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Transformational Leadership: A Multiple Mediation Model of its impact on Employee Creativity

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ABSTRACT

This study aimed to explore a comprehensive model to address indirect impact of transformational leadership on employee creativity. Study proposed three serial mediators; innovation climate, creative self-efficacy, and follower relational identification. A self-administered questionnaire survey was conducted from employees of IT and telecom sector. Smart PLS-SEM 3.2.9 was used to measure the direct and indirect analysis. Ability- Motivation- Opportunity theory is the overarching theory of present study where in the antecedents of employee creativity are categorized as three work systems to guide the performance of employees for an organization. Findings of this study reveals positive link between transformational leadership and employee creativity. Moreover, Innovation Climate, Creative Self Efficacy and Follower Relational Identification, is found to mediate the direct relationship. Present study contributes in existing literature by identifying the missing links in the form of innovation climate, creative self-efficacy and follower relational identification between Transformational leadership and Employee Creativity More mechanisms are suggested to enrich the existing framework by adding mediators as well as moderators. As results show that Employee Creativity is promoted through Transformational Leadership, so findings are valuable for managers to invest in training of supervisor's Transformational Leadership to find out the extent of potential to become a Transformational Leadership. The study suggested the dire need of organisations to focus on inculcating innovation climate in order to achieve desired creativity results.

Keywords: Transformational Leadership, Innovation Climate, Creative Self-Efficacy, Follower Relational Identification, Employee Creativity.

1. INTRODUCTION

Traditional assumptions are challenged by this era where digitization is demanded more with every passing day. Organizations need to structure employees' work as a key challenge to obtain innovative outcomes. 'Creativity' is a competency and

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Received Dec 31, 2018 Accepted January 7,2020 Published March 30,2020 human skill that is direly needed to cope up with digital era nevertheless less is written on the matter in comparison to the workforce digital mindsets and skills. However, generation of new working methods is inevitable in the present scenario of pandemic COVID-19 in order to ensure the practicing of additional, new value propositions by making the usage of new digital possibilities. Hence it is understandable the present scenario has called both scholars and practitioners to work for determining the predictors of creativity. This multiple mediation model and supporting results can be counted towards an effort to unleash the importance of stimulating employee creativity in Pakistan's IT and Telecommunication industry which in turn can stimulate human creativity by integration of digital and technical tools and thus providing the scope for employees to use communication and information technologies in their respective occupations of the economy, like health-care for instance (Ho_mann, Ivcevic, Brackett 2016; Anderson, Poto[×]cnik, Zhou 2014; Huh, Kim 2019; Pérez-Fuentes et. Al, 2019; Minbaeva 2013; Korzynski, Paniagua and Rodriguez-Montemayor 2019).

Ability- Motivation- Opportunity theory is the overarching theory of present study where in the antecedents of employee creativity are categorized as three work systems to guide the performance of employees for an organization (Hughes, 2007). These three work systems are named as Ability enhancing practices (i.e. creative selfefficacy in current model), motivation enhancing practices (i.e. transformational leadership and follower relational identification) in present study) and opportunity enhancing practices (i.e. innovation climate in this study) whose absence causes low performance for instance creativity as one of performance indicator.

Although there is found to exist relationship between transformational leadership and follower creativity, but there are many missing links such as under what boundary conditions (via what moderators) and explanatory mechanisms (via what mediators) creativity of the employees is affected (Gong, Huang, & Farh, 2009; Rosing, Frese, & Bausch, 2011; Shin & Zhou, 2003; Zhu, Newman, & & Hooke, 2013). Thus, the main objective behind this study is to examine these contingency variables those bridge the relationship between these two important variables. This study tested the serial mediation of innovation climate, creative self-efficacy, and follower relational identification between the relationship of Transformational Leadership and Employee Creativity.

2. LITERATURE REVIEW

2.1. Effect of Transformational Leadership on Innovation Climate

Transformational leaders are the leaders who can fruitfully convert the interests of employees from immediate self-centeredness to isolated mutual vision and motivate them to complete their responsibilities above the level (Banks et al., 2016). According to Bass and Avolio (1995) there are four components of transformational leadership: idealized influence, individualized consideration, intellectual stimulation, and inspirational motivation. Each of the components impacts the increase of employee level of risk taking behavior (Khalili, 2016; Zuraik, 2018; Afsar and Umrani, 2019). Transformational leadership extends their efforts to facilitate an environment where there is higher level of new ideas sharing between co-workers, thus, develop a climate of innovation. Innovation climate of an organization is defined as the shared perceptions at the team or organizational level as to the extent to which team or organizational processes encourage and enable innovation (Anderson & West, 1996, 1998).

Innovative persons look for a climate that rewards for stimulating innovation but punish for failed innovation (Newman et al., 2020). Intellectual stimulation of transformational leadership helps him to control all aspects of innovation within organization and build the climate of innovation (Zuraik, 2018). This motivates everyone in the organization to work innovatively which further reinforces innovation climate.

Thus, we postulate our first hypothesis as follows,

*H*₁: *Transformational Leadership is positively related with Innovation Climate.*

2.2. Effect of Transformational Leadership on Creative Self-Efficacy.

Transformational leaders give their employees valuable feedback for uncovering novel problems. They encourage the employees for creative thinking and reward them to boost up their morale to put extra efforts for bringing innovative work solutions (Afsar and Masood, 2018; Chaubey, Sahoo and Khatri, 2019). Transformational leaders treat their employees paternalistically, help them whenever needed, guide them in all circumstances, help them enhancing their knowledge, treat them equally and sharpen their skills (Bass B.1985; Hall, Johnson, Wysocki, & Kepner, 2002). Creative selfefficacy can be described as an individual level of confidence upon his or her capability for creative production of outcomes (Tierney and Farmer, 2002). Derived from the theory of self-efficacy the idea of self-efficacy has been imitated from the confidence in selfcapacity in relation to necessary knowledge, abilities and skills mandatory for creative performance (Bandura A., 1997). The idealized influence and individual consideration of transformational leader boosts the confidence of the employees in their capability of coming up with novel ideas and thus enhances their creativity self-efficacy (Jaiswal and Dhar, 2016; Chaubey, Sahoo and Khatri, 2019). Thus, we may conclude that:

H₂: Transformational Leadership is positively related with Creative Self-Efficacy.

2.3. Effect of Transformational Leadership on Follower Relational Identification.

Transformational leadership is among one of the leadership styles which encourage the follower relational identification (Qu, Janssen, & Shi, 2015). "It is the degree to which one includes the role relationship in one's self-concept". "It refers to a partial definition of oneself in terms of a given role relationship and offers a new way to understand the unique supervisor-subordinate relationship" (Sluss & Ashforth, 2007). Bass found that through inspirational motivation, a leader builds up the future vision which attracts and inspires the followers (Li et al., 2017; Nevşehir et al., 2019). By projecting a desired future state, certain tasks are allocated to achieve the objectives. Further it is argued that inspirational leadership motivation develops the trust of the followers on their leaders (Horstmeier et al., 2017; Li et al., 2017). Likewise, transformational leader acts as an ideal for their employees by putting higher level of efforts to achieve their goals. Their individualized attention reveals through high level of moral conduct and ethical norms (Horstmeier et al., 2017). Leading through examples attract a follower to reciprocate for greater good of the organization. Thus, the characteristics of transformational leadership makes them attractive for their followers and they start identifying with the leader (Shen, Chou and Schaubroeck, 2019a). Thus, we hypothesized that:

H₃: Transformational Leadership is positively related with Follower Relational

Identification.

2.4. Effect of Innovation Climate on Employee Creativity.

Employee creativity is the creation of valuable and unique concepts regarding products, procedures, processes and services by a team of employees who work collectively (Chen and Hou, 2016; Khalili, 2016). Employee creativity produce highly useful and novel ideas for generating new or improved existing products, procedures, schedules and services (Shalley, Gilson, & Blum, 2000). These days, employee creativity is stretched to the employees of whole organization so they can add their ideas directly or indirectly instead of getting limited to R&D staff only. So, novel concepts can be produced by all the employees at any position and level of organization. Prior literature considers the creativity as employee's intellectual capability and personal trait (Gong, Cheung, Wang, & Huang, 2012; Oldham & Cummings, 1996). Various organizational attributes can help enhancing the creative capabilities of the employees (Hsu and Chen, 2017). Moreover, innovation stimulating climate of an organization positively influences employees innovative and creative behaviour (Somech and Drach-Zahavy, 2013; Chaubey, Sahoo and Khatri, 2019). The shared perception of rewarding innovation enhancer outputs and punishing innovation inhibitors outputs reinforces the creative aptitude of the employees (Chen and Hou, 2016). Thus, we hypothesized that:

*H*₄: Innovation Climate is positively related with Employee Creativity.

2.5. Effect of Creative Self-Efficacy on Employees Creativity.

The belief that we can do it can motivate anyone to put extra effort on achieving the end results. Creative self-efficacy is the belief of a person upon his or her own capability to achieve viable creative solution to unique problems (Diliello, Houghton, & Dawley, 2011). Employees who have higher level of creative self-efficacy are much more confident on their capability to organize the intellectual resources, and more encouragement to implement the precise plans (Jaiswal and Dhar, 2016). In provision of that view, we proposed that creative self-efficacy have a positively significant relationship with employee creativity (Binnewies, Sonnentag, & Mojza, 2009). Based on the argument we postulate that:

*H*₅: Creative Self-Efficacy is positively related with Employees Creativity.

2.6. Effect of Follower Relational Identification on Employee Creativity.

Follower relational identification with organization motivates them to work differently for bringing innovative solution for every problem encountered on the work place (Wang and Rode, 2010). Their positive inclination towards organization bends them to come forth with unique products, services, practices and procedures (Walumbwa and Hartnell, 2011). Therefore, we identified that the prevalence of relational factors encourages employee creativity (Wang and Rode, 2010; Walumbwa and Hartnell, 2011; Gu, Tang and Jiang, 2013). Thus, we postulate following hypothesis as follows:

*H*₆: Follower Relational Identification is positively related with Employee Creativity.

2.7. Mediating Role of the Innovation Climate on relationship between Transformational Leadership and Employee Creativity

Previous studies discovered the role of transformational leadership in cultivating innovation climate (Jung, Chow, & Wu, 2003) which facilitates the utilization of organizational assets for encouraging employees more for creative work outcomes (Moghimi & Subramaniam, 2013). Due to its relational and motivational style, transformational leadership is among the most popular contemporary leadership concept (Banks et al., 2016). Effectiveness of this style lies in its ability to flourish the climate of innovation (Afsar and Umrani, 2019). Lack of policies and practices build up a futile environment to inhibit creative potential of its employees. Thus, we intend to investigate the indirect impact of transformational leadership on the employee creativity in the presence of innovation climate (Khalili, 2016; Zuraik, 2018). In this regard, there are diverse findings in literature e.g. A study conducted on a Chinese sample of respondents provide a strong support for intervening effect of innovation climate between transformational leadership and employee creativity (Dong, Zhang and Li, 2016). While on the other hand, a study of Turkish sample found to have an insignificant effect of innovation climate as a mediator among the same (Gumusluoglu & Ilsev, 2009). However, this study will investigate the mediating impact of innovation climate. Thus, we hypothesized following relationship,

H7: Innovation Climate mediates the relationship between Transformational

Leadership and Employee Creativity.

2.8. Mediating Role of Creative Self-Efficacy between Transformational Leadership and Employee Creativity

High level of creative self-efficacy is reflected when an individual has an intrinsic belief that he or she can surely give superior creativity performance (Tierney & Farmer, 2011). According to few researchers' higher level of creative self-efficacy helped them for finding answers of problems (Khalili, 2016). Unless a transformational leader would not enhance the creative self-efficacy of followers through individualized consideration for employee professional development, it would not help enhancing the creative performance of the individual (Chaubey, Sahoo and Khatri, 2019). So, we postulate that creative self-efficacy mediates the relationship between transformational leadership and employee creativity:

*H*₈: Creative Self-Efficacy mediates the relationship between Transformational Leadership and Employee Creativity.

2.9. Mediating Role of Relational Identification of Follower between Transformational Leadership and Employee Creativity

As expressed by relational identification theory, the degree to which a follower expresses their inclination towards leader in a role relationship, it may significantly affect their performance and motivation (Kark, Shamir, & Chen, 2003; Sluss & Ashforth, 2007; Sluss & Ashforth, 2008). Identification process with role relationship to the leader provoke the follower to yield the leaders point of view and relate their individual self-interest with interest of the leader (Gu, Tang and Jiang, 2013; Horstmeier et al., 2017; Shen, Chou and Schaubroeck, 2019b). Thus, producing a motivational addition to the goals and success of the leaders (Van Knippenberg, Van Knippenberg, De Cremer, & & Hogg, 2004).

It is argued that relational identification with transformational leadership style is significantly linked to creative performance of employees. Thus, we are formulating an indirect hypothesis as follows:

*H*₉: Follower Relational Identification mediates the relationship between Transformational Leadership and Employee Creativity.



3. RESEARCH METHODOLOGY

Data was collected from IT & Telecom sector of Pakistan. Respondents were middle and upper level managers and employees of IT and Telecom sector. Nature of present study was cross sectional. The survey participants comprise of 700 employees. Through which 650 employees respond back. Data for 16 respondents were eliminated due to incomplete questionnaires. Final data consisted of 634 employees. For ensuring the scales reliability and validity most suitable items were used. All the variables were measured on five-point Likert scale, ranging from 1= strongly disagree to 5= strongly agree. Questionnaire was in English language.

IT industry can have a deep impact on FDI and GDP of Pakistan if government takes major steps in facilitating and promoting the IT industry. In spite of all the challenges the IT industry has shown a winning global recognition. There are more than 1500 recognized IT firms in Pakistan. IT industry of Pakistan needs a clear direction and growth strategies (Ghauri, 2013, June 18). Griffeth, Hom, & Gaertner (2000) argued that employees are most important aspect of information technology industry. Ahmad et al., (2014) state that, nowadays telecommunication technology is among most dynamic technologies. If such companies fail to innovate, then they have the most probability that they will lose their customers. These days company leaders are in front of a challenge of equalizing key aspects like the need to develop employees' creative skills and motivating them, so they are capable of constantly delivering timely performance and high quality

(Mittal & Dhar, 2015). For this purpose, it is important to know the importance of leadership in betterment of a company. A leader is a pillar in a company so a leader must be cooperative and understanding that helps subordinates in meeting their standards as well as the goals of their company. Therefore, leader should be honest, have tolerance and must be passionate to solve the problems and should act as a role model for its subordinates (Northouse, 2015). In Pakistani context it is important to understand that Pakistan is a developing country. Therefore, there has been a long way to improve the targets and levels being a developing country (Mahmood, 2015).

For assessing the Transformational leadership16 items scales of (Avolio, Bass, & Jung, 1999) was used. For Employee Creativity 4 item scale was used (Tierney & Farmer, Creative self-efficacy development and creative performance over time, 2011). For measuring the Innovation Climate 16 item scale was used that validated by (Scott & Bruce, 1994). For Follower Relational Identification variable 10 item scale was used in the study which was proposed by (Kark, Shamir, & Chen, 2003). For validating the Creative Self-Efficacy 3 item scale was used that originated by (Tierney & Farmer, 2002).

4. RESULTS

In this study we used statistical tool named partial least square (PLS) modeling using the SmartPLS 3.2.9 version (Ringle, Wende, & Will, 2005) to assess our reflective measurement and structural models as there is no pre-requisite of assumption of normality and mostly survey based studies are not distributed normally (Chin & WW., 2003).

4.1. Assessment of Reflective Measurement Model

The reflective model developed is tested by using a two-step approach as suggested by Anderson and Gerbing (Anderson & Gerbing, 1988). The instrument's validity and reliability was tested firstly by testing measurement model following the guidelines of Hair et al. and Ramayah et al. followed by the testing of hypotheses by running structural model (Hair, Risher, Sarstedt, & Ringle, 2019; Ramayah, Cheah, Chuah, Ting, & Memon, 2018). We measured the loadings for the measurement model, AVE (average variance extracted) and CR (composite reliability). The loadings should be having values ≥ 0.5 , the values of AVE is acceptable when ≥ 0.5 and the CR should ≥ 0.7 . Table 1 shows all the values in good acceptable ranges. Moreover, except few the strict criteria for reflective model measurement was met i.e. 0.708 (Hair, Risher, Sarstedt, & Ringle, 2019).

Later HTMT criterion as suggested by Henseler et al. is used to measure the the discriminant validity in step two which was updated by Franke and Sarstedt (Henseler, Ringle, & Sarstedt, 2015; Franke & Sarstedt, 2019). As per strict criterion mode The HTMT values should be ≤ 0.90 in comparison to the lenient criterion which is ≤ 0.85 . Our results exhibited in Table 2 met the strict criterion making us capable to conclude that our respondents understood that the 5 constructs are distinct. Summing up this study's items are both reliable and valid in order to proceed further.

Table 1. Measurement Model for the First Order Constructs							
Construct	Items	CROSSLOADIN GS	rho_ A	Composit e Reliabilit y	Average Variance Extracte d (AVE)	Cronbach' s Alpha	
Creative Self Efficacy	C.S.E1	0.759	0.722	0.821	0.605	0.686	
	C.S.E2	0.771					
	C.S.E3	0.819					
Employee Creativity	E.C1	0.736	0.821	0.878	0.644	0.814	
	E.C2	0.833					
	E.C3	0.827					
	E.C4	0.809					
Follower Relational Identification	FRI10	0.718	0.855	0.882	0.517	0.845	
	FRI3	0.713					
	FRI4	0.753					
	FRI5	0.724					
	FRI6	0.681					
	FRI8	0.721					
	FRI9	0.730					
Innovation Climate	I.C10	0.701	0.859	0.891	0.541	0.857	
	I.C12	0.697					
	I.C4	0.780					
	I.C6	0.751					

	I.C7	0.762				
	I.C8	0.800				
	I.C9	0.643				
Transformation	TEI 10	0.703	0.804	0.012	0.500	0.802
al Leadership	IFLIU	0.705	0.694	0.912	0.309	0.895
	TFL11	0.751				
	TFL12	0.729				
	TFL13	0.684				
	TFL14	0.721				
	TFL15	0.768				
	TFL4	0.640				
	TFL5	0.677				
	TFL8	0.693				
	TFL9	0.763				

Table 2. Discriminant Validity (HTMT)							
	1	2	3	4	5		
CSE							
EC	0.868						
FRI	0.789	0.819					
IC	0.817	0.759	0.733				
TFL	0.797	0.745	0.788	0.774			

4.2. Structural Model

Data was collected using single source. At first we checked the data the Common Method Bias issue by following the suggestions i.e. full collinearity testing (Kock & Lynn, 2012; Kock, 2015). Against a common variable all the variables are regressed and as VIF ≤ 3.3 there no biasness from the single source of data. Table 1 analysis results showed that VIF ≤ 3.3 therefore single source of data biasness is not a serious issue in this study.

Table 3. Full Collinearity Testing							
CSE	FRI	IC	TFL	EC			
1.999	2.204	2.370	2.485	2.328			

*Note: CSE = Creative Self Efficacy, FRI = Follower Relational Identification, IC = Innovation Climate TFL = Transformational Leadership, EC = Employee Creativity

As our sample size is greater than 500 so in order to report the standard values, tvalues, p-values and path-coefficient we used a 5000 sample re sample procedure for bootstrapping as per suggestions of (Hair, Risher, Sarstedt, & Ringle, 2019; Ramayah, Cheah, Chuah, Ting, & Memon, 2018). A combination of effect sizes, confidence intervals in addition to p-values was utilised based on the criticism that for testing the significance of hypotheses P-values are not good criterion (C, MD, A, & al, 2002) shown in Table 4 and Table 5 for direct and indirect relationships testing respectively.

Table 4. Blindfolding for Predictive Relevance							
	SSO	SSE	Q ² (=1-SSE/SSO)				
CSE	1902	1447.533	0.239				
EC	2536	1596.934	0.37				
FRI	4438	3363.094	0.242				
IC	4438	3342.889	0.247				
TFL	6340	6340					

Q² calculation is another way to evaluate the predictive accuracy of PLS path model (Geisser, 1974; Stone, 1974). The Q² value combines aspects of in-sample explanatory power and out-of-sample prediction resultantly is not merely a measure of out-of-sample prediction (Shmueli, Ray, JM, & al., 2016; Sarstedt & JF., 2017). In order to calculate Q square for checking predictive relevance, we used blindfolding showing all values are greater than zero (Fornell & Cha, 1994). As in Table 4 all Q² values are in between 0 to 0.25 which shows acceptable predictive relevance except for EC where it is higher than 0.25 hence is in medium predictive relevance of the PLS-path model.

Table 5. PLS Predict (medium predictive power)							
Composite	Indicators	PLS PRI	EDICT	LM PRE	DICT	LM-PLS	
		RMSE	MAE	RMSE	MAE	RMSE	MAE
Creative Self	C.S.E1	0.68	0.528	0.677	0.521	-0.003	-0.007
Efficacy	C.S.E2	0.607	0.476	0.608	0.482	0.001	0.006
	C.S.E3	0.572	0.459	0.583	0.466	0.011	0.007
Employee	E.C1	0.567	0.467	0.581	0.477	0.014	0.010
Creativity	E.C2	0.557	0.454	0.57	0.453	0.013	-0.001
	E.C3	0.569	0.458	0.58	0.449	0.011	-0.009
	E.C4	0.582	0.473	0.585	0.463	0.003	-0.01
Follower	FRI3	0.673	0.503	0.674	0.495	0.001	-0.008
Relational	FRI4	0.609	0.464	0.614	0.461	0.005	-0.003
Identification	FRI5	0.562	0.452	0.567	0.443	0.005	-0.009
	FRI8	0.603	0.482	0.603	0.484	0.000	0.002
	FRI9	0.652	0.514	0.663	0.518	0.011	0.004
	FRI10	0.59	0.478	0.596	0.481	0.006	0.003
	FRI6	0.566	0.462	0.576	0.464	0.010	0.002
Individual	I.C4	0.779	0.546	0.78	0.559	0.001	0.013

Creativity	I.C6	0.755	0.555	0.737	0.558	-0.018	0.003		
	I.C7	0.711	0.518	0.709	0.52	-0.002	0.002		
	I.C8	0.656	0.486	0.667	0.49	0.011	0.004		
	I.C10	0.736	0.549	0.744	0.558	0.008	0.009		
	I.C12	0.681	0.515	0.68	0.51	-0.001	-0.005		
I.C9 0.608 0.499 0.606 0.486 -0.002 -0.013									
*Note: The shaded cases describe there is no improvement in predictive power of these cases of									
PLS Model vs Benchmark LM. Mean Absolute Error (MAE), Root Mean Squared Error (RMSE)									

Table 5 describes the predictive performance of the PLS Model's prediction errors in comparison to Benchmark Linear Regression Model.

While figure1 only shows the values of R2 which is interpreted as model's predictive power by many researchers despite it is only showing the explanatory power of model's in-sample and is silent about the power of prediction related to out-of-sample (Shmueli, 2010; Shmueli & OR., 2011; Dolce, V, & C., 2017). Addressing this concern, (Shmueli G, 2016) developed this PLS Predict algorithm in order to use the holdout and training samples for the generation and evaluation of predictions done by estimations in PLS path model. Using this valuable robust insight, we assess by generation of various in-sample as well as out of sample predictions whether in terms of cases and average predictions.

(Shmueli, Ray, JM, & al., 2016)proposed a set of procedures for out-of-sample prediction that involves estimating the model on an analysis (i.e., training) sample and evaluating its predictive performance on data other than the sample analyzed, referred to as a holdout sample.

Table 5 shows medium predictive power of our model as we obtained more positive signs when we minus PLS-SEM indictors from naïve LM benchmark. This interpretation is based on the rule of thumb that if majority of indicators in the naïve LM benchmark yields greater prediction error in comparison to the PLS-SEM analysis then model falls in second best category out of four (high predictive power , medium predictive power, low predictive power, lacks predictive power) in terms of predictive relevance indicated a medium predictive power like ours (Hair, F., Risher, J, Sarstedt, & & Ringle, 2019).



Figure 1: PLS-SEM PATH MODELLING ALGORITHM

Table 6. Hypothesis Testing Direct Effects									
Hypothesis	Relationshin	Std	Std	t-	р-	BCI	BCI	VIF	Decision
rypotnesis Relationship	Beta	Error	values	values	LL	UL	VII.	Decision	
H1	TFL -> IC	0.682	0.024	28.811	0.000	0.643	0.720	1.000	Supported
H2	TFL -> CSE	0.631	0.03	20.951	0.000	0.581	0.679	1.000	Supported
H3	TFL -> FRI	0.689	0.027	25.52	0.000	0.643	0.732	1.000	Supported
H4	IC -> EC	0.187	0.055	3.351	0.001	0.097	0.276	2.237	Supported
H5	FRI -> EC	0.325	0.056	5.755	0.000	0.234	0.418	2.204	Supported

*Note: We use 95% confidence interval with a bootstrapping of 5,000

Table 7. Hypothesis Testing Indirect Effects								
Hypothesis	Relationshi p	Std Beta	Std Error	t- values	p- values	BCI LL	BCI UL	Decision
H6	TFL -> CSE -> EC	0.163	0.033	4.944	0.000	0.107	0.217	Supported
H7	TFL -> FRI -> EC	0.224	0.040	5.514	0.000	0.159	0.290	Supported
H8	TFL -> IC - > EC	0.128	0.038	3.285	0.001	0.065	0.190	Supported

*Note: We use 95% confidence interval with a bootstrapping of 5,000



Figure 2: Hypothesis Testing: Bootstrapping Results at 5000 sample

Table 8 Goodness of Model-fit				
Saturated Model		Estimated Model		
SRMR	0.066	0.08		

Goodness of model fit for present study exists as our model's SRMR < 0.08 (Henseler & PA, 2016; Henseler J, 2017), nevertheless it's not that much stringent criteria in using PLS-SEM path models and requires to be used cautiously keeping in mind the predictive nature of statistical tool.

5. DISCUSSION

The royal impact of employee creativity on improved organizational performance has encouraged researchers to investigate the mechanism that helps enhancing the employee creativity. This study was conducted to delve into the process of enhancing employee creativity through transformational leadership and multiple serial mediators such as innovation climate, creative self-efficacy and follower relational identification. Empirical evidences confirmed the serial mediators. Our study confirmed that we find employees perception about transformational leadership is linked with individual creativity through the innovation climate, creative self-efficacy and relational identification with leader. This study consists of several important theoretical implications. Latest research has focused on core motivational perspectives to explain the underlying influence process through which employee creativity is promoted by transformational leadership (Gong, Huang, & Farh, 2009; Shin & Zhou, 2003). Organizations who welcome and support new and creative ideas create an atmosphere in workplace that increase satisfaction of employees and avoid the fear of risk. By enhancing transformational leadership and improving creativity of employees help to develop an environment where change and employee's constructive interaction are encouraged (Ranjbar, Rafiei, Shafiei, & Kargar, 2019).

Moreover, in this study we respond to the call initiating from inconsistent metaanalytical research findings (Hammond, Neff, Farr, Schwall, & Zhao, 2011; Rosing, Frese, & Bausch, 2011). That under what boundary conditions employee creativity might be promoted by transformational leadership style for a creative course of action. So, we contribute to the literature by giving fine-grained knowledge on whether, when and why the mediation of innovation climate, creative self-efficacy and follower relational identification links employee creativity with transformational leadership style.

This study primarily has contributed by developing a multiple mediation model in order to address this dearth of mediating mechanisms of transformational leader associated with the influence of follower relational identification, creative self-efficacy and climate for innovation on employee creativity. (Cai et al., 2020). The 21st century revolutionary transformation of organizations highlights the prominent role played by creativity and innovation in the success of the organizations (Cascio & Aguinis, 2019). Within this domain, our study has confirmed the significance of leadership within the organizations (Schaubroeck, et al., 2012). This is the leader who contributes in learning and development of their followers (Khaola & Coldwell, 2019; Sattayaraksa & Boon-itt, 2018). Transformational leader is one of the kinds of leaders who does conscious efforts to develop intrinsic motivation, providing ideological vision and expedite professional development of employees (Yulk Gary, 2009). Transformational leaders play a vital role in determining positive outcomes (Bushra, Ahmad, & Naveed, 2011; Chi & Pan, 2012). They are the leaders who help their subordinates to attain self-determination, autonomy and need for achievements (Mahmood, Uddin, & Fan, 2019; Omri, 2015).

Ability- Motivation- Opportunity theory is the overarching theory of present study where in the antecedents of employee creativity are categorized as three work systems to guide the performance of employees for an organization. These three work systems are named as Ability enhancing practices (i.e. creative self-efficacy in current model), motivation enhancing practices (i.e. transformational leadership and follower relational identification) in present study) and opportunity enhancing practices (i.e. innovation climate in this study) whose absence causes low performance for instance creativity as one of performance indicator.

Hence, present model is one of the unique efforts to figure out synergies embedded in various predictors in an integrated manner under the over-arching AMO theory.

5.1. Practical Implications

In today's complex and unstable environment employee creativity is considered to help the firms to adopt the fluctuating demands (Amabile, Conti, Coon, Lazenby, & Herron, 1996; Oldham & Cummings, 1996; Shalley, Gilson, & Blum, 2000; Shin & Zhou, 2003). So, in existing work situation which enforced adaptation to change, leaders must ponder the ways to encourage the employees to think and behave creatively in the improvement of new services and products, in designing novel work systems and processes, and in innovative problem solving. As the behaviour of transformational leaders cause employees to adopt the leader's values, goals and standards and demonstrate comparable qualities (Yulk Gary, 2009). So, leaders should supplement their transformational leadership behaviour by communicating and setting bold expectations for their employees' creative role behaviour for securing higher level of employee creativity. Results of this study show that innovation climate, creative self-efficacy and follower relational identification encourage the employees to take on creative activities when they find that a high expectation for creativity is settled by their leader. In this regard, a transformational leader can influence and motivate employees to engage in creative activities. As such behaviour of leader can be developed and learned (Barclay, Higgins, & Thompson, 1995), so precise programs of training and development should enable the supervisors to acquire communication strategies and skills that facilitate them to reveal transformational leadership behaviour by expressing compelling vision, individual consideration, and intellectual stimulation with setting clear expectations of creativity to their subordinates.

5.2. Future Recommendations

Limitations can be addressed by future researches. Although present study handled the issue of common method bias using VIF to overrule collinearity issue yet other nature of data collection is recommended like collecting data at different time periods e.g. longitudinal design. Secondly data should be collected by conducting interviews as well. The shaded area of Table 7 i.e. PLS-Predict points out a very interesting limitation or might be significance of the present study i.e. why these few cases didn't respond the way majority others did. This is what that calls for qualitative study following a positivistic approach (like ours) immediately to seek answers to dissimilar responses like why you answered these specific questions in a different manner or what at present in the context making you respond in this unique way. This can be a source of meaningful insight to understand those non-significant which might of more importance in comparison to majority having similar responses. Thirdly this study is conducted in IT and telecom sector only. So, in order to generalize the findings, it needs to replicate in other sectors where job nature of employees is more creative. Further relationship of transformational leadership and employee creativity can be measured by using other mechanisms. Moreover, it is needed to address the gap of contextualising creative self-efficacy as a moderator between different leadership styles (i.e. transformational leadership as well ethical leadership, transactional leadership, servant leadership etc.)

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