

## **THE ROLE OF TRANSFORMATIONAL LEADERSHIP IN ENHANCING INNOVATIVE WORK BEHAVIOR: THE MEDIATING EFFECTS OF EMPLOYEE AMBIDEXTERITY AND ORGANIZATIONAL SUPPORT UNDER WORK UNCERTAINTY**

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### **Abstract**

The current research study mainly aimed to examine the impact of transformational leadership (TL) and Innovative work behavior (IWB) in SMEs in Punjab, Pakistan in which employee ambidexterity(EA) and organizational support(OS) as mediator and work uncertainty(WU) as a moderator. The study follows a quantitative research design, gathering data from 50 SME's Punjab Pakistan. The study sample included 500 employees working in various managerial positions in SMEs. The questionnaire incorporated validated scales for TL, IWB, EA, OS, and WU, using a 5-point Likert scale. Data was analyzed through statistical modeling, including hypothesis testing and predictive significance assessment. The findings of the study reveal that most hypothesis are positively and significantly supported. However, the mediating effect of EA between TL and IWB is not positively related. The current paper has used Mediating role of Organizational Support. In the future, researcher may use different variables as mediators other than Employee Ambidexterity. Likewise, current study carried out focusing on the Small and Medium Enterprise (SMEs), while future studies may be focusing on other enterprises to check if results change.

In the advanced countries number of researches has been conducted related to IWB and TL. This study has contribution to the existing literature on SMEs with in the developing contribution with special focus on the Pakistan. it gives the significant insights regarding the influence of the leadership styles on innovation.

**Keywords:** Transformational Leadership, Work Uncertainty, Innovative Work Behavior, Employee Ambidexterity, Organizational Support, SMEs, Pakistan.

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## **Introduction and Background of the Study**

Businesses are bound to improve their work and output for the sake of the competition. The competition ratio is greater in the SMEs as compare to the other enterprises. Because the SMEs are seemed to be as the drivers of the growth of an economy and they largely provide the jobs to the people (Subhan et al., 2013).

Encouraged creativity and innovative work behavior are one successful strategy for businesses to obtain and preserve comparative edge (IWBs). As a result, modern organizations try to promote their staff to be inventive and creative. Companies like to hire workers that display these traits because they have an impact on the firm's inventive capabilities (Stam, 2013 and Lukes and Stephan, 2017). Investment in intellectual resources and cultivating an inventive culture inside the firm, as a result, play a significant influence in promoting innovation. When it comes to SMEs, there is a distinct absence of articles on the subject (Stoffers et al., 2018: Yang et al., 2024). Whenever it came to less developed nations. The ones that typically face the most challenges in terms of innovation, efficiency, and actual quality, the literature is even more limited.

Lastly, this research was conducted in Punjab Pakistan, which is a unique instance among emerging markets. Government intent and economic strategy in Punjab Pakistan really aren't conducive to corporate operations. Like a response, Punjab Pakistan is one of Pakistan's least active provinces. Innovation is among the metrics used to calculate the global competitive index (GCI). Such poor productivity is a product of Pakistan's economic climate, which has numerous adverse domestic conditions that have plagued firms, resulting in extraordinarily high unemployment rates, massive levels of black-market volatility, and a substantial brain drain (Burno et al., 2024). As much as government inaction isn't helping the problem, corporations must bear some of the blame because employees are frequently underpaid, abused, and have little possibilities for advancement (Shergill & Mehta, 2023). It's why that the necessary to better study the potential for boosting productivity at the micro scale, particularly given the scarcity of experimental research on the subject. The study's target group is SMEs of Pakistan. Due to a lack of research in this area, this study aims to fill the void and investigate new opportunities for the leaders.

This study examines how employee Ambidexterity and organizational support mediates the relationship of TL and IWB as well as how the work uncertainty moderates the relationship of transformational leadership and innovative behavior. By examining these correlations, we can better understand the contextual element, such as transformational leadership, that encourages people to take initiative in their job and be more productive (Li et al., 2019). The study's main objective was to add the existing literature on Pakistan's SMEs, which is mostly overlooked and under-researched. This epidemic has also had a significant impact on this area. Workers at businesses of all sizes exhibit a high link among TL, job uncertainty, and IWB in SMEs.

The study aimed to test and explore the influence of Transformational Leadership on Innovative Work Behavior along with the mediating role of Employee Ambidexterity, organizational support and moderating role is of the work uncertainty. On the basis of above aims following questions has been developed:

*Q1: What is the impact of TL on EA, OS and IWB?*

*Q2: What is the mediating role of EA, OS between TL and IWB?*

*Q3: What is the moderating role of WU on TL and IWB?*

Research Objectives

Following are the objectives of this research study:

- i. To check out the impact of TL on EA, OS and IWB.
- ii. To check out the mediating role of EA, OS between TL and IWB.
- iii. To check out the moderating role of WU on TL and IWB.

This research has been conducted in Punjab Pakistan, which is a unique instance among emerging markets. Government intent and economic strategy in Punjab Pakistan really aren't conducive to corporate operations. Like a response, Punjab Pakistan is one of Pakistan's most active province. Innovation is among the metrics used to calculate the GCI. Such poor productivity is a product of Pakistan's economic climate, which has numerous adverse domestic conditions that have plagued firms, resulting in extraordinarily high unemployment rates, massive levels of black market volatility, and a substantial brain drain. As much as government inaction isn't helping the problem, corporations must bear some of the blame because employees are frequently underpaid, abused, and have little possibilities for advancement. It's why that the necessary to better study the potential for boosting productivity at the micro scale, particularly given the scarcity of experimental research on the subject.

## **Literature Review**

### **Theoretical Background**

#### *Transformational Leadership*

Transformational leadership (TL) emphasizes intrinsic motivation, moral development, encouraging followers and fostering an ethical climate (Bass & Steidlmeier, 1999). These leaders motivate and empower followers, encourage cooperation, and provide mentorship, enabling individuals to exceed expectations while promoting collective well-being (Riggio., 2009). TL is critical in allowing firms to develop an innovative atmosphere in which people are given the autonomy they need to think creatively and offer new ideas. This results in more inventive behavior and more staff creativity (Jaiswal and Dhar, 2015). Transformational leadership is complex and innovative activity that connects among employees and organizational objectives. People are more likely to share their opinions and

possible solutions, organization (a group, and make key decisions when a TL is present, for example (Green et al., 2013). Because this environment encourages participants to avoid their task, TL may be able to manage the interaction between IWB aspects. The great majority of previous study has looked at innovation from the perspective of the owner-manager. The founder of a small business is widely believed to have total influence over the design phase (Nolan and Garavan, 2016; akar and Ert urk, 2010). This entails thinking about innovation from the eyes of workers.

#### *Innovative Work Behavior*

According to Stan et al 2014, most of the researchers used definition of innovation West and Farr (1990), which states that an innovation should be novel to a particular context rather than completely new. Most firms know that individual ingenuity may be profitable. Amabile (1988) asserts that for a business to get a competitive edge and experience extraordinary success in the marketplace, it is imperative that its personnel feel excited about utilizing IWBs. This unique model introduced the first theory of organizational innovation, aiming to clarify the connection between self-determination and organizational innovation, as well as the mutual influences between the two (Amabile and Pratt, 2016). Considering this concept, several facets of creative conduct have been investigated. A thorough examination of the evidence indicates that environmental, organizational, and individual factors all affect creativity (West and Farr, 1990; Kheng et al., 2013). But when it comes to IWB, the idea that everything begins with the individual has led to an emphasis on personal attributes (Scott and Bruce, 1994). The concrete conceptual model proposed by Ramamoorthy et al. (2005) may be used to derive the idea of IWB variables. They contended that a unified estimator framework's effect at various job levels determines the efficiency of IWB, as opposed to the influence of a binary classifier. Indeed, they claimed that aspects of the work, such emotional support, occupational control, and on-the-job training, enhance IWB.

#### *Work Uncertainty as Moderator*

Work uncertainty (WU) refers to the unpredictable and often uncertain nature of work environments, where various sources of ambiguity can impact both employee performance and well-being. It includes factors such as task uncertainty, resource availability, and input/output variability, which can significantly influence job satisfaction and organizational outcomes (Leach et al., 2013). Entrepreneurial and managerial traits, as well as skills, enthusiasm, and ability, are critical for SMEs to survive in a volatile economy. Entrepreneurial skills and qualities, such as corporate psychographic features, have been studied extensively. Entrepreneurs need leadership traits and experience, particularly opportunity orientation, creativity, and people skills, which may help them articulate their intended future image and inspire others to follow in their footsteps. In the framework of

psychological conditions for perceiving personal happiness by eliminating job insecurity, self-determination theory (SDT) is significant. Because shared ancestry, competency, and independence are universal psychological requirements, self-determination theory (SDT) posits that work settings that support these requirements improve self-initiative, psychological wellbeing, and job engagement by minimizing work ambiguity. Business owners stand out among legislators for their capacity to foster a feeling of community while being positive about the future. According to the definition, community involvement is the act of entrepreneurs cultivating a good cast of workers in order to establish strategic relevance. Future orientation, on the other hand, focuses on how corporate leaders may demonstrate their foresight and lead by example in an unpredictable environment by lowering workplace job insecurity. Decisions that are based on accurate future estimates are more likely to be successful. By communicating a compelling vision, being adaptable, and removing some ambiguity, entrepreneurial leaders stimulate opportunity awareness, inventiveness, and proactivity in small and medium-sized businesses (SMEs). An industry leader's job is to guide the creative processes within their firm. It is the leader's responsibility to create an environment where all employees may produce and apply new ideas, therefore contributing to creative practices. Entrepreneurial mindset enables workers to take risks and lowers job insecurity by fostering a supportive workplace. "A lack of reliability in work duties and needs" is a good definition of work uncertainty. Uncertainty is usually linked to temporary employment, unemployment, or a combination of the two. The sector is rapidly changing, and the unpredictability of the advancements adds to the worry. Employee productivity may drop as a result of the company's employment insecurity. Despite theoretical and empirical data, no empirical studies on the involvement of WU in the EL and PWB interaction have been conducted. This is a problem. This research aims to fill a gap in the literature. The present research is referred to as a "self-paradigm of job motivation." It explains how leadership and communication abilities are linked to personality traits like PWB and job instability. Workers are increasingly expected to engage in proactive conduct, which is described as "a set of soul, action behavior geared at changing the circumstance or oneself to achieve enhanced personal or organizational success." Insecurity, intricacy, and uncertainty characterize today's workplace. Employee morale is regarded to be boosted by autonomy and relatedness, according to SDT. To alleviate work insecurity, the entrepreneurial leader gives autonomy and intimate connections in motivating, resulting in proactive behavior on the part of employees.

#### *Employee Ambidexterity as Mediator*

Employee ambidexterity (EA) is defined as the ability of individuals to utilize existing resources and explore new opportunities within an organization. This dual capability is becoming increasingly important for enhancing both individual and organizational

performance in different sectors. Supportive organizational structures and cultures that encourage innovation and risk-taking enhance EA (Joseph et al., 2023). Additionally, style of leadership that encourage both exploitative and explorative activities are significantly boosts employee ambidexterity (Slåtten et al., 2023).

Organizational ambidexterity is classified into two types: exploiting and investigation (March, 1991). Employee exploration includes things like new idea generation and implementation, finding competitive solutions, and creative thinking (Kang and Snell, 2009, Gibson and Birkinshaw, 2004). While exploratory operations might benefit a company, they can also be expensive and harmful. Exploitative activities, on the other hand, rely on existing knowledge bases to boost quality and productivity (Gibson et al., 2004; Kang and Snell, 2009). Firms that must constantly adjust their operations rely significantly on this type of labor, since every improvement in efficiency may increase the customer satisfaction and drive firm profitability. Organizational ambidexterity is the topic of ambidexterity study (Junni et al., 2013). As per Canils and Veld, ambidexterity is created in two ways (2016). The first concern is structural ambidexterity, which necessitates autonomous exploration and exploitation operations (Smith and Tushman, 2005). Others argue that organizational ambidexterity is impossible to establish owing to competing goals (March, 1991; Tushman and O'Reilly 1996). According to this viewpoint, exploration and exploitation necessitate different and incompatible organizational structures (Benner and Tushman, 2003). According to research in this field, there is a historical succession of innovation behavior (Puranam et al., 2006). Longer periods of extraction are usually interwoven with shorter periods of exploration (Levinthal et al. and March, 1993). Organizational architecture should be updated throughout time to facilitate both exploiting and explorative behavior (Nickerson and Zenger, 2002). To begin, context ambidexterity (Canils and Veld, 2016) is described as the ability to participate in both exploratory and exploitative behavior at the same time. According to Prieto et al. (2012), organizations may seek ambidexterity by providing an atmosphere that promotes individuals to pursue both goals at the same time.

#### *Organizational Support as Mediator*

Organizational support (OS) refers to the resources, structures, and processes that help organization to achieve its goals effectively. It includes the knowledge, skills, and capabilities necessary for achieving strategic objectives. By fostering these competencies, organizations are better equipped to adapt to innovations and sustain their competitive advantage (Khotijah et al., 2023). To preserve a competitive edge, businesses must figure out how to keep their skilled employees. Individuals' conduct and attitudes are impacted by the organization's support, as per organizational support theory (Eisenberger and Stinglhamber, 2011 and Eisenberger et al., 1997). This sort of connection has the potential to have a significant influence on how workers perceive the organization. As a result, POS

is seen as critical. The perspective of the firm's consideration refers to an employee's perspective on the organization's attention (Baran et al., 2012). The workers' belief in the value of their contributions is reflected in POS. It is also considered that the company places a high value on the well-being of its employees (Rhoades and Eisenberger, 2002 and Eisenberger and Stinglhamber, 2011). Employee impressions of fair treatment and job recognition from the company have a number of positive repercussions, including increased devotion, devotion, and success (DeConinck and DeConinck, 2017). POS is credited with a favorable individual outcome (Eisenberger 2011). It is also considered that the company places a high value on the well-being of its employees (Eisenberger 2011; Rhoades and Eisenberger, 2002). Employee impressions of fair treatment and job recognition from the company have a number of positive repercussions, including increased devotion, loyalty, and success (DeConinck 2017). POS is credited with a positive individual outcome (Eisenberger 2011).

### Research Model

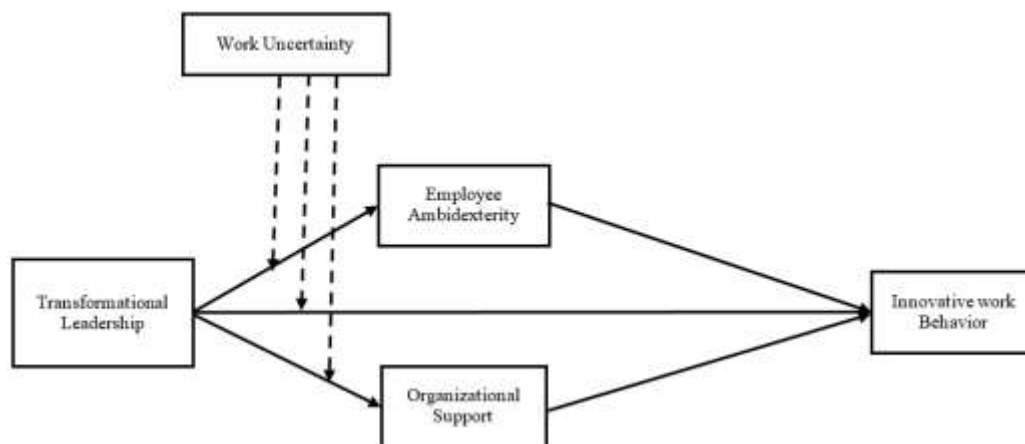


Figure 1: Research Model

### Hypothesis

*H<sub>1</sub>: There is a positive and significant impact of EA on IWB*

*H<sub>2</sub>: There is a positive and significant impact of OS on IWB*

*H<sub>3</sub>: There is a positive and significant impact of TL on EA*

*H<sub>4</sub>: There is a positive and significant impact of TL on IWB*

*H<sub>5</sub>: There is a positive and significant impact of TO on OS*

*H<sub>6</sub>: There is a positive and significant impact of WU on EA*

*H<sub>7</sub>: There is a positive and significant impact of WU on IWM*

*H<sub>8</sub>: There is a positive and significant impact of WU on OS*

*H<sub>9</sub>: EA significantly mediates the association among TL and IWB*

*H<sub>10</sub>: OS significantly mediates the association among TL and IWB*

*H<sub>11</sub>: EA significantly mediates the association among WU and IWB.*

*H<sub>12</sub>: OS significantly mediates the association among WU and IWB*

## **Methodology**

### *Questionnaire and Pre-test*

The current study examines the relationship between TL and IWB, in which the OS and WU act as mediators and the WU as a moderator. For this investigation, the questionnaire was primarily divided into two groups. (For example, questions on specific variables and demographic characteristics such as age, gender, group, and employment position/rank). It was decided to use both objects that have been proven to work in the literature and items that were altered to fit the goals of this investigation. All items were evaluated on a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree), 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly. In particular, Nayanananda Nilwala et al. (2017) adopted eight questions on transformational leadership; Tierney, Farmer, and Graen (1999) adopted nine questions on innovative work behavior; Leach et al. (2021) adopted nine questions on work uncertainty; Mom, Van Den Bosch, and Volberda (2007) adopted eleven questions on employee ambidexterity. Eisenberger et al. adopted nine questions related to organizational support (1986). This study's questionnaire was pretested on fifty small and medium-sized businesses.

### *Sampling technique and Data Collection*

A purposive sampling technique is used to target SMEs in Punjab, Pakistan. Data was gathered using Google forms. A link to an online survey created using Google Forms was forwarded to staff members of SMEs holding different managerial positions. The respondents were questioned about their thoughts on the research problem via a



questionnaire. The purpose of the study was clearly mentioned in the questionnaire. The investigator gathers 744 questionnaires from the participants. Due to problems in the remaining questionnaires that were chosen for assessing the results, some of them were not helpful.

## Findings

### *Introduction*

This current research portion is divided in 4 segments, discusses the findings of the statistical data analysis. In the first instance, descriptive statistics were employed to examine the respondents' characteristics and outcomes. The conclusions of the measurement model evaluation are described in the second section. Finally, the model's hypothesis testing and predictive significance are discussed.

### *Response Rate*

A total of 960 questionnaires were distributed to workers who are working on different position in SMEs in Punjab, Pakistan. This area was selected because there are many SMEs. All SMEs workers showed their willingness to take part in the online questionnaire survey. Table 4.1 shows the response rate of the sampled SMEs of Punjab, Pakistan. Out of the 960 questionnaires distributed, 815 questionnaires were returned. Nonetheless, 40 cases were omitted, of which 31 were incomplete. Hence, only 744 questionnaires which represented a valid response rate of 77.5% were used for data analysis. This response rate was obtained with tremendous effort and hard work. Furthermore, because of self-administered questionnaires, the response was fairly strong (Farouk, Abu Elanain, Obeidat, & Al-Nahyan, 2016).

Table 1 Response Rate

Sr. No.	Location colleagues	Distributed Questionnaires	Returned Questionnaires
01	SMEs of Okara City	30*16=480	397
02	SMEs of Lahore City	30*16=480	418
	Total	960	815

### *Data normality*

It is crucial to assess the data's normality distribution prior to employing inferential statistics, even if PLS-SEM does not require need the data has a normal distribution (Hair et al., 2007). Therefore, as recommended by Munro (2005), this study evaluated the data normality using the Skewness, Kurtosis, and histogram plots. Before implementing the Smart PLS program for hypothesis testing, the researcher utilized (IBM SPSS statistics 25) software to evaluate the data normality and for the screen and cleaning step. The skewness value should be

between -3 to +3 and the kurtosis value be between -10 to +10 is acceptable to prove the normal distribution. So the values of all items were between the standard values of Skewness and kurtosis. There were some missing values in the items of PSD and NER. Which was rectified by the researcher by using the SPSS rectifying the missing value technique. The researcher checked the demographics to check out the characteristics of the participants and applied the descriptive statistics tests by (IBM SPSS statistics 25) software to check out the characteristics of the data and the mean of the data. Reliability has been checked by (IBM SPSS statistics 25). ALL the items of the variables were reliable. No abnormality was found in the data. So the data was ready to apply to the test by Smart PLS Software.

#### *Common method bias*

A common error can be occurred even by a single questionnaire respondent. It was found in a study by Kock (2015) that using (PLS-SEM) partial least squares is prone to biases. Using (PLS-SEM), the author argues that complete collinearity may be utilized to measure the common method's effectiveness. In the analysis, the VIF value should be less than 5 when using the variance inflation factors (VIF) provided by the full collinearity test, and all of the VIF values in this study were less than 5. As a result, the independent variables have no correlation.

### **Results of Measurement Model Assessment**

#### *Convergent validity*

#### *Factor Loading, Average Variance Extracted (AVE), and Reliability*

The measurement model was evaluated using loadings, (AVE), and (CR) in order to confirm convergent validity. Both the (CR) value and the average variance extracted (AVE) value need to be greater than 5. A steady in the table means that the composite reliability (CR) value is more than 0.70 and the AVE values are more than 0.05. Here is a separate demonstration of the first- and second-order structures. Alpha should have a value of 0.70. Furthermore, factor loading needs to be higher than 0.05. EVERY value satisfies the requirements of the standard values for APHA, CR, AVE, and factor loading.

#### *Discriminant Validity*

Discriminant validity measures how well one variable can distinguish itself from other variables (Hair et al., 2010). Both the FLC and HTMT criteria were used to assess discriminant validity in this research (Henseler et al., 2015).

**Table 2 Survey respondents' demographic profiles**

<b>Items</b>			<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Gender	Valid	Male	398	53.5	53.5	53.5
		Female	346	46.5	46.5	100
Age	Valid	Up to 30	3	0.4	0.4	0.4
		31-35	13	1.7	1.7	2.2
		46-55	162	21.8	21.8	23.9
		41-45	355	47.7	47.7	71.6
		45+	211	28.4	28.4	100
Location	Valid	SMEs Okara City	356	47.8	47.8	47.8
		SMEs Lahore City	388	52.2	52.2	100
Designation	Valid	Directors	1	0.1	0.1	0.1
		Senior Managers	41	5.5	5.5	5.6
		Junior Managers	167	22.4	22.4	28.1
		Senior Employees	384	51.6	51.6	79.7
		Junior Employees	151	20.3	20.3	100

*Fornell and Larcker*

In order to evaluate discriminant validity using the FLC, the correlation values of other items were compared to the square root of the AVE for each component (Fornell and Larcker, 1981). The AVE square root coefficients are shown diagonally in the correlation matrix. To prove discriminant validity, the square root AVE values must be greater than the squared correlation estimates (Hair et al., 2006). Between the AVE square root values and the other variables, there was a statistically significant difference in correlation. All constructs demonstrated strong discriminant validity since all diagonal elements were higher than light of the fact elements in the relevant columns and rows. Researchers in this study also examined how objects were loaded across. Hair and colleagues (2010) have suggested loading estimations of 0.50 or larger and in the ideal case 0.70. The objects with low factor loadings, on the other hand, should be eliminated in the meanwhile. Aside from that, all elements of a build should be heavily loaded onto their respective structures (Hair et al., 2016). We found that all items had a greater factor loading than their cross-loadings in our investigation. Each indication had its underlying construct, thus there was no cross-loading between them.

*HTMT*

When it comes to discriminant validity, Henseler and coworkers (2015) offer advanced criteria (HTMT) and agree that FLC is an appropriate method to evaluate discriminant validity. In contrast, the FLC is unable to identify the absence of discriminant validity in a variety of study scenarios. To test the constructs' discriminant validity, the HTMT was employed and its results are shown in Table 3 below. According to Gold et al. (2001), none of the constructs had a discriminant validity value of more than 0.90.

**Table 3**

<b>Variable</b>	<b>Item</b>	<b>Outer Loading</b>	<b>Alpha</b>	<b>C.R</b>	<b>AVE</b>
Innovative Work Behavior	IWB1	0.861	0.959	0.965	0.751
	IWB2	0.871			
	IWB3	0.893			
	IWB4	0.819			
	IWB5	0.866			
	IWB6	0.9			
	IWB7	0.85			
	IWB8	0.89			
	IWB9	0.848			
Work Uncertainty	WU7	0.89	0.859	0.914	0.78
	WU8	0.858			
	WU9	0.901			
Employee Ambidexterity	EA1	0.888	0.929	0.945	0.741
	EA2	0.913			
	EA3	0.906			
	EA4	0.911			
	EA5	0.723			
	EA6	0.807			
Transformational Leadership	TL1	0.908	0.947	0.959	0.825
	TL2	0.893			
	TL3	0.905			
	TL4	0.942			
	TL5	0.892			
Organizational Support	OS1	0.662	0.86	0.9	0.645
	OS2	0.88			
	OS3	0.881			
	OS4	0.836			
	OS5	0.734			

**Table 4. HTMT (First Order Constructs)**

Variables	1	2	3	4	5
Employee Ambidexterity	0.861				
Innovative Work Behavior	0.862	0.867			
Organizational Support	0.806	0.849	0.803		
Transformational Leadership	0.795	0.812	0.749	0.908	
Work Uncertainty	0.819	0.83	0.81	0.722	0.883

**Smart PLS-SEM Results***Structural Model*

After the models and data have been measured, the hypothesis will be tested. The researcher decided the model's significance using standard errors and t-values. Smart PLS 3 was used to assess the indirect and effects of the hypothesis using the bootstrapping approach (Ringle et al., 2005). The theory has been tested in two parts. The first table of the path analysis shows the direct influence of the primary factors, while the second table shows the indirect hypothesis analysis. So in the first table of the path analysis, as displayed, EA has a significant and positive relationship with IWB ( $\beta$  0.264, Std 0.078, T-Value 3.388, P-value 0.001, LL 0.131, UL 0.413). The values of the relationship were under the acceptable range. Thus H1 is supported. Moreover Moderating effect 1 has significant and positive relationship with IWB ( $\beta$ =0.092, std = 0.038, t-value=2.434, p-value =0.015, LL= 0.007, UL=0.159). The values of the relationship were under the acceptable range. Thus H2 is supported. Moreover, Moderating effect 2 has insignificant but positive relationship with OS ( $\beta$ =0.033, std =0.045, t-value= 0.742, p-value=0.458, LL= -0.063, UL= 0.106). The values of the relationship were not under the acceptable range. Thus H3 is not supported. Moreover, Moderating effect 3 has significant and positive relationship with EA ( $\beta$ =0.088, std = 0.032, t-value = 2.795, p-value= 0.005, LL = 0.008, UL= 0.146). The values of the relationship were under the acceptable range. Thus H4 is supported. Moreover, OS has significant and positive relationship with IWB ( $\beta$ = 0.231, std = 0.063, t-value = 3.67, p-value = 0.000, LL = 0.1, UL = 0.348). The values of the relationship were under the acceptable range. Thus H5 is supported. Moreover, TL has significant and positive relationship with EA ( $\beta$  = 0.497, std = 0.056, t-value = 8.815, p-value= 0.000, LL = 0.382, UL =0.605). The values in the relationship were under the acceptable range. Thus H6 is supported. Moreover, TL has significant and positive relationship with IWB ( $\beta$  = 0.338, std = 0.078, t-value = 4.311, p-value = 0.000, LL = 0.179, UL = 0.479). The values of the relationship were under the acceptable range. Thus H7 is supported. While, TL has significant and positive relationship with OS ( $\beta$  =0.37, Std =0.077, T-value= 4.827, P-value= 0.000, LL=0.218, UL=0.499). The values of the relationship were

under the acceptable range. Thus H8 is supported. Moreover, WU has significant and positive relationship with EA ( $\beta = 0.549$ , Std = 0.061, T-value= 9.061, P-value= 0.000, LL=0.427, UL=0.657). The values of the relationship are under the acceptable range. Thus H9 is supported. Moreover, Work Uncertainty has significant and positive relationship with IWB ( $\beta = 0.169$ , Std = 0.053, T-value= 3.21, P-value= 0.001, LL=0.058, UL=0.265). The values of the relationship were under the acceptable range. Thus H10 is supported. Moreover, Work Uncertainty has significant and positive relationship with OS ( $\beta = 0.576$ , Std = 0.073, T-value= 7.912, P-value= 0.000, LL=0.419, UL=0.698). The values of the relationship were under the acceptable range. Thus H11 is supported.

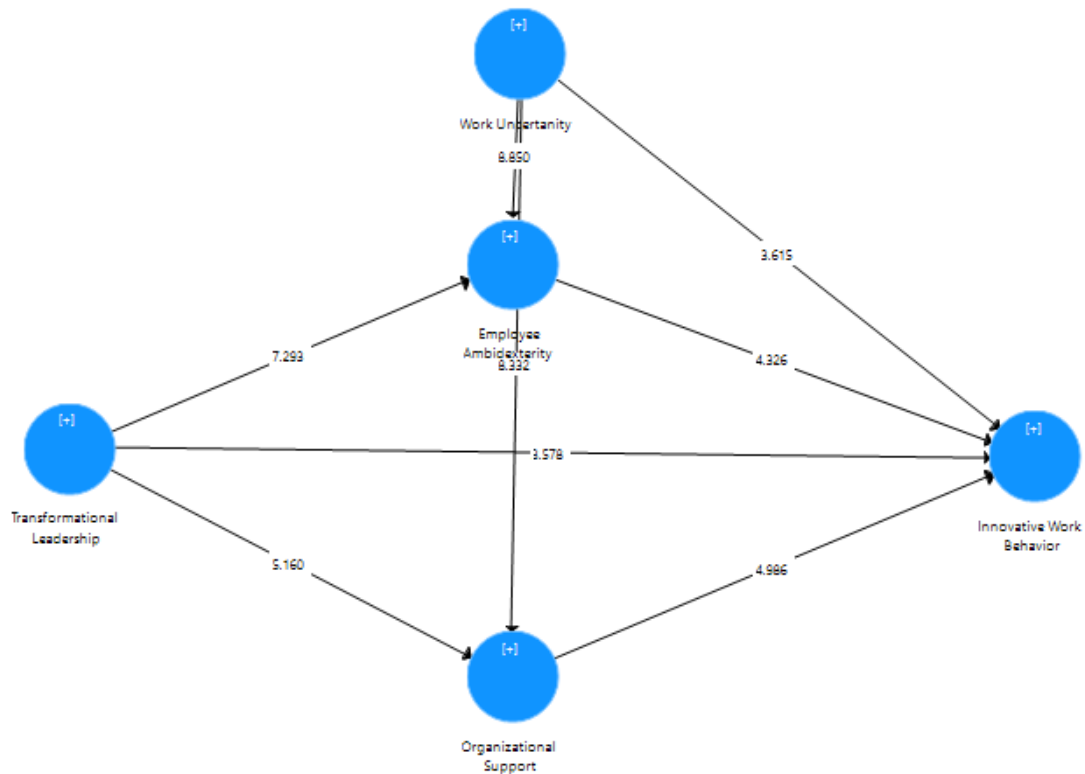


Figure. 2. Measurement model assessment.

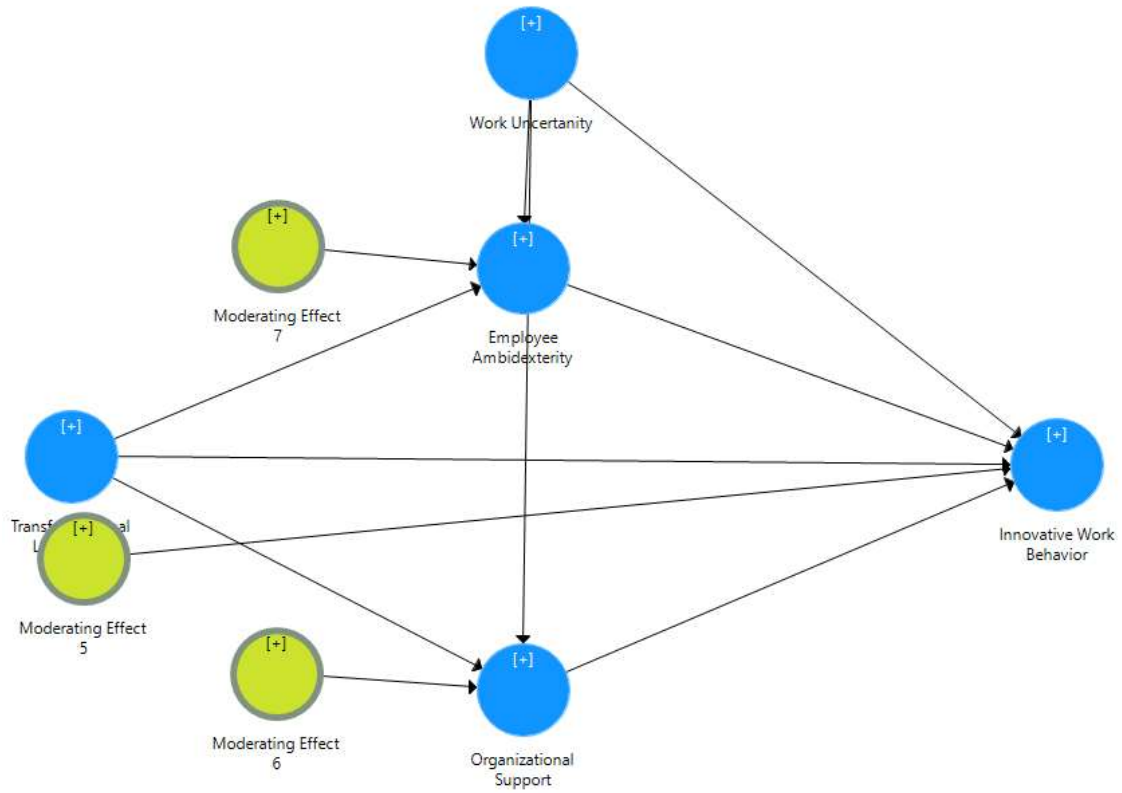


Figure 3 Structural model assessment

**Table 5. Path Coefficients Analysis**

Items	Beta	S.D	T-Value	P-Value	LL	UL	Result
EA -> IWB	0.264	0.078	3.388	0.001	0.131	0.413	Supporting
Moderating Effect 1 -> IWB	0.092	0.038	2.434	0.015	0.007	0.159	Supporting
Moderating Effect 2 -> OS	0.033	0.045	0.742	0.458	-0.063	0.106	Not Supporting
Moderating Effect 3 -> EA	0.088	0.032	2.795	0.005	0.008	0.146	Supporting
OS -> IWB	0.231	0.063	3.67	0.000	0.1	0.348	Supporting
TL -> EA	0.497	0.056	8.815	0.000	0.382	0.605	Supporting
TL -> IWB	0.338	0.078	4.311	0.000	0.179	0.479	Supporting
TL -> OS	0.37	0.077	4.827	0.000	0.218	0.499	Supporting
WU -> EA	0.549	0.061	9.061	0.000	0.427	0.657	Supporting
WU -> IWB	0.169	0.053	3.21	0.001	0.058	0.265	Supporting
WU -> OS	0.576	0.073	7.912	0.000	0.419	0.698	Supporting

Note: \*p < 0.05 (t > 1.65); \*\*p < 0.01 (t > 2.33)

**Table 6: Specific Indirect Effects**

Mediation	Beta	S.D	T-Value	P-Value	LL	UL	Result
TL -> EA -> IWB	0.131	0.041	3.167	0.002	0.062	0.225	Supporting
TL -> OS -> IWB	0.085	0.03	2.858	0.004	0.029	0.147	Supporting
WU -> EA -> IWB	0.145	0.046	3.177	0.002	0.065	0.234	Supporting
WU -> OS -> IWB	0.133	0.039	3.374	0.001	0.057	0.207	Supporting

Note: \*p < 0.05 (t > 1.65); \*\*p < 0.01 (t > 2.33)

## Discussion and Conclusion

This study examines how EA and OS explained the relationship of TL and IWB by the mediation effect and how the WU plays the moderation effect among the relationship of TL and IB. By examining these correlations, we can better understand the contextual element, such as TL, that encourages people to take initiative in their job and be more productive. The aim of the study was to fill the gap from the existing literature about this topic, which is mostly overlooked and under-researched. The results of this study showed a strong correlation among TL, WU, and IWB. The current study is investigating the relationship of TL on IWB in which the Moderating role is of the WU and Mediating role is of the EA and OS. During this investigation, the questionnaire was primarily divided into two groups. (e.g., questions related to selected variables, and about demographic characteristics for example age, gender, group, and employee position/rank). It was decided to use items that have been verified in the literature as well as items that were adapted for this study's goals. Specifically, eight questions on TL were adopted by the Nayananda Nilwala et al., (2017), and nine



questions on IWB Behavior were adopted by the Tierney, Farmer and Graen (1999), nine questions on WU were adopted by the Leach et al. (2021), eleven questions on employee ambidexterity were adopted by the Mom, Van Den Bosch, and Volberda (2007). Nine questions on OS were adopted by the Eisenberger et al. (1986). Results showed H1 is supported. Moreover Moderating effect 1 has significant and positive relationship with Innovative work behavior Thus H2 is supported. Moreover, Moderating effect 2 has insignificant but positive relationship with OS, Thus H3 is not supported. Moreover, Moderating effect 3 has significant and positive relationship with employee ambidexterity, Thus H4 is supported. Moreover, OS has significant and positive relationship With IWB, Thus H5 is supported. Moreover, TL has significant and positive relationship with EA, Thus H6 is supported. Moreover, TL has significant and positive relationship with IWB, Thus H7 is supported. While, TL has significant and positive relationship with OS, Thus H8 is supported. Moreover, WU has significant and positive relationship with EA, Thus H9 is supported. Moreover, WU has significant and positive relationship with IWB, Thus H11 is supported. So in a nutshell, all the hypothesis are positively and significantly supported except the mediating effect 3 with EA.

### **Limitations and Future Direction**

The OS has been used as the Mediating variable, in the future, research may be carried out using different mediators other than EA and OS. Likewise, the research has been conducted on SMEs while futures study may focus on other enterprises which may show dissimilar results.

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