

Exploring The Efficacy of Distinct Theoretical Stances to Promote Employee ...

Exploring The Efficacy of Distinct Theoretical Stances to Promote Employee Creativity and Innovation at Workplace

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Abstract

The current study has investigated the impact of distinct theoretical interventions on employee creativity and innovation. The study is explanatory in nature where deductive approach to theorizing has been opted. Study has been conducted on 300 x HR managers working in textile industry of Pakistan. A well structured questionnaire has been used through survey procedure for collection of first hand data from the research participants. SPSS software application has been used for integration and interpretation of study outcomes. The findings of study revealed that DOI theoretical interventions, inter-actionist theoretical interventions, four factor theoretical interventions, social cognitive theoretical interventions and ambidexterity theoretical interventions have positive and significant relationship with employee creativity and innovation. In contrast, componential theoretical interventions and Ford's model theoretical interventions have not positive and significant relationships with employee creativity and innovation. The study has contributed to creativity and innovation literature with novel empirical knowledge. Furthermore, the study has also practical implications for practitioners of textile industry. Since, upon implementation of interventions suggested by current study can augment employees' creativity and innovation in organizational perspective.

Keywords: Ambidexterity theory, componential theory, creativity and innovation, diffusion of innovation theory, Ford's model, four factor theory, inter-actionist perspective.

1. Introduction

In present business landscape growth, profitability and success of textile industry is tied with employee creativity and innovation. Managers use various theories to devise and implement interventions that can improve the innovative potential of their employees aiming to

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The strength of innovation in organizational perspective is connected with thinking differently, exploring new ways and searching for improvements to undertake innovative behavior aiming to improve the products and services. Moreover, innovation in organizational perspective is related to thinking differently and implementing novel ideas to improve the goods and services (Akram et al., 2016). Organizational innovation has also relationship with exploration and exploitation as well as incremental improvements to improve products and services. (Bani Melhem, 2018). Therefore, managers working in textile industry must be very smart to select those potential theoretical interventions which may have strength to improve the innovative strength of workforce (Hameed et al., 2018). There are distinct theories that portray interventions to promote employee creativity and innovation. DOI theoretical interventions, inter-actionist theoretical interventions, componential theoretical interventions, Ford's model theoretical interventions, four factor theoretical interventions, social cognitive theoretical interventions and ambidexterity theoretical interventions are prominent one which are positively and significantly related to employee creativity and innovation.

2. Literature Review

There are numerous theoretical stances in literature that have suggested distinct interventions which debate on how employees can behave innovatively to promote organizational innovativeness.

2.1 The Diffusion of Innovation (DOI) Theory

Rogers (2003) introduced 'Diffusion of Innovation' theory. Diffusion of innovation theory is concerned with different attributes that contribute towards employees' innovation adoption in organizational perspective. The attributes of innovation help in explaining that why some individuals adopt innovation more easily than others who feel hard to adopt the innovation. Innovation attributes comprise of compatibility, complexity, relative advantage, trial-ability as well as the observe-ability. These attributes specify the probable factors which contribute towards an individual's innovation propensity. Moreover, these innovation attributes have grave impact on creativity and innovation adoption behavior but each act differently (Rogers, 2003).

The relative advantage is the extent of innovation to improve over time on account of prevailing practices in use. In simple words, relative advantage indicates that adoption of

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newness will be better than existing practice and will benefit the individual work role as well as firm productivity and performance. This relative advantage can be applied to even a new innovator's informal proposal (Bradford & Florin, 2003). Compatibility refers to the extent of perception of individual regarding prevailing norms. Furthermore, it includes compatibility with respect to potential of common adopters (Jackson et al., 2013). In sum compatibility refers to individual employee's perception regarding easy integration of newness with workplace environment and individual work practices. Kafetzopoulos et al. (2019) further argues that when an individual perceives that innovation correctly aligns the existing values, previous experiences as well as current needs he or she will surely adopt the innovation (Kohles et al., 2013). As far as complexity is concerned, it indicates the extent to which an individual employee perceives that an innovation is difficult to understand and practice. When an employee perceives that newness is not so complex to adopt, surely he or she will adopt it willingly. On the other hand, feelings of hard complexity refrain from adoption of newness.

In an organizational context if it is not clearly understood by employees that how innovation will impact its adopter's jobs, it would be more likely that innovation will not progress (Kohles et al., 2013). Trial-ability indicates that how and to which level an innovation can be tried and experienced prior taking decision of adopting or rejecting it (Jackson et al., 2013). Innovation gets progress in organizational perspective and employees try it willingly when they feel that they have to make a little effort in adoption and will not face any trouble as well. Furthermore, there will not be any risk of remaining backward and loosing the job (Bradford & Florin, 2003). Observe-ability means, to which extent, an innovation is being seen by its potential adopters. Observe-ability may be seen in employees in an organizational context in the form of noticeable behaviors, everyday procedures and in the form of symbols etc. It encourages employees to make mind toward innovation and adopt and implement it in their work roles. In DOI theory, innovation attributes and adoption categories explain how innovation adoption process is completed.

Communication is another important attribute in DOI theory that explains the effectiveness of innovation adoption process. Communication is a process that provides opportunity to the participants to create and share information mutually and reach on a common understanding to innovate in organizational perspective. A communication channel may be defines as a mean from whom a message is transmitted from the source to the receiving end. Diffusion refers to a social process which is used to build interpersonal relationships across different channels (Bradford & Florin, 2003). Innovation adoption comprises of individual and a communication channel. Therefore innovation adoption process may be affected by communicative challenges.

DOI theory has numerous applications. The DOI scholars extensively used the theory in their research studies. According to Li et al. (2019) there are many applications of DOI. Researchers applied DOI theory across distinct disciplines and professions including small and medium firms, banking, child care centers, information technology industries, public sector and aviation. In communication research and information technology field,

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researchers also applied the DOI theory. In innovation process importance of individual communications has also been taken into account by the DOI theory. According to Rogers (2003) mutual (one person to other person) communication is imperative for diffusion of innovation for each type of innovation user. The author noted that owing to sharing of their experiences, people who have adopted newness or innovation placed grave impact on those who still had not adopted the same. Owing to this interaction and mutual communication these employees also make their minds towards adoption of innovation and thus innovation adoption process gets progress to extensive extent (McGrath & Zell, 2001). In accordance with Finke et al. (1992) back and forth activities are essential to ascertain successful innovation.

Change agents propose that test and refining new ideas and feeding outcome information to the system becomes source of spreading innovation within the whole organization. For example idea generation and creative thinking of an individual being a team member will be affected positively by brainstorming session. DOI theory also has its implications for innovation process within the social networks. Some research studies have investigated the impact of social networks on the innovation processes in the industry of information technology. In accordance with Jackson et al. (2013) early innovation adopters had greater social participation. DOI theory is also applicable to management science literature. Ma Prieto et al. (2014) applied DOI theory when they analyzed leader vs follower communication while focusing on the integration processes of vision. The authors stated that Rogers's vision proved helpful for managers and workers for developing a better understanding regarding philosophy behind the innovation (Kohles et al., 2013). The study of Murray (2009) also utilized DOI theory for analyzing the influence of managers on diffusion of innovation in the intra-organizational networks. The focus of research study was on communication process and managers' strategies for implementation of DOI. Rogers also used DOI theory when made focus on the process of individual innovativeness, specifically when managers' innovativeness was taken into account. The DOI theory helped substantially in addressing the individual innovativeness. However, its emphasis is on innovation traits and mutual communication of employees (Bradford & Florin, 2003).

H1: Diffusion of Innovation based interventions positively and significantly promote employee creativity and innovation

2.2 Componential Theory of Creativity and Innovation

Amabile (1996) articulated componential theory of creativity. This theory deals with individual level creativity and innovation in psychological and organizational perspective. The componential theory of creativity is a framework for implementation of individual level creativity at workplace. The model has both social as well as psychological elements essentially required in producing the innovative behavior of employees. Theory argues that for a creative response, four components are necessary (I. Ivkovic, et al., 2017). Three components have relationship with the individual and one is relevant to environment which is beyond the control of individual. Domain skills, intrinsic task motivation and creativity-relevant processes are part of individual domain and the social environment wherein an

Exploring The Efficacy of Distinct Theoretical Stances to Promote Employee ... employee is working external to individual's perspective (Kafetzopoulos et al., 2019). Componential theory of creativity states that confluence of all components is necessary for individual creative behavior. The key premise of this theory is its components that impact individual creative actions to promote organizational creativity and innovation (Amabile, 1996).

Relevant domain skills consist of individual knowledge, expertise, intelligence, professional skills as well as talent which are necessary to resolve the problems of a particular domain. Management processes and product design are examples of distinct domains. These individual skills encompass the raw materials upon which creative process could be drawn by the individual. Personality characteristics and cognitive styles are part of creativity-relevant processes and require independence, risk taking and adaptability of new perspective for problem solving (Meissner et al., 2017). Tolerance for ambiguity and self-discipline are included in personality processes. Task motivation enables creative work. Due to intrinsic task motivation the individual has passion to undertake a task and solve the problem owing to self interest and personality. Extrinsic motivation, on the other hand, arises from employee-employer contract, where rewards and external incentives motivate the employee to do what desires.

A key premise of the componential theory is people creativity through the intrinsic motivation. Owing to self interest, job enjoyment, satisfaction and challenging work, people feel motivated and behave creatively. Social environment is an external factor that impacts individual creative behavior (Klopotan et al., 2018). Social environment comprises of extrinsic motivators that either undermine intrinsic motivation or serve as stimulants of intrinsic motivation as well as creativity. Research studies have concluded distinct environmental factors that undermine creativity process in organizational settings. Such as criticism of peers, superiors and even juniors on creative thinking and new ideas generation on account of politics within the organization, low risk attitude, conservative mindedness while supporting the status quo, massive time pressure and low risk attitude of management. On the other hand, many environmental factors can stimulate creativity as well, such as work freedom, top management support for creativity and innovation, supervisory encouragement, risk tolerance, new ideas acceptance and recognition for creative work (Rafsanjani et al., 2020).

H2: Componential Theory of Creativity and Innovation based interventions positively and significantly promote employee creativity and innovation.

2.3 Inter-actionist Perspective of Employee Creativity

In accordance with the inter-actionist point of view, organizational creativity (Woodman et al., 1993) is concerned with individual job situation at organizational hierarchy. Organizational creativity may be outcome of distinct antecedents' conditions like individual thinking style and ability to think differently, personality traits, domain knowledge, self motivation, social influences like recognition & rewards and influence of contextual variable like physical environment which relate to individual employee (Yuan & Woodman, 2010). As

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far as creativity is discussed at team level, it may be said that outcome of creative behaviors of each team or group member is concerned with composition of group member as well as job characteristics, contextual influences like organizational culture and reward systems and team processes (Aggarwal et al., 2019). This creativity framework is most frequently practiced framework that makes emphasis on individual and contextual variables owing to which organizational creativity is either enhances or decreases at the workplaces (Shalley et al., 2009).

H3: Inter-actionist based interventions positively and significantly promote employee creativity and innovation.

2.4 Ford's Model of Individual Creative Actions

In accordance with Ford (1996) employees stay between two competing options at their jobs; either they would be creative when performing their job activities or would prefer status quo, habitual and routine work behavior. The author pointed out three key factors which have influence on decision making in this regard which include individual motivation, processes of making sense as well as skills and knowledge. Therefore, individual creativity and innovation is outcome of these factors. When combined effect of these elements is weak, the creativity process of individual will also be weak (Klopota et al., 2018). On the other hand, when joint impact of these three variables is high, the higher level of individual creativity and innovation would be witnessed from the employees. Furthermore, decision of individual pertaining to undertaking creativity and innovation initiatives or performing merely routine tasks are also affected by the individual motivation. Their creative or habitual initiatives come under the influence of creativity expectations, values, rewards and recognitions implemented in the organization. Individual confidence and beliefs like, capable to undertake creative actions without being in state of distress and anxiety also relate to this context (Wang et al., 2016). This conceptual framework did not attract much attention of researchers owing to complexity. Since, empirical test of multiple variables given in the model seemed hard by the researchers. However, some empirical support of model was received in the later years. Janssen (2005) has conducted a research study on individual creativity and innovation under the application of this theoretical model.

H4: Ford's Model based interventions positively and significantly promote employee creativity and innovation.

2.5 Four Factor Theory of Innovation

The four factor theory of innovation was introduced by West (1990). In accordance with the West (1990) there are four factors of the team climate that promote the innovation. The vision, task orientation, participative safety, and the support for innovation have been said effective factors associated with creativity and innovation within the team members. When team members acknowledge that vision is understandable, it is given value as well as has acceptance by the members of the team, hence the innovation gets progress in the team members. Likewise, when there is perception within team members that participation for new ideas and problem solutions will be taken into account without judgment or criticism,

Exploring The Efficacy of Distinct Theoretical Stances to Promote Employee ... the innovation will progress within the team participants. Likewise, initiating a debate and making discussion within team members pertaining to distinct probable solutions and its likely careful examination also enhances the creativity and innovation of team participants. Perception of team members regarding support for innovation will also optimize the innovative work behavior of team members (Wang et al., 2016). This theory won a wide range acceptance and acknowledgement for stimulation of team innovation and researchers conducted research studies in distinct disciplines. For many meta-analytic studies, the theory also bagged a substantial support (Hulsheger et al., 2009).

H5: Four Factor Theory based interventions positively and significantly promote employee creativity and innovation.

2.6 Ambidexterity Theory of Innovation

In order to manage conflicting demands at organizational level through organization members' creative actions, a theory was first time introduced by Duncan (1976) which is known as ambidexterity theory. Ambidexterity is defined as "the ability of a complex and adaptive system to manage and meet conflicting demands by engaging in fundamentally different activities". In a general term ambidexterity means successful management of organizational exploitation and exploration potential. For instant, successful implementations of production and services will be part of exploitation process undertaken by the employees. On the other hand, creation of new products, services and processes would come in exploration process. The research study made distinction between active management and self-regulatory processes and suggested that to integrate distinct work activities in an organization both aspects were significant (Wang et al., 2020). The ambidexterity theory remained area of interest for authors for a longer period of time to explore the individual creativity and innovation (Rosing et al., 2011).

H6: Ambidexterity Theory based interventions positively and significantly promote employee creativity and innovation.

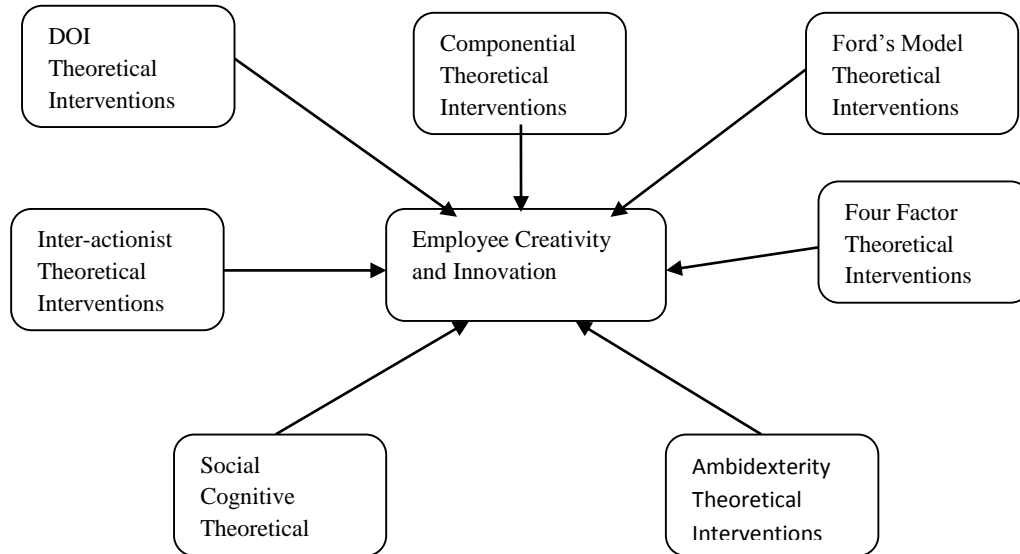
2.7 Social Cognitive Theory

Social cognitive theory was introduced by Bandura (1977) which has gained a substantial support in understanding and predicting the human behavior. The author shared that people hold expectations regarding their behaviors. One is concerned with belief of the individual on his or her own efficacy to perform and the other is related to one's expectations from a particular behavior to be performed for a particular task or a reason (Bandura, 1986). Furthermore, the author also discussed that how human behaviors may be changed in lines with desired objectives. According to social cognitive theory, self-efficacy is individual belief or judgment to accomplish a given task, hence it does not reflect level of knowledge or skills one possesses. Since, self-efficacy is what one can do regardless of skills he or she possesses (Bandura, 1986). Using the insights of the social cognitive theory many studies have been conducted by researchers to develop the understanding regarding behaviors that may be opted by the employees to promote creativity and innovation at the workplaces (Karimi et al., 2022).

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H7: Social Cognitive Theory based interventions positively and significantly promote employee creativity and innovation.

2.8 Conceptual Framework



3. Research Methodology

3.1 Research Design

The nature of this study is non-experimental quantitative. The study has been conducted using deductive approach with cross sectional data collection technique. It examines relationship between the independent variables and dependent variable. Creswell (2011) has opined that quantitative study approach to an investigation better evaluates the relationships among variables under review, reduces to specific questions, hypothesis & variables, uses observations & measurement and tests theories (Neuman, 2014).

3.2 Population, Sampling & Data Collection

Approximate total population of current research is 30,000 managers working in textile industry of Pakistan. In accordance with 'Glenn's (1992) Published Table' standard sample size is 280. However, on account of considering low response rate from research participants a sample of 350 has been finalized for collection of data. Data has been collected using a well-structured questionnaire while opting cross sectional technique. 300 x respondents completely replied the questionnaire, whereas remaining respondents either not reply the questionnaire or left the major information incomplete. Therefore, incomplete questionnaire were discarded from the data.

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3.3 Data Analyses Strategy

Using SPSS technique primary data collected from HR managers have been analyzed. When to evaluate theories and testing the rational influence of each individual predictor variable on an outcome variable SPSS software is appropriate option which significantly calculates, central tendency, level of significance, mean and carry outs correlations and regression analyses etc (Neuman, 2014).

4. Findings of Research Study

4.1 Respondents Response

Out of 350 x respondents, 300 respondents replied to the questionnaire. 85 % were males and 15 % were female respondents. 25% research participants were undergraduate, 45% were graduate and 30% were having postgraduate & above degrees. Service experience of research participants was also diversified i.e. 30 % had up to 5 years experience, 35% respondents had served between 5-10 years, 15% respondents were having experience between 10 to 15 years and 20% respondents were having more than 15 years experience in textile industry of Pakistan.

4.2 One Sample T Test- Mean Analysis

Mean analysis of all variables were carried out. Table 4.1 below clearly indicates that value of mean is greater than 3 for five variables and for two variables the value of mean is below 3. It indicates that in lines with central tendency most of respondents have viewed that all variables except Componential Theory and Ford’s Model have positive impact on employee creativity and innovation.

**Table 4.1
One-Sample t-Test-Mean Analysis**

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
4.3 DOI Theoretical Interventions	300	3.7167	1.34413	.04915
Componential Theoretical Interventions	300	2.9933	1.60047	.09818
Ford’s Model Theoretical Interventions	300	2.6300	1.44912	.08944
Inter-actionist Theoretical Interventions	300	3.5267	1.26437	.03877
Four Factor Theoretical Interventions	300	3.3467	1.11781	.04876
Social Cognitive Theoretical Interventions	300	4.7500	2.15784	.12036

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Ambidexterity Theoretical Interventions	300	3.4567	1.23782	.03861
Employee Creativity and Innovation	300	3.3100	2.14781	.11034

Hypothesis Testing

One sample t-test statistical analyses were carried out using SPSS application. Details of the same are appended in table 4.2:

**Table 4.2
One-Sample t-Test**

One-Sample Test						
	Test Value = 3					
	T	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
DOI Theoretical Interventions	.635	299	.000	.04333	.1588	.2021
Componential Theoretical Interventions	.986	299	.278	.00667	.3999	.4765
Ford's Model Theoretical Interventions	.883	299	.434	.05000	.4460	.5460
Inter-actionist Theoretical Interventions	1.678	299	.003	.11327	.0216	.3917
Four Factor Theoretical Interventions	2.194	299	.000	.13667	.1010	.3523
Social Cognitive Theoretical Interventions	2.351	299	.000	.12000	.2065	.4365
Ambidexterity Theoretical Interventions	1.134	299	.001	.19667	.0310	.4623
Employee Creativity and Innovation	0.311	299	.002	.13000	.1065	.2465

These results indicate that DOI theoretical interventions, inter-actionist theoretical interventions, four factor theoretical interventions, social cognitive theoretical interventions and ambidexterity theoretical interventions are positively and significantly related to employee creativity and innovation. Since, p-value of these relationships is below 0.05. Hence, null hypothesis have been rejected and alternative hypothesis have been accepted. It means that these theoretical stances are positively and significantly associated with employee creativity and innovation. In contrast, componential theoretical interventions and Ford's Model theoretical interventions have not positive and significant relationships with employee creativity and innovation. Since, p-value is lower than 0.05. Hence, these two

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5. Discussion

The current study was concerned with knowing that; what is the impact of various theoretical interventions to promote employee creativity and innovation in textile industry of Pakistan. The mean analysis and probability test results indicate that relationship between DOI theoretical interventions and employee creativity and innovation is positive and significant. It means interventions imparted under the lens of DOI theory have potential to promote employee creativity and innovation at workplaces in textile industry of Pakistan. These statistical results are in lines with many prior researchers findings who have declared that DOI theoretical interventions can promote employee creativity and innovation (Kafetzopoulos et al., 2019). Similarly, relationship between Inter-actionist theoretical interventions and employee creativity and innovation is also positive and significant. Therefore, interventions imparted under inter-actionist theory of innovation have potential to promote employee creativity and innovation. These results are in lines with many prior researchers findings who have declared that Inter-actionist theoretical interventions can promote employee creativity and innovation (Yuan & Woodman, 2010). In similar way, relationship between four factor theoretical interventions and employee creativity and innovation are also positively and significantly related to each other. Therefore, intervention imparted under four factor theory of innovation can promote employee creativity and innovation. These results are in lines with many prior research studies who have declared that four factor theory theoretical interventions can promote employee creativity and innovation (West, 1993). The relationships between social cognitive theoretical interventions as well as ambidexterity theoretical interventions and employee creativity and innovation are positively and significantly related. Hence, these theories have positive impact to promote employee creativity and innovation. These results are in lines with many prior researchers findings who have found that social cognitive theoretical interventions as well as ambidexterity theoretical interventions can promote employee creativity and innovation (Karimi et al., 2022; Rosing et al., 2011).

In contrast, componential theoretical interventions and Ford's model theoretical interventions have not significant relationships with employee creativity and innovation. Since, significance test and mean analysis did not confirm the relationship. These results state that in textile industry perspective these variables may not bring favorable results to promote the employee creativity and innovation. These results are in lines with some research studies which have found that componential theoretical interventions and Ford's model theoretical interventions yield no positive results to promote employee creativity and innovation (Kafetzopoulos et al., 2019; Klopotan et al., 2018).

5.1 Conclusion and Implications of Research Study

This research study was concerned with various theoretical stances which have been discussed in literature as significant interventions to promote individual employee creativity and innovation. DOI theoretical interventions, inter-actionist theoretical interventions, four

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factor theoretical interventions, social cognitive theoretical interventions and ambidexterity theoretical interventions have been proved to be positively and significantly related to employee creativity and innovation. On the other hand, Componential Theoretical Interventions and Ford's Model Theoretical Interventions have not positive and significant relationships with employee creativity and innovation. Therefore, it may be concluded that these two causal relationships have no influence on employee creativity and innovation.

The study contributed to creativity and innovation literature with novel empirical knowledge. The study has also implications for textile industry managers as through implementation of interventions suggested by the study findings can improve the creativity and innovation potential of employees. In future it is recommended that using the conceptual framework devised in current study may replicate researcher in other professions, industries and geographical locations to further understand the phenomenon through which right theory can be selected to impart interventions to promote employee creativity and innovation.

References

1. Aggarwal, I., & Anita, W. W. (2019). Team creativity, cognition, and cognitive style diversity. *Management Science*, 65,86–99.
2. Akram T., Lei S., Haider M. J., & Hussain, S.T. (2019). The impact of organizational justice on employee innovative work behavior: mediating role of knowledge sharing. *J Innov Knowl*.
3. Amabile, T. M., Conti, R., Coon, H., Lazenby, J., & Herron, M. (1996). Assessing the work environment for creativity. *Academy of Management Journal*, 39(5), 1154-1184. doi: 10.2307/256995
4. Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological Review*, 84 (2), 191-215.
5. Bandura, A. (1986). *Social foundations of thought and action: a social cognitive theory*. Englewood Cliffs: Prentice Hall.
6. Bani-Melhe, Rachid, Z. S., & Mohamed A. (2018). Determinants of employees' innovative behavior. *International Journal of Contemporary Hospitality Management*, 30, 1–20.
7. Bradford, M., & Florin, J. (2003). Examining The Role of Innovation Diffusion Factors on The Implementation Success of Enterprise Resource Planning Systems. *International Journal of Accounting Information Systems*, 4(3), 205–225. [http://dx.doi.org/10.1016/S1467-0895\(03\)00026-5](http://dx.doi.org/10.1016/S1467-0895(03)00026-5).
8. Creswell, J. W. (2011). *Controversies in mixed methods research*. *The Sage handbook of qualitative research*.
9. Duncan, R. B. (1976). The ambidextrous organization: Designing dual structures for innovation. *The Management of Organization*, 167-188.
10. Ford, C. M. (1996). A theory of individual creative action in multiple social domains. *Academy of Management Review*, 21(4), 1112-1142.
11. Hameed, W. U., Basheer, M. F., Iqbal, J., Anwar, A., & Ahmad, H. K. (2018). Determinants of Firm's open innovation performance and the role of R & D department: an empirical evidence from Malaysian SME's. *Journal of Global Entrepreneurship Research*, 8(1), 1-20.
12. Hulsheger, U. R., Anderson, N., & Salgado, J. F. (2009). Team-level predictors of innovation at work: A comprehensive meta-analysis spanning three decades of research. *Journal of Applied Psychology*, 94(5), 1128-1145. doi: 10.1037/a0015978
13. Ivkovic, T. L., Willett, M. J. B., & Gorbet, M. (2017). Design Days Boot Camp: Enhancing Student

Exploring The Efficacy of Distinct Theoretical Stances to Promote Employee ... Motivation to Start Thinking in Engineering Design Terms in the First Year, in CEEA Annual Conference, Toronto, 36-43.

14. Jackson, J. D., Mun, Y. Y., & Park, J. S. (2013). An empirical test of three mediation models for the relationship between personal innovativeness and user acceptance of technology. *Information & Management, 50*(4), 154-161. doi:10.1016/j.im.2013.02.006
15. Janssen, O. (2005). The joint impact of perceived influence and supervisor supportiveness on employee innovative behaviour. *Journal of Occupational and Organizational Psychology, 78*(4), 573-579. doi:10.1348/096317905X25823
16. Kafetzopoulos, D., Evangelos P., & Dimitris S. (2019). Innovation dimensions and business performance under environmental uncertainty. *European Journal of Innovation Management, 23*(8) 56-76.
17. Karimi, S., Ahmadi Malek, F., & Yaghoubi Farani, A. (2022). The relationship between proactive personality and employees' creativity: the mediating role of intrinsic motivation and creative self-efficacy. *Economic Research-Ekonomiska Istrazivanja, 35*(1), 4500-4519.
18. Khan, M. A., Ismail, F. B., Hussain, A. & Alghazali, B. (2020). The interplay of leadership styles, innovative work behavior, organizational culture, and organizational citizenship behavior. *SAGE, 10*, (1), 215824401989826.
19. Klopotan, I., Trina M., & Petar K. (2018). Exploring the motivation of employees in a firm: A case-study. *Business Systems Research Journal, 9*, 151-60.
20. Kohles, J. C., Bligh, M. C., & Carsten, M. K. (2013). The vision integration process: Applying Rogers' diffusion of innovations theory to leader-follower communications. *Leadership, 9*, 466-485. doi:10.1177/1742715012459784
21. McGrath, C., & Zell, D. (2001). The future of innovation diffusion research and its implications for management a conversation with Everett Rogers. *Journal of Management Inquiry, 10*, 386-391. doi:10.1177/1056492601104012
22. Meissner, Philip, & Torsten, W. (2017). The effect of cognitive diversity on the illusion of control bias in strategic decisions: An experimental investigation. *European Management Journal, 35*, 30-39.
23. Murray, C. E. (2009). Diffusion of innovation theory: A bridge for the research practice gap in counseling. *Journal of Counseling & Development, 87*(1), 108-116. doi: <http://dx.doi.org/10.1002/j.1556-6678.2009.tb00556>
24. Neuman, W. L. (2014). *Social Research Methods: Qualitative and Quantitative Approaches* (7th ed). Pearson Education Limited.
25. Rafsanjani, M. A., Ghofur, M. A., Fitrayati, D., & Dewi, R. M. (2020). Does Perceived Organizational Support Mitigate the Negative Effect of Teacher- Researcher Role Conflict among Lecturers? (Evidence from Indonesia). *Pedagogika, 138*(2), 25-36, doi: <https://doi.org/10.15823/p.2020.138.2>
26. Rogers, E. M. (2003). Diffusion of innovations. New York, NY: Free Press. Rogers, E. M. (2004). A prospective and retrospective look at the diffusion model. *Journal of Health Communication, 9*, 13-19. doi:10.1080/10810730490271449
27. Rosing, K., Frese, M., & Bausch, A. (2011). Explaining the heterogeneity of the leadership-innovation relationship: Ambidextrous leadership. *The Leadership Quarterly, 22*(5), 956-974. doi: 10.1016/j.leaqua.2011.07.014
28. Shalley, C. E., Gilson, L. L., & Blum, T. C. (2009). Interactive effects of growth need strength, work context, and job complexity on self-reported creative performance. *Academy of Management Journal, 52*(3), 489-505. doi: 10.5465/AMJ.2009.41330806
29. Wang, S., Eva, N., Newman, A., & Zhou, H. (2020). A double-edged sword: the effects of ambidextrous leadership on follower innovative behaviors. *Asia Pacific Journal of Management, 37*(1), 1-15. doi:10.1016/j.aspm.2019.07.005

Exploring The Efficacy of Distinct Theoretical Stances to Promote Employee ...
1-22. doi: <https://doi.org/10.1007/s10490-020-09714-0>.

30. Wang, X. H., Tae-Yeol K., & Deog-Ro L. (2016). Cognitive diversity and team creativity: Effects of team intrinsic motivation and transformational leadership. *Journal of Business Research*, 69, 31-39.
31. West, M. A., & Farr, J. L. (1990). Innovation at work. *Psychological and organizational strategies*, 02-15.
32. Woodman, R. W., Sawyer, J. E., & Griffin, R. W. (1993). Toward a theory of organizational creativity. *The Academy of Management Review*, 18(2), 293-321. doi: 10.2307/258761
33. Yuan, F., & Woodman, R. W. (2010). Innovative behavior in the workplace: The role of performance and image outcome expectations.