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# Inclusive Leadership and Adaptive Performance: Testing a Mediated Moderation of Psychological Safety and Learning Behaviors

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**Abstract-** The study objective was to explore the relationship between inclusive leadership (IL) and adaptive performance (AP) in public sector school teachers of Azad Jammu and Kashmir, Pakistan. Moreover, the indirect impact of IL on AP through the mediation of psychological safety (PS) was also tested. Furthermore, the mediated moderation impact of PS and learning behaviors (LB) was also investigated. The study is quantitative and cross-sectional, and the data were collected using a structured questionnaire from 279 respondents, which were selected using a simple random sampling technique. The collected data were analyzed by conducting structural equation modeling (SEM) using AMOS-24. Mediation and moderation analyses were performed using Hayes process macro. Results reveal the significant direct influence of IL on AP and indirectly through PS. Results also confirm significant mediated moderation of PS and LB. There are limited studies that have explored the impact of IL on AP, and in addition, the current study is unique that it explored the mediated moderation impact of psychological safety and learning behaviors.

**Keywords: Inclusive Leadership; PsychologicalSafety; Learning Behaviors; Adaptive Performance**

## I. INTRODUCTION

Leadership is widely recognized as "the influencing process to understand and agree about others needs to be done and how to doing it, and the progression of assisting individual and collective efforts to accomplish shared goals and objectives" (Yukl& Becker, 2006). Leaders behave differently in different situations; however, in the perspective of innovation, subordinates need a close association with the leader to speak about new ideas(Carmeli, Ben-Hador, Waldman & Rupp2009). This study focuses on the form of relational leadership, which is inclusive leadership. The inclusion of a leader in a particular task indicates a leader's inclusive style. Inclusive leadership emphasizes the collective benefit via relational work accomplishment. Hollander (2012) stated inclusive leadership as "doing things with people, rather than to people," Nembhard and Edmondson (2006) initiated the concept of inclusive leadership that focuses on openness, accessibility, and availability.

Zeng, Zhao, and Zhao (2020) studied the impact of IL on employee's taking-charge behavior with the mediating impact of thriving at work and psychological safety.Yu (2020) explores the effect of IL on adaptive performance. Despite significant research studies on IL's impacts on different organizational and individual behaviors and work outcomes, there are still too many neglected research areas where more comprehensive studies are required.

Psychological safety refers to individuals' perceptions of the consequences of taking interpersonal risks in their work environment (Kahn, 1990; May, Gilson &Shalley, 2004;). As such, it describes a perception that "people are comfortable being themselves" (Edmondson, 1999, p. 354 and 2004) and "feel able to show and employ one's self without fear of negative consequences to self-image, status, or career" (Kahn, 1990, p. 708). Different researchers have defined AP using different terms such as "adaptivity" (Griffin, Parker, & Mason, 2010), "adaptive behavior" (Karaevli& Hall, 2006), "adaptive expertise" (Chen, Thomas, Wallace, 2005), and "adaptability" (Smith, Ford& Kozlowski, 1997).

As AP has been studied in different organizational settings using different variables, it is hard to determine a universal AP definition (Pulakos et al., 2002). For instance, the study of Ilgen and Pulakos

(1999) and Karaevli and Hall (2006) explained proper behavioral reactions in diverse situations. Pulakos et al. (2000) incorporated eight dimensions to explain AP, Chen, Thomas, Wallace (2005) described it as the ability to adapt skills and knowledge, and Ployhart and Bliese (2006) highlighted personal characteristics.This study will investigate the impact of IL on employee's adaptive performance by examining mediating roles of psychological safety and the moderating role of learning behaviors previously explored.

The scarcity of economic resources and increasing global competition have forced organizations to be more efficient, flexible, and innovative. To acquire these characteristics, organizations need such human resources that adapt to changes effectively (Kozlowski et al., 2008). AP is an aspect of work performance that replicates such effectiveness. AP consists of obtaining increased capabilities to cope with changing job requirements efficiently. Employees' AP at the individual-level enables organizations to manage change, facilitate organizational learning, and synchronize with fluctuating customer expectations. Researchers have defined overall job performance as actions or behaviors that influence organizational effectiveness. Shoss, Witt and Vera, (2012) have categorized the performance into four facets; "task performance, contextual performance or organizational citizenship behavior, counterproductive work behavior, and withdrawal behavior." Task performance indicates required behaviors written clearly in job descriptions, whereas contextual performance shows behaviors that help in developing psychological and social work environments (Shoss, Witt, & Vera, 2012). On the other hand, counterproductive job performance includes all actions that are intentionally done to harm individuals or organizations (Sackett et al., 2006; 2001; Shoss, Witt, & Vera, 2012), while withdrawal behavior indicates voluntary turnover, absenteeism, and tardiness (Johns, 2002).

Inclusive leaders should principally address these capabilities. Without a doubt, such leaders offer exciting future visions that demonstrate commitment, facilitate the emergence of groups' empowerment, and have been found to increase effects thoroughly linked to AP, such as organizational innovativeness (Jung, Chow, & Wu, 2003), and creativity (Shin & Zhou, 2003). "The current study is an effort to contribute to this evolving trend by investigating when and how IL influences individual AP. This study focuses on AP's prediction, which comprises such behaviors that reflect modifying and applying capabilities in reaction to either current or potential change.

## II. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

### INCLUSIVE LEADERSHIP (IL) AND ADAPTIVE PERFORMANCE (AP)

Edmondson and Nembhard (2006) initially introduced the concept of IL. The notion of IL is entirely new in the literature, and limited studies show the impacts of IL atthe organizational level. When coping with the complicated and changing work climate and making in-time arrangements to the structure, the key to success is to have extraordinary skills and talent. Therefore, organizations are increasingly focused on either the workforce can efficiently accept the environmental changes or not. To survive in viable situations, prompt response to changes becomes one of the key competitive advantage factors for organizations. Fang (2019) investigated the impact of IL on team performance in china's context and established that inclusive leaders give more consideration to the leaders-followers relationships, and IL is the combination of transformational, shared, transactional, and authentic leadership styles.Qi and Liu (2017) have established IL's positive influence on team performances and employee voice behaviors. Ye, Wang, and Guo (2019) also explored IL's positive relationship with team performance and innovation.

In the IL and performance field, literature has also established a positive association between transformational leadership and AP, learning, and innovation climate (Han & Williams, 2008; El Akremi, Vandenberghe&Camerman, 2010). As IL's concept is still in the early stages, there is limited literature available on IL, its antecedents, and outcomes. Though some studies validate IL as a predictor of positive work behaviors, for example, "Jundt, Shoss, & Huang, (2015) found a positive relationship of transformational leadership with AP. Carmeli, Reiter-Palmon, and Ziv (2010) found a significant effect of IL on employee engagement in workplace creativity. Javed et al. (2017,2018) found a positive correlation of IL with innovative work behaviors. Choi, Tran, and Kang (2015) established a positive impact of IL on employee well-being. The study of Randel et al. (2018) also explains the positive outcomes of inclusive leadership. On the basis of past studies, we also predicted a positive relationship between IL and AP."

**H1.***Inclusive leadership is positively related to adaptive performance.*

**Psychological Safety**

Literature from decades discussed the concept of psychological security; Maslow discussed it in his hierarchy of need as "a kind of feelingof confidence, safety, and freedom detachment out fear and anxiety, in particular, it contains the feeling a person meet current and future needs "(Maslow, 1943). Psychological safety is the perception of individuals by which they feel free cognitively and can decidebased on new ideas and behavior (Edmondson, 1999).

A researcher from decades has been checked outcomes variables and influential factors of psychological safety. Influencing factors of psychological safety can be divided into four factors 1. Individual factors: psychologically safe conditions increase the individuals' engagement at work (May, Gilson & Harter, 2004). 2. Tynan(2005) found that leadership behavior is the most effective predictor for employee psychological safety.4. Organizational contexts: literature tested factors influencing individual psychological safety like organizational innovation and change. Organizational innovation reduces the perceived external risk and threat of employees at the workplace. And psychological safety and innovation are important for change (Baer& Frese, 2003).

Literature suggested five outcome variables of psychological safety that are also discussed as predictors of innovative behavior.And can be divided into the following aspects. 1.Knowledge sharing: Scholars studied the relationship between psychological safety and knowledge-sharing behavior. Zhang Pengcheng(2011) found that psychological safety mediates the relationship between charismatic leadership and knowledge sharing and positively related to knowledge sharing. There is a significant positive correlation between psychological safety, knowledge sharing, and willingness of employees.2.Voice: psychological safety mediate the relationship between superior-subordinates and employee voice behavior (Van Dyne et al., 2008).3.Innovation: there is a significant positive relationship between psychological safety and innovative behavior. Psychological safety increases the creative work involvement of employees at the workplace (Carmeli, 2010). And employee psychological safety is also positively correlated with creativity (Zhang &Pengcheng, 2011); job involvement: Kahn et al. (1990) and May et al.(2004) found psychological safety improves employee engagement at the workplace. And many scholars discussed the relationship between psychological safety and 5.job performance: Psychological safety increase the job performance of employees in the organization (Brown et al., 1996; Edmondson, 1999). The perceptions of individuals being safe from the psychological threats to increase employees' performance at the workplace.

Psychological safety is a complex phenomenon that predicts different behavior, but there is still a need of research (Javed et al., 2017).Consequently, psychological safety is important for innovation.

**Mediating Role of Psychological Safety**

Psychological safety explains the perception that 'people are comfortable being themselves (Edmondson, 1999, p. 354) and 'feel able to show and employ oneself without fear of negative consequences to self-image, status or career' (Kahn, 1990, p. 708). At the workplace, employees' actions result in different consequences, which sometimes results in organizational failure. Specifically, in the context of innovation, employees show IWB, therefore, risk proposing new ideas. Researchers stated that developing new ideas involve high risk (George & Zhou, 2007; Mathisen, Einarsen&Mykletun, 2012). Gong, Cheung, Wang, and Huang (2010) described some reasons for evolving risk with the new ideas. First, generating new ideas does not guarantee the attainment of desired goals because most of the idea fails. Second, novel or useful ideas may be rejected, or employees who show creative ideas may be considered as those who show deviant behavior. Employees in this regard need a psychologically safe environment for their risk-taking actions inherent to creative endeavor (Kanfer& Ackerman, 1989; Edmondson, 1999). Thus, psychological safety refers to employees' perception regarding risk-taking actions (Edmondson, 1999) like IWB inthe work setting. Employees find a psychologically safe environment to propose new ideas when perceiving inclusive leadership (Carmeli et al. 2010).

Inclusive leadership creates an environment that promotes mutual benefit without relying on one person's responsibility alone (Hollander, 2012). In this environment, everyone, both leaders and employees, shows inclusion to complete the assigned tasks well. Thus, in developing new ideas, employees emphasize IWB, and leadership enhances psychological safety for them in the risk of new ideas. This quality of exchange relationship between inclusive leadership and employees is well

explained by LMX theory. LMX theory explains that strong and quality leader-member relationships encourage employees to commit to the leader's organizational goal (Graen&Uhl-Bien, 1995; Castigan, 2012). While showing IWB, employees generate, promote, and implement new ideas. Therefore, when found a quality relationship with the leader, feel the work environment safer to show IWB. In this regard, Scott and Bruce (1994) found a positive relationship between the quality of exchange leader-employees relationship and employees' innovativeness.

Moreover, inclusive leadership advances employees' views and opinions through self-respect and self significance (Shamir & Howell, 2000). Detert and Burris (2007) stated that when leaders consider employees by emphasizing their self-value, they perceive high psychological safety. In this regard, Edmondson (1999) extended the ideas about safety leadership and stated that "If the leader is supportive, coaching-oriented, and has non-defensive responses to questions and challenges, members are likely to conclude that the team constitutes a safe environment" (p. 356). In a psychologically safe environment, the leader communicates a message that it's a guarantee that employees will not be punished in expressing their concerns and ideas (Walumbwa&Schaubroeck, 2009; Zhang, Tsui& Wang, 2011).

Further, Edmondson (2004) stated that inclusive leaders' exhibition of characteristics like openness, availability, and accessibility boosts psychological safety in employees at a workplace. These leader characteristics are consistent with the studies that stated that leader care and interpersonal relationship increases employees' trust and psychological safety (Burke et al., 2007; Carmeli, Brueller& Dutton, 2009). Further, Carmeli et al. (2010) found a positive relationship between inclusive leadership and psychological safety. In addition,employees in a psychologically safe environment generate new and novel ideas (Amabile&Grykiewicz, 1989; Baer &Frese, 2003; Rank, Pace &Frese 2004; Gilson and Shalley, 2004; Kark&Carmeli, 2009). Following this line of research, Sharifirad (2013) further extended the idea of psychological safety and stated that employees with psychological safety generate new ideas and promote and implement new ideas in the organization. Thus, the following hypothesis can be established:

**H2**: *Psychological safety mediates the relationship between inclusive leadership and adaptive performance.*

**Psychological safety, learning behavior, and adaptive performance**

Learning behavior in organizations caught significant research attention (Edmondson, 1999; Carmeli, Brueller& Dutton, 2009). The scholarly attention on this very construct concluded two different aspects of learning, e.g., learning as an outcome and learning as a continuous process. According to Levitt and March (1 988), organizational learning is the organizational process's outcome. However, individual learning behavior or learning as a concept was coined by Dewey (1986), which means the process of designing, carrying out, reflecting upon, and modifying actions, in contrast to what he saw as the human tendency to rely excessively on habitual or auto- matic behavior. Thus learning at the individual level is the outcome of an individual's efforts and organizational processes. However, despite havening an appetite for learning, individuals may encounter different work environments where taking risks can be harmful. As learning involves trying out new things, employees need psychological safety and leadership support to flourish their ideas and improve their learning (Edmondson, 1999). According to Edmondson (1999), psychological safety is an individual believes that he or she is safe while taking an interpersonal risk. Hence, this is argued that psychological safety is the pretext for individual learning behavior in an ever-changing work environment. Previous studies have shown a positive relationship between PS and individual learning behavior (Edmondson, 1999; Hirak, Peng, Carmeli&Schaubroeck, 2012).

Adaptive performance has also attained scholarly attention in a highly competitive work environment of the 21st century (Marques-Quinteiro et al., 2019; Bell & Kozlowski, 2002). Employees need to flexible enough to adjust themselves tothe outside environment to create a better ecosystem. Studies in the past have highlighted the importance of adaptive performance in various spheres (Marques-Quinteiro et al., 2019; Sweta, 2021). Rodríguez et al. (2019) found a positive relationship between students' behavioral engagement and performance. Adaptive performance can be strengthened when a high level of learning behavior is exhibited. Thus, we hypothesize that:

**H3:** *There is a positive relationship betweenpsychological safety and adaptive performance,and this relationship getsstronger with high learning behaviors than lower.*

## III. METHODS

### *Measures*

To measure the study variables, all items were adopted from previous valid studies. The construct of inclusive leadership was measured with three dimensions, "openness, availability, and accessibility," and a 9-item scale developed by Carmeli, Reiter-Palmon, and Ziv (2010) was used to measure it. The construct of learning behaviors was measured with a 7-item measurement scale, and psychological safety was measured using a 5-item measurement scale adopted from the study of Edmondson (1999) andCarmeli, Brueller, and Dutton (2009). Items to measure the construct of adaptive performance were adopted from the study of Pulakos et al. (2000). All items were measured using, and a five-point Likert scale where 1=strongly disagree and 5=strongly agree.

### *Sampling Procedure*

In the current study, respondents were public sector school teachers of Azad Jammu and Kashmir Pakistan. As the list of all teachers was available with the education department, hence respondents were collected randomly. A paper-based survey technique was adopted in this study, and 500 respondents were approached during their working hours. After a field survey of three months, 298 responses were collected, from which 19 responses were excluded due to inadequate or missing information. As a result, the current study's final sample size is 279 respondents, and the successful response rate was 56 percent. Among these respondents, 61 percent were male, and 39 percent were female. All the respondents have graduation or higher education qualifications. Therefore, our study sample comprises highly educated people. The distributed questionnaire was in the English language.

### *Analysis Method*

Collected data were analyzed using SPSS and AMOS version 24 in four phases. Initially, reliability and validity were measured. Secondly, model fitness was assessed using confirmatory factor analysis (CFA). Structural equation modeling (SEM) was conducted to test the hypotheses in the third phase. Lastly, the moderation and mediated moderation analysis were conducted through a slop test using Hayes process macro.

## IV. RESULTS

### *Validities*

Discriminant and divergent validities were examined to evaluate our research model's quality, and results are presented in table-1. The results indicate excellent discriminant and divergent validity as values of composite reliability (CR) are greater than 0.60, average variance extracted (AVE) is greater than 0.50, Maximum shared variance (MSV) is less than AVE, and the square root of AVE is also less than the correlations, as recommended by Fornell and Larcker, (1981), Bagozzi and Yi, (1988) and also used in a recent study by Chenini et al. (2020).

***Table 01: Descriptive Statistics, Reliability, Validity, and Correlation Analysis***

| Variables | Mean | SD | CR | AVE | MSV | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|---|---|---|---|
| **1.** IL | 3.64 | .88 | 0.91 | 0.54 | 0.26 | **0.732** | | | |
| **2.**PS | 3.42 | .89 | 0.95 | 0.80 | 0.26 | 0.468*** | **0.892** | | |
| **3.** AP | 3.48 | .87 | 0.97 | 0.77 | 0.22 | 0.342*** | 0.457*** | **0.877** | |
| **4.**LB | 3.27 | 1.09 | 0.96 | 0.78 | 0.08 | 0.141* | 0.257*** | 0.195** | **0.884** |

***N = 279; Significance of Correlations: † p < 0.100; * p < 0.050; ** p < 0.010; *** p < 0.001; MSV = Maximum Shared Variance;Diagonal elements (in bold) are the square root of the AVE.***

### *Confirmatory Factor Analysis*

CFA was conducted to measure the model fitness as it is a prerequisite before testing hypotheses (Anderson & Gerbing, 1988). The most common fit indices such as "Chi-square ($\chi^2$/df), Tucker-Lewis index (TLI), Comparative Fit Index (CFI), Incremental fit index (IFI), and Root Mean Square Error of

Approximation (RMSEA)" were used to assess the measurement model's fitness. The 4-factor baseline measurement model shows excellent model fit ($\chi^2$/df = 1.94, RMSEA= .06, IFI= .95, TLI= .95, and CFI= .95) as shown in table-2.

***Table 2: Measurement Model***

| *Measurement Model* | *$\chi^2$* | *df* | *$\chi^2$/df* | *RMSEA* | *IFI* | *TLI* | *CFI* |
|---|---|---|---|---|---|---|---|
| 4- Factors Base-line Measurement Model | 775.752 | 399 | 1.94 | .06 | .95 | .95 | .95 |

***Test of Hypotheses***

Hypotheses were tested through performing structural equational modeling (CFA) using AMOS-24, and results are shown in table-3. Results reveal significant direct impact of IL on AP (β = .337, P <.001), IL on PS (β = .476, P <.001), and PS on AP (β = .443, P <.001). Results confirm acceptance of all hypothesized direct relationships, as shown in table-3.

The indirect effect of inclusive leadership on adaptive performance through psychological safety mediation is shown in table-4. The results confirm the significant indirect impact of IL on AP in the presence of psychological safety (β = .178, P <.001), hence, H2 is also accepted.

***Table 3: Test of Hypothesis Direct Effect***

| *Relationships* | *Path coefficients* | *P-Value* |
|---|---|---|
| Inclusive Leadership→ Adaptive Performance | 0.337 | *** |
| Inclusive Leadership→ Psychological Safety | 0.476 | *** |
| Psychological Safety → Adaptive Performance | 0.443 | *** |

***Note: *p <.05, **p <.01***p <.001.***

***Table 4: Test of Hypothesis Mediation Effect***

| *Relationship* | *Indirect Effect* | *P-Value* | *LLCI* | *ULCI* |
|---|---|---|---|---|
| Inclusive Leadership→ Psychological Safety → Adaptive Performance *(Direct effect 0.161** & Total effect 0.337***)* | 0.178 | *** | 0.102 | 0.262 |

***Note: *p <.05, **p <.01***p <.001.***

***Moderation Effect***

Table-4 and figure-2 show the results of the moderating effect of learning behavior. The results show that the relationship between PS and AP is positive and significant. This relationship gets stronger when there is an interaction of a moderator (learning behavior). As shown in the slop, the relationship between PS and AP shows a low effect when there are low learning behaviors (β = 0.252, P<.001). Moreover, the relationship between PS and AP gets stronger with the increase of learning behavior (β = .441, P <.001; and β = .630, P <.001). Figure-2 (Mod graph) also shows that the relationship between PS and AP is higher with high learning behaviors than lower. Therefore, learning behaviors strengthen the relationship between PS and AP, confirming our 3rdhypothesized relationship as H3.

***Table 5: Adaptive Performance Predicted from Psychological Safety and Learning Behaviors (Moderation Effect)***

| **DV: Adaptive Performance** | β | *p* | 95% CI | |
|---|---|---|---|---|
| PS** | -0.122 | 0.43 | -0.423 | 0.179 |
| LB ** | -0.523 | < .01 | -0.840 | -0.206 |
| PS x LB*** | 0.172 | < .001 | 0.083 | 0.262 |

Test(s) of highest order unconditional interaction: (X*W)

$R^2$ -chng = .0389***
F Statistics = 14.367

***Conditional Effects of the focal predictor (PS) at values of the moderator (LB)***

| | β | *p* | 95% CI | |
|---|---|---|---|---|
| One *SD* below mean | 0.252 | <.001 | 0.116 | 0.388 |
| At the mean | 0.441 | <.001 | 0.338 | 0.544 |
| One *SD* above mean | 0.630 | <.001 | 0.481 | 0.779 |

*** p<.001, ** p<.01, * p<.05

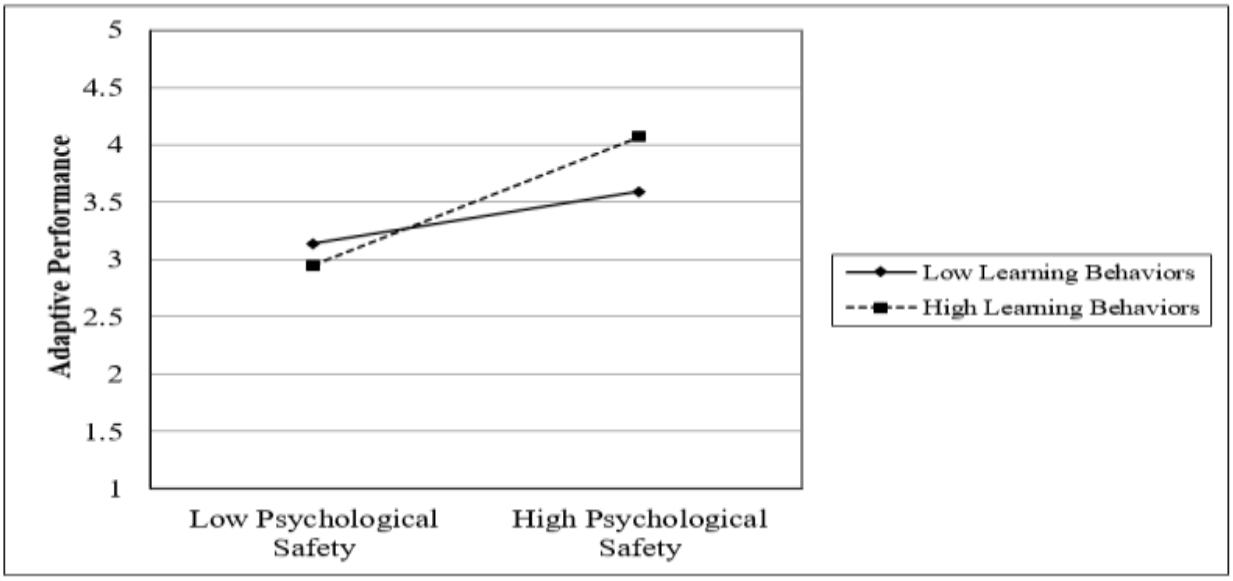


***Figure-2: Moderation Effect***

***Mediated Moderation***

The results reveal that the indirect effect of psychological safety did not span zero, which confirms significant indirect effect when there is low level of PS (β = .09, 95% LLCI = .009 95% ULCI = .189) , moderate level of PS (β = 0.16, 95% LLCI = .089 % ULCI = .239) , high level of PS (β = 0.23, 95% LLCI = .129 95% ULCI = .342). Because there is no zero presence in the CI (confidence intervals), the results indicate a significant conditional indirect effect (see Table-6). The relationships are shown by plotting high, and low values of (Mean +SD) moderated mediation in figure 03. The results show that the relationship between psychological safety and adaptive performance through learning behaviors significantly increased when learning behaviors happen. As a result, hypothesis H3 is also accepted and well supported.

***Table 6: Mediated Moderation***

| | **DV:** Adaptive Performance | | |
|---|---|---|---|
| **Learning Behaviors** | **β** | ***LL(95%)CI*** | ***UL(95%)CI*** |
| Low psychological safety | 0.09 | 0.009 | 0.189 |
| Moderate psychological safety | 0.16 | 0.089 | 0.239 |
| High psychological safety | 0.23 | 0.129 | 0.342 |
| $R^2$ = 0.23, $R^2$ Δ = 0.029<br>MSE = 0.58, P < .001 | | | |
| **Index of Mediated Moderation** | | | |
| | **Index** | ***BootLLCI*** | ***BootULCI*** |

| | | | |
|---|---|---|---|
| Psychological Safety*Learning Behaviors | 0.064 | 0.012 | 0.125 |

***Note: 5,000 bootstrap samples: N= 279***

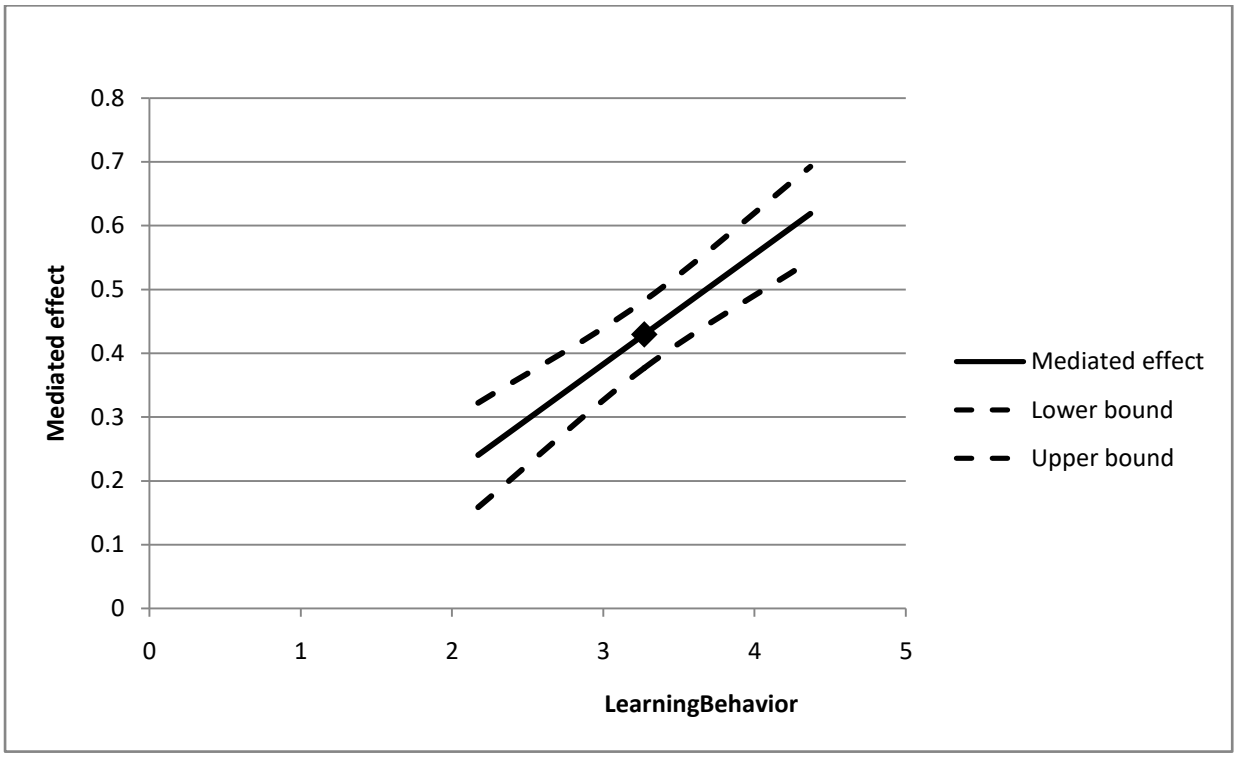


***Figure-3: Mediated Moderation Effect***

## V. DISCUSSION

In the education sector of Pakistan, this study aims to clarify the effect of IL on adaptive performance through a mediating role of psychological safety. Moreover, this study also intended to explore the moderation effect of learning behaviors in the relationship between psychological safety and adaptive performance. In addition, the study also investigates the mediated moderation effect of psychological safety and learning behaviors on the adaptive performance of public sector school teachers. To achieve study objectives, numerous hypotheses were developed and tested. The study predicted a positive and significant impact of IL on adaptive performance in hypothesis-1. Results reveal a significant and positive impact of IL on adaptive performance. These findings are well aligned with the past studies of Qurrahtulain et al. (2020) and Yu (2020). In the second hypothesized relationship, the study results also established a significant and positive relationship between IL and psychological safety. The results also established a positive impact of psychological safety on adaptive performance.

Moreover, study findings reveal that the impact of IL on adaptive performance gets stronger in the presence of psychological safety. These findings are well established by many past studies such as studies of Carmeli, Reiter-Palmon, and Ziv (2010), Hirak et al. (2012), Javed et al. (2019), Yin (2013), Zeng, Zhao, and Zhao (2020), and Zhao, Ahmed, and Faraz, (2020).The study also predictsa significant moderating role of learning behaviors in the relationship between psychological safety and adaptive performance in such a way that in the presence of higher learning behaviors, the impact of inclusive leadership on adaptive performance will be higher. These results are inconsistent with past studies of Edmondson (1999), Kim, Lee, and Connerton (2020), and Parker and du Plooy (2021).

## VI. CONCLUSIONS

According to the sample analysis findings, inclusive leadership and employee adaptive success have a positive relationship. The theoretical support in related aspects can be obtained from several scholars' explications domestically and overseas on these topics' theories. The adoption of an inclusive leadership model contributes to improved results. If a staff's level of appreciation of leadership success is strong, it helps increase adaptive performance, improve the organization's productivity, and increase employee innovation. According to this research, organizations should encourage a successful inclusive leadership model to optimize the efficacy of adaptive performance. As per the author's best knowledge, this is the first theoretical framework established to identify IL and AP's relationship through the mediation mechanism of psychological safety and moderating effect of learning behaviors in the relation of psychological safety and adaptive performance.

## REFERENCES


1. Amabile, T. M., &Gryskiewicz, N. D. (1989). The creative environment scales: Work environment inventory. *Creativity research journal*, *2*(4), 231-253.
2. Baer, M., &Frese, M. (2003). Innovation is not enough: Climates for initiative and psychological safety, process innovations, and firm performance. *Journal of organizational behavior, 24(1*), 45-68.
3. Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the academy of marketing science*, *16*(1), 74-94.
4. Bell, B. S., & Kozlowski, S. W. (2002). Adaptive guidance: Enhancing selfregulation, knowledge, and performance in technology-based training. Personnel Psychology, 55, 267–306.
5. Brown, J. W., Churchill, R. V., &Lapidus, M. (1996). Complex variables and applications (Vol.7). New York: McGraw-Hill.
6. Burke, C. S., Sims, D. E., Lazzara, E. H., & Salas, E. (2007). Trust in leadership: A multi-level review and integration. *The Leadership Quarterly,18(6*), 606-632
7. Carmeli, A., Ben-Hador, B., Waldman, D. A., & Rupp, D. E. (2009). How leaders cultivate social capital and nurture employee vigor: Implications for job performance. *Journal of Applied Psychology*, *94*(6), 1553.
8. Carmeli, A., Ben-Hador, B., Waldman, D. A., & Rupp, D. E. (2009). How leaders cultivate social capital and nurture employee vigor: Implications for job performance. *Journal of Applied Psychology*, *94*(6), 1553.
9. Carmeli, A., Brueller, D., & Dutton, J. E. (2009). Learning behaviours in the workplace: The role of high-quality interpersonal relationships and psychological safety. *Systems Research and Behavioral Science, 26(1*), 81-98.
10. Carmeli, A., Reiter-Palmon, R., &Ziv, E. (2010). Inclusive leadership and employee involvement in creative tasks in the workplace: The mediating role of psychological safety. *Creativity Research Journal*, *22*(3), 250-260.
11. Chen, G., Thomas, B., & Wallace, J. C. (2005). A multilevel examination of the relationships among training outcomes, mediating regulatory processes, and adaptive performance. *Journal of Applied Psychology*, *90*(5), 827.
12. Chenini, A., Iqbal, J., Qurrahtulain, K., Husain Mahmood, M. A., &Aldehayyat, J. S. (2020). Strategic procurement, supplier integration, and speed-to-market: The mediating role of procurement lead-time performance and manufacturing performance. *Journal of Public Affairs*, e2248.
13. Choi, S. B., Tran, T. B. H., & Park, B. I. (2015). Inclusive leadership and work engagement: Mediating roles of affective organizational commitment and creativity. *Social Behavior and Personality: an international journal*, *43*(6), 931-943.
14. Costigan, R. D., Insinga, R. C., Berman, J. J., Kranas, G., &Kureshov, V. A. (2012). A Four-Country Study of the Relationship of Affect-Based Trust to Turnover Intention*. Journal of Applied Social Psychology, 42(*5), 1123-1142.
15. Detert, J. R., & Burris, E. R. (2007). Leadership behavior and employee voice: Is the door really open?. *Academy of management journal*, *50*(4), 869-884.
16. Dewey, J. (1986, September). Experience and education. In *The educational forum* (Vol. 50, No. 3, pp. 241-252). Taylor & Francis Group.
17. Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative science quarterly*, *44*(2), 350-383.

18. El Akremi, A., Vandenberghe, C., &Camerman, J. (2010). The role of justice and social exchange relationships in workplace deviance: Test of a mediated model. *Human relations*, *63*(11), 1687-1717.
19. Fang, Y. (2019). The Impact of Inclusive Leadership on Innovative Behaviors Among the New Generation of Employees: The mediating Role of Psychological Capital. *Academy of Management Global Proceedings*, (2019), 208.
20. Fang, Y., Chen, J. Y., Wang, M. J., & Chen, C. Y. (2019). The Impact of Inclusive Leadership on Employees Innovative Behaviors: The Mediation of Psychological Capital. *Frontiers in psychology*, *10*, 1803.
21. Fornell, C., &Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research, 18*(1), 39–50.
22. George, J. M., & Zhou, J. (2007). Dual tuning in a supportive context: Joint contributions ofpositive mood, negative mood, and supervisory behaviors to employee creativity. *Academy of Management Journal, 50(3*), 605-622.
23. Gilson, L. L., &Shalley, C. E. (2004). A little creativity goes a long way: An examination of teams' engagement in creative processes. *Journal of management, 30(*4), 453-470.
24. Gong, Y., Cheung, S. Y., Wang, M., & Huang, J. C. (2012). Unfolding the proactive process for creativity integration of the employee proactivity, information exchange, and psychological safety perspectives. *Journal of Management, 38(5*), 1611-1633.
25. Graen, G. B., &Nembhard, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. The *leadership quarterly, 6(2),* 219-247.
26. Graen, G. B., &Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *The leadership quarterly*, *6*(2), 219-247.
27. Han, T. Y., & Williams, K. J. (2008). Multilevel investigation of adaptive performance: Individual-and team-level relationships. *Group & Organization Management*, *33*(6), 657-684.
28. Hirak, R., Peng, A. C., Carmeli, A., &Schaubroeck, J. M. (2012). Linking leader inclusiveness to work unit performance: The importance of psychological safety and learning from failures. *The Leadership Quarterly*, *23*(1), 107-117.
29. Hollander, E. (2012). *Inclusive leadership: The essential leader-follower relationship*. Routledge.
30. Ilgen, D. R., &Pulakos, E. D. (1999). *The Changing Nature of Performance: Implications for Staffing, Motivation, and Development. Frontiers of Industrial and Organizational Psychology*. Jossey-Bass Inc., Publishers, 350 Sansome Street, San Francisco, CA 94104.
31. Javed, B., Naqvi, S. M. M. R., Khan, A. K., Arjoon, S., &Tayyeb, H. H. (2017). Impact of inclusive leadership on innovative work behavior: The role of psychological safety–CORRIGENDUM. *Journal of Management & Organization*, *23*(3), 472-472.
32. Johns, G. (2002). The psychology of lateness, absenteeism, and turnover. In. Anderson N, Ones D, Sinangil HK, Viswesvaran C, (Eds.), Handbook of industrial, work and organizational psychology (Vol. 2, pp. 232–252).
33. Jundt, D. K., Shoss, M. K., & Huang, J. L. (2015). Individual adaptive performance in organizations: A review. *Journal of Organizational Behavior*, *36*(S1), S53-S71.
34. Jung, D. I., Chow, C., & Wu, A. (2003). The role of transformational leadership in enhancing organizational innovation: hypotheses and some preliminary findings. The Leadership Quarterly, 14, 525–544.
35. Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of management journal, 33*(4), 692-724.
36. Kanfer, R., & Ackerman, P. L. (1989). Motivation and cognitive abilities: An integrative/aptitude-treatment interaction approach to skill acquisition. *Journal of applied psychology, 74*(4), 657.
37. Karaevli, A., & Hall, D. T. T. (2006). How career variety promotes the adaptability of managers: A theoretical model. *Journal of Vocational behavior*, *69*(3), 359-373.
38. Kim, S., Lee, H., &Connerton, T. P. (2020). How Psychological Safety Affects Team Performance: Mediating Role of Efficacy and Learning Behavior. *Frontiers in psychology*, *11*, 1581.
39. Kozlowski, S. W., Watola, D. J., Jensen, J. M., Kim, B. H., &Botero, I. C. (2009). Developing adaptive teams: A theory of dynamic team leadership.
40. Levitt, B., & March, J. G. (1988). Organizational learning. *Annual review of sociology*, *14*(1), 319-338.

41. Marques-Quinteiro, P., Vargas, R., Eifler, N., &Curral, L. (2019). Employee adaptive performance and job satisfaction during organizational crisis: the role of self-leadership. *European Journal of Work and Organizational Psychology*, *28*(1), 85-100.
42. Maslow, A. H. (1943). A theory of human motivation. *Psychological review,50*(4), 370.
43. Mathisen, G. E., Einarsen, S., &Mykletun, R. (2012). Creative leaders promote creative organizations. *International Journal of Manpower*.
44. May, D. R., Gilson, R. L., & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of occupational and organizational psychology, 77*(1), 11-37.
45. Nembhard, I. M., & Edmondson, A. C. (2006). Making it safe: The effects of leader inclusiveness and professional status on psychological safety and improvement efforts in health care teams. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, *27*(7), 941-966.
46. Ning, L. I., Jin, Y. A. N., &Mingxuan, J. I. N. (2007). How does organizational trust benefit work performance?. Frontiers of Business Research in China,1(4), 622-637.
47. Parker, H., & du Plooy, E. (2021). Team-based games: Catalysts for developing psychological safety, learning and performance. *Journal of Business Research*, *125*, 45-51.
48. Ployhart, R. E., &Bliese, P. D. (2006). Individual adaptability (I-ADAPT) theory: Conceptualizing the antecedents, consequences, and measurement of individual differences in adaptability. In *Understanding adaptability: A prerequisite for effective performance within complex environments*. Emerald Group Publishing Limited.
49. Pulakos, E. D., Arad, S., Donovan, M. A., &Plamondon, K. E. (2000). Adaptability in the workplace: Development of a taxonomy of adaptive performance. *Journal of Applied Psychology,* 85, 612– 624. doi:10.1037/0021-9010.85.4.612
50. Qi, L., Liu, B., Wei, X., & Hu, Y. (2019). Impact of inclusive leadership on employee innovative behavior: Perceived organizational support as a mediator. *PloS one*, *14*(2).
51. Qurrahtulain, K., Bashir, T., Hussain, I., Ahmed, S., &Nisar, A. (2020). Impact of inclusive leadership on adaptive performance with the mediation of vigor at work and moderation of internal locus of control. *Journal of Public Affairs*, e2380.
52. Randel, A. E., Galvin, B. M., Shore, L. M., Ehrhart, K. H., Chung, B. G., Dean, M. A., &Kedharnath, U. (2018). Inclusive leadership: Realizing positive outcomes through belongingness and being valued for uniqueness. *Human Resource Management Review*, *28*(2), 190-203.
53. Rank, J., Pace, V. L., &Frese, M. (2004). Three avenues for future research on creativity, innovation, and initiative. *Applied Psychology, 53*(4), 518-528.
54. Rodríguez, S., Núñez, J. C., Valle, A., Freire, C., Ferradás, M. D. M., & Rodríguez-Llorente, C. (2019). Relationship between students' prior academic achievement and homework behavioral engagement: The mediating/moderating role of learning motivation. *Frontiers in psychology*, *10*, 1047.
55. Sackett, P. R., Berry, C. M., Wiemann, S. A., &Laczo, R. M. (2006). Citizenship and counterproductive behavior: Clarifying relations between the two domains. *Human performance*, *19*(4), 441-464.
56. Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behavior: A path model of individual innovation in the workplace. *Academy of management journal, 37*(3), 580-607.
57. Shamir, B., & Howell, J. M. (2000). The role of followers in the charismatic leadership process: Susceptibility, social construction, and leader empowerment. In *Academy of Management annual meeting, Toronto*.
58. Sharifirad, M. S. (2013). Transformational leadership, innovative work behavior, and employee well-being. *Global Business Perspectives, 1*(3), 198-225.
59. Shin, S. J., & Zhou, J. (2003). Transformational leadership, conservation, and creativity: Evidence from Korea. *Academy of management Journal*, *46*(6), 703-714.
60. Shoss, M. K., Witt, L. A., & Vera, D. (2012). When does adaptive performance lead to higher task performance?. *Journal of organizational behavior*, *33*(7), 910-924.
61. Smith, E. M., Ford, J. K., & Kozlowski, S. W. (1997). Building adaptive expertise: Implications for training design strategies.
62. Sweta, S. (2021). Framework for Adaptive E-Learning System. In *Modern Approach to Educational Data Mining and Its Applications* (pp. 51-62). Springer, Singapore.
63. Tynan, R. (2005). The Effects of Threat Sensitivity and Face Giving on Dyadic Psychological Safety and Upward Communication1. *Journal of Applied Social Psychology, 35*(2), 223-247.

64. Van Dyne, L., Kamdar, D., &Joireman, J. (2008). In-role perceptions buffer the negative impact of low LMX on helping and enhance the positive impact of high LMX on voice. *Journal of Applied Psychology, 93*(6), 1195.
65. Walumbwa, F. O., &Schaubroeck, J. (2009). Leader personality traits and employee voice behavior: mediating roles of ethical leadership and work group psychological safety. *Journal of Applied Psychology*, *94*(5), 1275.
66. Wang, J., Yang, J., Yu, K., Lv, F., Huang, T., & Gong, Y. (2010, June). Locality-constrained linear coding for image classification. In *Computer Vision and Pattern Recognition (CVPR), 2010 IEEE Conference on* (pp. 3360-3367). IEEE.
67. Ye, Q., Wang, D., &Guo, W. (2019). Inclusive leadership and team innovation: the role of team voice and performance pressure. *European Management Journal*, *37*(4), 468-480.
68. Yin, L. W. (2013). Inclusive leadership and employee voice: Mediating roles of psychological safety and leader-member exchange. *Unpublished undergraduate thesis). Hong Kong Baptist University*.
69. Yu, Y. (2020, January). Impact of Inclusive Leadership on Employees' Adaptive Performance. In *2019 International Conference on Education Science and Economic Development (ICESED 2019)*. Atlantis Press.
70. Yukl, Gary A., and Wendy S. Becker. "Effective empowerment in organizations." *Organization Management Journal* 3, no. 3 (2006): 210-231.
71. Zeng, H., Zhao, L., & Zhao, Y. (2020). Inclusive Leadership and Taking-Charge Behavior: Roles of Psychological Safety and Thriving at Work. *Frontiers in Psychology*, *11*.
72. Zhang Pengcheng, (2011 )(School of Management,Huazhong University of Science and Technology,Wuhan
73. Zhang, A. Y., Tsui, A. S., & Wang, D. X. (2011). Leadership behaviors and group creativity in Chinese organizations: The role of group processes. *The Leadership Quarterly, 22*(5), 851-862.
74. Zhao, F., Ahmed, F., &Faraz, N. A. (2020). Caring for the caregiver during COVID-19 outbreak: Does inclusive leadership improve psychological safety and curb psychological distress? A cross-sectional study. *International journal of nursing studies*, *110*, 103725.