI = .98 and RMSEA = .06. Factor loading range was from 0.83 to 0.87.

**Creativity:** Creativity was measured with 5-items scale of Churchman, Scharf, & Wright (1990). A sample item was "this employee searches out many creative ideas and methods that might improve current conditions". The internal consistency Cronbach's alpha for this scale was 0.90. Its model fit results were CMIN/DF = 2.35, CFI = .99, RMR = .01, GFI = .99, AGFI = .96, NFI = .99, TLI = .98 & RMSEA = .05 which indicated a good fit. Factor loadings range was from 0.79 to 0.87.

**Need for Achievement:** This was measured using five items adopted from the Steers, & Braunstein, (1976). The sample item was "I enjoy the satisfaction of successfully completing a difficult job." The reliability for this scale was 0.91 and factor loading range was from 0.86 to 0.80.

#### **Measurement Models**

To examine the discriminant validity of all study variables, paired CFAs were analyzed. We compared one and two combined factor models with three factor model and found best results for three factor model/full measurement model indicating CMIN/df = 3.18, CFI = .96, RMR = .04, GFI = .92, NFI = .94, TLI = .95 and RMSEA = .05 as given in table 2.

Table 1: CFA result of Individual and paired analysis (Measurement Models)

Model	CMIN	DF	CMIN / DF	CFI	RMR	GFI	NFI	TLI	RMSEA
Individual Analysis									
PL	8.47	2	4.23	.99	.01	.99	.99	.98	.09
NACH	8.14	2	4.07	.99	.01	.99	.99	.98	.08
CR	7.07	3	2.35	.99	.01	.99	.99	.98	.05
Paired Analysis									
1factor (PL+ NA+	212.79	65	3.27	.89	.14	.82	.88	.87	.12
CR combined)									
2factor CR,	219.12	70	3.43	.90	.07	.84	.88	.87	.07
(PL+NA combined)									
2 factor PL,	273.92	72	3.80	.88	.13	.88	.87	.86	.08
(NA+CR Combined)									
2 factor NA,	264.77	70	3.78	.87	.09	.84	.86	.86	.11
(PL+CR Combined)									
3factor PL, NA, CR	242.07	76	3.18	.96	.04	.92	.94	.95	.05

Degrees of freedom (df), Root mean square residual (RMR), Goodness of Fit Index (GFI), Adjusted Goodness of Fit Index (AGFI), Root Mean Square Error of Approximation (RMSEA) PL= Participative leadership; NACH= Need for achievement; CR= creativity; PL= participative leadership; NACH= Need for achievement; CRT= creativity; N=400

## **Descriptive and Correlations**

The descriptive statistics including mean and standard deviations are given of study variables in table 2. The mean value for participative leadership was 3.81 (S.D = 1.09), need for achievement was 4.08 (S.D = .87) and for peer reported employee creativity was 3.87 (S.D = .79). These variables are positively correlated with each other. Participative leadership was significantly and positively correlated with Need for achievement (r=.28, P < 0.01) and creativity (r =.40, P < 0.01). Creativity was also found significantly related to need for achievement (r = .23, P < 0.01).

Table 2: Mean, standard Deviation, reliabilities & correlation of study variables

	Mean	SD	PLT1	NACHT1	CRT2
PLT1	3.81	1.09	(.93)		
NACHT1	4.08	.87	.284**	(.91)	
CRT2	3.87	.79	.405**	.235**	(.90)

<sup>\*\*</sup>Correlation is significant at the 0.01 level (2-tailed)

N=400; T1= Time1; T2= Time2, PL= Participative leadership; NACH= Need for achievement; CR= creativity peer reported

### **Moderation Analysis**

Hierarchical linear regression was used to analyze the interactive effect of participative leadership style and need for achievement on employee

<sup>\*</sup> Correlation is significant at the 0.05 level (2-tailed)

creativity. Following Baron & Kenny (1986) procedure, independent variable (Participative Leadership) and moderator (Need for Achievement) were entered in the first step whereas interaction term of both variables (PL c x NA C) was entered in the second step. Independent and moderating variables were centered as suggested by Aiken and West (1991). The results indicated significant impact of participative leadership ( $\beta = .27$ , p < .001) and need for achievement ( $\beta = .15$ , p < .001) on creativity by producing variance of 18 % that approved hypothesis 1. Interaction term of participative leadership and need for achievement also showed a significant impact on creativity ( $\beta = .13$ , p < .001) with additional variance of 2.6 % that proves moderation as given in Table 3. To examine the direction of the relationship at high and low value of need for achievement, we analyzed slope test. Results showed that the relationship between participative leadership and creativity got stronger at high value (-1 SD) of moderator ( $\beta$  = .39, p < .001) and at low value (+1 SD) of moderator ( $\beta = .15$ , p < .001) as given in Table 4. Therefore, moderation hypothesis 2 was also accepted. Interaction plot is also given in figure 2 to show the impact of participative leadership on creativity at high and low condition of need for achievement.

Table 3: *Hierarchical Regression Analysis for moderation* 

Predictors	В	$R^2$	$\blacktriangle R^2$	Sig.
Step1 NACH_c	.151			
PL_c	.273	.180	.180	.000
Step 2 PLxNACH	.138	.206	.026	.000

<sup>\*</sup>P<.05. \*\*P<.001

Table 4: *Conditional effect of X on y at values of the moderator(s)* 

NACH(Moderator)	Effect	SE	t-value	p-value	LLCI	ULCI
8718	.1537	.0460	3.3451	.0009	.0634	.2441
.0000	.2745	.0339	8.1076	.0000	.2079	.3410
.8718	.3952	.0494	8.0043	.0000	.2981	.4923

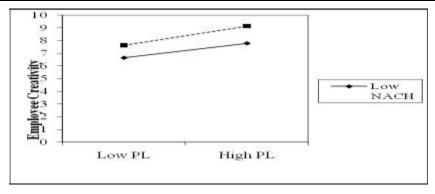


Fig 2: *Interaction plot for moderation* 

### **Discussion**

This study intended to examine how participative leadership style develops creativity among employees. We also proposed and analyzed moderating role of an individual factor of employees the need for achievement between participative leadership and creativity relationship. Results indicated a good support for both hypotheses. We employed Social cognitive theory (Bandura, 1986) to explain how followers learn from their leaders' behavior and behave accordingly.

The significant impact of participative leadership on followers' creativity validated previous studies results reported by Aspland, Darmawan, & Ben (2013) who revealed that participative leadership was positively associated with employee performance. These results are also similar to prior studies of that participative leadership style enhances employee creativity (Abraham & Hayward, 1985; Gupta & Singh, 2014). Moreover, our results also proved that employees show more creativity under participative leadership style and who possess high need for achievement. It is may be based on a positive association between need for achievement and goal accomplishment (Slocum, Cron, & Brown, 2002). This study contributes the domain of knowledge by examining the role of individual factor the need for achievement to enhance creative performance under participative leadership. Employees feel more motivation due to the leader as well as their own need for achievement and share their creative ideas to perform their jobs in a better and efficient manner. Study was conducted in banking sector employees that also indicates that they perform better under participative leadership style where they feel more confidence and trust on leader to share their creative ideas. By methodology this study addresses the issue of common method bias by taking time lagged and peer rated response for creativity.

# **Implications for Managers**

The present study makes multiple valuable managerial implications as well. This study tested a moderation model of participative leadership style in the banking sector domain. Each manger wants a creative work team that has an ability to resolve the problems and perform the tasks in better and efficient manner. Present study helps managers to recognize rigorous features of participative leadership, and its importance to generate creativity among followers. Secondly managers can identify the potential employees having higher need for achievement for the creative jobs. Particularly in the context of Pakistan where society is high power distance, where employees are not encouraged to share their ideas with their leaders, may thrive more if they get a participative leader.

# **Limitations and Future Suggestions**

Although we tried to test the proposed model in a time lagged design, but truly longitudinal design could be better choice. We selected banking organizations based on convenience for data collection, but the proposed model should also be tested in telecom sector employees where employee creativity is highly required. We examined moderating role of need for achievement but in future studies, creative self-efficacy and creative environment can be examined to figure out their conditional impact between participative leadership style and creativity. Few more attitudinal and behavioral outcome should also be included for example, job engagement and organizational commitment.

#### References

- Abraham, C., & Hayward, G. (1985). Towards a microscopic analysis of industrial innovations: from diffusion curves to technological integration through participative management. *Technovation*, *3*(1), 3-17.
- Ahearne, M., Mathieu, J., & Rapp, A. (2005). To empower or not to empower your sales force? An empirical examination of the influence of leadership empowerment behavior on customer satisfaction and performance. *Journal of Applied psychology*, 90(5), 945.
- Aiken, L. S., & Stephen, G. (1985). West (1991). Multiple regression: Testing and interpreting interactions, 75-87.
- Amabile, T. M. (1988). From individual creativity to organizational innovation.
- Amabile, T. M. (1996). Creativity in context: Update to" the social psychology of creativity." West view press.
- Amabile, T. M. (1997). Motivating creativity in organizations: On doing what you love and loving what you do. *California management review*, 40(1), 39-58.
- Amabile, T. M., Schatzel, E. A., Moneta, G. B., & Kramer, S. J. (2004). Leader behaviors and the work environment for creativity: Perceived leader support. *The Leadership Quarterly*, 15(1), 5-32.
- Ames, C. (1992). Classrooms: Goals, structures, and student motivation. *Journal of educational psychology*, 84(3), 261.
- Ardekani, S. R., & Jahromi, S. A. S. (2011). Relationship between Participative Management and Personnel Productivity: A Survey in Gachsaran Gas and Oil Company. *World Applied Sciences Journal*, 15(9), 1319-1324.
- Arnold, J. A., Arad, S., Rhoades, J. A., & Drasgow, F. (2000). The empowering leadership questionnaire: The construction and validation of a new scale for measuring leader behaviors. *Journal of Organizational Behavior*,21(3), 249-269.
- Arrindell, W. A., & Van der Ende, J. (1985). An empirical test of the utility of the observations-to-variables ratio in factor and components analysis. *Applied Psychological Measurement*, 9(2), 165-178.
- Aspland, T. L., Darmawan, I. N., & Ben, F. (2013). *Participative management and its relationships with employee performance behaviour: a study in the university sector in Malang Indonesia* (Doctoral dissertation).
- Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Prentice-Hall, Inc.

- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, *51*(6), 1173.
- Deci, E. L., & Ryan, R. M. (1985). Intrinsic motivation and self-determination in human behavior. *New York and London: Plenum*.
- Deci, E. L., Connell, J.P., & Ryan, R. M. (1989). Self-determination in a work organization. *Journal of Applied Psychology*, 74(4), 580-590.
- Elliot, A. J. (2006). The hierarchical model of approach-avoidance motivation. *Motivation and emotion*, 30(2), 111-116.
- Elliot, A. J., & Church, M. A. (1997). A hierarchical model of approach and avoidance achievement motivation. *Journal of personality and social psychology*, 72(1), 218.
- Ford, C. M. (1996). A theory of individual creative action in multiple social domains. *Academy of Management review*, 21(4), 1112-1142.
- Fulmer, R. M. (2005). What leaders and their organizations can do to develop ethical leaders. *Handbook on Responsible Leadership and Governance in Global Business. Glos: Edward Elgar*, 42-53.
- Gupta, V., & Singh, S. (2014). Psychological capital as a mediator of the relationship between leadership and creative performance behaviors: Empirical evidence from the Indian R&D sector. *The International Journal of Human Resource Management*, 25(10), 1373-1394.
- Hair, J. F., Black, W.C., Babin, B.J., Anderson, R. E., & Tatham, R. L. (2006). Multivariate data analysis (vol. 6). Upper Saddle River, NJ: Pearson Prentice Hall.
- Harackiewicz, J. M. (1989). Performance evaluation and intrinsic motivation processes: The effects of achievement orientation and rewards. In *Personality Psychology* (pp. 128-137). Springer US.
- Harackiewicz, J. M., & Elliot, A. J. (1993). Achievement goals and intrinsic motivation. *Journal of personality and social psychology*, 65(5), 904.
- Huang, X., Iun, J., Liu, A., & Gong, Y. (2010). Does participative leadership enhance work performance by inducing empowerment or trust? The differential effects on managerial and non-managerial subordinates. *Journal of Organizational Behavior*, 31(1), 122-143.
- Hwang, S. J., Quast, L. N., Center, B. A., Chung, C. T. N., Hahn, H. J., & Wohkittel, J. (2015). The impact of leadership behaviours on leaders perceived job performance across cultures: comparing the role of charismatic, directive, participative, and supportive leadership behaviours in the US and four Confucian Asian countries. *Human Resource Development International*, 18(3), 259-277.
- Jackson, D. N. (1974). *Personality research form manual*. Research Psychologists Press.
- Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behaviour. *Journal of Occupational and organizational psychology*, 73(3), 287-302.
- Jones, G. R., & George, J.M. (2006). Contemporary management (4<sup>th</sup> ed). Boston: McGraw-Hill.

- Jordan, M, (2011), "Leadership of the Future: Strategies for Success", Retrieved from: http://www.vcgsoftware.com/Article-Leadership of the Future.asp
- Kahai, S. S., Sosik, J. J., & Avolio, B. J. (1997). Effects of leadership style and problem structure on work group process and outcomes in an electronic meeting system environment. *Personnel Psychology*, 50(1), 121-146.
- Kakabadse, N. K., Kakabadse, A. P., & Lee-Davies, L. (2009). CSR leaders road-map. *Corporate Governance: The international journal of business in society*, 9(1), 50-57.
- Khazanchi, S., & Masterson, S. S. (2011). Who and what is fair matters: A multi-foci social exchange model of creativity. *Journal of Organizational Behavior*, 32(1), 86-106.
- Krause, D. E., Gebert, D., & Kearney, E. (2007). Implementing Process Innovations, the Benefits of Combining Delegative-Participative with Consultative-Advisory Leadership. *Journal of Leadership & Organizational Studies*, *14*(1), 16-25.
- Larsen, H. H., O'Driscoll, M. P., & Humphries, M. (1991). Technological innovation and the development of managerial competencies. *Technovation*, 11(7), 419-428.
- Laschinger, H. K. S., Finegan, J. E., Shamian, J., & Wilk, P. (2004). A longitudinal analysis of the impact of workplace empowerment on work satisfaction. *Journal of Organizational Behavior*, 25(4), 527-545.
- McClelland DC, Koestner R, Weinberger J (1989). How do self-attributed and implicit motives differ? Psychology Review, 96(4), 690-702.
- McClelland, D. C. (1965). N achievement and entrepreneurship: A longitudinal study. *Journal of personality and Social Psychology*, 1(4), 389.
- Meyer, J.P., & Allen, N.J. (1997). Commitment in the workplace. Thousand Oaks, C.A: sage.
- Miao, Q., Newman, A., Schwarz, G., & Xu, L. (2013). Participative leadership and the organizational commitment of civil servants in China: the mediating effects of trust in supervisor. *British Journal of Management*, 24(S1), S76-S92
- Montag, T., Maertz, C. P., & Baer, M. (2012). A critical analysis of the workplace creativity criterion space. *Journal of Management*, 38(4), 1362-1386.
- Morris, J. L., & Fargher, K. (1974). Achievement drive and creativity as correlates of success in small business. *Australian Journal of Psychology*, 26(3), 217-222.
- Mowday, R. T. (1999). Reflections on the study and relevance of organizational commitment. *Human resource management review*, 8(4), 387-401.
- Mowday, R.T., Porter, L.w., & Steers, R.M., (1982). Organizational linkages: The psychology of commitment, absenteeism & turnover. San Diego, CA: Academic press.
- Murray, H. A. (1938). Explorations in personality. New York: Oxford University Press.
- Nunnely, C. J., & Beirnstein, I. H. (2010). *Psychometric Theory. New York:* McGraw-Hill.
- Oldham, G. R., & Cummings, A. (1996). Employee creativity: Personal and contextual factors at work. *Academy of management journal*, 39(3), 607-634.

- Robbins, S. B., Lauver, K., Le, H., Davis, D., Langley, R., & Carlstrom, A. (2004). Do psychosocial and study skill factors predict college outcomes? A meta-analysis. *Psychological bulletin*, *130*(2), 261.
- Rok, B. (2009). Ethical context of the participative leadership model: taking people into account. *Corporate Governance: The international journal of business in society*, 9(4), 461-472.
- Rosing, K., Frese, M., & Bausch, A. (2011). Explaining the heterogeneity of the leadership-innovation relationship: Ambidextrous leadership. *The Leadership Quarterly*, 22(5), 956-974.
- Sauer, S. J. (2011). Taking the reins: the effects of new leader status and leadership style on team performance. *Journal of Applied Psychology*, 96(3), 574.
- Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behavior: A path model of individual innovation in the workplace. *Academy of management journal*, *37*(3), 580-607.
- Slenker, P. (1983). "Some problems in justifying CAM/CAD". Automan Conference, Birmingham: UK.
- Slocum, J. W., Cron, W. L., & Brown, S. P. (2002). The effect of goal conflict on performance. *Journal of Leadership & Organizational Studies*, *9*(1), 77-89.
- Somech, A. (2006). The effects of leadership style and team process on performance and innovation in functionally heterogeneous teams. *Journal of management*, 32(1), 132-157.
- Somech, A., & Wenderow, M. (2006). The impact of participative and directive leadership on teachers' performance: The intervening effects of job structuring, decision domain and leader member exchange. Education Administration Quarterly, 42(5), 746-772.
- Soyer, R. B., Rovenpor, J. L., & Kopelman, R. E. (1999). Narcissism and achievement motivation as related to three facets of the sales role: Attraction, satisfaction and performance. *Journal of Business and psychology*, *14*(2), 285-304.
- Spence, J.T. & Helmreich, R.L. (1983), "Achievement-related motives and behaviors", in Spence, J.T. (Ed.), Achievement and Achievement Motives, Freeman, San Francisco, CA, 128-157.
- Steers, R. M., & Braunstein, D. N. (1976). A behaviorally-based measure of manifest needs in work settings. *Journal of Vocational Behavior*, 9(2), 251-266.
- Steinheider, B., Bayerl, P. S., & Wuestewald, T. (2006). The effects of participative management on employee commitment, productivity, and community satisfaction in a police agency. In annual meeting of the International Communication Association, Dresden International Congress Centre, Dresden, Germany. Retrieved fromhttp://www. allacademic.com/meta/p93097\_index. html.
- Treviño, L. K., Brown, M., & Hartman, L. P. (2003). A qualitative investigation of perceived executive ethical leadership: Perceptions from inside and outside the executive suite. *Human relations*, 56(1), 5-37.
- Tuuli, M.M., & Rowlinson, S. (2009). Performance consequences of psychological empowerment. Journal of Construction Engineering Management. Retrieved from http://www.ascelibrary.org.

- Urdan, T. (1997). Achievement goal theory: Past results, future directions. *Advances in motivation and achievement*, 10, 99-141.
- VanYperen, N. W., Berg, A. E., & Willering, M. C. (1999). Towards a better understanding of the link between participation in decision-making and organizational citizenship behaviour: A multilevel analysis. *Journal of Occupational and Organizational Psychology*, 72(3), 377-392.
- Velicer, W. F., & Fava, J. L. (1998). Affects of variable and subject sampling on factor pattern recovery. *Psychological methods*, *3*(2), 231.
- Wageman, R. (2001). How leaders foster self-managing team effectiveness: Design choices versus hands-on coaching. *Organization Science*, 12(5), 559-577.
- Wainer, H. A., & Rubin, I. M. (1969). Motivation of research and development entrepreneurs: Determinants of company success. *Journal of Applied Psychology*, 53(3p1), 178-184.
- White, D. (1981). Why won't managers co-operate? Innovation and productivity in engineering. *Industrial Relations Journal*, 12(2), 61-71.
- Zhou, J., & George, J. M. (2001). When job dissatisfaction leads to creativity: Encouraging the expression of voice. *Academy of Management journal*, 44(4), 682-696.