



## HOW TRANSFORMATIONAL LEADERSHIP INFLUENCES INNOVATIVE BEHAVIOR: THE MEDIATING ROLE OF PSYCHOLOGICAL EMPOWERMENT AND PROACTIVITY OF EMPLOYEES

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### ABSTRACT

This research aims to examine the impact of transformational leadership on innovative behaviour of employees within the organization. It draws on conservation of resources theory and examines when and how transformational leadership style relates to innovative behaviour of employees. The study proposes a sequential mediation effect of psychological empowerment and proactivity of employees that predicts innovative behaviour among employees. The data of 230 employees is collected from large public sector organizations, from employees and their managers by utilizing three-wave time lagged study design. The results of the study were obtained using PROCESS macro by Hayes via 2000 resample bias corrected (BC) bootstrap method. The findings not only validate the applicability of psychological empowerment and proactivity for innovative behaviour but also found these as mediators between transformational leadership and innovative behaviour relationship.



Theoretical and practical implications are also discussed in light of the findings.

**Keywords:** Transformational leadership; psychological empowerment; proactivity; innovative behavior; sequential mediation

## 1. INTRODUCTION

Organizational innovation, that is defined as the generation and implementation of new processes and practices, is considered crucial for organization's sustainable competitive edge in today's challenging environment (Jia et al., 2018). For organizational effectiveness, employees' innovative behavior plays a significant role (Pieterse et al., 2010), as innovative endeavors are initiated and implemented by employees (Amabile, 1996). The promise of a sustainable competitive edge is greatly linked to the management of innovative behaviors of employees (Pieterse et al., 2010). Hence, it is not surprising that stimulation of innovative behaviour among employees is an imperative question for leadership research and practice (Pieterse et al., 2010).

According to Pieterse et al., (2010) the leadership styles for affecting innovative behaviour of employees have not received the deserved attention. The theories of transformational leadership, according to Bass (1995), portrays this style's core function as innovation stimulator. Jiang (2017) also argues that the behavioural outcomes of employees are greatly affected by the transformational style of leadership.

Although existing literature, in detail, looks into the characteristics of transformational leadership, however according to Henker et al., (2015), it lacks depth in the evaluation of the mechanism that enables transformational leaders to exert effects on followers' attitudes and behaviours. Avolio et al. (2004) also stresses that further investigation is needed to understand transformational leadership's impact on follower's outcomes. It, no doubt impacts psychological well-being of followers, yet, still, it is, unclear that why this is the case (Van Dierendonck et al., 2004).

According to Pillai (1999), transformational leaders trust their followers. This trust enhances positive emotions in followers (Bono et al., 2007) thus contributes towards higher levels of psychological empowerment among followers (Seibert et al., 2011). Psychological empowerment, according to Spreitzer (1995), reflects one's active orientation towards work roles. It is one's belief that one can influence work activities and outcomes. By pushing authority downwards, tolerating unsuccessful initiatives and encouraging proactivity, transformational style of leading contributes to significant positive behavioral outcomes.



Proactivity refers to behaviors that are change oriented, self-starting and future focused (Parker et al. 2006). Taking charge, voice, personal initiative, and actively seeking feedback are different domains of proactive behaviour (Parker, 2019). These initiative taking traits imply the use of creative and active strategies that assist in overcoming problems as they occur (Frese, 1997). One of the aims of the current research is to integrate and clarify the relationships of proactivity by identifying its antecedents and outcomes.

This current study emphasizes on the antecedents of innovative behaviour such as psychological empowerment and proactive behaviour of employees in the presence of transformational style of leadership. To the best of our knowledge, previous studies have not determined the impact of transformational leadership on innovative behaviour with sequential mediating effects of psychological empowerment and proactivity of employees. Moreover, this study also incorporates conservation of resources theory (Hobfoll, 1989) in explaining how and why individuals are motivated to build and protect resources. This study would help leaders in understanding how and what they can do to foster positive behaviours leading to innovative behaviour.

Twenty years of research on empowerment by Spreitzer (2008) and meta-analysis by Seibert et al., (2011), that addresses the antecedents and consequences of psychological empowerment within teams and individuals, has emphasized to focus more research that can explore the relationship of mediation of psychological empowerment. Further, the paper addresses to the research call of Bednell et al., (2018). He endorses that future research may examine the factors; such as employee's autonomy, support from leaders, individual capacity and knowledge distribution networks that may foster innovative behaviour in the organization.

## **2. THEORY AND HYPOTHESES**

The predictions for current research have been grounded in COR (Conservation of Resources) theory (Hobfoll, 1989). The conservation of resources theory proposes that individuals get motivation from retention, protection and building of resources (Hobfoll, 1985). It contends on two tenets: conservation of resource and investment of resource. The resource conservation tenet argues that limited resources possessed by individuals motivate them to protect these resources from further exhaustion.

For instance, in the presence of leader's abuse or lack of support, employees chose to be silent or opt detachment to minimize future loss of resource (Xu, Loi & Lam, 2015). Whereas the resource investment tenet that is a less examined tenet of the theory, contends that



investment of resources at the workplace is initiated for the acquisition of new resources (Hobfoll, 1989).

For example, learning climate, one of the critical organizational resource, leads to work engagement to improve performance (Eldor & Harpaz, 2016). Support from supervisors normally provide valuable resources, such as socioemotional and material resources to the employees. Hence arousing a sense of impact in their performance (Zhou et al., 2012).

Consistent with resource investment tenet of the theory, we propose that transformational leader with its unique attributes enable employees to manage loss of resources, that is inherently possessed by innovation paradox. With respect to innovation particularly, the loss of resources is of particular note as innovative endeavors hold a risk of failure between 60% to 90%.

This implies that for attainment of innovative behaviour, leaders are confronted with situations in which they are to encourage and appreciate efforts even though these efforts most of the time lead to failures (Brown & Anthony, 2011). Hence Supportive leaders provide valuable resources in terms of material and socioemotional resources to their followers. The followers who receive such resources are assumed to build more resources to meet their goals. In this way, the positive environment created by leadership enhances psychological empowerment in followers and they reciprocate it by bringing good initiatives, creativity and innovative solutions in their surroundings (Hunter, 2017).

## **2.1. Transformational Leadership, Psychological Empowerment, Proactivity of Employees and Innovative Behaviour**

Leaders with a vision can transform organizations by giving empowerment to their employees (Kim, 2014). Transformational style of leadership plays a significant role in establishing a connection with employees (Avolio & Mhatre, 2012). According to Bass and Avolio (1994), this style of leadership can be categorized into four classifications i.e., *idealized influence and charisma*-leaders are as role models and followers want to get associated with them; *intellectual stimulation*-leaders take risks and initiatives and they provide creative consideration of issues; *individualized consideration*-leaders recognize follower's different needs and listen to their concerns; *inspirational motivation*-leaders' vision is a source of motivation and it communicates high expectations.

Research confirms that transformational leadership positively predicts the follower's work attitudes and behaviours (Liu et al., 2017). Various studies on leadership reveal that



transformational style enhances productivity by influencing the perception of employees regarding work conditions (Bakker et al. 2011).

Bass and Avolio's model of transformational leadership (1997) with its four characteristics is analysed in this research paper to investigate the impact of transformational leadership on innovative behaviour of employees with mediating effects of psychological empowerment and proactive behaviour of employees. The concept of psychological empowerment was first introduced by Kanter (1977).

According to Bennis and Nanus (1985), the concept of employee empowerment describes "authority throughout the organization, enabling employees at lower levels in the organization to take appropriate action". Psychological empowerment exists if the workers feel that to a certain extent, they can control their lives at the workplace (Spreitzer, 1995). Whereas the emphasis of a leader on participation, accompanying rewards leads to the empowerment of employees (Sinha et al., 2016).

Organizational structure, leadership style, the culture within the organization all play their part in the facilitation of an environment that fosters empowerment in employees (Mallak & Kurstedt, 1996). Seibert et al., (2011) argued that leadership and work design play a vital role in making employees empowered. The theory of transformational leadership considers empowerment as a central mechanism in arousing positive work behaviour in followers to achieve organizational objectives (Yukl, 1998).

According to Lowe et al., (1996), transformational style of leading enable followers to reach their maximum potential through reshaping their aspirations, needs, identities and preferences. The characteristic of *individualized consideration* in transformational leaders enables them to carefully listen to the followers' needs for growth by acting as coaches or mentors (Bass & Avolio, 1994).

To develop follower's full potential, transformational leaders encourage them to take up more responsibilities (Avolio, 1999; Pauliené, 2012). They provide better prospects of decision latitude for their followers, enhancing their psychological empowerment and making their job more meaningful (Wayne, Liden & Sparrowe, 2000). Hence, this style of leadership enhances psychological empowerment in followers (Sinha, Priyadarshi & Kumar, 2016) and increase their proactivity (Frese& Fay, 2001; Michaelis et al., 2010).

According to Crant (2000) research on proactivity "...has not emerged as an integrated research stream . . . there is no single definition, theory, or measure driving this body of work"



(p. 435). Although proactive behaviors, in the literature, have shown to be significantly important in diverse organizational areas. However, relation between different proactive behaviors, their general processes and antecedents are a downside associated with it. (Schmitt et al., 2016).

Proactive behaviour is an attribute of transformational leaders, who themselves initiate tasks that creates improvements in their work. As leaders are role models for followers, hence their personal proactive behaviour possess an expectancy to be imitated by their followers (Schmitt et al., 2016). Moreover, the development of positivity by transformational leaders is connected to proactivity (Bindl et al., 2012). For example, leaders who with their inspirational language frequently connect with their followers, leave a positive behavioral impact on their followers. Thus, in line with previous research, we formulate the following hypothesis:

- **Hypothesis 1:** Transformational leadership is positively related to psychological empowerment and proactivity of employees

Positive supervisory support increases employee well-being (Gilbreath and Benson, 2004). Bono and Ilies (2006) argued that “..... leaders enable their followers to experience positive emotions” (p. 331). It increases proactivity in followers. They initiate change without being asked to improve the environment(Grant & Ashford, 2008).

Proactivity although is never a job description, however, this behaviour implicitly improves the job and the surrounding (Fay & Sonnentag, 2010). Proactive style initiates changes and manipulates the opportunities (Newman et al., 2017). The positive bonding that exists between transformational leadership and followers, leads them to constructive suggestions (Schmitt et al., 2016). Psychological empowerment leads to proactive orientation towards tasks (Crant, 2000).

According to Deci and Ryan (1985) the perception of individuals that they have autonomy over their work enables them to take more initiatives in work-related situations. Empowered individuals are found to take frequent actions on problems and by initiating changes, enhance the quality of their work (Gibson and Vermeulen, 2003). Hence, it is expected that psychological empowerment will influence proactivity of employees.

- **Hypothesis 2:** Psychological Empowerment is positively related to employee’s proactivity within the organization

Schumpeter (1934) was the first person who recognized the concept of innovation. He described it as a process that creates an impact on economic development. Different researchers described innovative behaviour differently. Thus, the definition and concept of innovative behaviour argued by different scholars is also different. According to Gumusluouglu and Ilsev, 2009, it is the “formation of novel, important and useful products or services in organizational environment”. Innovations are focused on thinking out of the box by redesigning products and processes.

Transformational leaders hence by arousing psychological empowerment and proactivity facilitates the innovation culture in the organization. They encourage creative ideas and suggestions that pave the way to innovative behaviour (Gumusluouglu & Ilsev, 2009; Sosik, Kahai & Avolio, 1998; Choi et al., 2016). Employees get inspired by leaders selfless behaviour and initiate changes, for the betterment in their surroundings through proactivity (Schmitt, Den Hartog & Belschak, 2016).

According to Kanter (1983), macro-level changes within organizations most of the time emerge from micro-level departures from traditions i.e., innovations. Kanter, further argued that when an organization relaxes controls, it develops opportunities for purposive experimentation. The accumulation of these deviations, over time, provide a pool of successful initiatives that may be disseminated throughout the organization. Oldham and Cummings (1996). in the same vein, argued that innovation emerges when employees have freedom to think. Few researches, however, suggests strong correlation between proactivity and innovation.

- **Hypothesis 3:** Positive relationship exists between proactivity of employees and their innovative behaviour

## 2.2. Psychological Empowerment and Proactivity as Mediator

According to Spreitzer et al., (1997), the dimensions of empowerment that are related to meaning and competence adds satisfaction to employee’s work. Spector (1986) argued that self-determination leads to task accomplishment. Whereas some researchers considered competence and impact as a strong predictor of performance (Liden et al., 2000; Spector, 1986; Spreitzer et al., 1997).

The positive outcomes of psychological empowerment are due to the enhancement of the personal sense of self-worth that gets translated into higher levels of positivity at the workplace (Aryee & Chen, 2006). Employees show confidence and competence towards



assigned tasks when they have a feeling of meaningful jobs and possess control at the workplace (Aryee & Chen, 2006). The preceding discussion suggests a mediating role for psychological empowerment in the transformational leadership–innovative behaviour outcome relationships. Having its underpinnings in motivation, psychological empowerment may serve as a mechanism through which transformational leader influences its follower’s behavioural outcomes (Zhu et al., 2019).

- **Hypothesis 4:** Psychological empowerment mediates the relationship between transformational leadership and employee’s innovative behaviour.

Transformational style of leadership empowers their followers, make them ready to perform beyond expectations enhancing their proactive behaviour and ultimately increase innovation in their behaviour (Gumusluoglu & Ilsev, 2009). Furthermore, Frese and Fay (2009) argued that positivity that exists between a follower and a transformational leader leads to employees’ proactivity as it encourages them to take initiatives and go beyond what is formally required from them.

- **Hypothesis 5:** Employee’s proactivity mediates the relationship between transformational leadership and employee’s innovative behaviour.

When leaders contribute positively towards teams, the team members reciprocate by identifying inefficiencies and making a positive contribution at the workplace (Schmitt et al., 2016). Secondly, transformational leaders are proactive themselves and either their followers make them role models or get positive vibes from them, leading them to become more proactive themselves (Den Hartog & Belschak, 2012). Hence, in line with the previous discussion, we predict that proactivity gets enhanced by a transformational style of leadership and it mediates the relationship of transformational leadership and innovative behaviour outcomes.

- **Hypothesis 6:** Psychological Empowerment and employee’s proactive behaviour sequentially mediate the relationship between transformational leadership and employee’s innovative behaviour.

### 2.3. The Hypothesized Research Model

The above discussion shows that transformational support will lead to an improvement in innovative behavior of employees with sequential mediating effects of psychological empowerment and proactivity in employees.





The model presented in Figure 1 describes the relationship between transformational leadership, psychological empowerment, proactivity and innovative behavior. It is a sequential mediation model that describes a three-part (paths) mediating effect (Preacher & Hayes, 2008) via psychological empowerment and proactivity. Hayes (2013) argues that the model allows one mediator (psychological empowerment) to casually affect the other mediator (proactivity). Hypotheses one to three, represent unmediated paths whereas after adding, two mediators i.e, psychological empowerment and proactivity, the study shows three path mediation models.

Hypothesis 4 demonstrates the mediation effect of psychological empowerment on transformational leadership-innovative behaviour relation. To test the proactivity as a mediator between transformational leadership-innovative behaviour relation, hypotheses 5 has been established. Hypothesis 6 predicts that psychological empowerment and proactivity sequentially serve as mediators between transformational leadership–innovative behaviour relationship.

Therefore, the formulation of the direct and mediated pathways is as follows:

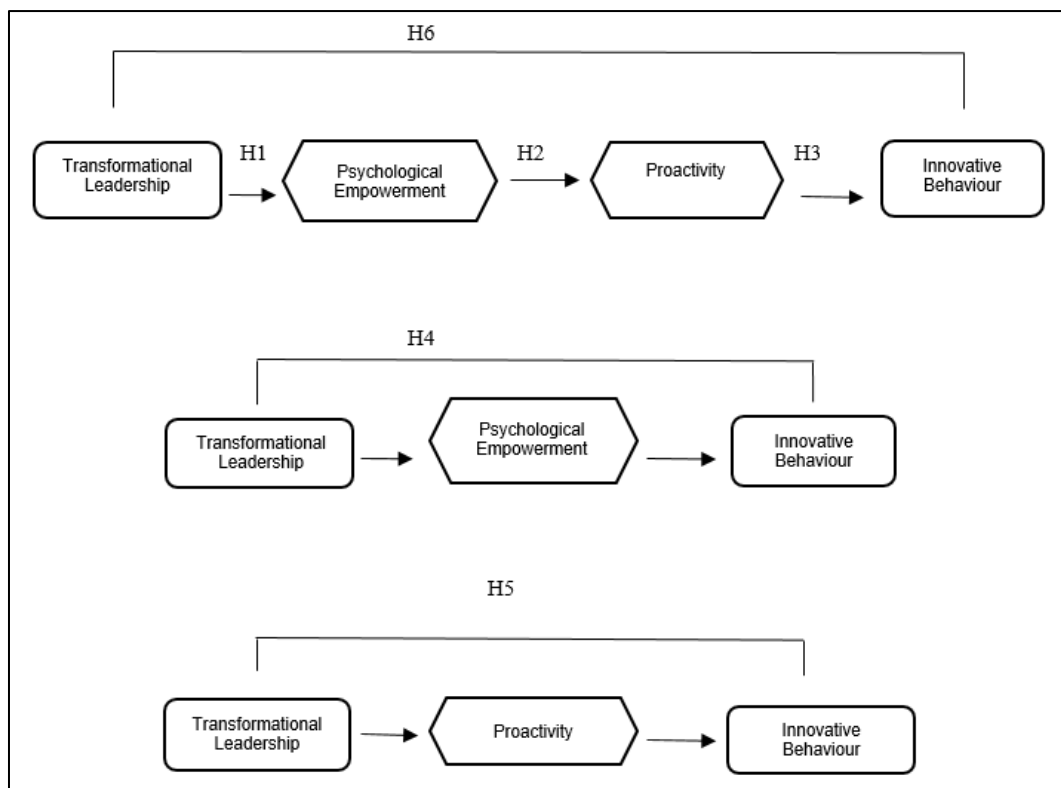


Figure 1: Sequential Mediation Model

### 3. DATA AND METHODOLOGY

#### 3.1. Sample and Procedure

The cross-sectional design is adopted for the study. It is multi-source research. The data is collected from supervisors and employees working in large public sector organizations in Lahore, Pakistan. A sample of 230 employees and their supervisors were taken through convenience sampling. The data is analyzed through the statistical package of SPSS, AMOS and Process macro by Hayes.

Study settings were kept natural and simple. The scale and questions, used in this study are taken from previous researches, as they are more valid and have been tested before. The primary instrument used in collecting data was structured questionnaire designed in a close-ended pattern. There were two sets of questionnaires i.e., one for supervisors (measuring the variables of innovative behaviour and the other set for employees (measuring transformational leadership, psychological empowerment and proactivity). The first author of the study took minimum interference in administering the questionnaire from both employees and their respective supervisors. However, clear, specific and logical directions were provided before filling out the questionnaires.

For data collection, three-wave time-lagged study design is used to avoid common method biases (Podsakoff et al., 2003), making it a multi-time study. Participants were asked to fill out the questionnaires about transformational leadership at Time 1 (T1). After 15 days later at Time 2 (T2), questionnaires for psychological empowerment and proactivity were filled by the employees. Further 15 days later, at T3, managers/leaders, who supervised at least 10 employees, were asked to fill the questionnaires regarding innovative behaviour of employees. At T1, 350 questionnaires were distributed, out of which 310 were received back with a response rate of 89%.

Out of the received questionnaires, 300 were completed and distributed for T2 variables. The complete received questionnaires remained at 250 with a response rate of 83%. For T3, 250 questionnaires were distributed to 25 managers, out of which 230 questionnaires were received with a response rate of 92%. Data for transformational leadership, psychological empowerment and proactive behaviour were filled by employees and for innovative behaviour, data was collected from managers making it a multi-source study.

Demographic variables consist of gender, age, tenure in the organization and education. Gender was given the values as 1=Male and 2=Female. Marital status was given the values as 1= Single, 2= Married, 3= Divorced and 4= Widow. Age, education, and tenure in the organization were kept as open-ended. Female were 55% of the total respondents whereas male



was 45% of the total sample. The mean age of the sample was 30.32 years with a SD of 10.89 years. The mean tenure remained at 5.78 years with a standard deviation of 4.81 years.

### 3.2. Measures

- *Transformational Leadership*: Podsakoff et al. (1990) scale is used to measure Transformational leadership. The scale contains 22 items and measures on 5-point Likert type scale from 1= Strongly Disagree to 5= Strongly Agree. A sample item is “My leader inspires others with his/her plans for the future”. Cronbach’s alpha, for this scale, is recorded at 0.81.
- *Psychological Empowerment*: Spreitzer, (1995) is used to measure Psychological Empowerment. The scale contains 12 items with four cognitive dimensions: meaning, competence, self-determination and impact of psychological empowerment. A sample item is “*The work I do is very important to me*”. It is measured on a 5-point Likert scale from 1= strongly disagree; and 5 = strongly agree). Cronbach’s alpha, for this scale, stood at 0.87.
- *Proactive Behavior*: We used scale developed by Frese, Fay, Hilburger, Leng, and Tag (1997) to measure the personal initiatives of employees. The scale contains 7 items like “I am always looking for better ways to do things”. The scale is scored on 5-point Likert type scale ranging from 1= Strongly Disagree to 5= Strongly Agree. Cronbach’s alpha, for this scale, is 0.91.
- *Innovative Behaviour*: Innovative behaviour is measured by a 6-item scale developed by Scott & Bruce (1994). A sample item that was asked from the manager to assess worker’s innovative behaviour is this worker “searches out new technologies, processes, techniques, and/or product ideas”. The measurement is taken from the employee’s manager. Cronbach’s alpha, for this scale, stood at 0.90.

### 3.3. Control Variables

In the current study, company size, gender, age, tenure in the organization (seniority) have been controlled. Earlier researches have reported a relationship between innovation and the size of the company (Laforet, 2008; Wagner & Hansen, 2005). Similarly, tenure and seniority of employees have also been found to be associated with innovative behaviour (Damanpour & Schneider, 2008) as senior employees have greater access to resources.

## 4. RESULTS

#### 4.1. Descriptive Statistics

Mean, standard deviations, and correlations of the study variables are shown in Table 1. The reliability of the instrument also shows a high value of Cronbach Alpha ranging from .81 to .91. Moreover, the results show a significant positive correlation among study variables.

Consistent with Baron and Kenny's (1986) recommendations, a variable may function as a mediator if the four conditions are satisfied i.e. relation between independent and dependent variable exists; relation between independent variable and mediator exist, mediator has a relation with dependent variable and addition of mediator in the independent-dependent relationship makes their relationship non-significant or significantly smaller. Table 1 reveals significant correlations between study variables hence providing authentication to conduct mediation analysis for our current research.

Correlation between innovative behaviour and transformational leadership is significant as it stands at ( $r = 0.85, p < 0.01$ ). Psychological empowerment and proactive behaviour also reveals significant correlation with the independent variable i.e. transformational leadership ( $r = 0.75, p < 0.01$  and  $r = 0.57, p < 0.01$ ). Both the mediators, psychological empowerment and proactive behaviour, also show significant correlation with the dependent variable i.e., innovative behaviour ( $r = 0.71, p < 0.01$ ;  $r = 0.70, p < 0.01$ ). Hence the prerequisite of taking psychological empowerment and proactive behaviour as mediators are met.

The results are shown in Table 1.

Table 1: Correlation and Descriptive Statistics

Variables	Mean	SD	1	2	3	4	5	6	7	8
1. Gender	1.53	0.500								
2. Age	30.32	10.89	0.16*							
3. Tenure	5.78	4.81	0.16*	0.58**						
4. Education	15.67	3.76	0.32*	0.72**	0.13*					
5. Transformational Leadership	2.94	0.91	0.00	0.29**	0.12	0.34**	(0.81)			
6. Psychological Empowerment	2.71	0.88	0.04	0.54**	0.18**	0.62**	0.75**	(0.87)		
7. Proactive Behaviour	3.15	1.04	0.01	0.18**	0.02	0.24**	0.57**	0.20**	(0.91)	
8. Innovative Behavior	3.16	1.07	0.01	0.24**	0.11	0.26**	0.85**	0.71**	0.71**	(0.90)

Note:  $n = 230$ , Cronbach's alpha is on the diagonal in the parentheses; \*\*  $p < 0.01$  (two-tailed), \*  $p < 0.05$  (two-tailed)

#### 4.2. Hypotheses Testing

Sequential mediation analysis was performed by means of SPSS macro and Hayes PROCESS Model 6. We employed 2000 re-sample BC bootstrapping method to reduce the



limitation of small sample size (Preacher & Hayes, 2008). Table 2 reveals the results of the mediation Model.

Table 2: Path Coefficients & Indirect Effects of Mediation Models

From → To	Path Coefficients			Indirect Effects		
	PE	PB	IB	Effect	Boot LLCI	Boot ULCI
<b>TFL</b>	.724***	.101***	.299***			
<b>PE</b>		.618***	.523***			
<b>PB</b>			.492***			
<b>Total Indirect Effects</b>					.610	.799
<b>Indirect Effect</b>						
<b>TFL → PE → IB</b>				.320	.252	.393
<b>TFL → PE → PB → IB</b>				.186	.266	.109
<b>TFL → PB → IB</b>				.459	.387	.541
<b>Direct Effect</b>						
<b>TFL → IB</b>					.183	.415
<b>Total Effect</b>						
<b>TFL → IB</b>					.918	1.08

Note:\*\*\*p < 0.001, \*\*p < 0.05, \*p < 0.01;LL=Lower limit; UL=Upper Limit; CI= Confidence Interval. TFL refers to 'Transformational Leadership', PE refers to 'Psychological Empowerment', PB refers to 'Proactive Behaviour', IB refers to 'Innovative Behaviour'.

The findings, as proposed, showed positive relation of transformational leadership (TFL) with psychological empowerment (PE) with  $\beta = .724$ ,  $p < .001$ . Hence, it reveals the support of our Hypothesis 1. Psychological empowerment is also positively related to proactivity of employees as  $\beta = .618$ ,  $p < 0.001$ ; supporting Hypothesis 2 of our study. The proactivity of employees also shows a positive relation with innovative behaviour supporting 3<sup>rd</sup> hypothesis ( $\beta = .492$ ,  $p < 0.001$ ).

The mediation of psychological empowerment between transformational leadership and innovative behaviour shows upper and lower limits of CI<sub>95%</sub> confidence level [.252, .393]. As the values of both the limits are positive and do not include a zero value, showing significant result, hence it supports prediction for our hypothesis 4. Moreover, the mediation of proactive behaviour between transformational leadership and innovative behaviour is also significant as



the upper and lower limits are positive and do not contain a zero value  $CI_{95\% \text{ confidence level}}$  [.387, .541] showing significant result, supporting Hypothesis 5 of our study.

The sequential mediation of psychological empowerment and proactive behaviour between transformational leadership and innovative behaviour with limits of  $CI_{95\% \text{ confidence level}}$  [.266, .109] that is shown to be statistically significant, hence supporting the prediction of our Hypothesis 6. The total effect result shows that the upper and lower limits do not contain a zero value  $CI_{95\% \text{ confidence level}}$  [.918, 1.08]. Hence these results show the significance of the total effect of the model.

### **4.3. Discussion**

The research was initiated to examine the mediating role of psychological empowerment and proactive behaviour on the relationship between transformational leadership and innovative behaviour of employees. Relationship evidence for this construct is inconsistent and scarce. The objective of the current study is to shed light on the effects of leadership style on innovative behaviour by probing follower psychological empowerment and proactivity as mediators.

According to our knowledge, no previous research exists in literature, hence making this endeavour significant. Findings from 230 employees and their managers offered support to our predictions that transformational leadership enhances innovative behaviour indirectly by creating an environment of empowered employees in which they are encouraged to take initiatives that lead to innovative behaviour (Amankwaa et al., 2019). Empowerment and proactivity were found to mediate the relationship with innovative behaviors, partially.

The result strengthens the findings of conservation of resources theory (Hobfoll, 1989) by revealing a positive connection between transformational leadership, psychological empowerment and proactivity of employees. The findings get support from Hobfoll's (1989) argument that investment of resources by the individuals take place for obtaining more valued resources so as to build new resources that become a source for the attainment of their objectives (Hobfoll, 1989).

Conservation of Resources Theory argues that support extended by the leader is a valuable organizational resource that enhances follower's energy to perform tasks by empowering them and making them more proactive (Salanova, Agut, & Peiró, 2005). The followers in these circumstances, reciprocate the positivity they receive from their leader



(Yang, 2018). They become more enthusiastic about their work and invest their resources and capabilities in order to meet and achieve their valued career goals.

The environment of empowerment and proactivity that is extended by transformational style, foster innovative behaviour in employees. Hence our argument gets support that an important organizational resource, namely, the transformational leader will enhance employee's innovative behaviour through increasing their empowerment and proactivity.

For instance, the support of transformational leadership is invested in empowerment and initiative-taking to get creativity and innovativeness in workplace settings. Generally, supportive leaders in terms of material resources and socioemotional backing offer valued resources to their followers. This, hence, leads followers to have a better sense of impact (Yang, 2018; Zhou et al., 2012).

Moreover, motivation theories argue that a motivational construct may impact the intentions of individuals but is not sufficient enough to directly lead to behavioural outcomes (Locke & Latham, 1990). Moreover, innovations and innovative behaviour are based on initiatives and risk-taking (Marane, 2012). These decisions cannot take place without psychologically empowered employees who are proactive. Hence, the current research not only validates the applicability of psychological empowerment and proactivity in the context of innovation but also found these as mediators between transformational leadership and innovative behaviour.

## **5. THEORETICAL IMPLICATIONS**

The study offers significant theoretical contributions. Firstly, it addresses the scarcity of research with regard to leadership style on innovative behaviour as according to Pieterse et al. (2010) the leadership styles for affecting innovative behaviour of employees have not received the deserved attention. The findings of this research contribute to the literature of innovative behaviour un multiple ways.

It addresses the direct and indirect association between transformational leadership, psychological empowerment, proactivity and its impact on innovative behaviour. A lack of research among the variables created the need to empirically investigate and establish a theoretical model. We have not found any study linking all these variables; therefore, these results have become one of the means through which the current study adds to the existing body of knowledge. Further according to our literature review, this study is the first to ascertain

the sequential mediating effect of psychological empowerment and proactive behaviour in the extant literature of transformational leadership and innovative behaviour relations.

### **5.1. Practical implications**

From practical implication's perspective, the current study provides guidelines to the organizations that in the presence of transformational leadership style, the focus needs to be given to empowering employees as this will add confidence to them and they will take initiatives. The study provides implications, for management for adoption of such mechanisms i.e., psychological empowerment and proactivity, that increase innovative behaviour among employees. For stimulation of proactivity, it seems advisable to focus on enhancing employee's empowerment through transformational style of leading (Bass & Avolio's, 1994).

The characteristics of intellectual stimulation and individualized consideration of transformational leaders helps the organization to establish an environment where creative thought is welcomed and initiative taking becomes a norm. Moreover by recognize follower's different needs and listening to their concerns, proactivity also gets enhanced.

### **5.2. Limitations and Future Research**

The current research also poses a certain set of limitations. First, the use of cross-sectional design challenges the underlying conclusions. Use of longitudinal research design for psychological empowerment and proactivity may provide a better analysis of the construct. Secondly, the collection of data has been performed through convenience sampling technique which attracts caution for generalizability of results.

Future studies may account for these limitations. Moreover, future research may investigate the access to knowledge sharing or informational resources as important factors that enable successful innovative behaviour in the presence of a transformational style of leadership.

## **6. CONCLUSION**

The findings of this paper offer new insights as well as confirms to many notions instituted in previous research. The multi-time and multi-source model of the current study proposes several substantial contributions to multi-time theory and research. We presented the concept that transformational leadership influences followers' innovative behaviour when psychological empowerment and proactivity in employees sequentially mediates the relationship.





Previous studies used proactivity as a moderator, we, however, argued on the premise developed by Belschak & Hartog, (2010), that proactivity gets enhanced in the presence of transformational style of leadership. The current study examined the mediation effects of psychological empowerment and proactivity on transformational leadership-innovative behaviour relationship and offered empirical justification for predictions.

The study provides guidelines to the organizations to develop an environment by opting transformational style of leadership that gives psychological empowerment to their employees so that they exhibit proactivity that will eventually lead to innovative behaviour. Transformational leadership may develop follower's full potential and encourage them to take up more responsibilities with empowerment.

We have contended and justified that employees with empowerment will see themselves with more capability that will influence their job within the organizations in a meaningful way. Transformational leaders encourage their followers to re-examine traditional ways of doing things and appreciate novelty and creativity for problem solving as well as performance of work.

Such environment within the organization prepares followers to assume more responsibility, and ultimately develop their followers into leaders. In this vein, employees would perform extra-role efforts, become creative for problem solving that eventually enhances their innovative behaviour.

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**APPENDIX**

<b>Transformational Leadership (Podsakoff, et.al;1990)</b>					
Please indicate your disagreement or agreement regarding at what extent your co-worker is civil with you. My Leader....	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	1	2	3	4	5
My leader:					
1. is always seeking new opportunities for the unit/department/organization	1	2	3	4	5
2. Paints an interesting picture of the future for our group	1	2	3	4	5
3. has a clear understanding of where we are going	1	2	3	4	5
4. Inspires others with his/her plans for the future	1	2	3	4	5
5. is able to get other committed to his/her dreams of the future	1	2	3	4	5
6. leads by "doing" rather than by "telling"	1	2	3	4	5
7. provides a good model to follow	1	2	3	4	5
8. leads by example	1	2	3	4	5
9. fosters collaboration among work groups	1	2	3	4	5
10. encourages employees to be "team players"	1	2	3	4	5
11. gets the group to work together for the same goal	1	2	3	4	5
12. develops a team attitude and spirit among his/her employees	1	2	3	4	5
13. shows us that he/she expects a lot from us	1	2	3	4	5
14. insists on only the best performance	1	2	3	4	5
15. will not settle for second best	1	2	3	4	5
16. acts without considering my feelings (R)	1	2	3	4	5
17. shows respect for my personal feelings	1	2	3	4	5
18. behaves in a manner that is thoughtful of my personal needs;	1	2	3	4	5
19. treats me without considering my personal feelings;	1	2	3	4	5
20. has provided me with new ways of looking at things which used to be a puzzle for me	1	2	3	4	5
21. has ideas that have forced me to rethink some of my own ideas I have never questioned before	1	2	3	4	5
22. has stimulated me to think about old problems in new ways	1	2	3	4	5
<b>Psychological Empowerment (Spreitzer 1995)</b>					
Please indicate the extent of agreement with each of the following statements. (Please tick only one number)					
1. The work I do is very important to me	<b>Not at all 1 2 3 4 5 To an exceptional degree</b>				
2. My job activities are personally meaningful to me	<b>Not at all 1 2 3 4 5 To an exceptional degree</b>				
3. The work I do is meaningful to me	<b>Not at all 1 2 3 4 5 To an exceptional degree</b>				
4. I am confident about my ability to do my job	<b>Not at all 1 2 3 4 5 To an exceptional degree</b>				
5. I am self-assured about my capabilities to perform my work activities	<b>Not at all 1 2 3 4 5 To an exceptional degree</b>				
6. I have mastered the skills necessary for my job	<b>Not at all 1 2 3 4 5 To an exceptional degree</b>				
7. I have significant autonomy in determining how I do my job	<b>Not at all 1 2 3 4 5 To an exceptional degree</b>				
8. I can decide on my own to go about doing my work	<b>Not at all 1 2 3 4 5 To an exceptional degree</b>				
9. I have considerable opportunity for independence and freedom in how I do my job	<b>Not at all 1 2 3 4 5 To an exceptional degree</b>				
10. My impact on what happens in my department is large	<b>Not at all 1 2 3 4 5 To an exceptional degree</b>				
11. I have a great deal of control over what happens in my department	<b>Not at all 1 2 3 4 5 To an exceptional degree</b>				
12. I have significant influences over what happens in my department	<b>Not at all 1 2 3 4 5 To an exceptional degree</b>				



<b>Innovative Behaviour: Scott &amp; Bruce (1994).</b>	
Please indicate the extent of agreement with each of the following statements. (Please tick only one number)	
1. searches out new technologies, processes, techniques, and/or product ideas	<b>Not at all</b> 12 3 4 5 <b>To an exceptional degree</b>
2. generates creative ideas	<b>Not at all</b> 12 3 4 5 <b>To an exceptional degree</b>
3. promotes and champions ideas to others;	<b>Not at all</b> 12 3 4 5 <b>To an exceptional degree</b>
4. investigates and secures funds needed to implement new ideas	<b>Not at all</b> 12 3 4 5 <b>To an exceptional degree</b>
5. develops adequate plans and schedules for the implementation of new ideas	<b>Not at all</b> 12 3 4 5 <b>To an exceptional degree</b>
6. is innovative, in general	<b>Not at all</b> 12 3 4 5 <b>To an exceptional degree</b>

<b>Proactive Behaviour Frese et al (1997)</b> Please indicate your disagreement or agreement regarding at what extent your co-worker is civil with you. My Leader....	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
1. I actively attack problems.					
2. Whenever something goes wrong, I search for a solution immediately.	1	2	3	4	5
3. Whenever there is a chance to get actively involved, I take it.	1	2	3	4	5
4. I take initiative immediately even when others don't.	1	2	3	4	5
5. I use opportunities quickly in order to attain my goals.	1	2	3	4	5
6. Usually I do more than I am asked to do.	1	2	3	4	5
7. I am particularly good at realizing ideas.	1	2	3	4	5

