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HOW LEADERSHIP STYLES EFFECTS CONTINUOUS IMPROVEMENT AND INNOVATION: A MEDIATION & MODERATION MODEL

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| KEYWORDS   | ABSTRACT  |
|--|---|
| Transformational leadership, Inclusive Leadership, Psychological Safety, Perceive Organizational Support, Continuous Improvement, Innovation | This study aims to analyze and compare two direction graces and their effect on employee innovation & continuous improvement. This research is unique in nature and first to explore combined effect of leadership styles and their output and unique mediation and moderation effect. Study used structured questionnaire for data collection purpose that was distributed in employees to voluntarily participate in the survey and responded to the questions using a self-administration technique. After collecting required information, data has been analyzed over SPSS. This study aims to find results of research model were supported by extensive literature review, mainly on transformational leadership style and relation with innovation and continuous improvement. In this current study, empirical relationships will be explored with mediation and moderation effects. Consequently, the current research provides input to the organizations as to how they can face challenges in future. Best leaders make healthy relation with employees and motivate them to work. With the support of leaders, employees enjoy working in organizations and indulge in day-to-day activities. |
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#### INTRODUCTION

In current globalization world, with innovation new technologies and techniques, uninterruptedly rising and changing market situations along worldwide financial crises, Organizations are bound to adopt new and unique ways and process to keep them at the top level. Leaders are a key source of information and employees rely upon leaders and look for insights. It's been long to recognize the innovation as vital for the survival of an organization that leads towards its betterment and success (Amabile, 1988; Jiang & Chen, 2018; Zacher & Rosing, 2015). While the best deal of attention has

been given to innovation on both individual and organizational level (Chen, Zheng, Yang, & Bai, 2016; Damanpour & Schneider, 2006; Gumusluoglu & Ilsev, 2009), it has been examined that team level innovation or inclusive leadership style can be trivial as compare to other variable in diverse situations (Eisenbeiss, Knippenberg & Boerner, 2008; Tang & Naumann, 2016). Innovation and creativity can be generated through team work but it can be ill-fated for organization (Pirola & Mann, 2004: 255), and the team work cannot be denied in this modern era due to competitors available in the environment so the team work or inclusive leadership in this modern era are very helpful to achieve the targets and goals (Eisenbeiss et al., 2008; Lyubovnikova, Legood, Turner, & Mamakouka, 2017).

Consequently, it cannot be surprised that teams have been essential and important topic in theory and practice (Jiang & Chen, 2018; Rosing, Tang & Naumann, 2016). On the other hand, when the inspiration, motivation and encouragement to be get emphasized then transformational leadership is attracted and get much attention in innovation literature (Jiang & Chen, 2018; Keller, 2006). It is very challengeable to get the employee efficiency towards their job satisfaction to keep them productive. Transformational leadership style does extra with the employees of an organization in a way to keep them motivated by implementing the four core components of such leadership style including idealized influence, intellectual stimulation, inspirational motivation and individualized consideration. Bass, Avolio, Jung and Berson (2003) suggested that the transformational leaders just do their work in a way that keep the employees motivated as it is the challengeable task. Thus, leaderships is important element and crucial predictor for the desired innovation as study has also been conducted by Shurbagi and Zahari (2012) regarding relationship by implementing the transformational leadership style in National Oil Cooperation, Libya and found a very positive / better change among the employees. Transformational leadership style also motivates employees by using their skills.

It is very important to keep in mind when transformational leadership style occurs in organization then it creates a dependency of the individuals towards leaders so it can produce the less proactive employees, that also change the behaviors of individuals towards effectiveness. (Kark et al., 2003; Li et al., 2016). In continuation of this, transformational leadership is considered to be very wideranging style that increase the factor of innovation and creativity in an organization. (Han, Luo, & Zhong, 2016; Rosing et al., 2011; Zacher & Rosing, 2015). This study will help that which one style of leadership is more proactive and innovative then studies responded that inclusive leadership style might be applicable in current era that is directly related towards innovation in an organization. (Hülsheger, Anderson, & Salgado, 2009; Jiang & Chen, 2018; Lyubovnikova et al., 2017). It is thus further studied according the theories contingency theory (Fiedler, 1971) as well as the situational leadership theory (Hersey & Blanchard, 1969) expresses that the leadership share the ideas that leadership is a common theory/community theory, so the desired understanding cannot be done in separation beyond the situation to which it belongs. The main objective of the said study describes and examines that when and how these leadership styles are related to achieve the organizational targets; innovation.

#### LITERATURE REVIEW

# Transformational Leadership

The organizations work hard to reach their objectives in today's competitive atmosphere (Paracha, Qamar, Mirza, Hassan & Wagas, 2012). The leaders in organizations, which help workers to achieve their aims and goals, play a crucial part. Leadership is described as an individual's ability to lead a group to achieve common objective (Marie-Christine (2007). This is procedure where an individual communicates, motivates and helps the employees of firm to achieve their objectives (Chaudhry & Javed, 2012). Leaders increase the performance of employees and make them happy in their jobs. As such, for many years it has been a controversial matter (Islam, Aamir, Ahmed & Muhammad, 2012). Performance and pleasure in employment are significantly linked to leaders who consider employees to be a vital asset, engage them in decision-making and understand their needs (Wang & Rode, 2010). In this connection, the style of transformational leadership has an important impact on staff innovation and is suitable to identify the new chances and to improve organizational skills. Employees' trust and values are boosted by transformational leaders, and as a result, the employee's output exceeds expectations (Bushra, Usman, & Naveed, 2001). Thus, the researchers recognize that transformational leadership is the powerful approach to manage human creativity at high levels (Gong et al., 2009).

# Inclusive Leadership

Inclusive leaders encourage the engagement of the employees and take on new employee ideas (Carmeli et al. 2010; Pless and Maak 2004), in order to encourage fresh ideas and viewpoints shared by employees, on the one hand, the characteristics of the openness even leading acts can increase employees' perception of their organizational affiliation and uniqueness (Randel et al. 2018), which in return can encourage the self-esteem of employees and stimulate their vocal promotion (Liang et al. 2012).

## Psychological Safety

The psychological safety of employees is greatly strengthened when the behavior of leaders is more open, available and accessible (Carmeli et al. 2010). In this linking, employees mostly inclined for seeking guidance from their leaders in order to prevent errors, enhance the capacity and create confidence through training and development. The position of leaders to advise, trust and respect can strengthen psychological safety of their colleagues, excite emotions and make them inspired to work more likely.

## Perceived Organizational Support

In recent times, the organizations are moving to become a people-oriented and take steps about the employee's well-being. Due to competition in talent market organizations pay importance to HR functions, and paid attention to retain, hire, and development of employees (Srikanth, 2019; Islam and Ahmed, 2018). In this connection, these arguments provide the base to evaluate the impacts of the initial steps of organization for employees in different situations to gain organizational success (Khawaja, 2020).

#### Continuous Improvement

New methods of working are constantly enhanced, to energetically and regularly make practice changes (Anand et al. 2009). This experimental method leads to a continual flow of the advanced

inventions (Bessant & Francis 1999). Such skills include an organizational design and environment in which organizational members constantly improve and learn. Continued improvements lead to better operational and financial performance by eliminating superfluous variability and reducing additional non-value operations, boosting quality and pleasure of customers (Hopp & Spearman 2004). Continuous improvement seems to be a fitness element that enhances the efficiency of other practices (Bortolotti et al. 2015). Leadership (Zu, Robbins & Fredendall 2010), building a culture for continuous improvement (Iranian, Beskese & Love 2004), participatory objectives of constant development (Jurburg et al. 2017), empowerment (Hirzel, Leier & Fredendall, 2017), information and observatory enactment management are key factors in continuous development (Germany et al. 2018; Eaidgah et al. 2016).

#### Innovation

Innovative products, services/processes are buried in an enterprise. The product, services or process changes based on fresh ideas that strengthen the relationship of innovation (Igbal & Hameed, 2020; Rahman & Ramos, 2012). It is important as engine to deal with the worldwide economic pressure, imbalanced economic markets, technical complications, science, new market hope and consumer-related information (Saguy, 2011). Organizations must Innovative through the development of new items or procedures to remain competing in global marketplace (Solleiro & Castañón, 2005). The innovation process is a description of all physical and cognitive acts performed by staff to achieve the interdependent innovative tasks essential to produce new ideas and innovations (Mueller & Kamdar, 2011). In this connection, the most recent available and accessible research shows that not just in a specific working group, unique ideas are created but also in the workplace in the context of working difficulties (Amabile, 2013; Taggar, 2002). Therefore, it is because staff learn informally from working together and consulting one other in the face of problems in the social environment (Marsick & Watkins, 2001).

# Hypotheses Development

This research chapter includes theoretical and conceptual reflections on the research variables, as well as meanings of concepts. While analyzing the literature, it is assured that the critical analysis is carried out. In this chapter, gaps are also established, and information from the literature is given. Also, hypotheses with complete theoretical rationale are also a valuable feature that contributes to the overall study.

## Transformational leadership

Para et al. (2018) study recommended special emphasis in mediation upon the linked components. Transformation management supports greater company efficiency, but it remains uncertain what mediates amid those two elements (Para et al., 2018). This emphasis on transformation leadership's association with strong success is particularly important because companies have to be innovative to their systems and commodities to achieve strategic edge and to produce successful results (Della et al., 2018). The aim of leader is, throughout this report, to give workers with actual vision, support and promotion and to meet development needs to achieve environment targets of organization, as well as to fulfil their needs (Mittal & Dhar, 2016). It encourages new skills and engages in green processes and practices to enhance products, enables companies to provide green and marketable

products/services (Andriopoulos & Lewis 2010) and boost conservational efficacy (Andriopoulos & Lewis 2010; Dranev et al., 2018). The aim of present study is to reveal, including transactional and transformational brand leadership, how 'in-role brand behavior' and 'extra-role brand behavior, influence diverse forms of brand leadership. Development of innovative culture, empowerment and inspiration to trust and recognize with organization vision that affects the company innovation and organizational performance is part of transformation management amid many styles of leadership (Mittal & Dhar, 2015).

# Psychological Safety

The psychological safety enables group and individual reflection, cognitive and distinctive thought capabilities leading to higher results, performance as well as learning behavior (Edmondson, 1999). In previous studies psychological safety construct, including its impact, was considerably examined in diverse working environments (Edmondson, 1999). Psychological safety is a crucial intellectual state to develop new the knowledge and bring about change, according to Edmondson (1999) and Kahn (1990). Various behavioral outcomes, such sharing information, creativity, learning attitudes and behaviors and organizational citizenship, could arise from this standpoint. Relations between psychological safety and its possible impacts such as learning, generation of knowledge, as well as performance were examined in an empirical study by Choo et al (2007). Leaders are seen to have a good influence on the psychological safety. In this connection, transformational leaders help create environment best suited to learning (Isaksen & Akkermans, 2011). Therefore, such leaders promote psychological safety that enables people to openly express their thinking, motivates them to grow by taking chances and looking for the new experiences (Wanless, 2016). Transformational leaders impact followers by putting out remarkable aims and acting as examples of role exemplary (Zaman et al., 2019b), since they have "transformational effects" over effective engagement with employees (Zaman et al., 2020).

H1: Transformational leadership have significant & positive relationship with Psychological Safety.

# Inclusive Leadership

Inclusive leadership has become more and more means of gaining greater creativity for researchers and practitioners (Randeletal et al., 2018) to settle different employees. Leaders show transparency, accessibility and accessibility in their relationships with supporters. Previous studies focused mostly on creativity's positive impact via inclusive leadership (Carmeli et al., 2010). Including leadership, team creativity has boosted (Yi et al., 2019). The research focused mainly on the single intellectual mechanism, particularly optimistic mechanisms through inclusive leadership has beneficial impact on creativity (Carmeli et al., 2010). Recently, Busse et al. (2016) created a major theory dubbed the antecedent benefit-cost framework, which stated that ancestor variable has contradictory impact over two different mediation variables on reliant variable. This helps subordinates to assume that fresh ideas are recognized, promoted and do not suffer from failure, so that subordinates can obtain psychological certainty. Empirical investigations have shown that management transparency and good relationships promote mental security (Li et al., 2015). Even leadership allows subordinates to feel psychologically safe to do creative work and therefore enhance inclusiveness of subordinates in creative activity. Previous studies show that psychological safety is cognitive process of subordinate

conduct (Zhang, 2019).

H2: Inclusive leadership have a significant and positive relationship with the Psychological Safety.

# Continuous Improvement

Employee participation and commitment are intimately linked to continuous improvements (Costa et al. 2019). Therefore, a variety of histories of increased employee participation and engagement in enhancement programs are described in production and operational manuals, like responsibility, objective definition participation, decentralized decision-making, measuring performance systems, financial and non-financial awards and training (Marodin & Saurin 2013). In fact, training was promoted to increase the self-efficiency of employees, so as to grow them continuously (Ciarapica, & Sanctis 2017). The uses of systematic training programs in firms on different levels have also been explored. Employee involvement and dedication are closely tied to continuous improvement (Costa et al. 2019). Also, Anand et al. (2009) noted that organized groups are continuously developing a climate and infrastructure at various organizational levels and using the use of matching tools to implement structured improvement strategies. But the alleged increase in training in this common improvement strategy for the involvement of both employees and the efficiency of the organization are still not scientifically proven in our best knowledge. The continuous improvement, which is the active and repeated process changes, is the systematic use of new work ways (Anand et al. 2009). The process of learning about the progressive build-up of the experiments is constant development (Bessant & Francis 1999).

H3: The Psychological Safety have the significant relationship with the continuous improvements.

#### Innovation

An enterprise contains innovative products, services or procedures. The product, service or process modifications based on new ideas, that reinforce innovation relationships (Igbal & Hameed, 2020; Rahman & Ramos, 2012). As an engine it is vital to tackle global economic pressure, imbalanced economic marketplaces, technical obstacles, science, new market hope and knowledge about the consumers (Saguy, 2011). The organization needs to be innovative by developing new products or processes in order to remain competitive on the global market (Solleiro & Castañón 2005). The innovation process is summary of all physical and cognitive actions performed by staff to complete the innovative and interconnected tasks needed to produce new ideas or inventions (Mueller & Kamdar, 2011). It is also fair to assume that creative results have led to new goods or methods and have a positive impact on the entire business, because support for creativity findings on individual levels (Chong & Ma, 2010; Oldham, 2002). Chesbrough (2003) says innovation is organization's paradigm, which allows external and internal ideas to utilize same market channel both externally and internally.

H4: Psychological Safety have a substantial relationship with Innovation.

H5: PS enables substantial association amid transformational leadership, continuous improvement.

H6: PS facilitates significant association between the transformational leadership and innovation.

H7: PS intervenes substantial association between inclusive leadership 7 continuous improvement.

H8: Psychological Safety intervenes significant link between inclusive leadership and innovation.

# Perceived Organizational Supports

Perceived organizational assistance (POS) is a measure of employee welfare and an appreciation of their effort (Eisenberger et al., 1986). A significant body of scholarship has been dedicated to his study since its appearance in literature. On the contrary, studies on repercussions reveal that high POSs exhibit results which benefit employees and the organization (enhancing work performance and happiness) (Kurtessis et al., 2017). Accordingly, in our study we propose that POS for employees is also socially built idea, which is influenced by information obtained from their direct employees. Recently, corporations have become a person and take actions on well-being of their employees. As talent markets are competing, HR roles are of importance and employee retention, recruitment and development are taken care of (Srikanth, 2019; Islam & Ahmed, 2018). These ideas give the basis for assessing the effects of employees' early initiatives to achieve business success (Khawaja, 2020). Various studies remove perception of employee's corporate assistance will thus immediately boost work performance and dedication when employees receive help from companies (Wu & Liu, 2014; Islam et al, 2018; Tremblay 2019).

H9: POS controls significant association to transformational leadership & continuous improvement. H10: The POS controls has significant link the transformational leadership as well as the innovation. H11: POS regulates has significant link with the inclusive leadership and continuous improvement. H12: Perceived organizational support significant association to inclusive leadership & innovation.

Transformational Leadership Style

Psychological Safety

Psychological Safety

Inclusive Leadership Style

Innovation

Figure 1 Proposed Hypothesized Model

#### RESEARCH METHODOLOGY

This study has opened the new avenues for research and empirically proved relationships. Bundle of study has investigated the relationships of leadership styles and learning out comes but this study is unique in finding psychological safety as mediator and perceived organizational support as moderator. The data for this study is gathered using a questionnaire. The primary goal of using a questionnaire to collect data is to get first and information. Present study has utilized Podsakoff (1990) questionnaire to take respondent on Transformational leadership. The use of 5-point Likert scale to get answers from teaching and non-teaching staff as 1=strongly disagree and 5=strongly

agree. This in turn can encourage the self–esteem of employees and stimulate their vocal promotion (Liang et al. 2012) questionnaire contain 9 items to collect responses on 5–point Likert scale as 1=SD and 5=SA.

The psychological safety of employees is greatly strengthened when the behavior of leaders is more open, available and accessible (Carmeli et al. 2010). Use of 5-point Likert scale to gather responses from respondent. Support from the organization will encourage the employees to make extra efforts in duties (Wang, 2015; Ahmad et al., 2020). Continued improvements lead to better operational and financial performance by eliminating superfluous variability and falling additional non-value operations, boosting quality and pleasure of customers (Hopp & Spearman 2004). Organizations must Innovative through the development of new items or procedures to remain competing in the global marketplace (Solleiro & Castañón, 2005). The innovation process is a description of all the physical and cognitive acts performed by staff to achieve the interdependent innovative tasks essential to produce new ideas and innovations (Mueller & Kamdar, 2011). Instrument was further refined and improved based on reliability, discriminant and convergent validity of data collected for the pilot study.

## **RESULTS OF STUDY**

To conduct this study, 500 questionnaires were spread to teaching and non-teaching staff working at different administrative levels. 350 questionnaires were received back. 10 responses deleted due to outlier and the further analysis process done by using 335 responses. Descriptive analysis has been given below. The summery of Mean, standard deviation, skewness and kurtosis and item - total co-relation for Transformational Leadership, inclusive leadership, psychological safety, perceived organizational support, continuous improvement and innovation is presented in table above. Above table has successfully shown the data normality as mean values are appropriate and Skewness & Kurtosis has value within the range of -3 to +3. Cronbach alpha for psychological safety is 0.884, continuous improvement 0.943, transformational leadership 0.905, the perceived organizational support 0.804, inclusive leadership 0.908 and innovation 0.935 the reliability estimates show good consistency among the items of achievement motivation goals scale, since all the values are greater than cut-off point of 0.6.

#### **Exploratory & Confirmatory Factor Analysis**

In factor analysis it is attempted to mix several inter-correlated variables commonly under one or more overall variables. A practical view point, EFA attempts to investigate collected data and extract underlying factors in order to best present the data (Hair, et al. 2010). Thus, the model generation began with EFA followed by CFA to confirm the measurement model. The SPSS was used to conduct basic factorial analysis with approximate spin & extreme prospect approximation. Bartlett test for sphericity highlights significance of overall association to constructs, which denotes the intercorrelation among the variables. Data is assumed suitable for factor analysis (i.e., CFA) if the p value for Bartlett's test of sphericity is less than 0.05, and secondly, value of MSA is greater 0.50. The final EFA included the remaining 30 items resulting in 6 different elements which are greater to 1.00 showing 67.841% cumulative variance. The values for the extracted factors ranged from 25.240 to 4.876. Additionally, the factor loading ranged from 0.969 to 0.674. No other factor

explained more than 10% of variance, indicating that there was no one, general factor present. The sample was considered adequate owing to the KMO value of 0.879. The value for Bartlett's Test of Sphericity was also significant, representing a strong relationship among the items. Communalities for all items were fairly high, indicating that the variables are adequately distinct from each other. Moreover, the factor correlation matrix shows that the correlations among the factors were less than 0.7, a cut-off point proposed by Hair et al. (2010) hence factorability of the correlation matrix was thus achieved.

# Confirmatory Factor Analysis (CFA)

Confirmatory factor analysis employed when Exploratory Factor Analysis didn't provide definite measurement examination (Babin, et al., 2008). In contrast to exploratory factor analysis, CFA needs suitable definition, construct before a confirmatory test of the measurement theory (Hair, et al., 2010). Generally, researchers are guided to modulate the constructs on the basis of previous theory/literature, and examine validity for the intellectualized modal assumed sample data. Byrne (2001) believed Confirmatory factor analysis is much appropriate as is applied. Additionally, confirmatory factor analysis offers a broad collection of fit indices for theoretical model evaluation (Terblanche & Boshoff, 2008). Based on the above–mentioned merits CFA was employed to test the significance of the conceptualized model with the collected data set. After EFA, a plausible model with nine constructs was identified. According to the pattern matrix from EFA, the proposed plausible measurement and structural model was subjected to the specification for both the latent variables (IV) and DV. Actually, before assessing the structure model, it is recommended that the measurement model may be validate. Thus, ss discussed earlier, five steps: starts with the model specification; then researchers are required to identify the model; third, estimation parameters need to be set; forth, measurement of goodness of fit indices (GoFI); and finally, model can be re-shaped on grounds of GOFI.

Table 1 Model Fitness

TLI

| Goodness-of-fit Indices                       | Desirable Range | Measurement Model |
|---|-----------------|-------------------|
| Absolute Measures                             |                 |                   |
| χ2  | Nill            | 763.725           |
| NC  | ≤5              | 1.958             |
| RMSEA   | ≤ 0.08          | .050              |
| able 2 Model Fitness  Incremental fit indices |                 |                   |
| NFI   | ≥ 0.80          | .908              |
| CFI   | ≥ 0.90          | .953              |

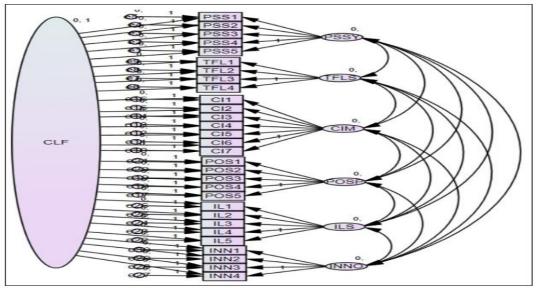
The GFI; Goodness-of-Fit, a statistical refers how well it fits a set of observations. Table 3.10 depicts a summary of goodness-of-fit indices with their respective desirable criteria employed the present learning.

 $\geq 0.90$ 

.943

Figure 2 Confirmatory Factor Analysis

Figure 3 Common Method Biseness



#### Common Method Bias

As pointed out, "method of unmeasured latent factor" proposed by Koff et al. (2003) was deployed for the test mutual method bias. As such, the further unmeasured common latent factor (CLF) was included to measure the model of confirmatory factor analysis. This common latent factor allowed control of the variance, attributing to gathering all measures with same method. In the next step, the CFA model and CLF results were compared with 0-factor measurement model. The outcomes show adding CLF didn't progress above-said method to appropriate. Different researchers have

proposed various remedies, but following Lowry et al. (2013) common latent factor was retained in the consequent structural model. By doing so, this study had effective control of effect of common method bias on the results.

#### **RESULTS OF STUDY**

This aims to find particular relationships of variables like, Direct relationship of transformational leadership and psychological safety, direct relationship of psychological safety with continuous improvement and innovation, inclusive leadership and psychological safety, TRF headship and continuous improvement & invention by having direct relationship among IL, CI & INN. In this study, there are for empirical relationship are explore with mediation and moderation effects. The study thus aimed to examine the desired relationships by using diverse techniques. So, first model to get linking between transformational leadership style and continuous improvement with impact of PS and moderation impact to perceive institutional support and thus the below mentioned are the leading hypotheses:

H1: TRF leadership have an important & good connection to PS.

H3: PS have an important connection to CI.

H5: PS intermediates an important connection b/w TRF & CI.

H9: POS moderates an important connection b/w TRF and CI.

Table 3 Hypothesis Testing

|    | • •                                 |         |        |         |           |
|----|-------------------------------------|---------|--------|---------|-----------|
|    | Path                                | UE      | SE     | P-value | Results   |
| H1 | $TRF \rightarrow PS$                | 0.4535  | 0.0451 | ***     | Supported |
| H3 | $PS \rightarrow CI$                 | 0.4758  | 0.2358 | 0.0445  | Supported |
| H5 | $TRF \rightarrow PS \rightarrow CI$ | 0.3362  | 0.0414 | ***     | Supported |
| H9 | POS                                 | -0.1133 | 0.0655 | 0.0847  | Supported |

Such data in above-mentioned stats exhibits important as well as good and substantial connection among TRF & psychological safety of substantial and positive relationship among psychological safety and continuous improvement. Statistics also satisfy assumptions of Baron and Kenny (1986). Direct relation of transformational leadership and psychological safety has  $\beta\!=\!0.4535$  and p=000 <0.05, and the impact of psychological safety on non-stop development / CI is  $\beta\!=\!0.4758$  with p = 0.0445. When intermediation impact of PS was analyzed b/w TRF & CI, value for coefficient decreased to  $\beta\!=\!0.3362$  with p=0.000<0.05. These facts shows that psychological safety positively intervene linking TRF and non-stop development. Moderation effect of perceived organizational support has  $\beta\!=\!-0.1133$  and p=0.0847, shows that perceived support negatively and significantly moderates the connection b/w TRF and non-stop development with intermediation impact of PS. Second model is the learning portrayed to analyses mediation impact of PS b/w transformational headship & innovation with moderation effect of perceived organizational support. Following table summarizes analyses results:

H4: Psychological Safety have important connection through Innovation.

H6:PS mediates the significant connection b/w TRF & invention.

H10: To perceive structural backing moderate's important connection b/w TRF & invention.

Table 4 Hypothesis Testing

|    | Path                                 | UE      | SE      | P-value | Results       |
|----|--------------------------------------|---------|---------|---------|---------------|
| H1 | $TRF \rightarrow PS$                 | 0.4535  | 0.0451  | ***     | Supported     |
| H3 | $PS \rightarrow INN$                 | -0.0445 | 0.0537  | 0.4074  | Not-Supported |
| H5 | $TRF \rightarrow PS \rightarrow INN$ | 0.0769  | 0.0505  | 0.1283  | Not-Supported |
| H9 | POS                                  | -0.0439 | -0.0397 | -0.0806 | Supported     |

The transformational leadership have positive and significant direct relationship with psychological safety but psychological safety does not have relation significant relation with innovation. These statistics do not fulfil the assumptions of Baron and Kenny (1986). So, psychological safety does not intermediate link b/w TRF and invention. Astonish facts of moderation effect as  $\beta$ = ~0.0439 and p= ~0.0806 shows that perceived organizational support negatively and significantly moderates relationship between psychological safety and innovation. Third aim of study is to get connection amid IL & continuous improvement over intermediating effect, psychological safety & restraining effect to get perceived organizational support.

H2: IL have important & good connection through Psychological Safety.

H7: Psychological Safety intermediates significant connection IL and non-stop development.

H11: Perceived organizational help moderates significant linking IL & non-stop development.

Outcomes of mediation model says that IL has the constructive and significant relation with  $\mathcal{E}$  psychological safety have had positive and significant relation with continuous improvement with  $\beta$ = 0.2473 and p=0.000<0.05. Third assumption of Baron and Kenny (1986) has not satisfied as inclusive leadership do not have significant relation with continuous improvement which shows that, in this model, mediation effect does not exist but perceived organizational support negatively and significantly moderate the relationship in this empirical model with  $\beta$ = -0.1330 and p= 0.0665 and 10% significance level.

Table 5 Hypothesis Testing

|    | Path                               | UE      | SE     | P-value | Results       |
|----|------------------------------------|---------|--------|---------|---------------|
| H2 | $IL \rightarrow PS$                | 0.1093  | 0.1570 | 0.0342  | Supported     |
| H3 | $PS \rightarrow CI$                | 0.2473  | 0.0426 | ***     | Supported     |
| H5 | $IL \rightarrow PS \rightarrow CI$ | 0.2473  | 0.0402 | 0.7164  | Not-Supported |
| H9 | POS                                | -0.1330 | 0.0722 | 0.0665  | Supported     |

Finally, present study is intended to find empirical connection b/w IL style  $\delta$  innovation through effects of psychological safety and moderation effect of perceived organizational support.

H8: Emotional protection/psychological safety intermediate significant link Inclusive headship / leadership & innovation.

H12: Perceived organizational provision controls significant connection b/w inclusive headship and invention.

It is necessary to analyses the assumptions of mediation model given by Baron and Kenny (1986). The facts demonstrations that comprehensive leadership have positive and important relation with

psychological safety as  $\beta$ = 0.1093 and p=0.0342. Psychological safety does not have significant relation with innovation but inclusive leadership style has positive and significant relation with innovation. Statistics given in table shows that model does not satisfy the mediation assumptions suggested Baron and Kenny, hence psychological safety does not intermediate the connection b/w inclusive leadership style and modernization, even perceived organizational support does not mediate this relationship.

Above-mentioned data, statistics are very strange, transformational leadership have positive and significant direct relationship with psychological safety but psychological safety do not have relation significant relation with innovation. These statistics do not fulfil the assumptions of Baron and Kenny (1986). So, psychological safety does not intermediate the connection b/w TRF and invention. Astonish facts of moderation effect as  $\beta$ = ~0.0439 and p= ~0.0806 shows that perceived organizational support negatively and significant moderates' relationship between psychological safety and innovation. Third aim of study is to get connection b/w IL & continuous improvement through intermediating effect, psychological safety and restraining the effect to get perceived organizational support.

H2: IL have important & good connection through Psychological Safety.

H7: Psychological Safety intermediates significant connection b/w IL& non-stop development.

H11: Perceived organizational help moderates significant connection b/w IL and non-stop development.

Outcomes of mediation model says that IL has constructive and the significant relation with and psychological safety have had positive and significant relation with continuous improvement with  $\beta$ = 0.2473 and p=0.000<0.05. Third assumption of Baron and Kenny (1986) has not satisfied as inclusive leadership do not have significant relation with continuous improvement which shows that, in this model, mediation effect does not exist but perceived organizational support negatively and significantly moderate the relationship in this empirical model with the  $\beta$ = -0.1330 and p= 0.0665 and 10% significance level.

Table 6 Hypothesis Testing

|    | · · · · · · · · · · · · · · · · · · · |         |        |         |               |
|----|---------------------------------------|---------|--------|---------|---------------|
|    | Path                                  | UE      | SE     | P-value | Results       |
| H2 | $IL \rightarrow PS$                   | 0.1093  | 0.1570 | 0.0342  | Supported     |
| H3 | $PS \rightarrow CI$                   | 0.2473  | 0.0426 | ***     | Supported     |
| H5 | $IL \rightarrow PS \rightarrow CI$    | 0.2473  | 0.0402 | 0.7164  | Not-Supported |
| H9 | POS                                   | -0.1330 | 0.0722 | 0.0665  | Supported     |

Finally, the present study is intended to find empirical connection b/w the IL style & innovation through effects of psychological safety and moderation effect of perceived organizational support. H8: The emotional protection / psychological safety intermediates the significant connection b/w Inclusive headship / leadership & innovation.

H12: Perceived organizational provision controls significant connection b/w inclusive headship and invention.

It is necessary to analyses the assumptions of mediation model given by Baron and Kenny (1986). The facts demonstrations that comprehensive leadership have positive and important relation with psychological safety as  $\beta$ = 0.1093 and p=0.0342. Psychological safety does not have significant relation with innovation but inclusive leadership style has positive and significant relation with innovation. Statistics given in table shows that model does not satisfy the mediation assumptions suggested BARON & KENNY, hence psychological safety does not intermediate the connection b/w inclusive leadership style and modernization, even perceived organizational support does not mediate this relationship.

Table 7 Hypothesis Testing

|    | Path                                | UE      | SE     | P-value | Results       |
|----|-------------------------------------|---------|--------|---------|---------------|
| H2 | $IL \rightarrow PS$                 | 0.1093  | 0.1570 | 0.0342  | Supported     |
| H3 | $PS \rightarrow INN$                | 0.2473  | 0.0426 | ***     | Supported     |
| H5 | $IL \rightarrow PS \rightarrow INN$ | 0.2473  | 0.0402 | 0.7164  | Not-Supported |
| H9 | POS                                 | -0.1330 | 0.0722 | 0.0665  | Supported     |

## Summary of Results

Current study purpose was establishment and authorize research model linking multi-dimensional and mediating relationship between transformational leadership, inclusive leadership, Innovation, continuous improvement, psychological safety and perceived organizational support. The results of research model were supported by extensive literature review, particularly on transformational leadership style and its relation with innovation, continuous improvement. Another relationship in the learning is analyses link Inclusive headship and its relation with innovation and continuous improvement. The background of leadership styles and their relation with other variables such as innovation and continuous improvement. To address research model, the results of EFA and CFA show that data is normal, valid and reliable and show model fitness. Results of research hypothesis are given in table below:

Table 8 Results Conclusion

|    | Path                                | UE      | SE      | P-value | Results       |
|----|-------------------------------------|---------|---------|---------|---------------|
| H1 | $TRF \rightarrow PS$                | 0.4535  | 0.0451  | ***     | Supported     |
| H3 | $PS \rightarrow CI$                 | 0.4758  | 0.2358  | 0.0445  | Supported     |
| H5 | $TRF \rightarrow PS \rightarrow CI$ | 0.3362  | 0.0414  | ***     | Supported     |
| H9 | POS                                 | -0.1133 | 0.0655  | 0.0847  | Supported     |
| H5 | TRF→PS→INN                          | 0.0769  | 0.0505  | 0.1283  | Not-Supported |
| H9 | POS                                 | -0.0439 | -0.0397 | -0.0806 | Supported     |
| H2 | $IL \rightarrow PS$                 | 0.1093  | 0.1570  | 0.0342  | Supported     |
| H5 | $IL \rightarrow PS \rightarrow CI$  | 0.2473  | 0.0402  | 0.7164  | Not-Supported |
| H9 | POS                                 | -0.1330 | 0.0722  | 0.0665  | Supported     |
| H2 | $IL \rightarrow PS$                 | 0.1093  | 0.1570  | 0.0342  | Supported     |
| H3 | $PS \rightarrow INN$                | 0.2473  | 0.0426  | ***     | Supported     |
| H5 | $IL \rightarrow PS \rightarrow INN$ | 0.2473  | 0.0402  | 0.7164  | Not-Supported |
| H9 | POS                                 | -0.1330 | 0.0722  | 0.0665  | Supported     |

First model, to get administrative help moderates connection negatively & significantly. Second purpose, currents learning is to get results of intervention impact for transformational leadership and innovation with mediating effect of emotional protection & restraining effect of perceived institutional support. Results show that, transformational leadership have positive and significant relation with innovation. The psychological safety does not significantly mediate the relationship between transformational leadership and innovation. Perceived organizational supports moderates this relationship negatively and significantly. The present study empirically proved that, inclusive leadership have positive and significant relation with continuous improvement. But psychological safety does not mediate desired relationship and perceived organizational support moderates the relationship negatively and significantly. It is concluded that, inclusive leadership have positive and significant relationship with the innovation but the psychological safety do not mediates their relationship and the perceived organizational support negatively and significantly moderate their relationship. Consequently, this study also outlined the theoretical and empirical contribution of the current study.

#### CONCLUSION

Leadership styles are very crucial in any organization and employees output strongly depends upon these styles. This study has attempted to compare two direction graces and their effect on employee innovation and continuous improvement. Intervention result of psychological safety  ${\mathfrak E}$ restraint result of perceived administrative support. In preliminary analysis, reliability, validity and normality of data was observed. The descriptive results of EFA, CFA and Cronbach alpha has shown the data reliability, validity and normality. Finally, the direct, mediation and moderation relation of variables are analyzed. With the support of leaders, the employees enjoy working in organizations and indulge in day-to-day activities. Self-satisfaction of employees leads them to continuously improve them self and provide innovative ideas to boost efficiency of organization. Transformational leadership and inclusive leadership have positive and significant relation with employee innovation and continuous improvement. Therefore, psychological safety mediates only transformational leadership and continuous improvement. Consequently, perceived organizational support negatively and significantly moderate the relationships. This research is unique in nature and first to explore combined effect of leadership styles and their output and unique mediation and moderation effect. This study is beneficial for policy makers and team leaders for better output and employee's task performance.

# Contributions & Implications

This study has taken initiative to compare both leadership styles with their impact on invention and continuous improvement by analyzing mediation result for emotional safety and moderation result for perceived administrative support data. This type of study is very rare and little literature is found that shows series relation found in this study. As financial turmoil consistent to grapple the educational sector and great challenges are to be faced in past and expectedly in future. Thus, the leadership styles are very crucial and very important to adopt best one. Best leadership styles make healthy relation with employees and motivate them to work. Psychological safety is another crucial factor that need be study. There are many factors through which, employees feel them psychologically safe and these factors might be wage rate, office environment, co-workers supports

and others phenomena. In this present study, statistics proved emotional care do not intermediate connection b/w different headship styles and worker's improvement and innovation. Some time, due to organizational support, employees become lazy and do not fulfil their duties in a proper way. They perceived that, organization have no punishment or fine system. Thus, in such circumstance, employee do not take interest in their work and do not improve their work and task assigned. They remain idle most of the time and do not innovate some beneficial for their organizations. So, policy maker can use the results of this study to implement in their organizations to make desired changes in work environment.

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