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TRANSFORMATIONAL LEADERSHIP AND INDIVIDUAL CREATIVITY: THE MEDIATING ROLE OF INTRINSIC MOTIVATION

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ABSTRACT

Purpose- It is assumed that transformational leadership as an organizational context might have a significant effect on the development of individual creativity capabilities within followers. Further, it is argued that intrinsic motivation mediates the transformational leadership behavior - individual creativity link, which we empirically know little about so far.

Methodology- Given hypothesis were investigated by using 304 questionnaires from 61 manufacturing companies operating in Eastern Marmara region. To more vigorously test the proposed model, partial least squares structural equation modelling (PLS-SEM) was employed with SmartPLS 3.0 statistical program.

Findings- The findings suggest that transformational leadership is an important tool that enhance individual creativity. The SEM results revealed that transformational leadership is positively associated with individual creativity and the effect of transformational leadership on individual creativity is partially mediated by inspirational motivation, which means both of our hypothesis are supported.

Conclusion- According to the findings, transformational leaders provide their followers' with recognition, provide a vision towards future; they act as role models and promote followers' commitment. They encourage the followers to take risks, increase their energy to generate novel ideas and solutions. As a result, followers with increased self-confidence become more inspired motivated and creative. Additionally, these followers, through the way that their leaders behave them, are inspired and motivated to be more creative in doing their tasks. Partially through inspirational motivation transformational leaders can stimulate the creative capabilities of followers. Finally, this study reveals the fact that the effect of transformational leadership is partially mediated by inspirational mediation.

Keywords : Transformational leadership, intrinsic motivation, individual creativity

JEL Codes: M10, M12, M19

1. INTRODUCTION

Over the last decades, further management problems necessitate creative thinking in order to find innovative ideas and solutions. Innovation and creativity are extremely relevant at organizations. Therefore, creative problem solving has become a driving force behind innovation that promotes superior performance. Transformational Leadership - introduced by Burns (1978) and developed by Bass (1985) – is an increasingly important concept in the field of strategic management and leadership theory (Antonakis and House, 2002; Eisenbeiß and Boerner, 2013). Up to now, it has been studied intensely (Avolio, Bass, and Jung, 1999; Shin and Zhou; 2003, Elkins and Keller, 2003.) and has also matched with creativity (Sosik, Kahai, and Avolio, 1998; Gumusluoglu and Ilsev, 2009; Eisenbeiß and Boerner, 2013; Mittal and Dhar, 2015). In particular, transformational leaders possess a shared vision that motivates team's performance, arouse their follower's autonomy and encouragement, and articulate their inspirational behaviours that support innovation climate within the organization. Amabile et al. (2004) also stated that a leader's behaviour is potent on individual creativity at the workplace (Jaiswal and Dhar, 2015; Mathew and Gupta, 2015). Transformational leaders enable their followers to question their thoughts and

assumptions, stimulate them to approach problems with new perspectives and create an organizational culture in their organization where innovation is dominant (Karcioğlu and Kaygin, 2013; Eliophotou-Menon and Ioannou, 2016). By this

supportive innovation climate, followers' demands are met and their creative performance is boosted (Jung et al., 2003; Gupta et al., 2012; Gupta and Singh, 2013; Jaiswal and Dhar, 2015). Also, transformational leaders try to achieve organizational goals by giving importance to the motivation of their employees' and this attitude make their employees feel special, encouraged and motivated (Greenberg and Baron, 2000; Williams, 2004; Naralan, Yıldız and Kahya, 2013). The creativity enhancing features of transformational leaders encourage their followers to develop new and creative ideas and put them into practice to create value and generate innovations (Marcati et al., 2008; Gumusluoglu and Ilsev, 2009; Karcioğlu and Kaygın, 2013).

Through individualized consideration, the leaders provide each of their followers' with recognition and encouragement to fulfill the developmental needs of them. Through intellectual stimulation, the leaders provide support for exploratory thinking of their followers to find superior solutions for the actual problems. Through idealize influence, the leaders act as role models, promote followers' commitment and enhance their creativity. Through inspirational motivation, the leaders encourage their followers to take risks through organization's vision for innovation, increase their energy to generate novel ideas and solutions (Bass and Avolio, 1995; Avolio et al., 1999; Bass et al., 2003; Gumusluoglu and Ilsev, 2009; Eisenbeiß and Boerner, 2013; Jaiswal and Dhar, 2015). As stated by Amabile et al., (1996), the intrinsic motivation enhances excitement, energy, and concentration of employees by a task which enables them to search for new and better ways of doing things, and as a result increase their creativity level (Oldham and Cummings, 1996; Shin and Zhou, 2003). Shin and Zhou (2003) indicated that intrinsic motivation positively mediates the influence of transformational leadership on creativity (Shalley, Zhou and Oldham, 2004).

2. LITERATURE REVIEW

2.1. Transformational Leadership

Leadership has been discussed from various perspectives by scholars in strategic management. Their findings showed that transformational leadership impacts all stages in the strategic management process. First, in 1978, Burns introduced the term of transformational leadership in the U.S. His definition has been further expanded by other researchers, like Bass (1985), Avolio et al., (1999) and Shin and Zhou (2003) etc. Transformational leadership is defined as "the process of influencing major changes in the attitudes and assumptions of organization members and building commitment for the organization's mission, objectives, and strategies" (Yukl, 1989, p. 269). Further, transformational leadership - as an important factor at individual, organizational and societal level - is defined as a leadership approach that causes change in individuals and social systems. Transformational leaders broaden and elevate their subordinates' goals by altering their morale, ideas, interests, and values, and provide them with confidence to perform beyond expectations (Dvir, Eden, Avolio and Shamir, 2002). They facilitate the establishment of a shared vision that substantially motivates followers to achieve team performance (Liu, Liu, Ding and Lin, 2015). Transformational leaders facilitate cooperation by supporting team attachment and encourage their followers to adopt an explorative and open mind-set and to go beyond the routines (Jung, Chow and Wu, 2003; Eisenbeiß and Boerner, 2013), they motivate followers cooperating instead of competing (Liu, Liu, Ding and Lin, 2015), enhance their personal development and performance expectations (Bass, 1995), and transform their personal values for higher level of needs and aspirations (Jung, 2001) and develop their self-efficacy (Bass, 1990).

In their research, Avolio, Bass and Jung (1999) developed a Multi-Factor Leadership Model and succeeded to measure transformational leadership by a questionnaire named MLQ-Form 5X which we also used in our research. According to their MLQ model transformational leadership has four dimensions: idealized influence (charismatic role modelling), individualized consideration, inspirational motivation, and intellectual stimulation. The dimension of idealized influence (charismatic role modelling) indicates charismatic vision and behaviour of the leader that when taken as role model builds trust and confidence and promotes loyalty and admiration among followers. The dimension of individualized consideration indicates highly individualized consideration of the leader, acting as a mentor or coach, considering each follower's needs and concerns individually in order to reveal their talents and knowledge to exhibit creative solutions. The dimension of inspirational motivation indicates inspiring vision of the leader that motivates followers to go beyond their limits of comfort, take risks to submit new ideas or goals and engage in higher-level innovation. And, finally, the dimension of intellectual stimulation indicates the degree of stimulation that a leader can encourage and empower his followers to be innovative and creative. In the strategic management literature, organizations seem to be highest innovation oriented and transformational leaders nourish this goal by influencing their followers' thoughts, changing their behaviors and reforming the organization's social systems.

2.2. Individual Creativity

Nowadays, due to the rise of a knowledge-based economy, the concept of individual creativity at work is becoming a more important interest for organizations. From the strategic management perspective, the organizations agree that encouraging their employees to be creative enhance their effectiveness and success as well as their creativity (such as improving a process to make it more efficient, solving a problem, exploring completely, and becoming more responsive to opportunities etc.). So, they become more adaptable for changes in the market, can fulfil customer needs and compete globally. Given

the important role of employee creativity in the organization, researchers have become increasingly interested in identifying what is creativity. According to Amabile (1983), creativity is about the quality of products or responses judged to be creative by appropriate observers. It is also defined as the complex product of an employee's behavior at a particular situation (Woodman et al., 1993; Wang et al., 2016). Conceptually, creativity can be defined as the production of novel and organizationally valued (or useful) ideas in product, service, practice, and process (Mumford and Gustafson, 1988; Pirola-Merlo and Mann, 2004; Peng, Zhang, Fu and Tan, 2014). To be regarded as creative, there must be a product at hand which is novel, appropriate, useful, correct, or valuable response to the task and the task must be heuristic rather than algorithmic (Amabile, 1983; Dong et al., 2017).

2.3. Intrinsic Motivation

According to self-determination theory intrinsic motivation is one of the six dimensions of motivation that attracts and energize the employees by a task. When the activity is challenging, interesting, or enjoyable the positive feeling about activity makes them engage in the activity, bound up with the task and satisfied inherently (Amabile, 1983; Shin and Zhou, 2003; Conchie, 2013). Intrinsically motivated employees tend to be more flexible and determined to find many alternative solutions for problems and to use non-traditional approaches. Thus, we can say that it is a trigger for individual creativity (Tierney et al., 1999; Shin and Zhou, 2003). Recent studies have shown that transformational leadership behaviour affects the emotions of employee such as happiness, enthusiasm, and optimism which are also enhanced by intrinsic motivation (Deci and Ryan, 1985; Conchie, 2013).

3. DATA AND METHODOLOGY

3.1. Transformational Leadership and Individual Creativity

With the right leadership approach individual creativity can provide dramatic organizational change that can boost organizational effectiveness and survival (Woodman, Sawyer and Griffin, 1993). In line with, transformational leader's highly individualized consideration encourages followers' engagement to creativity-enhancing behaviours and take necessary actions to solve the problems. On the other hand, as the successful conversion of new concepts and knowledge into new products, services, or processes that deliver new customer value in the marketplace, organizational innovation is associated with creativity (Pirola-Merlo and Mann, 2004; Keathley et al., 2013). Thus, it is important for organizations to understand how to encourage individual creativity. Based on the above reasoning, it was hypothesized that:

H₁: Transformational leadership is positively associated with individual creativity.

3.2. Intrinsic Motivation, Transformational Leadership and Individual Creativity

Researches on creativity has shown that, transformational leadership as a situational factor influences creativity via influencing intrinsic motivation (Oldham and Cummings, 1996; Shin and Zhou, 2003; Schopman et al., 2015). Transformational leaders enhance capabilities and competencies of their followers which boost their intrinsic motivation and encourages them to search for new and better ways of doing things which finally leads to higher levels of creativity (Deci and Ryan, 1985; Amabile et al., 1996; Shin and Zhou, 2003). Based on the above reasoning, it was hypothesized that:

H₂: The intrinsic motivation mediates the relationship between transformational leadership and individual creativity.

For the purposes of this study, we assumed that transformational leadership as an organizational context might have a significant effect on the development of individual creativity capabilities within followers. Further, it is argued that intrinsic motivation mediates the transformational leadership behavior - individual creativity link, which we empirically know little about so far.

3.3. Measures, Sample and Data Collection

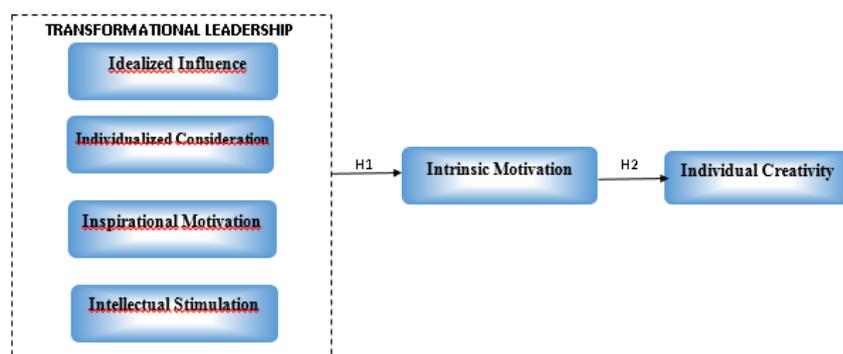
The latent constructs were assessed using multi-item measures on a five-point Likert scale ranging from 'strongly disagree' (1) to 'strongly agree' (5) from prior studies. Short explanations of each measure are as follows. In order to measure the transformational leadership behaviour, this study used four dimensions derived from Bass and Avolio (1990); that is: idealized influence, individualized consideration, inspirational motivation, and intellectual stimulation. For each dimension, four questions were asked. To measure individual creativity, this study employed thirteen questions adopted from the creativity measure of Zhou and George (2001). Finally, five question items derived from Tierney et al. (1999) were employed to assess the intrinsic motivation. The empirical analyses for the study are based on data from 61 big firms from manufacturing industry operating in Eastern Marmara region. In order to empirically investigate the hypotheses, tools such as e-mail, letter and face to face interviews are used for gathering data from the owners, top-managers, middle or first line. We obtained 347 surveys, then we discarded some of the surveys that are not suitable for our analyses. After the clarifying, our analysable sample was comprised of 304 participants from 61 different manufacturing companies. We compared the mean of variables, firm size, and ages of the eliminated surveys with the surveys used for the analysis, and found no statistical difference among them. In our sample, the respondents were senior employees/staffs (42%), senior engineers

(17%), functional/department managers (7%), technical leaders (13%), product/project managers (8%), general managers (12%), and owners of the firm (2%). The respondent departments were finance (9%), engineering and design (46%), marketing (13%), manufacturing (22%), and human resources (10%). Of the 304 respondents 159 (52%) were men, and 145 (48%) were women. The majority of the participants 201 (66%) are married and ranged in age from 30 to 40 years 170 (56%). Of the participants, %87 had university educations and %13 had master education.

3.4. Measure Validity and Reliability

To more vigorously test the proposed model (see Fig. 1), partial least squares structural equation modelling (PLS-SEM) was employed with SmartPLS 3.0 statistical program.

Figure 1: Theoretical Model



To assess the psychometric properties of the measurement instruments, we estimated a null model with no structural relationships. We evaluated reliability by means of composite scale reliability (CR), Cronbach's alpha, and average variance extracted (AVE). After dropping the problematic three items for all measures the PLS-based CR and Cronbach's alpha are well above the cut-off value of .70, and AVE exceeds the .50 cut-off value. As suggested by Fornell and Larcker (1981), the AVE for each construct was greater than the squared latent factor correlations between pairs of constructs (see Table 1). Before conducting any path analyses we conducted a second order factor analyse for the four components of transformational leadership; the results demonstrate that the four dimensions of the transformational demonstrate loading between 0.88-0.92. So it is proper to take the transformational leadership as a composite variable instead of a four dimensional one. A composite transformational leadership variable will enable us to see the mediating role of intrinsic motivation on the relationship between the transformational leadership and individual creativity.

Table 1: Discriminant Validity and Reliability Indicators

No	Variables	1	2	3	4	5	6
1	IC	1.000					
2	ICO	0.230	1.000				
3	IS	0.311	0.681	1.000			
4	II	0.221	0.738	0.723	1.000		
5	IM	0.275	0.748	0.756	0.787	1.000	
6	ID	0.291	0.885	0.883	0.898	0.920	1.000
	CR	0.939	0.848	0.846	0.847	0.842	0.931
	AVE	0.561	0.583	0.579	0.649	0.572	0.516
	α	0.929	0.761	0.757	0.729	0.750	0.920

Note 1: Diagonals show the square root of AVEs.

Note 2: IC = Individual creativity, ICO = Individualized consideration, IS = Intellectual stimulation, II = Idealized influence, ID= Individual Creativity, IM = Inspirational motivation, TL = Transformational leadership, CR = Composite Reliability, AVE = Average Variance Extracted, α = Cronbach's Alpha

4. FINDINGS AND DISCUSSIONS

4.1. Hypothesis Testing

In order to test the mediating effect of intrinsic motivation between transformational leadership and individual creativity, we employed the Baron and Kenny (1986) procedure, where a variable (M) mediates the relationship between an

independent variable (X) and a dependent variable (Y) if (a) X is significantly related to Y; (b) X is significantly related to M; (c) after X is controlled for, M remains significantly related to Y; and (d) after M is controlled for, the X – Y relationship is zero for a total mediation or just less for a partial mediation. Also, the presence of the mediator (M) must reduce the impact of the independent variable on the outcome compared with when M is not present (Akgun et al., 2014). Further, entering the mediator into the PLS-SEM model should also result in a significant increase in R^2 . To address these issues, we performed three different SEM models, as shown in Table 2. First model shows that transformational leadership is positively associated with individual creativity ($\beta=0.29$, $p<0.01$), thus supporting H_1 . The second model demonstrates that transformational leadership ($\beta=0.28$, $p<0.01$) is also positively associated with inspirational motivation. On the third model when we add the inspirational motivation as a mediator, the impact of the direct effect of transformational leadership ($\beta=0.10$, $p<0.05$) decreases; while there is a strong association between inspirational motivation and individual creativity ($\beta=0.68$, $p<0.01$). Thus, the effect of transformational leadership on individual creativity is partially mediated by inspirational motivation, supporting H_2 .

Table 2: Path Analyses

Models	Relationships			Path Coefficient (β)	
I. Model	TL	→	IC	0.29**	Supported
II. Model	TL	→	IM	0.28**	Supported
III. Model	TL	→	IC	0.10*	Supported
	TL	→	IM	0.28**	
	IM	→	IC	0.68**	

Note 1: IC = Individual creativity. IM = Inspirational motivation. TL = Transformational leadership
 **: $p<0.01$ *: $p<0.05$

Additionally Table 3 shows the R^2 of endogenous constructs in our three models. As seen in the table R^2 of individual creativity increases from 0.08 to 0.51 when the mediator inspirational motivation is added. So the last condition is also fulfilled for the mediator analyses.

Table 3: Structural Model

Models	Endogeneous Construct	R^2
I. Model	IC	0,08
II. Model	IM	0.07
	IM	0.07
III. Model	IC	0.51

5. CONCLUSION

Creativity is an central subject for both academicians and practitioners in today`s hypercompetitive business environments. This paper tries to generate a holistic model for individual creativity by shedding a light on the mechanism between transformation leadership and individual creativity. There is a wide held assumption that transformational leadership has a positive effect on individual creativity of employees; but how? Inspirational motivation arises as a possible answer. So basically this paper attempts to reveal the mediating role of inspirational motivation on the relationship between transformational leadership and individual creativity. The findings of the study demonstrated that transformational leadership, inspirational motivation and individual creativity scales which are developed in Western countries, are appropriate for an emerging economy and eastern country; Turkey. Measures demonstrated high validity and reliability, and model results were quite similar with the empirical studies completed in developed and western countries.

The findings showed that transformational leadership was positively related with individual creativity. Transformational leaders provide their followers` with recognition, provide a vision towards future; they act as role models and promote

followers' commitment. They encourage the followers to take risks, increase their energy to generate novel ideas and solutions. As a result, followers with increased self-confidence become more inspired motivated and creative. Here inspirational motivation comes to the scene. Indeed these followers, through the way that their leaders behave them, are inspired and motivated to be more creative in doing their tasks. In addition, this study provided empirical evidence in support of the relationship between transformational leadership and inspirational motivation, as well as the mediator role of inspirational motivation. Partially through inspirational motivation transformational leaders can stimulate the creative capabilities of followers. The findings of this study cannot be taken as certain evidence since several limitations to the study results deserve interpretation. First, this study is conducted on big firms. Second, these results reported here emerge from a local area; East Marmara province. Results may differ for SMEs located on different areas that are operating in different cultural, environmental and political conditions. Third, the sample is composed of employees of the firms operating in manufacturing industries; results may differ for different industries. Notwithstanding these limitations, this study provides important implications from theoretical and practical perspectives. This study indicates that transformational leadership and inspirational motivation have positive influences on individual creativity. In addition, the findings of this study reveals the fact that the effect of transformational leadership is partially mediated by inspirational mediation.

REFERENCES

- Akgün, A. E., Keskin, H., Byrne, J. C., & İlhan, Ö. Ö. (2014), "Complex adaptive system mechanisms, adaptive management practices, and firm product innovativeness", *R&D Management*, 44(1), 18-41.
- Amabile, T.M., Conti, R., Coon, H., Lazenby, J. and Herron, M. (1996), "Assessing the work environment for creativity", *Academy of Management Journal*, 39 (5), pp.1154–1184.
- Amabile, T.M., Schatzel, E.A., Moneta, G.B. and Kramer, S.J. (2004), "Leader behaviors and the work environment for creativity: perceived leader support", *Leadership Quarterly*, 15 (1), pp.5–32.
- Amabile, T.M. (1983), "The social psychology of creativity", New York: Springer-Verlag.
- Antonakis, J. and House, R.J. (2002), "The full-range leadership theory: The way forward". In B.J.Avolio & F.J. Yammarino (Eds.), *Transformational and charismatic leadership: the road ahead* (pp. 3-34). Amsterdam: JAI.
- Avolio, B.J., Bass, B.M. and Jung, D.I. (1999), "Re-examining the components of transformational and transactional leadership using the Multifactor Leadership Questionnaire", *Journal of Occupational and Organizational Psychology*, 72 (4), pp.441–463.
- Baron, R. and Kenny, D. (1986), "The moderator–mediator variable distinction in social psychological research", *Journal of Personality and Social Psychology*, 51, 6, pp.1173–1182.
- Bass, B.M. (1990), "From transactional to transformational leadership: learning to share the vision", *Organizational Dynamics*, 18 (3), pp.19–32.
- Bass, B.M. (1995), "Transformational leadership", *Journal of Management Inquiry*, 4 (3), pp.293–298.
- Bass, B.M. (1985), "Leadership and Performance beyond expectations". New York: Free Press.
- Bass, B.M. and Avolio, B.J. (1995), "MLQ Multifactor Leadership Questionnaire", Technical report. Redwood City, CA: Mind Garden.
- Bass, B.M., Avolio, B.J., Jung, D.I. and Benson, Y. (2003), "Predicting unit performance by assessing transformational and transactional leadership", *Journal of Applied Psychology*, 88, No. 2, pp.207-218.
- Bass, B.M. and Avolio, B.J. (1990), "Developing Transformational Leadership: 1992 and Beyond", *Journal of European Industrial Training*, Vol. 14, Issue: 5.
- Burns, J.M. (1978), "Leadership". New York: Harper & Row.
- Conchie, S.M. (2013), "Transformational Leadership, Intrinsic Motivation, and Trust: A Moderated-Mediated Model of Workplace Safety", *Journal of Occupational Health Psychology*, 18(2), pp. 198-210.
- Deci, E.L. and Ryan, R.M. (1985), "Intrinsic motivation and self-determination in human behavior". New York: Plenum Press.
- Dong, Y., Bartol, K.M., Zhang, Z. and Li, C. (2017), "Enhancing employee creativity via individual skill development and team knowledge sharing: Influences of dual-focused transformational leadership", *Journal of Organizational Behavior*, 38, pp. 439–458.
- Dvir, T., Eden, D., Avolio, B.J. and Shamir, B. (2002), "Impact of transformational leadership on follower development and performance: a field experiment", *Academy of Management Journal*, 45 (4), 735–744.
- Eisenbeiß, S.A. and Boerner, S. (2013), "A Double-edged Sword: Transformational Leadership and Individual Creativity", *British Journal of Management*, Vol. 24, Issue 1, pp.54-68.
- Eliophotou-Menon, M. and Ioannou, A. (2016), "The Link Between Transformational Leadership and Teachers' Job Satisfaction, Commitment, Motivation to Learn, and Trust in The Leader", *Academy of Educational Leadership Journal*, 20 (3), pp. 12-22.
- Elkins, T. and Keller, R.T. (2003), "Leadership in research and development organizations: a literature review and conceptual framework", *Leadership Quarterly*, 14, pp.587–606.

- Fornell, C. and Larcker, D.F. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, 18, 1, pp.39–51.
- Gong, Y., 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), pp.765-778.
- Greenberg, J. and Baron, R.A. (2000), "Behavior in organizations: Understanding and managing the human side of work", Upper Saddle River, NJ: Prentice Hall.
- Gumusluoglu, L. and Ilsev, A. (2009), "Transformational Leadership, Creativity, and Organizational Innovation", *Journal of Business Research*, 62, pp.461-473.
- Gupta, V., Singh, S., and Khatri, N. (2013), "Creativity in Research and Development Laboratories: A New Scale for Leader Behaviors", *IIMB Management Review*, 25 (2), pp.83-90.
- Gupta, V., Singh, S., Kumar, S. and Bhattacharya, A. (2012), "Development of a Causal Framework Linking Leadership to Employee Creativity: A Study of Indian R&D Laboratories", *The Indian Journal of Industrial Relations*, 48 (1), pp.120-136.
- Jaiswal, N.K. and Dhar, R.L. (2015), "Transformational leadership, innovation climate, creative self-efficacy and employee creativity: A multilevel study", *International Journal of Hospitality Management*, 51, pp.30-41.
- Keathley, J., Merrill, P., Owens, T., Meggarrey, I. and Posey, K. (2013), "The Executive Guide to Innovation: Turning Good Ideas into Great Results", Quality Press..
- Jung, D.I. (2001), "Transformational and transactional leadership and their effects on creativity in groups", *Creativity Research Journal*, 13 (2), pp.185–195.
- Jung, D.I., Chow, C. and Wu, A. (2003), "The role of transformational leadership in enhancing organizational innovation: Hypotheses and some preliminary findings", *The Leadership Quarterly*, pp.525-544.
- Karcioglu, F. and Kaygin, E. (2013), "Dönüştürücü Liderlik Anlayışının Yaratıcılığa ve Yeniliğe Etkisi", *KAU IIBF Dergisi*, 4 (5), pp.99-111.
- Liu, M.L., Liu, N.T., Ding, C.G. and Lin, C.P. (2015), "Exploring team performance in high-tech industries: Future trends of building up teamwork", *Technological Forecasting and Social Change*, 91, pp.295-310.
- Marcati, A., Guido, G. and Peluso, A.M. (2008), "The role of SME entrepreneurs' innovativeness and personality in the adoption of innovations", *Research Policy*, 37, pp.579–590.
- Mathew, M. and Gupta, K.S. (2015), "Transformational Leadership: emotional intelligence", *SCMS Journal Of Indian Management*, 12(2), pp. 75-89.
- Mittal, S. and Dhar, R.L. (2015), "Transformational leadership and employee creativity: Mediating role of creative self-efficacy and moderating role of knowledge sharing", *Management Decision*, Vol. 53 Issue: 5, pp.894-910,
- Mumford, M.D. and Gustafson, S.B. (1988), "Creativity syndrome: integration, application, and innovation", *Psychological Bulletin*, 103 (1), pp.27–43.
- Naralan, A., Yildiz, I. and Kahya, C. (2013), "Donüştürücü Liderlik Algisi İle Bilgi Yonetimi Kabiliyetleri Arasındaki İlişkiler: Kosgeb İşletmelerinde Örnek Bir Uygulama", *Yönetim ve Ekonomi Araştırmaları Dergisi*, (20), pp.65-87.
- Oldham, G.R. and Cummings, A. (1996), "Employee creativity: personal and contextual factors at work", *Academy of Management Journal*, 39 (3), pp. 607–634.
- Peng, J., Zhang, G., Fu, Z. and Tan, Y. (2014), "An empirical investigation on organizational innovation and individual creativity", Prajogo, D., & McDermott, C. M.
- Pirola-Merlo, A.J. and Mann, L. (2004), "The relationship between individual creativity and team creativity: aggregating across people and time", *Journal of Organizational Behavior*, vol 25, no. 2, pp. 235 - 257.
- Schopman, L.M., Kalshoven, K. and Boon, C. (2015), "When health care workers perceive high-commitment HRM will they be motivated to continue working in health care? It may depend on their supervisor and intrinsic motivation", *The International Journal of Human Resource Management*, pp. 1-21.
- Shalley, C.E., Zhou, J. and Oldham, G.R. (2004), "The effects of personal and contextual characteristics on creativity: where should we go from here?", *Journal of Management*, 30 (6), pp.933–958.
- Shalley, C.E. (1995), "Effects of coercion, expected evaluation, and goal setting on creativity and productivity", *Academy of Management Journal*, 38, pp.483-503.
- Shin S.J. and Zhou, J. (2003), "Transformational leadership, conservation and creativity: evidence from Korea", *Academy of Management Journal*, 46 (6), pp.703–714.
- Sosik, J.J., Kahai, S.S. and Avolio, B.J. (1998), "Transformational leadership and dimensions of creativity: motivating idea generation in computer-mediated groups", *Creativity Research Journal*, 11 (2), pp. 111–121.
- Tierney, P., Farmer S.M., and Graen, G.B. (1999), "An examination of leadership and employee creativity: the relevance of traits and relationships", *Personnel Psychology*, 591–620..
- Wang, P. and Rode, J.C. (2010), "Transformational leadership and follower creativity: The moderating effects of identification with leader and organizational climate", *Human Relations August*, 63 (8), pp. 1105-1128.
- Wang, X., Kim, T. and Lee, D. (2016), "Cognitive diversity and team creativity: Effects of team intrinsic motivation and transformational leadership", *Journal of Business Research*, 69 (9), pp. 3231–3239.

Woodman, R.W., Sawyer J.E., and Griffin R.W. (1993), "Toward a theory of organizational creativity". *Academy of Management Review*, 18 (2):293–321.

Xiao-Hua, W. Tae-Yeol, K., and Deog-Ro, L. (2016), "Cognitive diversity and team creativity: Effects of team intrinsic motivation and transformational leadership", *Journal of Business Research*, 69, pp. 3231–3239.

Yukl, G. (1989), "Managerial Leadership: A review of Theory and Research", *Journal of Management*, Vol. 15, No.2, pp.251-289.

Zhou, J. and George, J.M. (2001), "When job dissatisfaction leads to creativity: encouraging the expression of voice", *Academy of Management Journal*, 44 (4), pp. 682–696.