

# The Impact of Change-Oriented Leadership on Employees' Performance: Mediating Role of Employees' Engagement

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Employees' engagement, employees' performance, and organizational performance are positively interlinked. The purpose of this study is to investigate the mediating role of employees' engagement between change-oriented leadership and employees' performance. With a time-lag approach (3 waves) and a structured questionnaire, the data were collected from 271 employees (Nurses) working in health units of Pakistan. For the empirical investigation, a partial least square- structural equation modeling (PLS-SEM) approach was used. The results of this investigation are as follows, change-oriented leadership has a significant positive impact on employees' performance, and employees' engagement partially and complimentary mediates the relationship between change-oriented leadership and employees' performance. In other words, change-oriented leaders play a significant role to engage the employees and motivate them to increase their performance. This study extends the limited understanding of change-oriented leadership and its relationship with employees' engagement and performance. The limitations and future research directions are discussed in the last section of this study.

**Key words:** *Change-oriented leadership; Employees' engagement; Employees' performance; Social exchange theory; Health units*

## INTRODUCTION

Continuously increasing the role of transformational, and innovative technologies in organizations are decreasing the focus and investment of organizations in their human resource (Huselid et al., 1997; Othman et al., 2017). Although, innovative technologies especially, information technologies are providing learning opportunities and ease of work to employees (Mikkelsen and Olsen, 2018), however, skilled employees feel comparatively less important and less engaged with the organization in the presence of innovative technologies. In this scenario, it is a challenge for leadership to adopt a specific behavior to train the employees in the right direction and increase employees' engagement and performance (Robertson et al., 2012; Xu et al., 2017). The situational theory of leadership explains that leadership behavior is a dynamic phenomenon (Sims et al., 2009), because, there is no single leadership behavior suitable for all situations. Therefore, it is necessary to apply a specific leadership behavior as per the situation of the organization. Management must strive and urge to settle its matters (Yukl, 2012, 2002). Globalization is continuously increasing rivalry among organizations and the role of leadership is also increasing at the same pace. Therefore, an effective leadership style is a dire need for contemporary organizations for sustainability (George, 2007; Gilley, McMillan, & Gilley, 2009; Wang & Hsieh, 2013).

Change-oriented leadership (COL) is a contemporary style of leadership. The COL is an extension of the two-dimensional *i.e.* task-oriented and people-oriented leadership model (Ekvall and Arvonen, 1991). Therefore, the COL is also the third dimension of the leadership model (Ekvall, 1991; Yukl et al., 2002). The COL style refers to new ideas, vision, and innovative ways of doing work by taking rapid decisions, encouraging interaction with employees with effective plans (Ekvall, 1991; Ekvall and Arvonen, 1991). According to Ekvall (1991), change-oriented leaders create awareness among employees about mandatory changes. The COL through support and involvement with employees enhances their level of motivation and commitment towards the organization (Mikkelsen and Olsen, 2018; Skogstad and Einarsen, 1999).

Rogers (2003) links the five stages (awareness, interest, trial, the decision to continue or quit, and adoption) of change acceptance with employees' acceptance levels of change (innovators, early adopters, early majority, late majority, and laggards). The leaders are the role model for the employees regarding the acceptance of mandatory change in the organization. The guidance of the leaders boosts up employees' interest level and motivates them to become innovators, early adopters, or the early majority in the perspective of change acceptance (Gilley, Gilley, et al., 2009). A change-oriented leader describes and explores the necessity of change by demonstrating creative ideas, providing innovation in tasks, and implanting new strategies that help to keep the employees satisfied, involved, and committed with their work role (Ekvall, 1991; Skogstad and Einarsen, 1999).

The leaders who play their role by giving directions, implementing strategies, and taking quick actions where necessary, enhance the employees' satisfaction and performance (Breevaart et al., 2015). Similarly, the COL also has the same attributes such as developing creative ideas, introducing innovative work styles, and taking the risk by scanning the environment to implement the change (Yukl, 2002). Therefore, in exchange for COL style, employees are highly motivated and committed to their work due to a perception of a successful career path with COL (Ekvall and Arvonen, 1991; Skogstad and Einarsen, 1999). The employees who are extremely engaged, have a positive and sensitive feeling and passion for achieving their paramount energy to contribute to organizational success (Othman et al., 2017). In other words, this intrinsic motivation plays a vital role to enhance employee commitment, innovative behavior, and performance (Park et al., 2014).

Engagement refers to a state of mind based on positiveness, fulfillment, and work-relatedness characterized by dedication, vigor, and absorption (Schaufeli & Bakker, 2013). In literature, employee engagement and work engagement are interchangeably used (Bakker, 2011; Saks, 2006). However, work engagement denotes only an employee relationship with work conversely, employee engagement denotes linkage with the organization (Agarwal et al., 2012; Saks, 2006). The relationship between leaders and employees is evaluated based on their mutual level of exchange, trust, faith, loyalty, and affection (Graen and Uhl-Bien, 1995). The Leader-member exchange (LMX) paradigm enhances the engagement level of employees, develops innovative behavior in employees, and decreases their turnover intentions (Agarwal et al., 2012; Macey et al., 2011). Drawn on LMX theory, Gupta & Sharma (2018) concluded that the relationship between COL and employee engagement can be enhanced.

Several scholars have confirmed the association between engagement and employees' performance (Anitha, 2014; Aryee et al., 2012; Christian et al., 2011; Rich et al., 2010; Salanova et al., 2005). However, in the best knowledge of the present study authors, the relationship between COL and employee performance with the mediating role of employee engagement is still required investigation. According to the prior study of Bakker (2011) employees who are more engaged in their work, are more inspired to work on new information and more productive and go the extra mile to achieve their goals. Therefore, the objective of the present study is to explore the impact of COL on employees' performance and the mediating role of employees' engagement between COL and employees' performance. To seek these objectives, the present study has two research questions. First, what is the impact of COL on employees' performance? Second, how employees' engagement mediates the relationship between COL and employees' performance. For empirical evidence, this study extracted the answers of the above-stated questions from the employees (Nurses) of health units in Pakistan. The health units and respondents are randomly selected from the different cities of Pakistan.

## LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

### Change Oriented Leadership and Employee Performance

Leadership is the most prime factor that influences the follower's performance (Bartram and Casimir, 2007). Numerous researchers have acknowledged the positive effect of leadership on subordinates (McCull-Kennedy & Anderson, 2002; Wang & Guan, 2018; Yukl, 2012, 2002, 2008). The scholars are not agreed on a single definition of Leadership due to its multidimensional nature and various characteristics (Alonderiene and Majauskaite, 2016). Leadership as a quality can be observed in human behavior who has the authority to rule others (Organ, 1996). One school of thought defined leadership as the process to influence their subordinates for the achievement of organizational goals (Bartram and Casimir, 2007; Cangemi et al., 2008) Another school of thought explain that leadership depends on personal skills, abilities, and traits of a human (Arnold et al., 2005; Grint, 2005). Several authors have examined the impact of different leadership styles on employee performance such as transformational and transactional leadership (Buil et al., 2018; Carter et al., 2013; Masa'deh et al., 2016; Vigoda-Gadot, 2007) Authoritative leadership (Wang & Guan, 2018) Leader-member exchange (Martin et al., 2016), and Benevolent leadership (Chan and Mak, 2012). These studies recommended that the best performance can be predicted through a definite leadership style as a scenario.

According to Hersey and Blanchard (1969), situational leadership theory prominence that single leadership behavior cannot perform well in all situations, different leadership behaviors are suitable in different situations (Sims et al., 2009). Therefore, Hersey and Blanchard (1982, 1972) formulated leadership behaviors styles in four types by considering the subordinate's maturity level. These behaviors are telling (subordinates have very low maturity), selling (subordinates have low maturity), participating (subordinates have moderately high maturity), and delegating (subordinates have very high maturity) (Thompson and Vecchio, 2009). The innovative technologies are rapidly updating (Azar and Ciabuschi, 2017; Gosens et al., 2015; Loebbecke and Picot, 2015), and changes are occurring in organizations regularly (Gill, 2002; Gilley, Gilley, et al., 2009). Fernandez (2008) explained that the change-oriented, relation-oriented, and production-oriented behaviors of leaders impact subordinates' performance. However, job satisfaction only seeks the impact of relation-oriented and change-oriented behaviors.

The chief executive officers (CEOs) as change-oriented leaders directly impact the organizational performance, while CEOs with harmonious passion strengthen the relationship between COL & organizational performance. On the contrary, CEOs with obsessive passion do not impact firm performance significantly (Siren et al., 2016). Harmonious passion is described as the willingly and continuous effort toward the change implementation that boosts up CEO's change-oriented behavior for securing long-term organizational success. Therefore, the performance of the firm and employees can be raised through change-oriented leadership

behavior and harmonious passion (Siren et al., 2016). A recent study on COL explored its direct and indirect positive association toward employee's innovative behavior. The association was found more prominent and strong during high perceived supervisor support even in crises situation (Jaroensutiyotin et al., 2018). The COL enhances employee's receipts commitment to change during the implantation of organizational change (Van Der Voet, 2016). The change-oriented leader explains to their subordinates regarding unavoidable changes and guides them all over the work process. The subordinates under the COL become more committed and motivated and fall in the category of "innovators", "early adopters" or the "early majority" (Gilley, Gilley, et al., 2009). According to the study of Gil (2005), COL increases the performance and satisfaction of health care teams in the hospital sector and team climate mediates this association. The COL usually adopts the proactive approach by informing the subordinates regarding organizational changes and causes of changes. This proactive approach helps the employees to make up their minds for expected changes and anticipated performance (Ekvall, 1991). The COL build up strong commitment. A study has shown that environment dynamics have a significant role in the relationship between leadership practices and employee's responses to change. This study found the environment dynamic as an important factor between leader practices and employees' change commitment (Surty and Scheepers, 2020). Although, During external monitoring, COL scans the environment before implementing change to avoid employee ambiguity (Yukl et al., 2002). So, employees remain to satisfy and committed to this change (Gil et al., 2005). The LMX theory broadens positive effects on COL and employees' change behavior (Lin, Kao, et al., 2016). Thus, this study is extending its roots. By considering the above evidence from the literature, it is proposed that;

**H1.** Change oriented leadership has a positive impact on employees' performance.

### **Mediating Role of Employee Engagement**

Kahn (1990) elaborated on the concept of employee engagement in his ethnographic work on summer camp representatives and architecture firm workers. It has been explored all through the previous decade (Bakker et al., 2008; Kahn, 1990; Rothbard, 2001). Employee engagement performs a predominant job in the contemporary business world for better hierarchical achievement (Xu and Thomas, 2011). Kahn (1990) explained that after the engagement, people employ and express themselves physically, cognitively, and emotionally while performing their role. Rothbard (2001) also considered employee engagement equal to employees' psychological presence and add two critical components: attention and absorption. Attention refers to cognitive availability and the amount of time one spends thinking about a role while absorption means being engrossed in a role and refers to the intensity of a worker s' focus on a role. Schaufeli & Bakker (2013) explained employee engagement as a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption.

Segalla & Denisi (2019) categorized employee engagement into four types namely, no engagement, abusive engagement, shared engagement, and unsatisfied engagement.

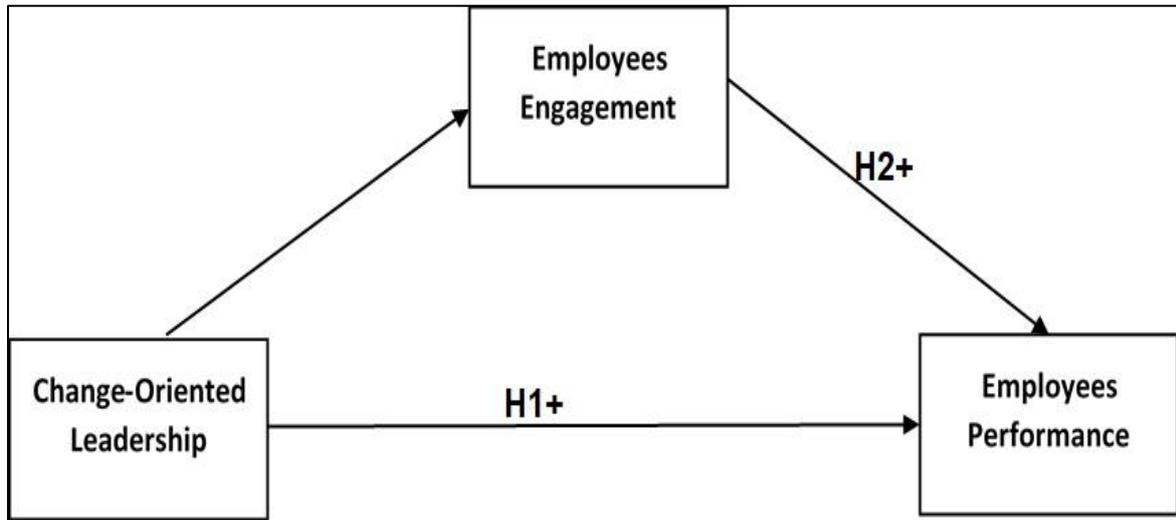
Halbesleben & Wheeler (2008) in their empirical study found that non-engaged employees decrease their performance and non-embedded workers develop turnover intentions. The scholars explain four reasons behind the better performance of an engaged employee which include positive emotions, better psychological and physical health, create their job and personal resources, and transfer their engagement to others (Segalla & Denisi, 2019). The workers with enthusiastic, energetic & solid feelings show a great extent of achievement due to their satisfaction with their job, clients, organization, and customers (Bakker et al., 2008). A resourceful work environment enhances work engagement and work engagement, in turn, enhances the employee's job performance (Bakker and Bal, 2010).

Organizations should value their leadership behavior due to its significance for employee engagement and employee trust (Wang & Hsieh, 2013). Anitha (2014) explained that employee engagement is directly related to employee performance. Scholars suggested executives should identify such factors that help to increase employee engagement and performance (Gupta and Sharma, 2018). Besides, employee engagement and satisfaction can be raised through the changes in management practices and these changes may lead to the achievement of better business outcomes (Harter et al., 2002). Luthans (2002) clarified that leaders are responsible for crafting the atmosphere to support subordinates enthusiastically and cognitively. In literature, several studies have been conducted on the relationship of COL and performance with different mediating variables such as team climate (Gil et al., 2005), psychology safety and team learning behavior (Ortega et al., 2014), learning demands, and job involvement (Mikkelsen and Olsen, 2018). However, the mediating role of employee engagement is still missing. Secondly, Othman (2017) concluded a negative relationship between COL and employee engagement. In justification, Othman clarified that it might be happened due to diverse scales of employee engagement and urged further research on this relationship before making any conclusion.

Based on the above-mentioned theoretical support, it can be predicted that COL has a positive influence on employee performance. The LMX theory plays a supportive role among these associations as per a prior study (Agarwal et al., 2012). Besides, the relationship between COL and employee performance still needs to be examined with the mediating role of employee engagement. As a prior study revealed that employee perceived leadership mediated the positive relationship between employee perceived change and work engagement (Caulfield and Senger, 2017). Hence, it is significant to increase the information of the construct that potentially mediates the effect of COL on employee performance. Therefore, the present study proposed that;

**H2.** Employee engagement mediates the relationship between COL and employee performance.

**Figure 1. Conceptual Framework**



## METHODOLOGY

To seek the empirical evidence regarding the hypotheses of the present study, nurses staff from hospitals of Pakistan are targeted. The five District Head Quarter (DHQ) hospitals of Pakistan were randomly selected for data collection. The dual-language (Urdu and English) questionnaire based on previous studies was developed and proved by senior researchers of the present study discipline. A comprehensive cover letter along with the questionnaire was also designed. Through this cover letter, it was assured to the respondents (nurses) that their participation and recognition will be kept anonymous and data will be used for present study analyses only. Furthermore, it was also requested to the participants that avoid consultation regarding answers to the questionnaire with their colleagues. It was also clarified to the respondents that there are no good or bad answers and they should respond as naturally as they can. The issue of non-response bias possibility is also considered in the present study (Hair, Hult, Ringle, & Sarstedt, 2016). The present study addressed this issue by comparing the early and late responses/ respondents. After analyses, the outcomes of the early respondents and late respondents established that there is no significant variation in answers. These procedural actions help to reduce social desirability/agreement biases (Shaheen et al., 2019). To examine the common method variance, this study used “Harman’s Single-Factor” test. A Harman single factor test is a post hoc approach that is performed for data analyses to confirm that a single factor is liable for COL in the data set (Tehseen et al., 2017). This study used SPSS-21 to complete the “Harman’s Single-Factor” test. The generated “Principal Component Analysis” output showed 20 distinct factors accounting for 63% of the total variance (Appendix-1). The 1st unrotated factor taken only 41% of the variance in data. Thus, the two criteria/assumptions did not fulfill. First, no single factor was established. Secondly, the first factor does not cover the utmost of the variance (Tehseen et al., 2017). Thus, the outcome shows that CMV is not an issue in the paper.

This study was also permitted by the ethics committee of the institute to which the authors belong (GC University, Faisalabad, Pakistan). After prior permission from the principal officers of the respective DHQ hospitals, the authors personally visited the hospitals and contacted the nurses in both (day and night) shifts. Moreover, the data were collected from nurses on their free consent and willingness without any (social or professional) influence. As a consideration, the authors promised the participants for sharing the results and managerial implications of this study upon participants' requests.

This study adopted a time lag method for data collection. Therefore, the data were collected in three ways. In wave 1, the questionnaire (about COL and demographics) was distributed to 500 nurses randomly selected. Out of those 500, 390 respondents provided the complete answers. Wave 2, after 40 days gap, the questionnaire about employees' performance was asked to remain 390 nurses. However, from these 390, 311 nurses provided the answers. Wave 3, with a further 40 days gap, the questionnaire about employees' engagement was asked to 311 nurses. Finally, 271 nurses completed the full questionnaire. Thus, the attrition rates in Wave 1, Wave 2, and Wave 3 were 22%, 20.25%, and 13.18% respectively, which are acceptable in an online data collection method (Dillman, 2011).

### **Demographics**

Out of a total of 271 respondents, there were 15% males and 85% females. Similarly, 51% of respondents fell in less than 30 years of age category, 30% fell in 30 to 35, 6% fall in 35 to 40, 5% fall in 40 to 45, 6% fall in 45 to 50, and 2% fell in more than 50 years of age category. Likewise, 72% of respondents were married and 28% unmarried, and 91% of respondents were regular employees and 9% of respondents were working on a contract basis. Furthermore, 41% of respondents were less than 3 years of experience, 22% were 3 to 5 years of experience, 17% were 5 to 10 years of experience, 11% were 10 to 15 years of experience, 6% were 15 to 20 years of experience and 3% respondents were more than 20 years of experience.

### **Measurement of Variables**

To measure the variables, the prior validated items were used in this study. All items are measured at five-point Likert scales ranging from 1 (strongly disagree) to 5 (strongly agree), unless otherwise indicated.

#### *Change-Oriented Leadership:*

COL is measured by adopting a 10-item scale developed by Ekvall & Arvonen (1991). For instance, "My leader pushes for growth". Cronbach's alpha reliability for COL behavior was acceptable (Cronbach's  $\alpha = 0.91$ ). One item (No.9) was deleted from the final model due to the lower outer loading value (Hair et al., 2016).

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### *Employee Engagement:*

The employee engagement was measured by using a short version nine-item scale developed by Schaufeli, Bakker, & Salanova, (2006). The sample item is “*At my work, I feel bursting with energy*”. Cronbach’s alpha reliability for employee engagement was acceptable (Cronbach’s  $\alpha = 0.86$ ). Two items (No.1,2) were deleted from the final model due to lower outer loading values (Hair et al., 2016).

### *Employee Performance:*

Employee performance was measured by using the 4-item scale developed by Chen, Tsui, & Farh (2002). For instance “*My subordinate makes a significant contribution to the overall performance of our work unit*”. Cronbach’s alpha reliability for employee performance was acceptable (Cronbach’s  $\alpha 0.84$ ).

## **Statistical Model Applied**

The present study used the partial least square, structural equation modeling (PLS-SEM) method for empirical examination of the hypothesized model through smart PLS 3.0 software. The PLS-SEM technique is helpful for all types of research models such as univariate, bivariate, and multivariate (Bari et al., 2019; Hair et al., 2016) whereas the implication of multivariate technique required some significant considerations such as (a) coding, (b) measurement, (c) composite variables, (d) measurement scales, and (e) data distributions (Hair et al., 2016). PLS-SEM is used not only to develop but also to explore the theory (Hair et al., 2016). The application of PLS-SEM is used due to two principal advantages regarding data factors. First, our sample is small ( $N=271$ ), so with the help of this no identification issue arises and it can achieve a high level of statistical power (Hair et al., 2016). Second, usually, in algorithm PLS-SEM on an interval ratio or scale demands metric data for the valuation model indicators. Nevertheless, for ordinal scales PLS-SEM technique is equally helpful (Bari et al., 2019; Hair et al., 2016).

## **RESULT AND ANALYSIS**

### **Model Measurement**

This research model comprises 20 items of three variables. The reliability of all the values (outer loading) is equal to or above then the threshold standard (.70) (Hair et al., 2016), except one item of COL and two items of EE, that are deleted. Moreover, two items are slightly weak, one item from COL (0.667) and one item from EE (0.615) but Hair, Hult, Ringle, & Sarstedt (2017) suggested that slightly weak items can be holds due to their scale validity, Therefore, these items are continued. Second, construct internal consistency validity is measured by composite reliability (CR) and Cronbach’s  $\alpha$ . Table 1, The values of CR and Cronbach’s  $\alpha$  are

acceptable between the ranges 0.6 to 0.7 and considered good, however, at 0.95 and above it is considered problematic (Bari and Fanchen, 2017; Hair et al., 2016). Rho\_A coefficient is the contemporary method to measure the construct validity. All the values of the rho\_A coefficient are according to the threshold (above 0.7) level. (Bari et al., 2016; Dijkstra and Henseler, 2015). Construct convergent validity is measured by the average variance extracted (AVE). It measures the range to which a variable converges proceeding its indicators by estimating the difference of the item (Bari et al., 2019; Hair et al., 2013). Table 1, the AVE of all constructs greater than the threshold level of 0.5. Therefore, construct validity and reliability are confirmed (Bari et al., 2019; Bari and Fanchen, 2017; Lin, Su, et al., 2016).

**Table 1. Model Assessment.**

| Variables              | Items               | OLVs  | Construct reliability and validity |          |       |       |       |       |      |       |       |
|------------------------|---------------------|-------|------------------------------------|----------|-------|-------|-------|-------|------|-------|-------|
|                        |                     |       | CR                                 | $\alpha$ | rho_A | AVE   |       |       |      |       |       |
| Change-oriented Leader | COL 1               | 0.831 | 0.924                              | 0.907    | 0.912 | 0.574 |       |       |      |       |       |
|                        | COL 2               | 0.752 |                                    |          |       |       |       |       |      |       |       |
|                        | COL 3               | 0.781 |                                    |          |       |       |       |       |      |       |       |
|                        | COL 4               | 0.769 |                                    |          |       |       |       |       |      |       |       |
|                        | COL 5               | 0.765 |                                    |          |       |       |       |       |      |       |       |
|                        | COL 6               | 0.737 |                                    |          |       |       |       |       |      |       |       |
|                        | COL 7               | 0.793 |                                    |          |       |       |       |       |      |       |       |
|                        | COL 8               | 0.715 |                                    |          |       |       |       |       |      |       |       |
|                        | COL 10              | 0.667 |                                    |          |       |       |       |       |      |       |       |
|                        | Employee Engagement | EE 3  |                                    |          |       |       | 0.615 | 0.893 | 0.86 | 0.868 | 0.547 |
| EE 4                   |                     | 0.789 |                                    |          |       |       |       |       |      |       |       |
| EE 5                   |                     | 0.771 |                                    |          |       |       |       |       |      |       |       |
| EE 6                   |                     | 0.753 |                                    |          |       |       |       |       |      |       |       |
| EE 7                   |                     | 0.805 |                                    |          |       |       |       |       |      |       |       |
| EE 8                   |                     | 0.725 |                                    |          |       |       |       |       |      |       |       |
| EE 9                   |                     | 0.7   |                                    |          |       |       |       |       |      |       |       |
| Employee Performance   |                     | EP 1  | 0.758                              | 0.854    | 0.774 | 0.781 | 0.594 |       |      |       |       |
|                        |                     | EP 2  | 0.805                              |          |       |       |       |       |      |       |       |
|                        | EP 3                | 0.728 |                                    |          |       |       |       |       |      |       |       |
|                        | EP 4                | 0.791 |                                    |          |       |       |       |       |      |       |       |

*Note:* OLVs = Outer loading Values, CR = Composite Reliability,  $\alpha$  = Cronbach Alpha, rho\_A = Dijkstra–Henseler’s rho indicators, AVE = average variance extracted.

The collinearity issue of the model is examined through the values of the variance inflation factor (VIF). The values of VIF less than 5 are considered acceptable (Bari et al., 2016; Hair et al., 2016). All inner VIF values of the constructs are less than 5 which indicates no collinearity issues in the model. The coefficient of determination ( $R^2$ ) of dependent variables explains the level of variance of independent variables. The  $R^2$  values of employees’ engagement (0.345) and employees’ performance (0.433) are showing moderate strength of the model (Bari and

Fanchen, 2017; Hair et al., 2016). The standardized root means square residual (SRMR) is explained as “the difference between observed correlation and the model implied correlation matrix” (Hair et al., 2016). In the present study, the SRMR value is 0.068 which confirms the model fit as the threshold level is 0.082 (Bari et al., 2016).

Table 2 presents the discriminant validity of the model. Discriminant validity is examined through the Fornell-Larcker Criterion and Heterotrait-Monotrait ratios methods. Discriminant validity explains the degree to which the model’s variables are empirically discrete from others. Fornell-Larcker criterion explains discriminant validity such as the top values of diagonal are reasonably greater than the other values of diagonal showing in the relevant columns (Bari et al., 2016; Hair et al., 2016). HTMT ratio explains the correlation of factors (Hair et al., 2016). Statisticians suggest the threshold level of HTMT ratios is 0.90, however, 0.85 is preferably accepted. The values between two variables visibly discriminate when the HTMT value is showing less than 1 (Bari et al., 2016; Henseler et al., 2016; Pittino et al., 2018). Table 2 explained that both approaches confirm the discriminant validity of the present study model.

**Table 2. Discriminant Validity**

| Fornell-Larcker Criterion |       |       |       | Heterotrait-Monotrait ratio |       |      |    |
|---------------------------|-------|-------|-------|-----------------------------|-------|------|----|
| Constructs                | COL   | EE    | EP    | Constructs                  | COL   | EE   | EP |
| COL                       | 0.758 |       |       | COL                         |       |      |    |
| EE                        | 0.587 | 0.739 |       | EE                          | 0.653 |      |    |
| EP                        | 0.507 | 0.637 | 0.771 | EP                          | 0.588 | 0.76 |    |

Note: COL = COL, EP= Employee Performance, EE = Employee Engagement.

### Propositions Verification (Direct Effect)

The present study was proposed a direct positive significant relationship between COL and employees’ performance. Table 3 explains the direct significant positive relationship between COL and employees’ performance with  $\beta$  value .203, *t-value* value 3.306, and *p-value* .000 at .05 level of significance. Thus, H1a is accepted. The COL also has a direct significant positive relationship with employees’ engagement with  $\beta$  value 0.587 and *p-value* .000 at a significant level of 0.05. The employees’ engagement has also a direct and significant positive relationship with employees’ performance with  $\beta$  value 0.518 and *p-value* .000 at 0.05 level of significance.

**Table 3. Direct Effect**

| Structural Path | Path Coefficient ( <i>t-value</i> ) | Confidence interval (2.5%, 97.5%) | ( <i>p value</i> ) 0.05 | Outcomes      |
|-----------------|-------------------------------------|-----------------------------------|-------------------------|---------------|
| COL → EP        | 0.203 (3.506)                       | (0.090, 0.318)                    | 0.000                   | H1a supported |
| COL → EE        | 0.587 (8.967)                       | (0.449, 0.706)                    | 0.000                   |               |
| EE → EP         | 0.518 (8.161)                       | (0.387, 0.636)                    | 0.000                   |               |

Note: COL = COL, EP= Employee Performance, EE = Employee Engagement.

### Propositions Verification (Indirect Effect)

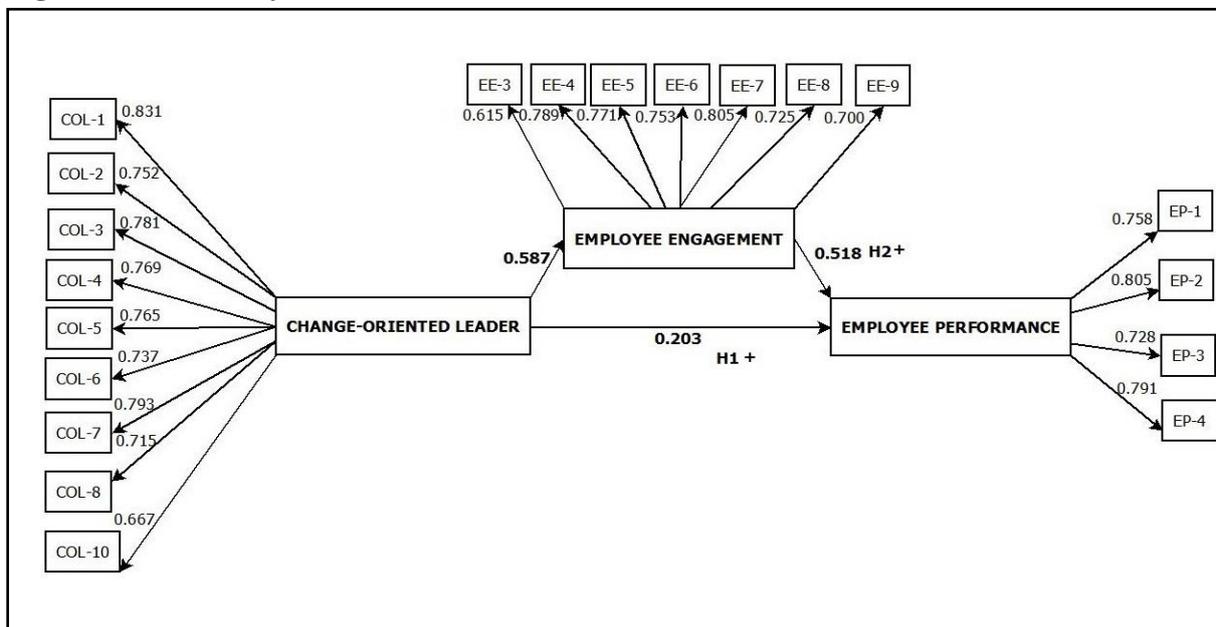
The indirect relationship of variables is explained in Table 4. The mediation level is determined through the variance accounted for (VAF) approach. As per the recommended criterion of scholars, greater than 80% value of VAF shows full mediation, between 20% and 80% shows partial mediation and less than 20% shows no mediation. (Bari et al., 2016; Hair et al., 2014). Therefore, the relationship between COL and employees' performance is partially mediated by employees' engagement with the VAF value of 59.96. Thus, H2 is accepted. Figure 2 explains the post-analysis model of the present study.

**Table 4. Indirect Effect**

| Structural Path | Path coefficient<br>(t value) | Indirect Effect | Total Effect  | VAF % | Outcomes     |
|-----------------|-------------------------------|-----------------|---------------|-------|--------------|
| COL → EE → EP   | 0.203 (3.506)                 | 0.304 (5.696)   | 0.507 (7.637) | 59.96 | H2 supported |

Note: COL = Change-oriented Leader, EE = Employee Engagement, EP = Employee Performance

**Figure 2. Post Analyses Model**



### DISCUSSION

The objective of the present study was to examine the influence of COL on employee performance through the mediation of employee engagement in the healthcare sector. The rationale of this study was the research call of Othman (2017). Othman (2017) conducted a study on the relationship between leadership behaviors (COL, task-oriented leadership, and

relation-oriented leadership) and employees' engagement. The outcomes of that study proved a negative relationship between COL and employees' engagement. As a justification, Othman (2017) explained that this was happened due to the diverse scale of employees' engagement and suggested further investigation on the relationship between COL and employees' engagement and performance. Therefore, keep in mind the call of Othman (2017), this study collected the evidence from the health units on the mediating role of employees' engagement between the relationship of COL and employees' performance by using the same scale of employee engagement which was used by Othman (2017).

The results of the present study are not in line with the results of the Othman (2017) study. The empirical outcomes of the present study prove that COL has a positive and significant relationship with employees' engagement and performance. These contradictory results signify the application and importance of Hofstede's cultural dimensions theory (Hofstede et al., 1990; Hofstede and Bond, 1984). The positive results of this study showed that different cultures and organizations impact differently on employees' behaviors and their mutual relationships. Secondly, this study not only confirms the application of situational leadership theory and LMX theory but also extends the application of these theories (Hersey and Blanchard, 1969). The present study collected evidence from the health units (DHQ hospitals in Pakistan). The data was collected from nurses and their respective duty supervisors. In hospitals, nurses deal with different patients from the perspectives of diseases, gender, age, culture, ethnicity, and sometimes emergency cases. Therefore, in a frequently changing environment and scenario, it is very difficult to handle all sorts of cases with a single traditional approach. Moreover, in the case of the irresponsible reaction of the patients or their relatives can demotivate the nurses. As a result, demotivated nurses can be less engaged/ disengaged (Campbell, 2018; Sellgren et al., 2006). In such a situation, COL (duty supervisors) can handle these situations by adopting situation-based behaviors and finding innovative solutions to solve unpredictable problems. Because by definition, change-oriented leaders mainly focus on new ways of doing work on new assignments, introduce new ideas and thoughts, and take a risk to implement decisions. The LMX approach can also be very helpful in this scenario.

The LMX theory explains employees' faith, trust, and loyalty towards leadership. The exchange of faith, trust, and loyalty between leaders and employees enhanced the level of LMX. Therefore, the employees take positively the actions and instructions of their leaders. Under the high level of LMX, employees become highly motivated and committed which increases the level of their engagement (Ekvall, 1991; Skogstad and Einarsen, 1999). Employees' engagement partially mediated the relationship between COL and employees' performance. It signifies that employees' engagement is not the only mediating variable that enhances the employees' performance. There are several other protentional constructs such as employees' motivation, a maintained psychological contract, workplace environment, and organizational changes that impact on employees' performance.

### **Theoretical Contribution**

The present study has significant theoretical contributions. This is one of the first studies that investigated the rationale of situational leadership theory and LMX theory while empirically investigating the association of COL, employees' engagement, and employees' performance in the health units. The present study also clarifies the theoretical uncertainty of Othman (2017) regarding the relationship between COL and employees' engagement. The present study confirms that situational leadership theory and LMX theory has a significant application on the relationship between COL and employees' engagement and performance. However, this study also highlights the significance of culture and the organization s' environment. In other words, Hofstede's cultural dimensions theory has a role in the above said theoretical relationships.

### **Managerial Implications**

This is the era of rapid, transformational, and innovative technologies and these technologies not only make the organizational environment vibrant but also impact employees' behavior. Therefore, it is imperative to keep employees engage to enhance the employees as well as the organization s' performance because high work engagement minimizes the operational cost and maintains the human resource committed toward the organization. Drawn on the results of the present study, the managerial implications of the present are as follows. First, organizations such as the health units (where the customers have different levels of temperaments and the short periods of contract) should develop the COL to train the employees for handling unpredictable situations with innovative solutions. Second, employees' engagement is a proven construct to enhance the employees as well as organizational performance and COL can be affected to keep the employees engage. Third, organizations and managers should be vigilant while adopting any specific leadership behavior because the same leadership style can produce different results. The contradictory results of this study with the results of Othman (2017) study is a piece of evidence.

### **Limitations & Future Research**

While conducting this study numerous limitations are considered. First, the sample size is just 271 which is very small as compared to the total population. Therefore, the outcomes of this study cannot present a clear picture of all nurses' perceptions of working in the hospitals of Pakistan. In the future, a longitudinal study or comparatively big sample size can be taken to strengthen/ confirming the findings of the present study. Second, the present study adopted several measures to minimize the issue of respondents' perception-based bias. Therefore, in the future, some other methodologies such as experiential study should be conducted. Third, the empirical investigation of the present study is conducted only on the nurses of DHQ hospitals of Pakistan. In the future, the same theoretical model can be tested in other sectors of the health units such as hotels and restaurants. Fourth, a comparative study on the present



theoretical model can be conducted in different national and organizational cultures or between developed and developing countries.

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### Appendix 1, Harman's Single-Factor

| Component | Initial Eigenvalues |               |              | Extraction Sums of Squared Loadings |               |              |
|-----------|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|
|           | Total               | % of Variance | Cumulative % | Total                               | % of Variance | Cumulative % |
| 1         | 8.275               | 41.374        | 41.374       | 8.275                               | 41.374        | 41.374       |
| 2         | 2.091               | 10.454        | 51.828       | 2.091                               | 10.454        | 51.828       |
| 3         | 1.305               | 6.523         | 58.351       | 1.305                               | 6.523         | 58.351       |
| 4         | 1.007               | 5.037         | 63.389       | 1.007                               | 5.037         | 63.389       |
| 5         | .786                | 3.930         | 67.318       |                                     |               |              |
| 6         | .679                | 3.396         | 70.714       |                                     |               |              |
| 7         | .644                | 3.218         | 73.932       |                                     |               |              |
| 8         | .584                | 2.922         | 76.855       |                                     |               |              |
| 9         | .576                | 2.878         | 79.733       |                                     |               |              |
| 10        | .520                | 2.600         | 82.332       |                                     |               |              |
| 11        | .457                | 2.285         | 84.617       |                                     |               |              |
| 12        | .450                | 2.252         | 86.869       |                                     |               |              |
| 13        | .439                | 2.195         | 89.064       |                                     |               |              |
| 14        | .405                | 2.024         | 91.088       |                                     |               |              |
| 15        | .366                | 1.830         | 92.918       |                                     |               |              |
| 16        | .359                | 1.794         | 94.712       |                                     |               |              |
| 17        | .322                | 1.611         | 96.323       |                                     |               |              |
| 18        | .285                | 1.426         | 97.749       |                                     |               |              |
| 19        | .253                | 1.263         | 99.013       |                                     |               |              |
| 20        | .197                | .987          | 100.000      |                                     |               |              |

Extraction Method: Principal Component Analysis.