Ethical Leadership and Employee Creative Performance: Discussing the mediating role of Employer Feedback Environment in Software Houses of Pakistan

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ABSTRACT

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Keywords
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Purpose:
The basic purpose of this study was to explore employee creative performance, the contextual issues in the form of the leader’s style, and the feedback environment established by the leader in the Pakistani context. This study has presented a mechanism model for an understanding predictor of employee creative performance with the help of various theories.

Methodology:
Data was collected and analyzed from software houses registered in PSEB from 320 leader-employee dyads. Our research design was correlational. To reduce the common method biases, data was collected from two sources: leaders and their subordinates by sending the online questionnaire. To measure the unidimensionality and validity of construct EFA was performed through SPSS. Further, to assess the common method biases Heterotrait-Monotrait Ratio (HTMT) was used. SEM was used to compute, analyze, and prove relationships of proposed hypotheses and model fitness. CFA was used to confirm the theoretical measurement model, on AMOS 24 by using the rotated factor analysis.

Finding:
To sustain in this era of the competitive global business environment, organizations can stimulate employee creative performance by focusing on contextual and subjective variables. As per findings, contextual factors like feedback environment associated with the leader regarding his style that should be ethical, have a vital position in an organization for improving creative performance among employees. Specifically, the current study owns its justification and contribution to the literature and practical implication in various ways.

Conclusion:
The study indicates that ethical style of leadership have strong positive (+) association with creative performance of employees as well as with employer feedback environment. Also that employer feedback environment have partial mediation among ethical leadership and employee creative performance.

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1. Introduction

In the present era of Globalization 90% of creativity and innovation occurs in software houses. Innovation is metaphorically considered the engine of an organization, while creativity is deemed to be the fuel needed to run and keep this engine running effectively. The precursor of innovation is generating creative ideas while the essence of creativity is to crop up with new ideas and do things in a better way (Javed, Iqbal, Iqbal, & Imran, 2021). To retain a competitive advantage in the market, the most radical strategy for an organization is to introduce creativity among employees (Anderson, De Dreu, & Nijstad, 2004; Duan, Liu, & Che, 2018). In this way, creative performance is a radical factor that is defined by Oldham and Cummings (1996b, p. 608) as the “Production of novel and useful ideas, product or procedures with the satisfaction of two contingencies, like novelty or originality and its usefulness or relevancy to the organization (Malik, Butt, & Choi, 2015). For the sustainable career of employees and organizational competitive advantage, it has been identified as one of the most important 21st-century skills (Hughes, Lee, Tian, Newman, & Legood, 2018). Countries, that have adopted these turn to be developed, while those in the process of adoption are in the category of developing countries, like Pakistan (Javed et al., 2021). As regards software houses in Pakistan are concerned it is far behind in their behavior of adoption of creativity and innovation. Hence, it is far behind in the race for creative performance among employees (Javed et al., 2021).

Employees are assumed to be indispensable in retaining competitive advantage in the market being forefront with clients and exposing the door for revolution and improvement in methodology and procedures that are not noticed by leaders or those who are responsible for the development of the organization (Chaubey, Sahoo, & Khatri, 2019). Hence, to achieve a sustainable competitive advantage by engendering innovation in products and services, employees’ creative performance should be enhanced (Artz, Norman, & Hatfield, 2003; Duan et al., 2018). As stated by Wong, Bunjak, Černe, and Fieseler (2021) that creative performance plays an important role in this era of the competitive business environment. Due to this much importance of creative performance, organizations must recognize those variables, which can facilitate the organization in increasing the creative performance among employees (Hughes et al., 2018).

Many theories developed a process-oriented approach according to which a complex relationship among leaders, followers, and organizations exists (Tseng & Levy, 2018). Leaders have a very dynamic impact on employees’ actions, rational approach, and specifically on contextual factors underscored in the strategy of human capital (Eckardt et al., 2021). Leadership processes being a complex mechanism and one of the expanding and active areas in the field of research links; a leader’s style with a creative performance at the individual level while, such a mechanism is not well understood (Fischer, Tian, Lee, & Hughes, 2021; Hughes et al., 2018). To address this loophole in the literature various mediating variables are needed to explore this mechanism as called for research by Duan et al. (2018).

From the previous empirical and theoretical research work, it was profound that the diversity of desirable outcomes is related to a supportive feedback environment. In a constructive feedback environment employees are not only provided with high quality and sufficient information but also employees are likely to realize to be treated carefully, appreciated, and supported by their leader (Sparr, 2008). During the process of delivering feedback, factors impact in a contextual sense like the credibility of feedback source, and its availability, frequency of favorable and unfavorable feedback, its delivery and
quality with the encouragement of feedback-seeking behavior (Blinebry, 2016; Rosen, Levy, & Hall, 2006). Moreover, a constructive leader’s feedback environment encourages employees to enhance their creative performance among them (Andiola, 2014).

Among supervisors’ or coworkers’ feedback environments, the leader’s feedback environment is considered to be more influential (Eva, Meacham, Newman, Schwarz, & Tham, 2019) for employee creative performance (George & Zhou, 2007). Steelman, Levy, and Snell (2004) have focused only on the supervisor and coworker feedback environment, but exploring ethical leadership, as a leader’s style, and its effect on the feedback environment is a novel way to understand the creation of a positive and constructive environment for their subordinate to achieve many desired outcomes. Leaders provide feedback whenever an employee needs to regulate his effort in maximizing his creative performance rather than waiting for formal organizational feedback. Leaders play a vital role in keeping alignment between individual performance and organizational goals through feedback. In this way, leaders act as a bridge between the individual actions of employees and organizational practices (Tseng & Levy, 2018).

Most of the literature on creative performance is based on evidence from developed western and Asian countries hence there is a call to investigate this phenomenon in developing countries (Shafi, Sarker, & Junrong, 2019). The present research has been propelled by the data collected from software houses registered in PSEB. Due to its geographical location, Pakistan is one of the most important developing countries. So, there is a strong need to jump into the antecedents of creative performance research to make it comprehend to the organization its benefits. This study includes external factors like feedback environment and ethical leadership simultaneously to attempt to generate such a model that will have the ability to enhance employee creative performance in software houses of the IT sector in Pakistan and that ultimately will contribute to the growth and development of the economy of Pakistan.

2. Theory and Hypotheses Development

2.1. Ethical Leadership and Employer Feedback Environment

Employees receive information from various sources (Morrison, 1993) like supervisors, coworkers, and subordinates (Steelman et al., 2004). Among supervisors’ or coworkers’ feedback environment, the leader’s feedback environment is considered to be more influential (Eva et al., 2019). Supervisors have a salient role in shaping the feedback environment and most studies consider supervisor feedback environment to be more reliable (Blinebry, 2016; Norris-Watts & Levy, 2004; Rosen et al., 2006; Whitaker, Dahling, & Levy, 2007). Since, the leader is fully equipped with the advantages of accessibility to the followers and enriched with the experience thus responsible for creating a developmental and accessible feedback environment (Katz, Rauvola, & Rudolph, 2021). Leaders provide constructive feedback that let their subordinates enhance their feeling of competence and enlighten the impact of their efforts on the attainments and achievements of groups and organizational goals (Feng, Zhang, Liu, Zhang, & Han, 2018). Positive feedback being one of the dimensions of the feedback environment influences more effectively than negative feedback due to employees’ perception regarding the credibility of feedback resources (Ilgen, Fisher, & Taylor, 1979; Mertens, Schollaert, & Anseel, 2021).

The ethical leader being both a moral people and a moral manager (Brown & Treviño, 2006; Danish, Ahmed, Farooq, Baig, & Ullah, 2021; Wang, Feng, & Lawton, 2017) are central enactors acting as decipherers of formal practices and influencing on informal
processes (Schleicher et al., 2018). They become the cause of a supportive feedback environment and a source of credibility, equipped with trustworthiness and expertise of knowledge (Ilgen et al., 1979). Credibility and trust are central features of an ethical leader (Kouzes & Posner, 2017). Ethical leader interacts with subordinates daily and is capable to build and maintain credible two ways and high-quality feedback channels (Brown & Treviño, 2014). Both leaders and followers flourish in this continuous feedback environment (Cappelli & Tavis, 2016; Levy, Tseng, Rosen, & Lueke, 2017). A leader’s style has an impact on the feedback environment arrogant leaders may cause lessen feedback-seeking behavior in this way disregard the feedback environment (Borden, Levy, & Silverman, 2018). On the contrary ethical leader being an attractive and legitimate role model holds the power to get the attention of his followers and influence them efficiently (Foy, 2019).

According to Social Learning Theory (Bandura, 1986) when an employee perceives that leader as a contextual factor has accurate knowledge of their performance, trust worthy, credible, considerate on employees, and is well aware of the employee’s job requirement, providing high-quality feedback on daily basis, with meaningfull purpose through coaching (Heslin, Vandewalle, & Latham, 2006) there will be a perception about supportive and accurate feedback environment (Steelman et al., 2004). Hence, the following hypothesis is postulated on this logical statement:

**H₁**: Ethical leaders have a positive association with employer feedback environment.

### 2.2. Employer Feedback Environment and Employee Creative Performance

The feedback environment is comprised of seven facets these are source credibility, feedback delivery, feedback quality, unfavorable feedback, and favorable feedback accurately, support for feedback-seeking, and source credibility (Steelman et al., 2004). According to the self-determined theory by (Deci & Ryan, 1985) employees are actively directed towards psychological growth, by gaining mastery of tasks and taking risks over new upcoming challenges, and by learning different skills to achieve organizational goals. Leaders in support of psychological growth allow their employees to play an active role in competing for new challenges.

A leader provides encouragement, support, and meaningful full feedback on their performance, resultantly emerging a feeling of satisfaction, commitment, and being passionate in support of pursuing their goal (Steelman & Wolfeld, 2018). Such sort of feedback, arises a feeling of one’s being competent, a key for personal growth (Ryan & Deci, 2000). Such feelings engaged more in work and foster a sense of self-determination by allowing employees to perform roles more actively (Fernet, 2013). Such self-determination is built by offering encouragement, support, and responsibilities, and also by providing meaningful feedback. As per the findings of Steelman et al. (2004) feedback is implemented to improve the performance of employees. Their findings suggest that both unfavorable and favorable veridical feedback as a facet of the feedback environment stimulates employee creativity (Gong & Zhang, 2017). Secondly, a feedback environment is both incentivizing and supportive in improving creative performance (Gong & Zhang, 2017). Hence based on the above literature, it can be postulated that:

**H₂**: Employer feedback environment positively associated with employee creative performance
2.3. Ethical leadership and Employee Creative Performance

Leaders being a primary source of leadership exert influence directly or indirectly, at the individual, group, and organizational levels to impact performance (Fischer, Dietz, & Antonakis, 2017; Krasman & Kotlyar, 2021; Zaim, Demir, & Budur, 2021). Creative performance being a non-routine task and an approach to creativity demands attention from its leader (Oldham & Cummings, 1996a). As per the componential theory of creativity Amabile, (2011) provides a theoretical base for this claim that “Leadership exerts influence on the creativity of employees through direct assistance in project, by developing expertise of subordinate, and by enhancing intrinsic motivation in employees”. Ethical leader involves employees as per the organizational policies, conferring courage to take risks while assisting in accomplishing organizational goals (Duan et al., 2018). Employees take many risks when they found that their leader is more trustworthy and ethical (Hoyt, Price, & Poatsy, 2013) guiding and directing them about organizational goals (Khokhar & Zia-ur-Rehman, 2017), and inspiring a positive attitude (Wu, 2017). On receiving such ethical treatment and autonomy of work, employees are encouraged and induced to embrace new challenges, and take initiative, resultantly it boosts employee creative performance (Eranil & Ozbilen, 2017; Kark & Carmeli 2009).

Ethical leader in this regard develops compassionate and sincere relationships with employees for promoting creative performance (Javed, Rawwas, Khandai, Shahid, & Tayyeb, 2018). Finally, ethical leaders tolerate and respect divergent values and views of employees by demonstrating honesty, trust, fairness, virtuousness, and consideration within their relationship (Northouse, 2021). Results of various studies show that ethical leadership has a positive link with creativity (Asif, Miao, Jameel, Manzoor, & Hussain, 2020; Li, Lu, & Eliason, 2021). So, it is hypothesized that:

H3: Ethical leadership has a significant and positive relationship with employee’s creative performance.

2.4. Feedback Environment Mediates Relation between Ethical Leadership and Employee’s Creative Performance

The feedback environment reflects the perceptions of the contextual, day-to-day routine feedback process within supervisor-subordinate relationships and essential component for consolidating relations among them (Katz et al., 2021). Many high-flying organizations have adopted regular and informal feedback environments instead of a formal one, to fulfill the employee’s expectations and for their effectiveness (Mertens et al., 2021). In a constructive feedback environment employees are not only provided with high quality and sufficient information but also employees are likely to realize to be treated carefully, appreciated, and supported by their leader (Sparr, 2008). An ethical leader creates a strong supervisor feedback environment (Zhang, Gong, Zhang, & Zhao, 2017).

As per the perspective of Social learning, role modeling is decisive for subsequent creativity, which generates significant relational context, causing employees to engage in creative activities (Gu, Tang, & Jiang, 2015). Through discussion and communication with subordinates, it is clarified how to accomplish goals (Thompson & Hart, 2006). Stimulated by this approach, employees become capable to enhance proactive behavior and learning, and by doing so they turn out to be more creative (Javed et al., 2018). Therefore, we may argue that:

H4: Employer feedback environments mediate the relation between Ethical leadership and Employee’s creative performance
3. Methodology

3.1. Participants and Procedure

Data was collected only once against each variable which means regarding time horizon it is a cross-sectional study by nature (Bell, Bryman, & Harley, 2018). To reduce the common method biases, data was collected from two sources: leaders and their subordinates by sending randomly two different questionnaires to leaders and employees to rate each other (Baruch & Holtom, 2008). The leader was assigned to fill the rating forms from those employees with whom he had plenty of opportunities to observe their creative performance.

After checking the reliability and validity of the questionnaire, a total of 418 dyadic questionnaires were distributed. Three hundred and twenty practicable dyads returned questionnaires, giving a response rate of 76.2%, which were carried out for further study evaluation.

Data was collected by visiting personally and mostly by sending the online questionnaire, to leaders and employees in non-contrived settings with less interference from the researcher (Sekaran & Bougie, 2016) from software houses of Islamabad, Lahore, Karachi, Quetta, and Peshawar registered at PSEB (2018). During the selection of individuals, an extreme effort was made to select those leaders who had a title like CEO, Business head, and, senior project director. Further, at a subordinate level, some other designations were also confirmed like, Software/Application Developer, Systems analyst, and Business analyst, who had further subordination as well (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).

The convenient sampling method was utilized as a sampling procedure because in practice in the case of the online data collection method 99% of researchers use this sampling technique (Zikmund, 2010), and also it was difficult to identify leaders’ and employees’ willingness to participate in the survey. AMOS 24 has been used, to be appropriate in constructing, developing, and testing theories (Gaskin, 2019). Cronbach’s Alpha was employed to test the reliability of the scale. All values of the constructs are greater than 0.80 meaning thereby is enough reliability of the instrument for measuring the construct under study.

3.2. Measures

3.2.1. Ethical Leadership

The developed scale was ranging from 1= strongly disagree to 7= strongly agree. The perception of ethical leadership was measured by using a 10-item scale validated by (Brown, Treviño, & Harrison, 2005). Example items included were “my supervisor makes balance and fair decisions” and “My boss can be trusted.” While Cronbach’s alpha for this study was 0.969.

3.2.2. Employer Feedback Environment

Instead of using this original scale, here we used shortened form of feedback environment comprised of seven dimensions but 21 items ranging from 1= strongly disagree to 7= strongly agree developed by (Rosen et al., 2006). Sample items were included “When I do a good job at work my supervisor praises my performance” and “My supervisor is generally familiar with my performance on the job”. The reported reliability of this scale was 0.986.
3.2.3. Employee Creative Performance
Consistent with previous research studies employee creative performance was measured by Leader’s rating (George & Zhou, 2001) on a scale ranging from 1= strongly disagree to 7= strongly agree. Example items included “My followers suggest new ways to increase quality” and “My followers often have new and innovative ideas.” The scale was reliable and the value of Cronbach’s alpha was 0.978.

4. Results and Analysis

4.1. Demographical Analysis
As per the demographic profile of respondents for frequency (N=320), there were 272 males (85%) and 48 females (15%) in the sample. 247 (77.2%) of respondents were between 20-30 years of age. Among participants, the qualification of most respondents 215 (67.2%) was between fourteen to eighteen years. Accordingly, the experience of the majority of 274 (85.6%) respondents had 1 to 10 years of experience.

4.2. Descriptive Statistics and Correlation Analysis
The Descriptive statistics and Correlational results are shown in Table 1:

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>S.D</th>
<th>EL</th>
<th>EFBE</th>
<th>ECP</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL</td>
<td>4.8269</td>
<td>1.04193</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EFBE</td>
<td>4.7887</td>
<td>.65756</td>
<td>.606**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>ECP</td>
<td>4.9627</td>
<td>.93030</td>
<td>.827**</td>
<td>.732**</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: Correlation is significant at the 0.01 level (2-tailed).

Source: Author’s own Elaboration

The Pearson Correlation matrix shows the magnitude and direction of the construct under study (Boddy & Smith, 2009). The correlation of EL with EFBE, and ECP have found to be moderately positive and statistically significant, as the values of correlation coefficient are (r =.606, <0.01), (r =.827, <0.01) respectively. This shows that an increase in EL leads to an increase in EFBE, and ECP as well. In the same way, EFBE has a positive and significant correlation with ECP (r =.732, <0.01). This indicates than an increase in EFBE leads to an increase in ECP positively. Finally, Table 1 shows that association among studied variables is suitable for the selection and prediction of the model.

4.3. Factor Analysis
For better comprehension of loadings of items into its particular factors the factors EFA was performed before CFA as recommended by Farrell & Rudd, (2009). No item was needed to drop due to any of the items having high correlation, or cross-loading, which was a good sign for applying further analysis. During EFA the Maximum Likelihood test was conducted which is necessary to perform the CFA (Tabachnick & Fidell, 2007). The majority of the loadings of the items were above 0.7 which means that all the items loaded are true representative of the relevant constructs. Table 2 shows the cross-loading of items.
### Table 2. Rotated Factor Matrix

<table>
<thead>
<tr>
<th>Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL1</td>
<td>.750</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EL2</td>
<td>.771</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EL3</td>
<td>.736</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EL4</td>
<td>.761</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EL5</td>
<td>.770</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EL6</td>
<td>.755</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EL7</td>
<td>.781</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EL8</td>
<td>.799</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EL9</td>
<td>.805</td>
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<td></td>
</tr>
<tr>
<td>EL10</td>
<td>.838</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EFBE1</td>
<td>.810</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EFBE2</td>
<td>.766</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EFBE3</td>
<td>.766</td>
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<td>EFBE4</td>
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<td>EFBE5</td>
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<td>EFBE6</td>
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<td>EFBE7</td>
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<td>.750</td>
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<td>EFBE10</td>
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<td>EFBE12</td>
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<td>EFBE13</td>
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<td>EFBE14</td>
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<td>EFBE15</td>
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<td>EFBE17</td>
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<td>EFBE19</td>
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<td>EFBE20</td>
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<td>EFBE21</td>
<td>.866</td>
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</tr>
<tr>
<td>ECP1</td>
<td>.655</td>
<td></td>
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<tr>
<td>ECP2</td>
<td>.645</td>
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<tr>
<td>ECP3</td>
<td>.649</td>
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<tr>
<td>ECP4</td>
<td>.621</td>
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<tr>
<td>ECP5</td>
<td>.602</td>
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<td>.614</td>
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<td>ECP7</td>
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<td>ECP8</td>
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<td>ECP9</td>
<td>.645</td>
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<td>ECP10</td>
<td>.621</td>
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<td>ECP11</td>
<td>.688</td>
<td></td>
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<tr>
<td>ECP12</td>
<td>.674</td>
<td></td>
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</tr>
<tr>
<td>ECP13</td>
<td>.718</td>
<td></td>
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</tr>
</tbody>
</table>

**Note:** Extraction Method: Maximum Likelihood. Rotation Method: Varimax with Kaiser Normalization.

| a. Rotation converged in 6 iterations. |

**Source: Author’s own Elaboration**
4.4. Structural Equation Modeling
In social and management sciences SEM is a well-recognized analysis technique over traditional multivariate techniques, as it simultaneously stretches a way to compute and analyze the relationships from available data to prove hypotheses and model fitness (Ringle, Sarstedt, Mitchell, & Gudergan, 2020).

4.5. Confirmatory Factor Analysis
CFA is used to confirm the theoretical measurement model based on previous literature (Collier, 2020; Kline, 2013). It was performed on AMOS 24 by using the rotated factor analysis performed through SPSS 25 in which all the factors from EFA were entered together in AMOS.

AMOS plugin has been used to analyze, as well as interpret the values of the measurement model, and to compare them with the threshold. These values are based on Chi-square (CMIN), Comparative Fit Index (CFI), Tucker Lewis Index (TLI), Incremental Fit Index (IFI), Residual Mean Square Error of Approximation (RMSEA), and Standardized Root Mean Residual (SRMR) (Collier, 2020; Henseler, Ringle, & Sarstedt, 2015; Hu & Bentler, 1999). As per Byrne (2013) criteria, CFI, TLI, and IFI should be greater than 0.90, and CFI at 0.93 is acceptable. The threshold for the RAMSEY should be less than 0.08 while the value of SRMR should be less than 0.05 (Browne & Cudeck, 1992). Table 5 demonstrates values of CMIN/DF for CFA (2.44), CFI (.935), TLI (.931), IFI (.935), RMSEA (.069), and SRMR (.0286) that have achieved the required threshold values. Hence this model was considered appropriate for analyzing hypothesized relationships among variables.

![Figure 1. Measurement Model](source: Author’s own elaboration)

4.6. Reliability and Validity
By using the plugin AMOS 24 referred by Gaskin (2016a) master reliability and validity were checked. Two of the items were deleted to get model fitness but it does not affect its reliability of construct which remained above 0.90. Table 3 demonstrates composite reliability used for the measurement of scale reliability (Hair, Black, Babin, & Anderson, 2014). Henseler et al. (2015) recommended that composite reliability thresholds should be more than 0.7. Table showing all the CR values of variables are above 0.7 such as CR value for EL, EFBE ECP is 0.968, 0.984, 0.976 respectively. This means that there is no issue of convergent validity, hence with this suitable data, we can proceed further. For finding discriminant validity of construct understudy AVE is used (Sharif, Mostafiz, &
Guptan, 2019), having values more than 0.5 as recommended by Hu and Bentler (1999). As per Fornell-Larcker Criterion, MSV (Maximum shared variance) value should be less than the AVE value (Henseler et al. 2015). As per the table, all the constructs have fewer values than AVE values such as values of MSV for EL, EFBE, and ECP are 0.720, 0.548, and 0.720 respectively. All diagonal values of each construct are the square root of AVE values which are greater than off-diagonal values of corresponding columns and rows. As per the table, this condition regarding discriminant validity is accomplished, hence the understudy constructs have discriminant validity.

<table>
<thead>
<tr>
<th>Table 3. Model Validity Measures</th>
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</thead>
<tbody>
<tr>
<td>α</td>
</tr>
<tr>
<td>EL</td>
</tr>
<tr>
<td>EFBE</td>
</tr>
<tr>
<td>ECP</td>
</tr>
</tbody>
</table>

Validity Concerns: No validity concerns here.

Source: Author’s own elaboration

4.7. Model Fitness of Measurement Model and Alternative Models

The values of model fit for the measurement model are explained in table 3 where CMIN/DF is between 1 and 3 while the value of CFI, TLI, and IFI are <0.90 and the value of RAMSEY is <0.08 all the values make the model a perfect fit.

Alternative models were also analyzed by merging different variables and factors. There were three more models developed such as the two-factor model, one more two-factor model, and the single-factor model. The two-factor model was run by conjoining the factors EL and ECP into one factor, keeping EFBE separately. As well as one more two-factor model was run by combining the two factors in such a way that EL, and EFBE, into one while leaving ECP a single factor. Further, one more one-factor model was run by combining all three constructs’ items into one single construct. Table 3 is showing the indicators of the model fits which are poorer than the original model fit indicators. The values of the CMIN, TLI, CFI, and RAMSEY of table 4 shows that the purposed model was good because two-factor more two 2-factors models, and single-factor models are not as good as the original three factors model.

<table>
<thead>
<tr>
<th>Table 4. Alternative Models</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Model 1</td>
</tr>
<tr>
<td>Model 2</td>
</tr>
<tr>
<td>Model 3</td>
</tr>
<tr>
<td>Model 4</td>
</tr>
</tbody>
</table>

Note: EL (Ethical Leadership); EFBE (Employer Feedback Environment); ECP (Employee Creative Performance).

Source: Author’s own Elaboration

4.8. Common Method Variance Assessment

To assess the common method bias, a technique known as Heterotrait-Monotrait Ratio (HTMT) has been used with a recommended threshold and criteria for each value that it should be less than .85 as recommended by (Henseler et al., 2015). The results of Table 5 show that respondents responded to the questionnaire without any biasness as the value
of each variable is less than the recommended threshold value. Hence, discriminant validity was established.

<table>
<thead>
<tr>
<th>Table 5. HTMT Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL</td>
</tr>
<tr>
<td>EL</td>
</tr>
<tr>
<td>EFBE</td>
</tr>
<tr>
<td>ECP</td>
</tr>
</tbody>
</table>

Note: HTMT Warnings
There are no warnings for this HTMT analysis.

Source: Author’s own Elaboration

4.9. Structural Model

Table 6 demonstrates model fitness statistics. The values of CMIN/DF for CFA (2.500) and SM (2.402), CFI for CFA (.918) and SM (.925), TLI for CFA (.914) and SM (.921), IFI for CFA (.918) and SM (.926) and RMSEA (Root mean squared error of approximation, by Browne and Cudeck (1992) for CFA (.069) and SM (.066) have achieved the required threshold values. Hence this model was considered appropriate for analyzing hypothesized relationships among variables.

Furthermore, path analysis provides support to understand the suggested relationship among the variables. With the help of the path analysis technique all the total, direct and indirect effects of the exogenous variables on endogenous variables are computed (Grapentine, 2000). The results of the path analysis are explained in Table 7 which demonstrates that EL has a significant positive relationship with EFBE ($\beta=.605$, $p<.01$), therefore H1 is accepted. Simultaneously, the table is explaining that EL has a positive significant effect on EFBSB ($\beta=.402$, $p<.01$) so, H2 is accepted. Similarly, EFBE has a positive relationship with EFBSB ($\beta=.518$, $p<.01$), hence H3 is accepted.
EFBSB has a positive effect on ECP ($\beta=.216$, $p<.01$) which supported H4. Further EL is positively related to ECP ($\beta=.542$, $p<.01$), so the H5 is also accepted. Finally, EFBE is positively associated with ECP ($\beta=.247$, $p<.01$), hence H6 is accepted.

### Table 7. Path Analysis

<table>
<thead>
<tr>
<th>Path</th>
<th>$S/D\beta$</th>
<th>Significant value</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>$H_1$ EL→EFBE</td>
<td>.613</td>
<td>***</td>
<td>Accepted</td>
</tr>
<tr>
<td>$H_2$ EFBE→ECP</td>
<td>.352</td>
<td>***</td>
<td>Accepted</td>
</tr>
<tr>
<td>$H_3$ EL→ECP</td>
<td>.633</td>
<td>***</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

Note1: *** is $p<0.001$, ** $p < 0.01$; * $p < 0.05$
Note2: EL (Ethical Leadership); EFBE (Employer Feedback Environment); ECP (Employee Creative Performance); $S/D\beta$ (Standardized Direct Beta)

**Source: Author’s own Elaboration**

### 4.10. Mediation Analysis

Bootstrapping technique has been used to test mediation, being a resampling method it generates sampling distribution to assess confidence interval and standard error (Bryman, 2016).

The study assessed the mediation role of Employer Feedback Environment (EFBE) between Ethical leadership (EL) and Employee Creative Performance (ECP) relationship. The result is showing a significant indirect effect of EL to ECP through EFBE ($\beta=.192, t=0.61= p<0.001$) supporting H4. Furthermore, the table 8 is showing direct effect of EL to ECP in the presence of mediating variables EFBE is significant ($\beta=.559$, $p<0.00$). Hence, EFBE partially mediates the relationship between EL and ECP. Mediation analysis summary is presented in Table 8.

**Source: Author’s own Elaboration**

### Table 8. Mediation Results

<table>
<thead>
<tr>
<th>Relationship</th>
<th>$D\beta$ With Med</th>
<th>$D\beta$ With Med</th>
<th>Confidence Interval</th>
<th>P-value</th>
<th>Parameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL→EFBE→ECP</td>
<td>0.559***</td>
<td>0.192</td>
<td>Lower Bound 0.141</td>
<td>.001</td>
<td>Partial Mediation</td>
</tr>
</tbody>
</table>

**Source: Author’s own Elaboration**
5. Discussion

The study of creative performance in relation to employees is imperative because they are one of the most important stakeholders and their feeling about a leader’s actions and image can have an effect on their behavior positively or negatively (Javed et al., 2021). Previous studies provide theoretical and conceptual frameworks that can support comprehending the role of ethical leadership in defining employees’ creative performance (Asif et al., 2020; Li et al., 2021; Özsungur, 2019). Among these empirical studies, a few studies, explain the underlying mechanism of the above-said relationship. In nutshell, we know that EL effect employees’ creative performance but why, how, and when this happens is less known. The study addresses the questions that a) Why does ethical leadership play important role in enhancing employee creative performance? b) When a feedback environment, mediates the relationship between ethical leadership and creative performance?

The findings about first question suggest that leaders may create influence, either directly or indirectly, increases or decreases in the frequency and quality of the creative performance displayed by their employees (Hughes et al., 2018). Results of various studies show that ethical leadership has a positive link with creative performance (Asif et al., 2020; Li et al., 2021). Our findings are consistent with the notion that an ethical leader demonstrates organizational commitment, confers courage to take the risk, listens to the views of employees, do not discourage them, and focus on two-way communication as a result, the employee feels psychologically safe and suggests novel ideas.

The study findings about the second question are that factor employer feedback environment have partial mediating effects among ethical leadership and creative performance. As per previous study analysis ethical leadership has a direct positive and significant relation with creative performance (Hughes et al., 2018; Özsungur, 2019) but this relationship becomes insignificant in the presence of this factor. Hence this study proved empirically to be a replica of previous studies.

The mediation model was supposed by using theoretical triangulation, i.e., Social Learning Theory (Bandura, 1986), self-determined theory (Deci & Ryan, 1985), Componential theory of creativity (Amabile, 2011) and the results of the study stand tall with the theoretical assumptions made in these studies.

These findings are in-line with previous studies and expand prior knowledge; for instance, various studies reported that leader influences directly also feedback environment as well (Gabriel, Frantz, Levy, & Hilliard, 2014; Gong & Li, 2019). These outcomes have also been investigated in other studies as predictor of performance as well (Mertens et al., 2021). The findings discussed in the above-mentioned section depicts that this study entails some novel explanation linking EL with ECP through EFBE mediation mechanism.

5.1. Conclusion

The study result is aligned with creative performance literature demonstrating that it is not a singular static construct; rather an output of a process carried out by persons or a person within an establishment, as acknowledged by Batey (2012) in a measurement framework (Hughes et al., 2018). Whereas the immediate effects of these constructs are concerned, having adopted one predictor may boost effect consequently in other one. For example, by applying an ethical leadership style, having strong relations with its
employees, strengthens the feedback environment which in turn enhances the creative performance among employees.

According to the best of our knowledge, we are the first one who has investigated the relation of ethical leadership to its feedback environment based on the notion of a study conducted by Steelman et al. (2004) and wherein they have suggested that feedback environment is get effected by a mentor (Gong & Li, 2019; Mertens et al., 2021) in return enhanced creative performance. Thus, we added to the existing knowledge base pertaining to the feedback environment on the part of the leader. Since, the ethical leader is a person who obtains and utilizes various resources through command, cooperation, competition, persuasion, and demonstration along with having features of credibility, trust worthiness to complete the task and achieve specific goals (Kuvaas, Buch, & Dysvik, 2017; Mo & Shi, 2017).

One of the strengths of our study is that this study is not limited to the extent of employee-leader continuous interaction, as recommended previously by the study of (Meinecke, Lehmann-Willingbrook, & Kauffeld, 2017). Within the framework of our research, we moved beyond the scope of dyadic research to the distal outcomes of such interaction like employee creative performance as recommended by (Tseng and Levy (2018). So, to gain its effectiveness, the leadership process must be assessed on employee self-regulation as an intermediate component in the form of developing a feedback environment but performance outcomes of employees should be the criteria of interest.

5.2. Limitations and Directions for Future Research
The research object, measurement, and, concept of creative performance needs to be redefined. Being a continuum process creative performance exists from incremental adjustment to fundamental breakthroughs. Since, the object of many scholars on creative performance has been to focus on research and development personnel, particularly in industrial enterprises or the service sector (Gong, Shan, & Yu, 2019). So, in modern organizations personnel involved in innovative work should not only be limited to these industries or the software industry but also there is a need for research on creative performance to be done in the field of agricultural technology as well to generalize the findings of this study in other fields.

For future research various other determinant factors must be used in the proposed model for explaining a comprehensive processes of creative performance and to ponder over its results, to determine whether there is a difference arises between results and the process itself. Since antecedents of creative performance have different cultural and national effects so, the role of cultural differences in creative performance should be studied as an important direction from the international perspective along with its comparative study.

References


