

Green Transformational Leadership and Green Performance: The mediating role of Green Mindfulness and Green Self-efficacy

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Abstract: green transformational leadership is deemed as crucial element to increase the green performance of organizations. The purpose of this study is to examine the impact of green transformational leadership on green performance by considering the mediating effect of green self-efficacy and green mindfulness. The study is descriptive and quantitative in nature. Survey questionnaire method was used and data have been collected from 200 respondents by applying simple random sampling technique. After applying required tests on AMOS and SPSS, findings revealed that green transformational leadership has significant and positive influence on green performance. Moreover, result also enlightened that green mindfulness and green self-efficacy significantly and partially mediates the relationship between green transformational leadership and green performance and. At the end, this article implementation, suggestion, and limitation have also been included for further researches.

Keywords: Green Transformational Leadership; Green Performance; Green Mindfulness; Green Self-efficacy.

1. INTRODUCTION

Nowadays environmentalism becomes very famous due to the due to the disastrous poison environment and global warming, therefore each of the firms is trying to make green innovative environment (Chen, 2011)[7]. Green Innovation is now a powerful aggressive tool because now every customer is very afraid of the environment and environmentally preferable products in the market (Chen and Chang, 2012)[9]. Organizations should adopt green innovation for various strategies as well as for the satisfaction of environmental needs of the market (Chen, 2008[8]; Sheu, 2014)[29]. For the improvement of innovation Green Transformational Leadership is very crucial (Elkins and Keller, 2003). Earlier studies paid less attention to the effect of green transformational leadership on green performance. And also pays less attention to the effect of Green Self-efficacy and Green Mindfulness on the relationship of GTL and GP. Previous researchers followed equation are survey method which just gave them cross-sectional data so that they unable to check the dynamic change in GT, GM, GE and GP in various levels. Due to the lack of GTL in an organization the GP of an organization not be increased which becomes the cause of disastrous environmental pollution and global warming in the society. There was less effect of GM and GE on GT and GP. That's why green performance not increased. In the globally framework, this study has a great exposure all

other sectors rather than manufacturing sector like Banking, hospitals, education, NGOs etc. In Pakistan green transformational leadership is very important because environmentalism is increasing. But unfortunately there is a less and limited work on this study although this study has great exposure in Pakistan, so we carry on this study in Pakistan.

The purpose of current study is to evaluate the impact on Green Performance of Green Transformational Leadership in the presence of Green Self-efficacy and Green Mindfulness.

1.1 Research Objectives

- To investigate the relationship between Green Transformational Leadership and Green Performance.
- To examine the mediating role of green mindfulness between the relationship between Green Transformational Leadership and green performance.
- To determine the mediating role of green selfefficacy between the relationship of green transformational leadership and green performance.

2. LITERATURE REVIEW

2.1 Green Transformational Leadership and Green Performance

Chen et al, (2013)[10] define green transformational leadership that it is the characteristic of leader to

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encourage his colleagues to attain environmental goals and motivate them to behave above the environmental expected performance. While, green performance may be defined as the performance of software and hardware that are included in the process of innovation which a company executes in green process and products that are involve the modernization in technologies like anticipation of pollution, saving energy, recycling of wastes and commercial environment administration (Chen et al, 2006).

Stimulating inspiration and rational encouragement are used by transformational leaders that are perilous for the innovation of an organization (Elkins and Keller, 2003)[15]. Jung et al. (2003)[22] explained that to develop new thoughts and vitalize their supporters for revolution, so previous studies recognized that on organizational innovation transformational leadership has a positive effect (Chen, Chang et al. 2014). For the expansion of new thoughts in the process of innovation transformational leadership plays a beneficiary role, after all, to contemplate all the problems in new techniques, transformational leaders' plays a role as a promoter by motivating followers (Waldman and Bass, 1991[34]; Keller, 1992) [23]. Further explained by Keller (1992) [23] that behavior is involved in transformational leadership that forces followers for new imaginations. So transformational leadership plays a vital role in enhancing team creativeness by encouraging followers to think solutions to problems from different aspects (Elkins and Keller, 2003)[15].Bass and Avolio (1990)[4] explored that since transformational leadership assists, motivate followers to think problems from aspects and convey a vision, transformational leadership has a positive effect on performance (Waldman innovative & Atwater, 1994[33];Keller, 1992[23];Chen, Chang et al. 2014)[11]. Previous studies did less work on the effect of green transformational leadership on green performance so we develop a framework for to cover this gap.

H1: Green transformational leadership has a positive and significant effect on green performance

2.2 Green Transformational Leadership And Green Mindfulness

Bass (2000)[5] purported that transformational leaders give motivation to their supporters to perform above the instant self-interest through rational motivation, stimulating incentives, personalized attention, and glamor. Transformational leadership also helps in introducing new thoughts by delivering inspiration, rational motivation and visualization (Mumford, 2000)[26]. According to Arendt (2009)[1], transformational leadership can enhance their supporters' importance by stimulating incentives. In addition to stimulating incentives may help to supporters to deliberate and identify the perspective and satisfaction of their job (Chen, Chang et al., 2014).For encouraging their supporters to act above the daily tasks of the job, Transformational Leadership may be helpful for giving them stimulating idea (Bono & Judge, 2003)[6]. A motivating idea can't just express the magnificent future but it also helpful for individuals to perform their existing job (Arendt, 2009)[1]. Moreover, transformational leadership also help individuals to see their position as a worker in an organization more attentive and superior perspective (Vogues & Sutcliffe, 2012)[32]. Therefore there is a positive impact of transformational leadership on mindfulness (Chen, Chang et al. 2014).Previous studies pay less attention to the effect of Green leadership on green mindfulness so we discuss this effect in our study.

H2: Green transformational leadership has a positive and significant effect on green mindfulness.

2.3 Mediating Role of Green Mindfulness

Previous studies explored that intentional elements of mindfulness have a positive relationship with job performance (Dane, 2011)[13]. On peripheral motivation and then improved performance mindfulness has an effective consideration (Herndon, 2008). To reduce the probability of revenue mindfulness could be helpful because it delivers better attention that can improve performance and develop work-related understanding (Vogus & Sutcliffe, 2012)[32]. Employees are fully involved in work and this involvement is favorable for innovative performance when they realize themselves in their job at a greater and more significant framework (Friedman & Forster, 2001)[16]. According to Davis and Davis (2011) improves skills of communication of employees, enables them to raise the abilities to make decisions and solving problems, so mindfulness will be helpful for performance innovation. Therefore, mindfulness would affect positively on innovative performance (Chen, Chang et al. 2014). Prior literature paid less attention to Green mindfulness so we discuss in our study to cover this gap.

According to Langer (1997)[25] responsiveness of essential propensity of humans are reflected by mindfulness, and also plays an effect role in struggling against negative suggestions of bandwagon occurrences (Chen, Chang et al. 2014). Mindfulness could be considering an effective tool for an organization to reduce the ambiguous circumstances of greater ups and downs that have terrible significances (Weick& Roberts, 1993)[35]. Mindfulness is the situation of dynamic wakefulness new information's are honestly conveyed that empowers members to take consideration in the continuous establishment, modification and learning (Langer, 1997)[25]. For emerging mindfulness to work in active, vague and impulsive situation organization accumulates systematic process, moreover, mindfulness plays a vital role for to sustain in experience to change and crises (Weick et al, 1999)[36]. Previous studies described that there is a positive effect of mindfulness on

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innovative thinking and learning (Langer, 1997). According to Kirkpatrick (1996), the reason was that for creating open-mid ness's atmosphere, flexibility and engagement mindful behavior would be very beneficial for these socially applicable transactions, so mindfulness significantly affect the performance of the organization (Chen, Chang et al. 2014). Earlier studies almost ignore the green mindfulness so we describe mindfulness in our study to overcome the gap.

H3: Green mindfulness significantly mediates the relationship between green transformational leadership and green performance.

2.4 Green Transformational Leadership And Green Self-Efficacy

explored by the Yukl (1990)[37] that It is transformational leadership make a vision effective in a clear way, define assurance and hopefulness, precise the purpose of achieving the vision, aggressively interconnect rules and opinions to their supporters and give authority to their supporters to attain goals (Chen, Chang et al. 2014). Moreover, transformational leadership also provide satisfactory position and perfect opinions for followers for help in believing that they have the ability to face challenges and encourage their attitude to participate actively in work-related tasks successful (Bass, 1990).Moreover, Sosik et al, (1998)[30] enlightened that to raise the disposition of followers to act above the opportunities, transformational leadership could also encourage them. Transformational Leadership positively impact on the self-efficiency of followers by giving importance to optimistic observation, approval of exceptional skills and anticipation of the outstanding performance. According to Howell and Higgins (1990)[20], transformational leaders with their experience and abilities can raise self-efficacy. Transformational leaders can also increase self-efficacy of followers by giving an instant confident feedback (Bandura, 2000). It is summed up by Gist and Mitchell (1992)[17] that transformational leaders can improve their self-efficacy. By making possible goals, connecting performance of employees according to results and illuminating principles, transformational leadership may impose a positive effect on self-efficacy(Chen, Chang et al. 2014). Previous studies ignore the effect of green transformational leadership on green self-efficacy so we discuss this in our study to cover this gap.

H4: Green transformational leadership has a positive and significant effect on green self-efficacy.

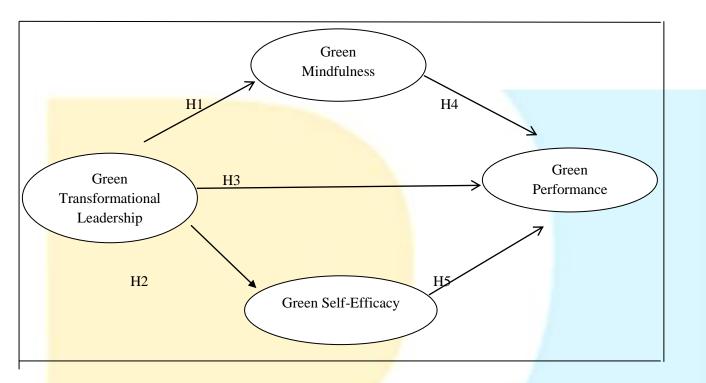
2.5 Mediating Role of Green Self-Efficacy

Self-efficacy is linked with several behavioral outcomes like consultation and Importunity (Bandura, 1997;Schunk,

1995)[28]. Various significant occupational consequences and job performance are forecast by self-efficacy. According to Bandura (1993), there is the positive impact of self-efficacy on positive feeling and thinking, goal setting and self-regulation (Zimmerman & Bandura, 1994[38]; Chen, Chang et al. 2014). Employees who recognize themselves a great efficacious that would stimulate plenty efforts, which is helpful in producing outstanding outcomes (Stajkovic & Luthans, 1998)[31]. Earlier studies explained that self-efficacy is very important for the improvement in performance (Gist & Mitchell, 1992)[17]. When individuals consider themselves that they have a high level of self-efficacy then they create new ideas for making new products having a great confidence in their abilities (Hmieleski & Baron, 2008)[19]. Hsiao et al. (2011)[21] argued that people having strong sagacity can lead to more creativity behavior. So self-efficacy and innovative performance have a positive relationship (Mumford et al., 2002). Previous studies almost ignore the effect of selfefficacy so we cover this gap by discussing in our study. Self-efficacy means the self-judgment of people to execute a certain task in their abilities. Self-efficacy is the name of self-confidence of people for achieving job opportunities believing in their abilities (Bandura, 1993). It is explained in social cognitive theory that greater level of self-efficacy boostup the confidence level of employees and they show better performance and show higher assurance to bear failures and remain job-focused (Stajkovic & Luthans, 1998)[31]. Gist and Mitchell (1992)[17] enlightened that having a high level of selfefficacy individuals show a complete confidence to continue and maintain high expectations for achieving goals (Chen, Chang et al., 2014).A Higher level of selfefficacy would be very beneficial for the individuals to maintain their struggles for goal achieving (Hmieleski & Baron, 2008)[19]. People who have agreater level of selfefficacy looks like they have a lot of confidence for the attainment of ideas, tasks and as a result, they raise the level of output (Hsiao et al., 2011)[21]. Green selfefficacy plays a vital mediating role between green transformational leadership and green performance, although these two components are very important (Chen, Chang et al., 2014).Prior studies gave less attention to self-efficacy so we discuss self-efficacy in a broader way to cover the gap.

H5: Green self-efficacy significantly mediates the relationship between green transformational leadership and green performance. Research framework

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3. METHODOLOGY

3.1 Sampling And Data

This study is descriptive and quantitative in nature. Questionnaire survey method was adopted to collect data. Data have been collected from 200 selected manufacturing organizations from all over the Pakistan by applying simple random sampling technique. The manufacturing sector has been selected for data collection, therefore, target population includes employees of all manufacturing organizations working in Pakistan. 200 manufacturing organizations have been shortlisted according to their financial performance, track record, and experience. Employees of 200 manufacturing organizations are included in the sampling frame. List of all employees obtained from concerned authorities of selected manufacturing organizations and after having formal appointments responses have been collected. The sample size was 200. Questionnaires floated in selected organizations Out of 200 questionnaires only were valid responded with response rate.

3.2 Measures

All the measures and instruments in this study were adopted from previously valid and reliable scales. To evaluate questionnaire items used a5-pointLikert scale. In 5-point Likert scale, 5 representing "strongly agree", 4 representing "agree", 3 representing "neutral", 2 representing "disagree" and 1 representing "strongly disagree" state of mind.

Green Transformational Leadership scale: Green Transformational Leadership is measured by 6-items scale (Chen & Chang., 2013).

Green mindfulness: Green mindfulness is measured by using the6-items scale that is developed by (Chen et al., 2014).

Green self-efficacy: Green self-efficacy is measured by adopting 6-items scale that is developed by (Chen et al., 2014).

Green performance: Green performance is measured by adopting 8-items scale by (Chen et al., 2006).

4. ANALYSIS AND RESULTS

4.1 **Demographics**

Most respondents were between the age group of 26-45 whose percentage is 47%. Following to this 43%, 9.0% and 0.5% were age group of up to 25, 46-55 and 56+ respectively. Furthermore, 38%, 48%, and 14% respondents belonged to Bachelors', Masters' and Ph.D. respectively. Moreover, 26%, 66%, and 8% respondents were doing their jobs as contractual employees, permanent employees and others respectively. Similarly, 25 % respondents have up to the1year length of service and 48.5%, 19.5% and 9% respondents have 2-5 years, 5-10 and more than 10 years length of service at visited Industries respectively.

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Table 1						
Construct	Mean	SD	a	1	2	3
1 Green Transformational Leadership	4.115	.78	.698	-		
2 Green Mindfulness	4.05	.701	.716	0.304**	_	
3 Green Self-efficacy	4.07	.7619	.806	0.29**	0.353**	-
4 Green Performance	3.94	.698	.761	0.313**	0.325**	0.292**

The above-mentioned table is representing the Pearson named as G correlation, descriptive statistics, and reliability among all understudies variables. The highest correlation existed between Green Self-Efficacy and Green mindfulness them are lai which is .353. It is reflecting that Green Self-Efficacy and green mindfulness are positively related to each other to prove dat with a moderate standard deviation. All other variables

named as Green Transformational Leadership and Green Performance is also correlated with each other. The mean values are showing the trend of responses that most of them are laid towards agreeableness. Results indicate that alpha values for all variables are under acceptable range to prove data reliability. (a > 0.70).

	CR	ÁVE	GTL	GSE	GM	GP
GTL	0.762	0.554	0.768			
GSE	0.834	0.612	0.234	0.756		
GM	0.818	0.562	0.345	0.481	0.745	
GP	0.825	0.872	0.432	0.287	0.456	0.867

Convergent validity exist in this model because the table mentioned above is showing convergent validity and discriminant of this model such as composite reliability has greater values than AVE that is 0.8 and 0.5 respectively. When concern with discriminant validity it relies on the square root of AVE values which essentially to be more than the correlation values. In that table the correlation values are lower than the square root of AVE values, therefore, this model also shows the presence of discriminant validity.

Table 3: Fit Indices	for CFA & SEM
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Fit Indices	CFA	SEM
Chi-square/df	2.98	2.93
GFI	0.90	0.91
AGFI	0.86	0.87
CFI	0.90	0.92
RMSEA	0.05	0.06
NFI	0.86	0.82
PGFI	0.56	0.51
PNFI	0.62	0.63

The result of Table 3 showing the fitness of model obtained from SEM and CFA dimensions both. First place is given to the fit index goodness which shows variancecovariance matrix and as the value is more than 0.90 that's why it is asserting a good fit for the model. AGFI is accommodated GFI having value more than 0.8 and this is comparatively good to show that this model is a good fit. Comparative fit index expressing CFI which demonstrates more accurate values that prove the model is close enough to complete fit because of having value more than 0.90. Root mean square error of approximation (RMSEA) having a lower value than 0.10 which is also representing the good fitness of model. NFI, PGFI, and PNFI also show that in statistical terms the model of the current study is completely fit because their values are in good range.

Table 4: Regression Analysis

Variables	В	SE	β	t	Sig.
Constant	2.874	.229		12.567	.000
Green Transformational Leadership	2.58	.055	.314	4.651	.000
$R^2 = 0.498$				N.I.	

Results demonstrate that there is a positive and significant relationship of Green Transformational Leadership with Green Performance with (R^2 = 49%, P<.05). In addition, analysis also indicates that 49% variance has been explained by Green Transformational Leadership in

Green Performance. P value for the beta coefficient of Green Transformational Leadership is .000 which is significant at 5% level of significance and this means that beta value 2.58 is statistically significant.

Table 5: SEM Mediation Analysis

	Direct	Indirect	Total
Relations	Effects	Effects	Effects
Green Performance< Green Mindfulness< Green Transformation Leadership	.44*	.32*	.48*
Green Performance< Green Self Efficacy< Green Transformation Leadership *p < 0.05, **p < 0.01, ***p < 0.001	.36*	.29*	.42*

The above-mentioned table is demonstrating the path analysis of the given variables and their relationships. The values of direct and indirect effect have been given to elaborate the directions of the relationship. The value of indirect effect is greater for the relationship among emotional intelligence, political skill and job satisfaction that is showing a strong mediation effect. The values of total effect are also greater for all the mediation relationships which are representing that political skill is a significant mediator between perceived politics and employee behaviors and emotional intelligence and employee behaviors.

5. CONCLUSION AND DISCUSSION

The main objective of the current study is to examine the connection of Green Performance and Green Transformational Leadership in the mediating relationship of Green Self-Efficacy and Green Mindfulness. H1 interpret that Green Transformational Leadership significantly and positively puts an impact on Green Mindfulness. The results prove that effect is positive and significant. The result supported by the previous studies which showed the positive and significant impact on Green Mindfulness of Green Leadership (Bass, 2000; Mumford, 2000; Arendt, 2009; Chang et al., 2014; Bono & Judge, 2003;; Vogues & Sutcliffe, 2012). Furthermore, H2 shows that there is a significant impact on Green Selfefficacy of Green transformational leadership. The results prove that effect is significant. The results supported by the previous researchers which showed the significant impact of Green Transformational Leadership on Green Self-Efficacy (Yukl, 1990; Chang et al., 2014; Bass, 1990; Sosik et al., 1998; Howell & Higgins, 1990; Bandura,

2000; Gist & Mitchell, 1992; Chang et al., 2014). Moreover, H3 disclose that Green Transformational Leadership puts a positive impact on Green Performance. It is proved by the results that the effect is significant. Previous studies support the results which explained the significant impact on Green Performance of Green Transformational Leadership (Elkins and Keller, 2003; Chang et al., 2014; Waldman & Bass, 1991; Keller, 1992; Bass & Avolio, 1990; Chang et al., 2014). Similarly,H4 shows the positive and significant of Green Mindfulness and Green relationship Performance. That relationship proves by the results. These results are supported by the previous studies which show the significant and positive relationship of Green mindfulness and Green Performance (Dane, 2011; Herndon, 2008; Vogus& Sutcliffe, 2012; Friedman & Forster, 2001; Davis & Davis, 2011; Chang et al., 2014). Furthermore,H5 revealed that self-efficacy has a positive effect on Green Performance. The results prove that association of self-efficacy and green performance. The result is supported by the previous studies which shows positive impact on Green performance of Green selfefficacy (Bandura, 1997; Bandura, 1993; Zimmerman & Bandura, 1994; Chang et al., 2014; Stajkovic & Luthans, 1998; Gist & Mitchell, 1992; Hmieleski& Baron, 2008; Hsiao et al., 2011). Moreover, H6 explained that Green Mindfulness positively and significantly mediates the relationship between green performance and Green Transformational leadership. This relationship proves by the result that green mindfulness positively and significantly mediates the relationship between green performance and green transformational leadership. Previous studies also support the positive and significant effect of green mindfulness on green transformational

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leadership and green performance (Chang et al., 2014;Weick& Roberts, 1993; Weick al., et 1999;Kirkpatrick, 1996;Chang et al., 2014). Similarly, H7 revealed that green self-efficacy also significantly and positively mediates the relationship between green performance and green transformational leadership. This relationship has proven by the result. The result is supported by the previous studies which showed the positive and significant impact of green self-efficacy on green transformational leadership and green performance (Bandura, 1997; Stajkovic & Luthans, 1998; Gist & Mitchel, 1992; Chang et al., 2014; Hsiao et al., 2011; Mumford et al., 2002).

5.1 **Practical Implications**

The practical implication of this study is that if other organizations want to raise their green performance then they will have to adopt in their innovation development process the concepts of green transformational leadership, green mindfulness, and green self-efficacy so that company's turnover will increase. Other organizations also use this study to raise the employee's mindfulness as well as their performance. By doing this employee's turnover ratio will be decreased and their performance will be increase.

This research study is not without limitations. There was area limitation. Moreover, we use Likert-type scale in a study in which problem occurred due to the responses of the Questionnaires which depended on the scale. In this study, questionnaire survey method is used which gave cross-sectional data. Future researchers can focus on longitudinal study. Some people gave intense responses and some gave very careful answers of the questions. When talking about future research this study could be applied in other sectors like Banking Sector, Education Health Sector rather than Sector, industrial (Manufacturing) sector. This study is applied in Pakistan so the future researchers could be conducted in other countries

6. **REFERENCES**

- [1] Arendt, L.A. Transformational leadership and follower creativity: The moderating effect of leader humor. *Rev. Bus. Res.* 2009
- [2] Bandura, A. Perceived self-efficacy in cognitive development and functioning. *Educ. Psychol.* 1993
- [3] Bandura, A. *Self-Efficacy: The Exercise of Control*; Freeman: New York, NY, USA, 1997.
- [4] Bass, B.M. From transactional to transformational leadership: Learning to share the vision. *Org. Dyn.* 1990
- [5] Bass, B.M. The future of leadership in learning organizations. J. Leadersh. Stud. 2000
- [6] Bono, J.E.; Judge, T.A. Self-concordance at work: Toward understanding the motivational effects of transformational leaders. Acad. Manag. J. 2003

- [7] Chen, Y.S. Green organizational identity: Sources and consequence. *Manag.Decis.*2011
- [8] Chen, Y.S. The driver of green innovation and green image-green core competence. *J. Bus. Ethics* 2008
- [9] Chen, Y.S.; Chang, C.H. Enhance green purchase intentions: The roles of green perceived value, green perceived risk, and green trust. *Manag.Decis.*2012.
- [10] Chen, Y.S.; Chang, C.H. The determinants of green product development performance: Green dynamic capabilities, green transformational leadership, and green creativity. J. Bus. Ethics 2013
- [11] Chen, Y.S.; Chang, C.H.; Yeh, S.L.; Cheng, H.I. Green shared vision and green creativity: The mediation roles of green mindfulness and green selfefficacy. *Qual. Quant.* 2014
- [12] Chen, Y.S.; Lai, S.B.; Wen, C.T. The influence of green innovation performance on corporate advantage in taiwan. *J. Bus. Ethics* 2006
- [13] Dane, E. Paying attention to mindfulness and its effects on task performance in the workplace.J. Manag. 2011
- [14] Davis, D.; Davis, J. What are the benefits of mindfulness? A practice review of psychotherapy-related research.*Psychotherapy* 2011
- [15] Elkins, T.; Keller, R.T. Leadership in research and development organizations: A literature review and conceptual framework. *Leadersh.Q.* 2003.
- [16] Friedman, R.S.; Forster, J.The effects of promotion and prevention cues on creativity.*J. Personal. Soc. Psychol.* 2001
- [17] Gist, M.E.; Mitchell, T.R. Self-efficacy: A theoretical analysis of its determinants and malleability. Acad. Manag. Rev. 1992
- [18] Herndon, F. Testing mindfulness with perceptual and cognitive factors: External vs. internal encoding, and the cognitive failures questionnaire. *Personal.Individ.Differ*. 2008
- [19] Hmieleski, K.M.; Baron, R.A. When does entrepreneurial self-efficacy enhance *versus* reduce firm performance? *Strat.Entrep.J.* 2008
- [20] Howell, J.M.; Higgins, C.A. Champions of technological innovation.*Adm. Sci. Q.* 1990
- [21] Hsiao, H.C.; Tu, Y.L.; Chang, J.C.; Chen, S.C.The influence of teachers' self-efficacy on innovative work behavior.*Int. Proc. Econ. Dev. Res.* 2011
- [22] Jung, D.I.; Chow, C.; Wu, A. The role of transformational leadership in enhancing organizational innovation: Hypotheses and some preliminary findings. *Leadersh.Q.* 2003
- [23] Keller, R.T. Transformational leadership and the performance of research and development project groups. *J. Manag.* 1992
- [24] Kirkpatrick, S.A.; Locke, E.A. Direct and indirect effects of three core charismatic leadership components on performance and attitudes.*J. Appl. Psychol.* 1996

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- [25] Langer, E.J. *The Power of Mindful Learning*; Addison-Wesley, Inc.: Reading, MA, USA, 1997.
- [26] Mumford, M.D. Managing creative people: Strategy and tactics for innovation. *Hum. Resour. Manag.Rev.* 2000
- [27] Mumford, M.D.; Scott, G.M.; Gaddis, B.; Strange, J.M. Leading creative people: Orchestrating expertise and relationships. *Leadersh.Q.* 2002
- [28] Schunk, D.H. Self-efficacy, motivation, and performance. J. Appl. Sport Psychol. 1995
- [29] Sheu, J.B. Green supply chain collaboration for fashionable consumer electronics products under third-party power intervention—A resource dependence perspective. *Sustainability* 2014.
- [30] Sosik, J.J.; Kahai, S.S.; Avolio, B.J. Transformational leadership and dimensions of creativity: Motivating idea generation in computer-mediated groups. *Creat.Res. J.* 1998
- [31] Stajkovic, A.D.; Luthans, F. Self-efficacy and workrelated performance: A meta-analysis. *Psychol. Bull.* 1998
- [32] Vogus, T.J.; Sutcliffe, K.M. Organizational mindfulness and mindful organizing: A reconciliation and path forward. *Acad. Manag. Learn. Educ.* 2012
- [33] Waldman, D.A.; Atwater, L.E. The nature of effective leadership and championing processes at different levels in an R&D hierarchy. J. High Technol. Manag. Res. 1994
- [34] Waldman, D.A.; Bass, B.M. Transformational leadership at different phases of the innovation process. J. High Technol. Manag. Res. 1991
- [35] Weick, K.E.; Roberts, K.H. Collective mind in organization: Heedful interrelating on flight decks. *Adm. Sci. Q.* 1993
- [36] Weick, K.E.; Sutcliffe, K.M.; Obstfeld, D. Organizing for high reliability: Processes of collective mindfulness. *Res. Org. Behav.* 1999
- [37] Yukl, G.A. *Leadership in Organizations*; Prentice-Hall, Inc.: Inglewood Cliffs, NJ, USA, 1998.
- [38] Zimmerman, B.J.; Bandura, A. Impact of selfregulatory influences on writing course attainment.*Am. Educ. Res. J.* 1994