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# Effect of ethical climate on corporate financial performance in Pakistan: An application of confirmatory tetrad analysis (CTA-PLS)approach

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**Abstract**
The ethical climate is one of the essential sub-constructs of organizational climate. It focuses on the ethical working behaviors of organizational members, including management and employees. Generally, ethical activities are considered as a hindrance to the corporate economic performance that is the root cause of unethical activities in organizations. This study has two main objectives. First, to establish and validate the six-factor ethical climate second-order construct. Purposely, the confirmatory tetrad analysis-partial least square (CTA-PLS) approach was applied to identify the right type of hierarchical latent variable (second-order construct). Second, to assess the effect of ethical climate on corporate financial performance in the context of Pakistan. The results first, confirm that type I (reflective-reflective) is appropriate for higher-order construct of ethical climate. Second, the significant direct effect of ethical climate and corporate financial performance is established by using the partial least square – structural equation modeling (PLS-SEM).

**Keywords:** Ethical climate, financial performance, hierarchical latent variable, second-order, higher-order.

## Introduction

The ethical climate is one of the critical success factors of an organization (Lau, Tong, Lien, Hsu, & Chong, 2017). It plays a vital role in developing stakeholders trust in a business that leads to superior organizational performance (Goebel & Weißenberger, 2017). Therefore, the managers should improve an ethical climate to build mutual trust and to gain competitive advantage. Since the evolution of the ethical climate construct by (Victor & Cullen, 1987), a lot of discussions on this construct have been done in different organizational contexts. Till the end of the 20$^{th}$ century, the debate was confined to the relationship of ethical climate and ethical employees behavior in the organization (Arnaud, 2006a; Schminke, Ambrose, & Neubaum, 2005; Walumbwa, Hartnell, & Misati, 2017). Afterward, the discussion has turned to explore the various antecedents such as leadership, and organizational practices and outcomes of the ethical climate, i.e., employees work attitudes, behaviors, psychological condition and financial performance (Martin & Cullen, 2006; Myer, Thoroughgood, & Mohammed, 2016; Newman, Round, Bhattacharya, & Roy, 2017).

Generally, firms involved in unethical activities; to gain financially as well as a competitive advantage (Myer et al., 2016), as they perceive ethical activities competing to financial performance. Therefore, maximum interest in these benefits prevents organizations from performing their operations ethically. Reflecting the same paradigm, the involvement of organization owners and employees has been exposed in the recent fake bank account scandal in Pakistan. Similarly, Ahmed, Shad, Mumtaz, & Tanveer (2012); Rana, Zainol, Yaacob, Ahmad, & Kashif-ur-Rehman (2018) reported a low level of ethical climate in Pakistani firms that calls the attention to determine the effect

of ethical climate on the financial performance in Pakistan. Therefore, this study aims to assess the relationship between ethical climate and organizational performance among Pakistani organizations.

Prior studies have mostly focused on developed countries by using Victor & Cullen (1987) ethical climate questionnaire to measure the level of ethical climate in organizations. Whereas, in her scholarly work Arnaud, (2006b) criticized the existing measure of ethical climate and developed a new measure based on Rest's psychological process model of ethical decision making (Rest, 1984). This new measure is based on six factors and provided a more comprehensive conceptual understanding of ethical climate than the former. Astonishingly in the context of Pakistan, there is no study found that has validated the Arnaud's measure of ethical climate at the organizational level. Therefore, it is vital to test and validate this measure in Pakistan. Hence, this study has measured the ethical work climate by using second-order reflective-reflective higher order construct.

## Literature review

### Ethical Climate

Every organization has a specific working environment based on its culture, referred to as a work climate (Arnaud, 2010). The ethical climate is one of the essential sub-constructs of organizational climate while considering its normative aspect. It focuses on the ethical working behaviors of organizational members, including management and employees (Martin & Cullen, 2006). Theory of ethical work climate (EWC) was first conceptualized by Victor & Cullen (1987, p. 51) as "the shared perceptions of what is ethically correct behavior and how ethical issues should be handled."

First, Victor & Cullen (1987, 1988) operationalized EWC by two main dimensions 1) ethical criterion (egoism, benevolence, and principle) 2) locus of analysis (individual, local, and cosmopolitan). By using these two dimensions, they hypothesized nine types of ethical climate, i.e., self-interest, company profit, efficiency, friendship, team interest, social responsibility, personal morality, company rules, procedures and laws, and professional code. Further, they found that currently, five types of ethical climate exist in an organization.

Further, Arnaud (2006b) has developed a new theory of ethical work climate (EWC) by conceptualizing the construct with all four dimensions of PPM model (Rest, 1984), i.e., collective moral sensitivity, collective moral judgment, collective moral motivation, and collective moral character. Whereas EWC theory by (Victor & Cullen, 1987, 1988) only follows one dimension of PPM model, i.e., moral judgment and ignores the rest. Therefore, the new theory of EWC is vital as it provides an in-depth understanding of the construct.

### Collective Moral Sensitivity

Moral sensitivity is defined as a person's capacity to distinguish between ethical and unethical activities (Reynolds & Miller, 2015). It is a psychological construct referred to as one's ability to think, understand, and acknowledge his/her actions as ethical or unethical (Tongsuebsai, Sujiva, & Lawthong, 2015). It is a network of emotions and beliefs that leads to moral actions (Pinazo Calatayud & Nos Aldas, 2016), as well as it is considered as a critical ingredient of moral decision making (Sparks, 2015) and an antecedent of moral judgment (Han, 2017; Pinazo Calatayud & Nos Aldas, 2016; Pohling, Bzdok, Eigenstetter, Stumpf, & Strobel, 2016; Tongsuebsai et al., 2015).

Furthermore, Han (2017) has found that the human brain reacts quicker on ethical issues comparing to non-ethical issues. These findings are in line with the social identity theory that advocates that employees behave pro-actively to social issues after identifying their leaders pro-societal and ethical behaviors (Shi & Ye, 2016; Waldman, Siegel, & Javidan, 2006). But these behaviors are moderated by situational factors (like the nature, timings, and intensity of the issue) and the personal character of the individual (Sparks, 2015; Wurthmann, 2017). Moral sensitivity has two sub-components, i.e., moral awareness and empathy (Arnaud, 2006a, 2010).

**Collective Moral Judgement**

The second component of Rest (1984, 1986) decision-making model is the moral judgment that referred to the decisions made by rational thinking based on the collective beliefs about morality that was established during the moral awareness process (Arnaud, 2006a; Barnett & Valentine, 2004; Reynolds, 2006). It is a unique process that varies from person to person, but its outcomes may be the same. To provide more clarityto this, Arnaud (2006) in her outstanding work on developing a measure of ethical climate referred to cognitive moral development theory (CMD). According to CMD, the decisions of two persons on a situation might be the same, but behind these decisions, the reasoning one person may be different from other (Kohlberg, 1981, 1984). For example, two persons A & B belong to various organizations encountered the same issue of forgery in financial statements. Both A and B reported the matter to the legal authorities, but their reasons for reporting the same are different. "A" reported because he thought that by not reporting the issue, he might face a legal proceeding that may lead to punishment. Whereas, "B" reported the matter by showing socially responsible behavior. In both cases, the outcome was the same based on different reasons. The former case is referred to Collective Moral Judgement – Focus on Self whereas, the latter case is stated as Collective Moral Judgement – Focus on others.

**Collective Moral Motivation**

Moral judgment only is not enough for moral behavior. For this, an individual's moral values must have to overthrow other values like power, economic, supremacy, etc. (Aboodi, 2017; Rest, 1984, 1986). This prioritization of moral values over other values is known as moral motivation (Arnaud, 2006a). But sometimes, moral behavior is not followed by moral motivation; rather, it is based on extrinsic motivation (Mittiga, 2017). For example, an eyewitness of crime appeared in the court of justice after the announcement of monetary reward instead of volunteering on moral grounds.It is in line with the homo economicus model, which assumed that human behavior is moderated by self-interest (Turaga, Howarth, & Borsuk, 2010). However, Collective moral motivation is a necessary element of the overall ethical environment (Mittiga, 2017).Out of four, the first two components of the psychological process model (PPM), i.e., moral sensitivity and moral judgment are cognitive whereas moral motivation is an effective component that leads towards moral behavior (Kaplan, 2017; Kaplan & Tivnan, 2014; Ware, 2014).

**Collective Moral Character**

Moral character is the key dimension of someone's personality in forming an impression of others (Goodwin, Piazza, & Rozin, 2014). Cohen, Panter, Turan, Morse, & Kim (2014) defined moral character as a personality trait that distinguishes people on the bases of their considerations about moral issues. In a social system, morality is determined by values set by society (Setiawan & Darmawan, 2016)whereas, organizations have their own values system (Erkutlu, 2011). Therefore, in organizations, the employee has to synchronize their moral character with the collective moral character prevailed in the organization. Arnaud (2006, 2010) conceptualized collective moral character as prevailing norms in the organization that is used to plan the ethical code of conduct. Organizational ethical norms are not spontaneous; rather, it involves comprehensive policy and efforts of management. In line with this, Lapsley & Woodbury (2016); Nerandzic et al. (2012) found that people having ethical education and training, possess strong moral personalities.

**Ethical Climate and Financial Performance**

Enhancing financial performance is the fundamental right of any organization but in an ethical way. Conventionally, the ethical activities were considered as the hindrance in economic performance (Dyllick & Hockerts, 2002; Epstein & Roy, 2003; Monir, Abu, & Rampling, 2015). Afterward, several studies have discussed the importance of the normative element of organizational

culture in the form of sustainability (Salzmann, Ionescu-Somers, & Steger, 2005; Shah & Rahim, 2019) and ethical climate (Arnaud, 2006b)in enhancing financial performance. Specifically, Myer et al. (2016) found that ethical climate is complementary to the service climate for improving business financial performance. Therefore, we hypothesized that an ethical climate has a direct impact on financial performance, specifically in the context of Pakistan.

## Methodology

The present research aims to evaluate the association between ethical climate and organizational performance among Pakistani organizations. Therefore, the nature of the study is correlational. The hypothesis is tested through Partial Least Squares Structural Equation Modelling (PLS-SEM) using Smartpls 3.0 software. Applying the judgmental sampling technique, 326 middle managers of 38 organizations listed in KSE 100 Index of Pakistan stock exchange have selected for data collection.

### Measures

#### *Ethical Climate*

Ethical climate explains the level of ethics prevailed in the working environment of any organization. This construct has been operationalized by 36 items with six factors on 5-point Likert scale developed by (Arnaud, 2006b). Out of total 5 items are related to collective moral sensitivity – norms of moral awareness, 7 items are related to collective moral sensitivity – norms of empathetic concerns, 5 items are related to collective moral judgment – focus on self, 5 items are related to collective moral judgment – focus on others, 8 items are related to Collective Moral Motivation and 6 items are related to Collective Moral Character.

#### *Financial Performance*

Financial performance is conceptualized as the perception of respondents regarding the firm's financial performance. This construct has been measured by using six items of perceived financial performance scale adapted by (Santiago, Pandey, & Theresa, 2019) on a 5-point Likert scale. Originally this 13-items scale was developed by Nouri, Motamedi, & Soltani (2017), to measure perceived risk and return.

### Unit of Analysis and Aggregation of Data

Selection of the subject or unit of analysis in research is a very important and critical decision (Cavana, Delahaye, & Sekaran, 2001). The results based on data collected from the unsuitable or inappropriate subject or unit of analysis can mislead the whole research findings. Therefore, the selection process of a unit of analysis in the present study involves consultation of academic researchers, top-level managers of various organization, and review of the methodology adopted by previous related studies. The unit of analysis of the present study is the firm level. As climate research focuses on a shared perception of the respondents about the observed phenomena, therefore it is necessary to transform the individual level responses to the organizational level.

For this purpose, Rwg(j) measure by (James, Demaree, and Wolf, 1984) was used on all constructs from each firm to guarantee the understanding among the managers and that it was sufficient to total individual-level factors to the firm-level. First Rwg(j) was registered to assess within-group agreement. At that point, intra-class connection ICC (1) and ICC (2) were determined to appraise the difference between groups and within groups. Table 1 displays the agreement indices for the five scales used for the study. The Rwg values ranged from 0.73 to 0.88, with a mean of 0.80 for all the variables. The ICC (1) for studied variables ranged from 0.11 to 0.22, with an average of 0.17. The ICC (2) ranged from 0.60 to 0.76, with an average of 0.66. These results confirm a high level of agreement and reliability in the studied variable scores.

**Table 1**
*Agreement indices of first-order constructs*

| Variable | Cronbach's Alpha | Rwg(j) | ICC1 | ICC2 |
|---|---|---|---|---|
| NMA | 0.88 | 0.74 | 0.19 | 0.64 |
| NEC | 0.78 | 0.88 | 0.15 | 0.76 |
| FS | 0.73 | 0.80 | 0.22 | 0.66 |
| FO | 0.83 | 0.74 | 0.11 | 0.61 |
| CMM | 0.87 | 0.83 | 0.17 | 0.66 |
| CMC | 0.80 | 0.86 | 0.20 | 0.72 |
| FP | 0.77 | 0.81 | 0.18 | 0.60 |

*Note: NMA-Norms of Moral Awareness, NEC-Norms of Empathetical Concerns, FS-Focus on Self, FO-Focus on Others, CMM-Collective Moral Motivation, CMC-Collective Moral Character, FP- Financial Performance.*

## Findings

### Measurement Model

This research has performed confirmatory factor analyses (CFA) to approve the measurement model (outer model) by inspecting the connection between items and their particular variable. Since the model comprises of the manifest (First-order) and latent variables (second order), surveying the measurement model included both constructs. All items' loading for reflective constructs were inspected to pass a cut-off value of 0.5 to assess reliability, as recommended by Hair et al. (2010). Therefore, the items with a loading of less than 0.5 were eliminated from further consideration (See Table 2).

### Construct Reliability and Validity

The reliability of every item/scale was evaluated by investigating the loadings of the individual items on their respective latent construct and internal consistency of the measure. Meanwhile, construct validity was examined by convergent and discriminant validity (Hair, Hult, Ringle, & Sarstedt, 2017).

### Convergent Validity

Convergent validity refers to the degree where multiple items used in the research to measure the same concept are in agreement (Hair, Hult, Ringle, & Sarstedt, 2014). Convergent validity of the measures used in this research is examined through outer loadings, the value of the average variance extracted (AVE). AVE value of 0.5 and higher should be achieved to prove that the latent variable explains more than half of its indicators' variance (Hair et al., 2010). Any loadings below 0.5 were deleted, resultantly final AVE and CR were above the benchmark value of 0.5 and 0.7, respectively(please refer to Table 2).

### Discriminant Validity

Discriminant validity can be defined as a situation when two or more distinctively different concepts are not correlated to one another (Hair et al., 2014). The methods that have been put forward to determine the constructs' discriminant validity are Fornell-Larcker criterion and Heterotrait-Monotrait Ratio (HTMT) Analysis. According to Fornell-Larcker criterion, the square root of AVE for each latent construct should be higher than the correlations of any other latent construct. As shown in Table 3, the square root of AVE for each construct is higher than the correlation for each construct. Similarly, in Heterotrait-Monotrait Ratio (HTMT) Analysis, the discriminant validity exists when all the values of HTMT ratio are less than 0.85. As shown in Table 4, the HTMT ratio of each indicator against its respective indicator was less than 0.85, that indicates the discriminant validity among indicators.

**Table 2**
*Result Summary for Reliability and Validity of Construct*

| Second Order | AVE | CR | First Order | Items | Loadings | AVE | CR | Item deleted |
|---|---|---|---|---|---|---|---|---|
| | | | Perceived Financial Performance | PFP1 | 0.902 | **0.589** | **0.874** | **PFP3** |
| | | | | PFP2 | 0.589 | | | |
| | | | | PFP4 | 0.612 | | | |
| | | | | PFP5 | 0.841 | | | |
| | | | | PFP6 | 0.838 | | | |
| **Ethical Climate** | **0.66** | **0.83** | Norms of Moral Awareness | NMA1 | 0.945 | **0.681** | **0.907** | **NMA5** |
| | | | | NMA2 | 0.965 | | | |
| | | | | NMA3 | 0.951 | | | |
| | | | | NMA4 | 0.949 | | | |
| | | | Norms of Empathetical Concerns | NEC1 | 0.887 | **0.749** | **0.954** | |
| | | | | NEC2 | 0.869 | | | |
| | | | | NEC3 | 0.947 | | | |
| | | | | NEC4 | 0.761 | | | |
| | | | | NEC5 | 0.869 | | | |
| | | | | NEC6 | 0.841 | | | |
| | | | | NEC7 | 0.874 | | | |
| | | | Focus on Self | FS1 | 0.919 | **0.649** | **0.901** | |
| | | | | FS2 | 0.748 | | | |
| | | | | FS3 | 0.728 | | | |
| | | | | FS4 | 0.904 | | | |
| | | | | FS5 | 0.702 | | | |
| | | | Focus on Others | FO1 | 0.866 | **0.79** | **0.903** | |
| | | | | FO2 | 0.941 | | | |
| | | | | FO3 | 0.919 | | | |
| | | | | FO4 | 0.935 | | | |
| | | | | FO5 | 0.919 | | | |
| | | | Collective Moral Motivation | CMM1 | 0.846 | **0.758** | **0.908** | |
| | | | | CMM2 | 0.969 | | | |
| | | | | CMM3 | 0.877 | | | |
| | | | | CMM4 | 0.94 | | | |
| | | | | CMM5 | 0.975 | | | |
| | | | | CMM6 | 0.953 | | | |
| | | | | CMM7 | 0.896 | | | |
| | | | | CMM8 | 0.947 | | | |
| | | | Collective Moral Character | CMC1 | 0.817 | **0.752** | **0.948** | |
| | | | | CMC2 | 0.915 | | | |
| | | | | CMC3 | 0.902 | | | |
| | | | | CMC4 | 0.886 | | | |
| | | | | CMC5 | 0.872 | | | |
| | | | | CMC6 | 0.804 | | | |

**Table 3**
*Fornell-Larcker Criterion Analysis for Checking Discriminant Validity of First Order Constructs*

| Variable | CMC | CMM | FO | FS | NEC | NMA | PFP |
|---|---|---|---|---|---|---|---|
| CMC | **0.867** | | | | | | |
| CMM | 0.354 | **0.870** | | | | | |
| FO | 0.312 | -0.299 | **0.888** | | | | |
| FS | 0.653 | 0.536 | 0.238 | **0.805** | | | |
| NEC | 0.441 | 0.211 | 0.387 | 0.295 | **0.865** | | |
| NMA | 0.57 | 0.035 | 0.324 | 0.23 | 0.712 | **0.825** | |
| FP | 0.539 | -0.053 | 0.311 | 0.055 | 0.576 | 0.617 | **0.767** |

*Note: The square root of AVE values are shown on the diagonals and printed with bold, non-diagonal elements are the latent variable correlation. NMA-Norms of Moral Awareness, NEC-Norms of Empathetical Concerns, FS-Focus on Self, FO-Focus on Others, CMM-Collective Moral Motivation, CMC-Collective Moral Character, FP- Financial Performance*

**Table 4**
*Heterotrait-Monotrait Ratio (HTMT) Analysis for Checking Discriminant Validity of First Order Constructs*

| Variable | CMC | CMM | FO | FS | NEC | NMA | PFP |
|---|---|---|---|---|---|---|---|
| CMC | | | | | | | |
| CMM | 0.363 | | | | | | |
| FO | 0.301 | 0.373 | | | | | |
| FS | 0.681 | 0.575 | 0.23 | | | | |
| NEC | 0.429 | 0.226 | 0.362 | 0.334 | | | |
| NMA | 0.566 | 0.099 | 0.296 | 0.326 | 0.737 | | |
| FP | 0.652 | 0.251 | 0.308 | 0.432 | 0.624 | 0.818 | |

*Note: NMA-Norms of Moral Awareness, NEC-Norms of Empathetical Concerns, FS-Focus on Self, FO-Focus on Others, CMM-Collective Moral Motivation, CMC-Collective Moral Character, FP- Financial Performance*

**The Establishment of Second-Order Constructs**

In this study, ethical climate (EC) is conceptualized as a second-order reflective-reflective construct. The second-order construct was assessed using the repeated indicator in which all the first-order constructs are taken out together as a reflective measure of second-order constructs in PLS model (Becker, Klein, & Wetzels, 2012; Wetzels, Odekerken-schröder, & Oppen, 2009). Hence, the second-order construct was measured directly by all indicators of first-order constructs.

The factors within the EC were formulated to capture collective ethical climate perceptions as they relate to each of the components of Rest's (1986) model for ethical decision making. Rest's theory states that each of the ethical decision-making steps is reflected in the final ethical decision.Arnaud(2006a) has used this logic to argue that conceptually, the six EC factors are all highly related but distinct dimensions of ethical climate,that together explain the overall ethical climate construct. These arguments provide theoretical justification for the use of a second-order EC factor. Several past empirical studies have also found the six EC factors to be highly intercorrelated and used ethical climate as a second-order reflective construct (Burnett, 2017). Table 5 describes standardized loadings and their significance level that supports the establishment of a second-order construct of ethical climate.

**Table 5**
*Second-order of EC and CSP and its relationship with first-order constructs*

| Second Order Construct | First Order Construct | Standardized Loadings | t-values | p-value |
|---|---|---|---|---|
| **Ethical Climate** | Norms of Moral Awareness | 0.834 | 9.072 | 0.000 |
| | Norms of Empathetical Concerns | 0.237 | 2.046 | 0.046 |
| | Focus on Self | 0.257 | 2.160 | 0.035 |
| | Focus on Others | 0.662 | 6.975 | 0.000 |
| | Collective Moral Motivation | 0.815 | 9.823 | 0.000 |
| | Collective Moral Character | 0.778 | 7.878 | 0.000 |

**Significance level p<0.05*

**Defining the Type of Second-Order Construct: *Confirmatory Tetrad Analysis (CTA-PLS)***

In addition to theoretical support, CTA-PLS is inferred as a better statistical measure to determine whether the latent / higher order construct is reflective or formative (Hair, Hult, Ringle, & Sarstedt, 2017). This approach is based on an evaluation of construct indicators in the form of the tetrad. The latent construct is said to reflective when all the tetrad values are non-significant (Hair et al., 2017; Svensson et al., 2018). Table 6 provides the CTA-PLS results explaining none of the tetrads is significant that provides empirical support to reflective models.

**Table 6**
*Confirmatory Tetrad Analysis (CTA-PLS)*

| Dimension | Tetrad | Original Value | $CI^{BCa}$ Low | $CI^{BCa}$ Up |
|---|---|---|---|---|
| **Norms of Moral Awareness** | 1,2,3,4 | 0.032 | -0.009 | 0.059 |
| | 1,2,4,3 | 0.026 | -0.005 | 0.061 |
| | 1,2,3,5 | -0.020 | -0.046 | 0.004 |
| | 1,3,5,2 | 0.008 | -0.020 | 0.036 |
| | 1,3,4,5 | -0.010 | -0.033 | 0.011 |
| **Norms of Emphatical Concerns** | 1,2,3,4 | 0.033 | -0.105 | 0.065 |
| | 1,2,4,3 | 0.015 | -0.025 | 0.057 |
| | 1,2,3,5 | 0.017 | -0.004 | 0.042 |
| | 1,3,5,2 | 0.001 | -0.011 | 0.014 |
| | 1,2,3,7 | 0.028 | -0.010 | 0.068 |

| | | | | |
|---|---|---|---|---|
| | 1,2,4,5 | 0.027 | -0.007 | 0.065 |
| | 1,2,4,7 | 0.014 | -0.033 | 0.062 |
| | 1,2,5,7 | 0.030 | -0.002 | 0.066 |
| | 1,6,7,2 | 0.014 | -0.017 | 0.047 |
| | 1,3,4,6 | 0.024 | -0.014 | 0.065 |
| | 1,3,7,4 | 0.007 | -0.009 | 0.024 |
| | 1,3,5,6 | 0.010 | -0.009 | 0.030 |
| | 1,4,6,5 | -0.008 | -0.023 | 0.006 |
| | 1,4,6,7 | -0.004 | -0.02 | 0.012 |
| **Focus on Self** | 1,2,3,4 | 0.013 | -0.013 | 0.030 |
| | 1,2,4,3 | -0.024 | -0.049 | 0.012 |
| | 1,2,3,5 | 0.006 | -0.011 | 0.015 |
| | 1,3,5,2 | -0.028 | -0.049 | 0.013 |
| | 1,3,4,5 | 0.003 | -0.016 | 0.021 |
| **Focus on Others** | 1,2,3,4 | 0.022 | -0.004 | 0.045 |
| | 1,2,4,3 | 0.006 | -0.017 | 0.029 |
| | 1,2,3,5 | 0.016 | -0.006 | 0.039 |
| | 1,3,5,2 | -0.012 | -0.024 | 0.012 |
| | 1,3,4,5 | -0.010 | -0.031 | 0.010 |
| **Collective Moral Motivation** | 1,2,3,4 | 0.031 | 0.007 | 0.061 |
| | 1,2,4,3 | -0.028 | -0.080 | 0.012 |
| | 1,2,3,5 | 0.029 | -0.007 | 0.068 |
| | 1,3,5,2 | -0.061 | -0.129 | 0.012 |
| | 1,2,3,6 | 0.026 | -0.008 | 0.064 |
| | 1,2,3,7 | 0.049 | -0.014 | 0.092 |
| | 1,2,3,8 | 0.020 | -0.005 | 0.048 |
| | 1,2,5,4 | -0.008 | -0.04 | 0.023 |
| | 1,2,7,4 | 0.029 | -0.004 | 0.067 |
| | 1,2,8,4 | -0.016 | -0.045 | 0.011 |
| | 1,5,6,2 | 0.030 | -0.008 | 0.072 |
| | 1,5,7,2 | 0.033 | -0.027 | 0.097 |
| | 1,6,8,2 | -0.029 | -0.058 | 0.015 |
| | 1,3,7,8 | 0.003 | -0.015 | 0.021 |

| | | | | |
|---|---|---|---|---|
| | 1,4,6,7 | 0.019 | -0.022 | 0.063 |
| | 1,5,6,8 | 0.028 | -0.040 | 0.060 |
| | 1,5,7,8 | 0.032 | -0.030 | 0.066 |
| | 2,3,6,4 | -0.001 | -0.037 | 0.035 |
| | 2,3,5,7 | -0.041 | -0.104 | 0.013 |
| | 2,6,7,5 | -0.011 | -0.033 | 0.010 |
| **Collective Moral Character** | 1,2,3,4 | 0.011 | -0.005 | 0.029 |
| | 1,2,4,3 | -0.005 | -0.031 | 0.02 |
| | 1,2,3,5 | 0.008 | -0.011 | 0.029 |
| | 1,3,5,2 | -0.004 | -0.021 | 0.012 |
| | 1,2,3,6 | 0.019 | -0.004 | 0.046 |
| | 1,2,4,5 | -0.016 | -0.039 | 0.006 |
| | 1,2,5,6 | 0.002 | -0.014 | 0.020 |
| | 1,3,4,6 | -0.022 | -0.044 | 0.050 |
| | 1,3,6,5 | -0.003 | -0.013 | 0.014 |

**Assessment of Structural Model**

The structural model can be ascertained by conducting a bootstrapping procedure (Zhao, Lynch, & Chen, 2010). The structural model assessment was performed to test the developed hypotheses relationships. This test can only be done after measurement model analysis has ensured no violation. In the structural evaluation, the path coefficients β and $R^2$ values are examined first. In other words, after computing the path estimates in the structural model, a bootstrap analysis was performed to assess the statistical significance of the path coefficients. Our results found a significant direct effect among the ethical climate and financial performance ($\beta = 0.629$, $t = 6.092$, $p<0.01$). The value of $R^2$ of the endogenous variable is 0.40. It means that the independent variable explains 40% of the variance in the dependent variable.

**Analyzing Predictive Relevance ($Q^2$)**

The predictive relevance $Q^2$ was employed To assess the capability of the research model to make a prediction (Duarte & Raposo, 2010; Götz, Liehr-Gobbers, & Krafft, 2010). The blindfolding procedure was performed to obtain the value of Q2. According to Hair et al. (2014), a Q2 greater than 0 implies that the model has predictive relevance, while a value less than 0 indicates a lack of predictive relevance. Values of 0.02, 0.15, and 0.35 suggest that an exogenous construct has a small, medium, and high predictive relevance for a specific endogenous construct (Hair et al., 2014). Table 9 explains the substantial results for the coefficient of determination and a medium level of predictive relevance that provides sufficient statistical support to the model fit.

**Table 9**

*Predictive Relevance for Endogenous Variables (Q2) and Coefficient of Determination ($R^2$)*

| Constructs | $Q^2$ | Result of Predictive Relevance | $R^2$ | Result of Coefficient of Determination |
|---|---|---|---|---|
| Financial Performance | 0.19 | Medium | 0.40 | Substantial |

## Conclusion

This study has established and validated the second-order reflective-reflective construct of ethical work climate in the context of Pakistan by using the confirmatory tetrad analysis – partial least square (CTA-PLS) approach. By utilizing this overall construct appropriately, the prospective researchers will get a better understanding of observed phenomena. Further, the results of the analysis confirm the significant positive direct effect of ethical climate on the firm's financial performance in Pakistan. This inference will eliminate the concerns of ethical climate between the investors and the management, and they will also be encouraged to develop it in their organizations. Finally, this research will help the regulators to develop the policy guidelines to define the ethical business process for enhancing overall corporate financial performance in the country.

**Reference**

Aboodi, R. (2017). One Thought Too Few: Where De Dicto Moral Motivation is Necessary. *Ethical Theory and Moral Practice*, *20*(2), 223–237. Ethical Theory and Moral Practice.

Ahmed, B., Shad, I., Mumtaz, R., & Tanveer, Z. (2012). Organizational ethics and job satisfaction : Evidence from Pakistan. *African Journal of Business Management*, *6*(8), 2966–2973.

Arnaud, A. (2006a). Conceptualizing and measuring ethical work climate: development and validation of the ethical climate index (ECI). *Academy of Management Proceedings*, *2006*(1), E1–E6. Retrieved from http://proceedings.aom.org/cgi/doi/10.5465/AMBPP.2006.27182164

Arnaud, A. (2006b). *A New Theory And Measure Of Ethical Work Climate: The Psychological Process Model (PPM) And The Ethical Climate Index (eci)*. University of Central Florida.

Arnaud, A. (2010). Conceptualizing and Measuring Ethical Work Climate. *Business & Society*, *49*(2), 345–358. Retrieved from http://journals.sagepub.com/doi/10.1177/0007650310362865

Barnett, T., & Valentine, S. (2004). Issue contingencies and marketers' recognition of ethical issues, ethical judgments and behavioral intentions. *Journal of Business Research*, *57*(4), 338–346.

Becker, J., Klein, K., & Wetzels, M. (2012). Hierarchical Latent Variable Models in PLS-SEM : Guidelines for Using Reflective-Formative Type Models. *Long Range Planning*, *45*(5–6), 359–394. Elsevier Ltd. Retrieved from http://dx.doi.org/10.1016/j.lrp.2012.10.001

Burnett, E. A. (2017). Bad Behavior with Good Intentions : The Role of Organizational Climate in Unethical Pro- Organizational Behavior. *All Theses*, 2608. Retrieved from https://tigerprints.clemson.edu/all_theses/2608

Cavana, R. Y., Delahaye, B. L., & Sekaran, U. (2001). *Applied business research: Qualitative and quantitative methods* (2nd ed.). Sydney: John Wiley & Sons.

Cohen, T. R., Panter, A. T., Turan, N., Morse, L., & Kim, Y. (2014). Moral character in the workplace. *Journal of Personality and Social Psychology*, *107*(5), 943–963.

Duarte, P. A. O., & Raposo, M. L. B. (2010). A PLS Model to Study Brand Preference: An Application to the Mobile Phone Market. In V. E. Vinzi, W. W. Chin, J. Henseler, & H. Wang (Eds.), *Handbook of Partial Least Squares: Concepts, Methods and Applications* (pp. 449–485). New York: Springer US.

Dyllick, T., & Hockerts, K. (2002). Beyond the business case for corporate sustainability. *Business Strategy and the Environment*, *11*(2), 130–141.

Epstein, M. J., & Roy, M.-J. (2003). Making the Business Case for Sustainability: Linking Social and Environmental Actions to Financial Performance. *Journal of Corporate Citizenship*, (9), 79–96.

Erkutlu, H. (2011). The moderating role of organizational culture in the relationship between organizational justice and organizational citizenship behaviors. *Leadership & Organization Development Journal*, *32*(6), 532–554.

Goebel, S., & Weißenberger, B. E. (2017). The Relationship Between Informal Controls , Ethical Work Climates , and Organizational Performance. *Journal of Business Ethics*, *141*(3), 505–528. Springer Netherlands.

Goodwin, G. P., Piazza, J., & Rozin, P. (2014). Moral character predominates in person perception and evaluation. *Journal of Personality and Social Psychology*, *106*(1), 148–168.

Götz, O., Liehr-Gobbers, K., & Krafft, M. (2010). Evaluation of structural equation models using the partial least squares (PLS) approach. In V. Esposito Vinzi, W. W. Chin, J. Hensler, & H. Wang (Eds.), *Handbook of partial least squares* (pp. 691–711). Springer Berlin Heidelberg.

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2010). *Multivariate Data Analysis* (7th ed.). New Jersey: Prentice Hall.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2014). *A Primer on Partial Least Squares Structure Equation Modelling (PLS)*. California, USA: Sage Publications Ltd.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structure Equation Modelling (PLS)* (2nd Editio.). California, USA: Sage Publications Ltd.

Han, H. (2017). Neural correlates of moral sensitivity and moral judgment associated with brain circuitries of selfhood: A meta-analysis. *Journal of Moral Education*, *46*(2), 97–113. Routledge. Retrieved from http://dx.doi.org/10.1080/03057240.2016.1262834

Kaplan, U. (2017). Moral Motivation as a Dynamic Developmental Process: Toward an Integrative Synthesis. *Journal for the Theory of Social Behaviour*, *47*(2), 195–221. Retrieved from http://doi.wiley.com/10.1111/jtsb.12116

Kaplan, U., & Tivnan, T. (2014). Moral motivation based on multiple developmental structures: An exploration of cognitive and emotional dynamics. *Journal of Genetic Psychology*, *175*(3), 181–201.

Kohlberg, L. (1981). *The Philosophy of Moral Development*. San Francisco: Harper & Row.

Kohlberg, L. (1984). *The Psychology of Moral Development*. San Francisco: Harper & Row.

Lapsley, D., & Woodbury, R. (2016). Moral-Character Development for Teacher Education. *Action in Teacher Education*, *38*(3), 194–206. Routledge. Retrieved from https://www.tandfonline.com/doi/full/10.1080/01626620.2016.1194785

Lau, P. Y. Y., Tong, J. L. Y. T., Lien, B. Y.-H., Hsu, Y.-C., & Chong, C. L. (2017). Ethical work climate, employee commitment and proactive customer service performance: Test of the mediating effects of organizational politics. *Journal of Retailing and Consumer Services*, *35*(July 2016), 20–26. Elsevier. Retrieved from http://linkinghub.elsevier.com/retrieve/pii/S0969698916303046

Martin, K. D., & Cullen, J. B. (2006). Continuities and extensions of ethical climate theory: A meta-analytic review. *Journal of Business Ethics*, *69*(2), 175–194.

Mittiga, R. A. (2017). Pluralist Partially Comprehensive Doctrines, Moral Motivation, and the Problem of Stability. *Res Publica*, *23*(4), 409–429. Springer Netherlands.

Monir, M., Abu, M., & Rampling, P. (2015). The Association Between Environmental Performance and Financial Performance A Study of the Electricity-Generating Companies in Australia and New Zealand. *Corporate Social Responsibility and Sustainability: Contemporary Perspectives*.

Myer, A., Thoroughgood, C., & Mohammed, S. (2016). Complementary or Competing Climates? Examining the Interactive Effect of Service and Ethical Climates on Company-Level Financial Performance. *Journal of Applied Psychology*, *101*(8), 1178–1190.

Nerandzic, B., Perovicy, V., & Zivkov, E. (2012). Personality and Moral Character Traits and Acknowledging the Principles of Management Ethics, Auditing and Accounting Ethics. *Economic Research-Ekonomska Istraživanja*, *25*(sup1), 288–312. Retrieved from http://www.tandfonline.com/doi/full/10.1080/1331677X.2012.11517566

Newman, A., Round, H., Bhattacharya, S., & Roy, A. (2017). Ethical Climates in Organizations: A Review and Research Agenda. *Business Ethics Quarterly*, *27*(4), 475–512.

Nouri, B. A., Motamedi, S., & Soltani, M. (2017). EMPIRICAL ANALYSIS OF THE FINANCIAL BEHAVIOR OF INVESTORS WITH BRAND APPROACH ( CASE STUDY : TEHRAN STOCK EXCHANGE). *Scientific Annals of Economics and Business*, *64*(1), 97–121.

Pinazo Calatayud, D., & Nos Aldas, E. (2016). Developing Moral Sensitivity Through Protest Scenarios in International NGDOs' Communication. *Communication Research*, *43*(1), 25–48. Retrieved from http://journals.sagepub.com/doi/10.1177/0093650213490721

Pohling, R., Bzdok, D., Eigenstetter, M., Stumpf, S., & Strobel, A. (2016). What is Ethical Competence? The Role of Empathy, Personal Values, and the Five-Factor Model of Personality

in Ethical Decision-Making. *Journal of Business Ethics*, *137*(3), 449–474. Springer Netherlands. Retrieved from http://link.springer.com/10.1007/s10551-015-2569-5

Rana, A. M., Zainol, F. A., Yaacob, M. R., Ahmad, H., & Kashif-ur-Rehman. (2018). Organizational Commitment and Ethical Conduct on Team Performance: Evidence from Pakistan. *International Journal of Academic Research in Business and Social Sciences*, *8*(7), 328–339.

Rest, J. . (1984). *The major components of morality*. New York: John Wiliey.

Rest, J. . (1986). *Moral development: Advances in research and theory*. New York: Praeger.

Reynolds, S. J. (2006). Moral awareness and ethical predispositions: Investigating the role of individual differences in the recognition of moral issues. *Journal of Applied Psychology*, *91*(1), 233–243.

Reynolds, S. J., & Miller, J. A. (2015). The recognition of moral issues: moral awareness, moral sensitivity and moral attentiveness. *Current Opinion in Psychology*, *6*, 114–117. Elsevier Ltd. Retrieved from http://dx.doi.org/10.1016/j.copsyc.2015.07.007

Salzmann, O., Ionescu-Somers, A. M., & Steger, U. (2005). The business case for corporate sustainability: Literature review and research options. *European Management Journal*, *23*(1), 27–36.

Santiago, A., Pandey, S., & Theresa, M. (2019). Family presence , family fi rm reputation and perceived fi nancial performance : Empirical evidence from the Philippines. *Journal of Family Business Strategy*.

Schminke, M., Ambrose, M. L., & Neubaum, D. O. (2005). The effect of leader moral development on ethical climate and employee attitudes. *Organizational Behavior and Human Decision Processes*, *97*(2), 135–151.

Setiawan, H., & Darmawan, C. (2016). Moral character and responsibility for semende people in ulu danau , South Sumatera. *HUMANIORA*, *7*(2016), 505–512.

Shah, S. I. U., & Rahim, N. A. (2019). Addressing the recent developments and potential gaps in the literature of corporate sustainability. *Journal of Studies in Social Sciences and Humanities*, *5*(1), 27–40.

Shi, Y., & Ye, M. (2016). Responsible Leadership: Review and Prospects. *American Journal of Industrial and Business Management*, (August), 877–884.

Sparks, J. R. (2015). A social cognitive explanation of situational and individual effects on moral sensitivity. *Journal of Applied Social Psychology*, *45*(1), 45–54.

Svensson, G., Ferro, C., Høgevold, N., Padin, C., Sosa, J. C., & Sarstedt, M. (2018). Framing the Triple Bottom Line Approach: Direct and Mediation Effects Between Economic, Social and Environmental Elements. *Journal of Cleaner Production*. Elsevier Ltd. Retrieved from https://doi.org/10.1016/j.jclepro.2018.06.226

Tongsuebsai, K., Sujiva, S., & Lawthong, N. (2015). Development and Construct Validity of the Moral Sensitivity Scale in Thai Version. *Procedia - Social and Behavioral Sciences*, *191*, 718–722. Elsevier B.V. Retrieved from http://linkinghub.elsevier.com/retrieve/pii/S1877042815028463

Turaga, R. M. R., Howarth, R. B., & Borsuk, M. E. (2010). Pro-environmental behavior: Rasional choice meets moral motivation. *Annals of the new york academy of sciences*, *1185*, 211–224.

Victor, B., & Cullen, J. B. (1987). A theory and measure of ethical climate in organizations. *Research in corporate social performance and policy*, *9*(1), 51–71.

Victor, B., & Cullen, J. B. (1988). The Organizational Bases of Ethical Work Climates. *Administrative Science Quarterly*, *33*(1), 101–125.

Waldman, D. A., Siegel, D. S., & Javidan, M. (2006). CEO transformational leadership and corporate

social responsibility. *Academy of Management Review*, *26*(0415), 117–227.

Walumbwa, F. O., Hartnell, C. A., & Misati, E. (2017). Does ethical leadership enhance group learning behavior? Examining the mediating influence of group ethical conduct, justice climate, and peer justice. *Journal of Business Research*, *72*, 14–23. Elsevier Inc. Retrieved from http://dx.doi.org/10.1016/j.jbusres.2016.11.013

Ware, O. (2014). Kant on Moral Sensibility and Moral Motivation. *Journal of the History of Philosophy*, *52*(4), 727–746. Retrieved from http://muse.jhu.edu/content/crossref/journals/journal_of_the_history_of_philosophy/v052/52.4.ware.html

Wetzels, M., Odekerken-schröder, G., & Oppen, C. Van. (2009). Using PLS Path Modeling Hierarchical and Empirical Construct Models : Guidelines and Empirical Illustration. *MIS Quarterly*, *33*(1), 177–195.

Wurthmann, K. (2017). Implicit Theories and Issue Characteristics as Determinants of Moral Awareness and Intentions. *Journal of Business Ethics*, *142*(1), 93–116. Springer Netherlands.

Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about Mediation Analysis. *Journal of Consumer Rsearch*, *37*, 197–206.