

Journal of Education & Social Sciences

ISSN: 2410-5767 (Online)

ISSN: 2414-8091 (Print)

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Manuscript Information

Submission: November 08, 2019

Reviews Completed: February 20, 2020

Acceptance: March 13, 2020

Publication: March 25, 2020

Citation in APA Style:

Adil, M. S., & Khan, U. (2020). Antecedents of Cognitive Job Engagement and its Effect on Teacher Performance: Moderating Roles of Occupational Stress and Mentoring, *Journal of Education & Social Sciences*, 8(1), 31-59.

DOI: <https://doi.org/10.20547/jess0812008103>





Antecedents of Cognitive Job Engagement and its Effect on Teacher Performance: Moderating Roles of Occupational Stress and Mentoring

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Abstract: This paper analyzes a) the effect of organizational climate, supervisor support, and organizational citizenship behavior (OCB-I) on cognitive job engagement (CJE); b) the effect of CJE on teacher performance; and c) the moderating roles of occupational stress and mentoring for the positive relationship between CJE and teacher performance. Data from 313 full-time teachers from public and private universities of Karachi (Pakistan) are analyzed using structural equation modeling. Results show that organizational climate and morale, and OCB-I have a significant effect on CJE which in turn, has a significant effect on teacher performance. However, supervisor support has been found completely unrelated to CJE. Occupational stress weakens the positive relationship between CJE and teacher performance, whereas mentoring strengthens the same relationship. PLS predict algorithm suggests medium predictive validity of the structural model. Theoretical contributions and managerial implications are discussed.

Keywords: Supervisor support; OCB; engagement; performance; stress; mentoring; higher education.

Introduction

“If we can’t have great places for teachers to work, we won’t have great places for students to learn” (Gordon, 2006).

Gaining and sustaining a competitive advantage in today’s hypercompetitive era are confounding challenges for organizations (Pham-Thai, McMurray, Muenjohn, & Muchiri, 2018) because the dynamic and professional work environment have substantially challenged the conventional view of measuring employee performance (Eldor & Harpaz, 2016). Universities are the hub of highly-qualified individuals where they are engaged in various educational pursuits e.g. developing research and development prowess (Patel, Moake, & Oh, 2017). Instead of traditional type of employees having least energy and motivation for rapid career progression, creative employees are increasingly considered as better human capital for an organization thus they are required to be retained and engaged in their work for the betterment of the individuals, and in the long run, for the entire organization.

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Certainly, the fundamental premise holds that a well-engaged employee in his/her work tends to possess high vigor and enthusiasm, be more productive and useful than unengaged employees (Lofquist, Isaksen, & Dahl, 2018), and be more willing to invest energy in self-satisfaction and self-reward (Idris, Dollard, & Tuckey, 2015). Therefore, in broader terms, job engagement potentially predicts individual performance and organizational survival. In short, job engagement is a motivational function (Bakker & Hakanen, 2019; Patel et al., 2017), however, it remains an ambiguous and intricate mechanism to date.

Indeed, cognitive job engagement (henceforth, 'CJE') is an emerging research domain (Lofquist et al., 2018) which has gained much attention in recent years. Bakker and Hakanen (2019) pointed out that (Kahn, 1990) coined the concept of engagement and defined it as "the harnessing of organization members' selves to their work role; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances". It is related with sentiments of significance, perception, enthusiasm, inspiration and satisfaction, and shows an emotional inspirational state, as opposed to a transitory and explicit enthusiastic condition of an individual in the workplace.

Notably, there are few studies which link organizational climate to job engagement, inter alia, in the healthcare sector (Ancarani, Mauro, & Giammanco, 2019), with reference to hospitals' service recovery climate (Menguc, Auh, Yeniaras, & Katsikeas, 2017), in state-own Israeli public elementary schools (Eldor & Shoshani, 2017), in terms of psychological climate (Kataria, Garg, & Rastogi, 2013) and particularly, psychological safety climate (Idris et al., 2015), among Indian male virtual workers, service climate in hotel industry (Salanova, Agut, & Peiró, 2005), in heterogeneous Israeli organizations using a dyadic sample. In short, literatures suggest that a healthy organizational climate leads to various positive organizational outcomes such as employee well-being, psychological empowerment, growth, and job engagement.

Nevertheless, there are still very limited empirical evidence which connects organizational climate with CJE (Ancarani et al., 2019). Besides, understanding antecedences and consequences of job engagement is a complex phenomenon which may not be predicted easily in today's era, hence, there is a growing need to further investigate both antecedences and consequences of job engagement (Pham-Thai et al., 2018). Less empirical evidence is available regarding the organizational consequences of job engagement (Schneider, Yost, Kropp, Kind, & Lam, 2018) especially, work performance. Similarly, a little is known about the relationship between organizational citizenship behavior (OCB) and job engagement (Bailey, Madden, Alfes, & Fletcher, 2017).

Extant empirical studies appear to be more concentrated on investigating job engagement in the Western context than non-Western developing countries such as Pakistan. Undeniably, the complex phenomenon of job engagement has gained some notable attention in Pakistan where studies were limited to investigating different antecedents of employee engagement in varied contexts such as organizational justice in the banks of Lahore (Alvi, Ijaz Cheema, & Haneef, 2014); transformational leadership in service companies listed in Islamabad Chamber of Commerce (Raja, 2012); intrinsic and extrinsic motivation (Khan & Iqbal, 2013); work-life balance in selected branches of banks; employee compensation in the banks of Lahore (Alvi et al., 2014); and self-evaluation, fairness and treatment of

employees, and service environment of organization in service sector (Danish, Ahmad, & Khan, 2014).

Besides, studies in the Pakistani context have also analyzed other antecedents of employee engagement such as spirit at work in banks (Danish et al., 2014); succession planning in the telecommunication sector of Rawalpindi (Gulzar & Durrani, 2014); empowerment and employee training (Nawaz, Hassan, Hassan, Shaukat, & Asadullah, 2014); employee motivation on employee engagement from both teaching and non-teaching staff of one campus of University of Gujrat; high-performance working practices in the banking sector of Multan (Akhtar, Nawaz, Mahmood, & Shahid, 2016); Psychological contract breach in public and private banks of Lahore (Malik & Khalid, 2016); job characteristics, reward and recognition, and coaching and training in six multinational FMCG companies (Iqbal, Shabbir, Zameer, Khan, & Sandhu, 2017).

In connection, Rasheed, Khan, and Ramzan (2013)'s study was limited to merely assess the bivariate correlations between perceived supervisor support, perceived organizational support, organizational justice, employee engagement, OCB-I, and OCB-O in public and private banks of Lahore. Yusoff, Ali, Khan, and Bakar (2013) extended the three-dimensional scale of Utrecht Work Engagement Scale (UWES) to university teachers of north Punjab, Islamabad, and Khyber Pakhtunkhwa (KPK) provinces. Using qualitative interviews with HR managers of 50 different public and private organizations, (Abbas, Murad, Yazdani, & Asghar, 2014) have extended (Kahn, 1990)'s model of personal engagement and disengagement to Pakistan. In short, afore-mentioned empirical evidences of engagement appeared to be limited to Federal Capital Islamabad, Punjab and KPK provinces only, and predominantly in the banking sector.

Likewise, there is a strong and positive correlation between highly-educated employees and their attitude towards enhancing their occupational skills and productivity, higher education institutions (HEIs) bring an interesting research context because a) job engagement of academic staff is much of a neglected area in research (Pham-Thai et al., 2018); b) there is a paucity of knowledge about the antecedents of CJE in the education sector especially in a developing country; and c) its holistic effect on teacher performance in higher education.

In addition, occupational stress has been found a direct and negative effect on teacher performance (Pei & Guoli, 2007), whereas mentoring has shown a significant and positive effect on teacher performance (Kirchmeyer, 2005). Although, what causes occupational stress for teachers are already well-documented, the literature in organizational studies is yet to analyze the joint moderating roles of occupational stress and mentoring for the relationship between CJE and teacher performance. Therefore, the objectives of this quantitative study are to analyze: a) the effect of organizational climate, supervisor support, and OCB-I on CJE; b) effect of CJE on teacher performance; and c) the moderating role of occupational stress and mentoring for the positive relationship between CJE and teacher performance?

Theoretical and Methodological Contributions

This deductive study makes the following theoretical and methodological contributions to the literature of education with specific reference to CJE and teacher performance:

First, this study provides an empirical support of the theoretical relationship between organizational climate and morale, and CJE - the relationship which is recently identified meagre to date in the literature (Ancarani et al., 2019). Moreover, it attempts to answer research call of (Pham-Thai et al., 2018) to investigate three antecedents of CJE of academic staff of higher education. Second, unlike previous authors, it is among the first to reveal a reverse lens between OCB-I and CJE by suggesting that OCB-I can have a direct and positive effect on CJE. Third, considering the substantial diversity of national culture between Western and non-Western countries, this study is the first report which analyzes the teacher performance as an outcome of CJE in HELs of an Asian developing country. Four, we build an argument that occupational stress and mentoring are the two significant boundary conditions which differently affect the positive relationship between CJE and teacher performance. Both moderating effects of the academic staff are tested for the first time in a single study. Five, this is the first report which applies PLSpredict to ascertain the out-of-sample predictive validity of the structural model in higher education. Finally, using a covariance-based CFA approach, it extends the (Moorman, 1993)'s five-dimensional OCB-I construct to the higher education context of a developing country.

Theoretical Background and Hypotheses

Organizational Climate and Morale, and CJE

Organizational climate is “an attribute of the organization, a conglomerate of attitudes, feelings, and behaviours which characterizes life in the organization, and exists independently of the perceptions and understandings of the members of the organization” (Ekvall, 1996). It generally aims to identify the unanimous perception of such employee behaviors which are going to be considered as acceptable and therefore, rewarded by the organization. Therefore, it is composed of perceived practices, policies and procedures shared among employees.

Job demands-resources (JD-R) model (Bakker & Demerouti, 2007) suggests organizational climate as a job resource because it promotes skills and abilities to meet one's demands for self-determination, competencies, and organizational identification. Employees tend to be more engaged in their job when there is a climate of career progression, work realization, and a sense of self-fulfillment. Unlike job demands which often result in severe organizational consequences such as job burnout (Adil & Baig, 2018), job resources are key drivers of CJE in both public and private sector. Meta-analyses (Christian, Garza, & Slaughter, 2011) also concluded that job resources are the established antecedents of CJE. More specifically, the school's climate for service demonstrated the highest effect on teachers' job engagement. In short, organizational climate and morale are positively related with CJE (Ancarani et al., 2019; Eldor & Harpaz, 2016). Hence, the following hy-

pothesis is suggested:

H₁: Organizational climate and morale have a positive effect on CJE.

Supervisor Support and CJE

According to Organizational Support Theory - OST (Eisenberger & Stinglhamber, 2011), employees build their varied social and emotional needs which lead them to: a) develop norms of reciprocity due to their perceptions about organizational support; b) build their sense of organizational identification as their social and emotional needs (such as self-esteem) get satisfied; and c) determine the extent to which the organization is ready to reward their increased efforts (Rhoades & Eisenberger, 2002).

Indeed, when employees perceive a higher level of organizational support, they tend to generally reciprocate their positive work behavior such as CJE. Therefore, OST reflects an application of Social Exchange Theory (Blau, 1964) in which employees trade their efforts in response to the tangible rewards they receive. In other words, due to mutual interactions (Boxall & Purcell, 2011), employees generally “return the favor” back to their supervisors in response to high perceived organizational support in the form of improved work engagement (Cropanzano & Mitchell, 2005).

A supervisor extends his/her social support in the form of a positive and helpful social interaction with subordinates. Employees perceive their supervisors as representative or “voice” of their organizations (Therkelsen & Fiebich, 2004), therefore, supervisor support is very much related with perceived organizational support. In fact, the supervisor-subordinates relationship reflects one of the most important elements of work environment which can increase the competencies of subordinates (Blancero, Boroski, & Dyer, 1996). Supervisor support develops two psychological understandings in subordinates: first, subordinates believe that their supervisor is interested in their emotions and occupational needs; and second, the supervisor will help them in their career development.

The integral role of the supervisor support may be further explained by Conservation of Resources (COR) Theory (Hobfoll & Shirom, 2000) and Theory of Personal Engagement -TPE (Kahn, 1990). According to COR, social support in organizations prohibits the negative repercussions of burnout which is mainly observed due to stressful work activities. In general, employees who receive constructive feedback regarding their jobs tend to strive hard in looking for better opportunities for their personal and career development. Similarly, TPE holds that the supervisor support portrays a “psychological meaningfulness” to subordinates such that they perceive motivational (i.e. psychological) empowerment because they find their supervisor very much interested and truly helpful towards their occupational success. It ultimately leads them to better engage in their work. In short, employees with greater positive supervisor support are more likely to engage in their work (Jin & McDonald, 2017) which ultimately lead towards organizational success (Albrecht, 2010).

With minor exception of Rofcanin, Las Heras, Bosch, Wood, and Mughal (2019) in which subordinates’ self-report perceived organizational support did not affect their work engagement, numerous studies have reported a significant and positive effect of supervi-

support on engagement (Adil & Ab Hamid, 2019; Holland, Cooper, & Sheehan, 2017; Jin & McDonald, 2017). Hence, the following hypothesis is posited:

H₂ : Supervisor support has a positive effect on CJE.

OCB-I and CJE

OCBs refer to the discretionary behaviours which are not formally acknowledged by the rewards system of an organization, however, they promote the effective and efficient functioning of organization (Moorman, 1993). It is recognized as crucial for organizational success and survival and one of the most critical organizational outcomes that involves an extra-role behavior in which employees adapt to an uncertain occupational environment (Lam, Wan, & Roussin, 2016). In short, OCB defines such type of employees who intends to “go the extra mile” or perform “beyond the call of duty” (Bogler & Somech, 2019).

Past studies such as Idris et al. (2015); Kataria et al. (2013) have established that job engagement leads to OCB. Rasheed et al. (2013) reported moderate correlation between employee engagement and OCB-I. However, we intend to reverse the causal lens between OCB-I and CJE arguing that OCB-I can have a direct and positive effect on CJE. In fact, the relationship between organization and its employees is found similar in many aspects in HEIs and for-profit organizations and due to professional autonomy in HEIs (Bauwens, Audenaert, Huisman, & Decramer, 2019), universities are generally conceived as ‘special’ entity where effectiveness of higher education may be improved when OCB becomes a norm which enables teachers to be more adaptive and resilient towards environmental and institutional changes.

This relationship may be conceptualized as social exchange relationship that is characterized by meaningful and useful efforts from both sides, and one side tends to expect some meaningful and substantial reciprocal contribution and benefits from the other side (Shore, Tetrick, Lynch, & Barksdale, 2006). Consequently, it leads us to postulate that employees are engaged in discretionary extra-role behavior such as OCB. The central tenet here is to develop a novel theoretical understanding that when employees are energized for extra-role (discretionary) behavior they are more likely to cognitively engaged in their job. Hence, the following hypothesis is advised:

H₃: OCB-I has a positive effect on CJE.

CJE and Teacher Performance

Job engagement refers to “... a positive, fulfilling work-related state of mind that is characterized by vigor, dedication, and absorption” (Schaufeli, Bakker, & Salanova, 2006). It denotes “a psychological connection with the performance of work tasks rather than an attitude toward features of the organization or the job” (Christian et al., 2011). Employees are less likely to exhibit their maximum potential if job resources are not aligned with what their job demands from them (Patel et al., 2017).

Literature has suggested a very strong relationship between job engagement and employee performance (Idris et al., 2015). Even in stressful situations, employees perceive their jobs in a positive way. Based on a systematic review of 172 studies of job engagement, Bailey et al. (2017) reported that employee performance has been recognized as one of the outcomes of job engagement. Hence, the following hypothesis is suggested:

H₄: CJE has a positive effect on teacher performance.

Moderating Role of Occupational Stress

Teachers face an ever burgeoning amount of occupational stress in their teaching profession (V. L. Anderson, Levinson, Barker, & Kiewra, 1999). A stressed teacher becomes a cost to an educational establishment in the form of his/her absenteeism, tardiness, and ultimately, turnover intention. An unmanaged occupational stress is a certain threat to their efficiency and personal success in various organizational practices. It is a pervasive threat in educational institutions which leads to both individual and organizational repercussions (Adil & Baig, 2018) such as health-related problems and reduced teacher performance (Pei & Guoli, 2007).

Stress has been identified a major concern in education in the form of overwhelming intricacies and still it is found to be a significant and a looming problem (Sarnacchiaro, Camminatiello, D'Ambra, & Palma, 2019). It severely affects the academic performance of university teachers and school teachers (Banerjee & Mehta, 2016).

The teaching profession should have been considered as a very noble profession having a great cause to build nations, however, in practice there are several job demands and resources which make this noble profession far much less than what it deserves. Occupational stress could moderate the positive relationship between CJE and teacher performance because an organizational climate having relatively more concentration on performance, employees are more likely to compete with one another instead of collaborating with one another for knowledge sharing and mutual skills development. Consequently, performance-centric climate serves as a job demand where employees evaluate it as a challenge to compete and more often as an obstacle depending on the type of job resources they have. It generally causes occupational stress - a negative outcome of job demands hence, we theorize that occupational stress would also undermine the positive relationship between CJE and teacher performance. In short, there are circumstances in which some job resources strengthen job engagement, whereas some job resources undermine it within the same organizational climate (Menguc et al., 2017). Hence, the following hypothesis is articulated:

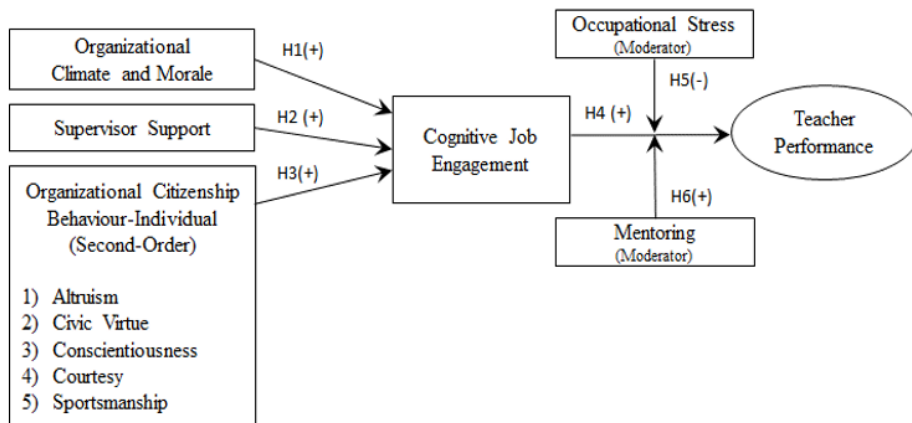
H₅: Occupational stress moderates the positive relationship between CJE and teacher performance such that an increase in occupational stress will dampen the positive relationship between CJE and teacher performance.

Moderating Role of Mentoring

Mentoring aims to support the learning and development of an inexperienced individual (called a protégé) following a special relationship where “objectivity, credibility, honesty, trustworthiness and confidentiality are critical” (Parsloe & Leedham, 2009). It encompasses an “off-line help by one person to another in making significant transitions in knowledge, work or thinking” for the career development of the protégé (Thomas & Lankau, 2009).

In addition to ‘career development’ and ‘role modeling’, the third function of mentoring is to provide protégés with a ‘psychological support’ which involves friendship, encouragement and counseling to improve his/her performance (Scandura & Ragins, 1993). These three functions of mentoring help the protégé in better understanding and simplifying the work roles and job demands. The protégé confidently shares different types of work difficulties and challenges with his/her mentor and mostly receives appropriate guidance and suggestions for addressing work difficulties and challenges effectively and efficiently. For instance, an experienced mentor encourages the protégé in developing positive moods at work (Cole, Bruch, & Vogel, 2006) due to which the protégé better understands the norms and values of the organization (Ashforth & Saks, 2002). Consequently, the protégé starts to align his/her work attitude with the job demands as well as the demands of stakeholders such as management, customers, etc. Therefore, an effective mentoring significantly contributes in enhancing the employee performance (Chi & Wang, 2018).

Figure 1
Hypothesized Framework



Parents are the primary mentors for their children in which they can intrinsically motivate their children for superior performance (Okagaki, Frensch, & Gordon, 1995). Whether it is peer mentoring, strategies of mentoring or even online mentoring (Ainsa & Olivarez, 2017), it has been well recognized that mentored employees tend to receive more

promotions and better salary packages and better employee performance (Kirchmeyer, 2005; Scandura & Ragins, 1993) than non-mentored employees and in the long run, mentoring improves business performance (Garvey & Garrett-Harris, 2005). Therefore, we build an argument that likewise occupational stress, mentoring could also moderate the positive relationship between CJE and teacher performance. Hence, the following hypothesis is articulated:

H₆: Mentoring moderates the positive relationship between CJE and teacher performance such that this positive relationship will strengthen for those who report a higher level of mentoring.

Method

Sample and Procedure

A total of 520 survey questionnaires were distributed to full-time teachers working in two public and four private universities of Karachi (Pakistan). We received 343 forms (the response rate was 65.9%). After removing 30 multivariate outliers, the usable sample was 313 for data analysis. Non-maleficence (Rooney & Evans, 2018), anonymity and confidentiality (Babbie, 2015) were maintained during data collection phase.

Besides, Harman's single factor test was applied in Jamovi® to examine CMV bias and to avoid any erroneous conclusions (Orgambidez & Almeida, 2019). An unrotated factor solution of PCA shows that the first factor merely accounts for 24% of the total variance which is less than the 50% cutoff value. It indicates that there is no manifestation of CMV bias in this study (Einarsen, Skogstad, Rørvik, Lande, & Nielsen, 2018). Appendix-A tabulates the composition of data.

Measures

To measure 11 latent variables (LVs) including five dimensions of OCB-I, a total of 69 questionnaire items were adapted from previous studies which have shown good psychometric properties. Unless otherwise specified, these items were rated on a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. All LVs were self-reported and had reflective measurement. Table 1 shows the list of study variables, number of items, sources of adopted/adapted items, and their respective Cronbach alpha.

Table 1
Measures, Sources and Cronbach Alpha

Variables	No. of Items	Source	Alpha
Organizational Climate and Morale	7	Glaser, Zamanou, and Hacker (1987)	0.867
Supervisor Support	7	Glaser, Zamanou, and Hacker (1987)	0.844
Cognitive Job Engagement	7	Rich et al. (2010)	0.900
Occupational Stress (Moderator)	7	Butt (2009)	0.804
Mentoring (Moderator)	8	Noe (1988)	0.888
Teacher Performance	9	Wallace and Chernatony (2009)	0.868
Organizational Citizenship Behaviour (OCB-I)	24	Moorman (1993)	0.901
OCB-I: Altruism	3	Moorman (1993)	0.816
OCB-I: Conscientiousness	5	Moorman (1993)	0.859
OCB-I: Courtesy	5	Moorman (1993)	0.863
OCB-I: Sportsmanship	6	Moorman (1993)	0.748
OCB-I: Civic Virtue	5	Moorman (1993)	0.836

Operational Definitions of Study Variables

Organizational Climate refers to “an attribute of the organization, a conglomerate of attitudes, feelings, and behaviours which characterizes life in the organization, and exists independently of the perceptions and understandings of the members of the organization” (Ekvall, 1996).

Supervisor Support refers to any form of a positive and helpful social interaction with subordinates in order to increase the competencies of subordinates (Blancero et al., 1996).

Cognitive Job Engagement is defined it as “the harnessing of organization members’ selves to their work role; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances”. It is related with sentiments of significance, perception, enthusiasm, inspiration and satisfaction, and shows an emotional inspirational state, as opposed to a transitory and explicit enthusiastic condition of an individual in the workplace (Bakker & Hakanen, 2019).

Occupational Stress serves as a moderator in this study which is a certain threat to teacher’s efficiency and personal success in various institutional practices. It is a pervasive threat in educational institutions which leads to both individual and organizational repercussions (Adil & Baig, 2018) such as health-related problems and reduced teacher performance.

Mentoring serves as a moderator in this study which is aims to support the learning and development of an inexperienced individual (called a protégé) following a special relationship where “objectivity, credibility, honesty, trustworthiness and confidentiality are critical” (Parsloe & Leedham, 2009). It encompasses an “off-line help by one person to another in making significant transitions in knowledge, work or thinking” (Megginson, 2006) for the career development of the protégé.

Organizational Citizenship Behaviour (OCB-I) refer to the individual’s discretionary behaviours which are not formally acknowledged by the rewards system of an organization, however, these behaviours generally promote the effective and efficient functioning of an academic institution (Moorman & Blakely, 1995). It has five dimensions namely, altruism, conscientiousness, courtesy, sportsmanship, and civic virtue. Altruism is defined as the “behaviors that have the effect of helping a specific other person with an organizationally relevant task or problem”. Conscientiousness denotes the “behaviors

that allow one to carry out their specific role requirement to levels well beyond those normally expected". Courtesy refers to the "behaviors designed to prevent a problem from occurring". Sportsmanship is defined as the "behaviors that entail avoiding excessive complaining or railing against mostly imagined slights". Finally, civic virtue denotes the "behaviors that evolve around the responsible participation in the political life of the organization" (Moorman, 1993).

Second-order CFA was conducted in AMOS version 22 to reaffirm the factor structure of OCB-I. We used three badness-of-fit indices (CMIN/DF, RMSEA, and SRMR) and four goodness-of-fit indices (GFI, NFI, TLI, and CFI). Table 2 shows that Model 1 represents a bad fit because none of the observed values met its respective cutoff value. In Model 2, we found all acceptable values except the statistically significant PCLOSE value, however, Model 3 revealed the best model-fit indices because all indices met their respective threshold values. Therefore, we conclude that Altruism, Conscientiousness, Courtesy, Sportsmanship, and Civic Virtue are not independent LVs, rather, these are the five dimensions of OCB-I.

Table 2
Confirmatory Factor Analysis (CFA) of OCB-I Scale

CFA Models	Description Threshold Value:	CMIN/DF < 3.0	RMSEA (PCLOSE) < 0.08 (>.05)	SRMR <0.08	GFI >0.90	NFI >0.90	TLI >0.90	CFI >0.90
Model 1:	Baseline Model	4.382	0.104 (.000)	0.104	0.77	0.75	0.76	0.79
Model 2:	All LVs as separate variables (without higher-order)	2.412	0.067 (.001)	0.053	0.90	0.89	0.92	0.93
Model 3:	OCB-I as the higher-order LV	2.049	0.058 (.076)	0.050	0.91	0.91	0.91	0.95

Data Analysis and Findings

Measurement Model

A measurement model (J. C. Anderson & Gerbing, 1988) was developed in SmartPLS to assess the validity and reliability of all LVs. Table 3a shows that all indicators of OCB-I were sufficiently loaded onto their respective dimension. The minimum and the maximum outer loadings were 0.756 and 0.890 respectively. Only one indicator of Sportsmanship is sufficiently loaded in the measurement model. Moreover, the lowest t-value among all 19 indicators is 17.084 which exceeds the cutoff value of 3.291 at 99.9% CI suggesting that all indicators have statistically significant loadings towards their respective dimension. Besides, the alpha, rho_A, and CR of all dimensions is greater than 0.70 suggesting a very good internal consistency reliability of each dimension. Moreover, AVE is also greater than 0.50 indicating good convergent validity. Finally, the Inner VIF values of each dimension is less than 3.3 suggesting that collinearity is not at critical levels between the five dimensions of OCB-I (Diamantopoulos & Siguaw, 2006).

Similarly, Table 3b shows that a total of 39 indicators of rests of the study variables gained sufficient loadings (min. = 0.622; max. = 0.841). The lowest t-value among all 39 indicators is 8.555 which is greater than cutoff value of 3.291 at 99.9% CI suggesting that all indicators have statistically significant loadings onto their respective LVs. Besides, the alpha, rho_A, and CR of all dimensions were greater than 0.70 suggesting a very good

internal consistency reliability of each LV. Moreover, AVE was also greater than 0.50 indicating good convergent validity. Finally, the Inner VIF values of each LV is less than 3.3 suggesting that collinearity is not at critical levels. In short, a total of 58 indicators out of 69 (i.e. 84% of the total indicators) are sufficiently loaded onto their respective LV showing good internal consistency reliability and convergent validity with no multicollinearity issue.

Table 3a
Measurement Model - Reliability, Validity and Multicollinearity of OCB-I

OCB-I Dimensions	Indicators	Loadings	T value	Sig	Alpha	rho_A	CR	AVE	Inner VIF
1) Altruism	Altruism_1	0.821	27.547	0.000	0.810	0.830	0.890	0.730	1.710
	Altruism_2	0.890	52.002	0.000					
	Altruism_3	0.848	42.071	0.000					
2) Civic Virtue	CivicVirtue.1	0.762	25.102	0.000	0.840	0.840	0.890	0.610	1.640
	CivicVirtue.2	0.760	24.819	0.000					
	CivicVirtue.3	0.788	24.159	0.000					
	CivicVirtue.4	0.817	34.162	0.000					
	CivicVirtue.5	0.767	26.854	0.000					
3) Conscientiousness	Conscientiousness_1	0.756	22.297	0.000	0.860	0.860	0.900	0.640	2.310
	Conscientiousness_2	0.814	24.672	0.000					
	Conscientiousness_3	0.852	37.593	0.000					
	Conscientiousness_4	0.797	26.775	0.000					
	Conscientiousness_5	0.780	26.567	0.000					
4) Courtesy	Courtesy_1	0.787	26.892	0.000	0.870	0.870	0.900	0.650	2.440
	Courtesy_2	0.767	17.084	0.000					
	Courtesy_3	0.863	31.389	0.000					
	Courtesy_4	0.824	26.356	0.000					
	Courtesy_5	0.790	26.002	0.000					
5) Sportsmanship	Sportsmanship_1	1.000			1.000	1.000	1.000	1.000	1.350

Finally, the discriminant validity was assessed by Heterotrait-Monotrait (HTMT) ratio of correlations and HTMT Inference (Henseler, Ringle, & Sarstedt, 2015). Table 4 shows that the HTMT ratio of correlations are less than the stringent criterion of 0.85 and in terms of HTMT Inference, all of these ratios of correlation are statistically significant at 95% CI ($p < .05$). It concludes that the discriminant validity has been established between all LVs (Henseler, 2017).

Hypotheses Testing

We applied PLS-SEM technique using the recommended 5,000 bootstrapping (Hair Jr, Hult, Ringle, & Sarstedt, 2016) in SmartPLS for testing hypotheses because of two main reasons: a) the research goal was to predict key target variables i.e. CJE and teacher performance, and b) the structural model was complex having 14 constructs (including higher-order LVs and 2 interactions) and a total of 58 reflective indicators (Hair, Ringle, & Sarstedt, 2011). Table 5 shows that Altruism, Civic Virtue, Conscientiousness, and Courtesy have statistically significant loadings on OCB-I at 99.9% CI (t -value > 3.291 ; $p < .001$)

and the 95% CIBC lower and upper bound limit of each dimension is also statistically different from zero suggesting that the population parameter estimate does not pass through zero. We used CIBC because it is "...the most trustworthy test if power is of utmost concern" (Hayes & Scharkow, 2013). Cohen (1992); Kock and Gaskins (2014) have suggested 0.10 as small; 0.30 as moderate; and 0.50 as large effect size. Reporting the effect size of an estimate is more important than reporting its p-value as Cohen (1990) noted, "...the primary product of a research inquiry is one or more measures of effect size, not p values" (p. 1310).

Table 3b
Measurement Model of the Study Variables other than OCB-I

Latent Variable	Indicators	Loadings	T value	Sig	Alpha	rho_A	CR	AVE	Inner VIF						
Organizational Climate	Climate_1	0.718	20.939	0.000	0.870	0.880	0.90	0.560	1.570						
	Climate_2	0.784	20.932	0.000											
	Climate_3	0.824	32.414	0.000											
	Climate_4	0.816	27.899	0.000											
	Climate_5	0.785	26.495	0.000											
	Climate_6	0.657	11.391	0.000											
	Climate_7	0.622	9.268	0.000											
Cognitive Job Engagement	Engagement_1	0.785	28.214	0.000	0.900	0.900	0.920	0.630	1.260						
	Engagement_2	0.837	36.507	0.000											
	Engagement_3	0.803	30.733	0.000											
	Engagement_4	0.820	31.409	0.000											
	Engagement_5	0.806	31.617	0.000											
	Engagement_6	0.787	25.132	0.000											
	Engagement_7	0.688	15.279	0.000											
Mentoring	Mentoring_3	0.719	20.249	0.000	0.890	0.900	0.920	0.650	1.310						
	Mentoring_4	0.820	39.16	0.000											
	Mentoring_5	0.826	35.221	0.000											
	Mentoring_6	0.841	34.753	0.000											
	Mentoring_7	0.835	33.931	0.000											
	Mentoring_8	0.795	29.068	0.000											
	Supervisor Support	SS_1	0.627	8.555						0.000	0.830	0.870	0.870	0.540	1.420
		SS_2	0.660	8.749						0.000					
SS_4		0.717	14.467	0.000											
SS_5		0.777	18.696	0.000											
SS_6		0.812	23.097	0.000											
SS_7		0.799	24.279	0.000											
Stress		Stress_2	0.761	21.27	0.000	0.770	0.790	0.840	0.520	1.070					
	Stress_3	0.740	15.667	0.000											
	Stress_4	0.712	14.14	0.000											
	Stress_5	0.703	12.13	0.000											
	Stress_6	0.671	10.589	0.000											
	Teacher Performance	TP_2	0.648	14.597	0.000						0.870	0.880	0.900	0.520	
TP_3		0.784	26.086	0.000											
TP_4		0.756	23.113	0.000											
TP_5		0.733	17.959	0.000											
TP_6		0.736	20.192	0.000											
TP_7		0.740	13.933	0.000											
TP_8		0.689	11.237	0.000											
TP_9		0.664	11.396	0.000											

Table 4
Discriminant Validity Using HTMT Ratio of Correlations

Latent Variable	1	2	3	4	5	6	7	8	9	10	11
Altruism											
Civic Virtue	0.467										
Conscientiousness	0.733	0.619									
Courtesy	0.609	0.694	0.765								
Organizational Climate	0.265	0.503	0.401	0.422							
Engagement	0.504	0.785	0.637	0.754	0.456						
Mentoring	0.338	0.378	0.372	0.328	0.550	0.500					
Supervisor Support	0.256	0.389	0.303	0.265	0.621	0.313	0.471				
Sportsmanship	0.321	0.382	0.379	0.547	0.248	0.490	0.124	0.180			
Stress	0.177	0.196	0.171	0.138	0.411	0.190	0.288	0.450	0.118		
Teacher Performance	0.188	0.478	0.321	0.346	0.442	0.407	0.408	0.565	0.184	0.336	

Note: HTMT.85 criterion is used; All ratio of correlations are statistically significant at 95% CI ($p < .05$).

The dimension of Sportsmanship was retained for further data analysis because the only one indicator of Sportsmanship is also found statistically significant (Table 5; Last Row) at 99.99% CI (t -value > 3.291 ; $p < .001$) followed by substantially very high practical significance (effect size is greater 0.50). In short, likewise the other four dimensions, the 95% CIBC limits of Sportsmanship is also statistically different from zero indicating its statistical significance.

Table 5
Significance of Dimensions to OCB-I (Second-Order)

Paths of Dimensionality	Estimate	SE	T Value	Sig	95% CIBC	Effect Size
Altruism → OCB	0.175	0.013	13.600	0.000	[0.152, 0.203]	110.07
Civic Virtue → OCB	0.310	0.019	16.702	0.000	[0.276, 0.349]	358.99
Conscientiousness → OCB	0.321	0.017	18.497	0.000	[0.289, 0.358]	273.7
Courtesy → OCB	0.358	0.018	19.885	0.000	[0.326, 0.398]	322.24
Sportsmanship → OCB	0.071	0.007	10.795	0.000	[0.060, 0.086]	23.11

Table 6 shows that organizational climate and morale ($\beta=0.113$; t -value= 2.217^*), and OCB-I ($\beta=0.699$; t -value= 17.162^{***}) have a significant and positive effect on CJE, hence H_1 and H_3 are supported. Similarly, CJE has a significant positive effect on teacher performance ($\beta=0.329$; t -value= 4.709^{***}), hence H_4 is also supported. Nevertheless, on contrary to our hypothesis, supervisor support is found to be completely unrelated with CJE ($\beta=0.004$; t -value= 0.088) with no effect size, hence H_2 is not supported. Although, H_1 and H_4 are statistically significant, both hypotheses have failed to earn any meaningful practical significance because the effect size of both hypotheses is less than 0.10 (Cohen, 1992). In contrast, OCB-I has been found to hold very high practical significance because the effect size of this SEM path is in excess of 0.50. The in-sample model fit (adjusted R^2) values show that organizational climate and morale, supervisor support, and OCB-I cumulatively explained over 56.8% variance in CJE, whereas CJE alone explained over 23.8% of the total variance in explaining teacher performance. Besides, the Q^2 value for both endogenous LVs is greater than zero suggesting that the structural model bears sufficient predictive relevance.

Table 6
Hypothesis Testing Using PLS-SEM with Bootstrapping

SEM Path	β	SE	T value	Sig	95% CIBC	Effect Size	R^2	Adj. R^2	Q^2
H1 Organizational Climate \rightarrow CJE	0.113	0.051	2.217*	0.027	[0.010, 0.209]	0.019	0.573	0.568	0.331
H2 Supervisor Support \rightarrow CJE	0.004	0.050	0.088	0.930	[-0.093, 0.100]	0.000			
H3 OCB \rightarrow CJE	0.699	0.041	17.162***	0.000	[0.610, 0.770]	0.914			
H4 CJE \rightarrow Teacher Performance	0.329	0.070	4.709***	0.000	[0.192, 0.465]	0.077	0.251	0.238	0.115

Note: * 95% CI ($p < .05$); *** 99.99% CI ($p < .001$)

Moderation Analyses

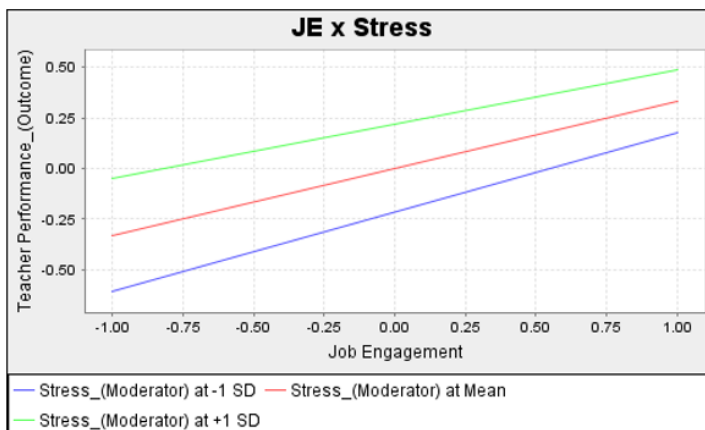
Table 7 shows that occupational stress has a significant but a positive effect on teacher performance ($\beta=0.219$; t -value=4.438***). However, Figure 2 shows that the interaction term weakens the positive relationship between CJE and teacher performance ($\beta=-0.063$), hence H_5 is supported, though, this moderation could not reach statistical significance (t -value=1.073). Notably, the interpretation and conclusion of H_5 are verified by Professor Dr. James Gaskin, Brigham Young University, Utah, USA (personal communication, November 22, 2019).

In contrast, Table 7 shows that Mentoring has a direct and positive effect on teacher performance ($\beta=0.172$; t -value=2.859**) as well as it moderates the positive relationship between CJE and teacher performance such that the positive relationship between CJE and teacher performance tends to increase for those university teachers who reported a higher level of mentoring, thus H_6 is also supported.

Table 7
Moderation Analysis

SEM Paths	Estimate	SE	T value	Sig	95% CIBC	Effect Size
Stress \rightarrow Teacher Performance	0.219	0.049	4.438	0.000	[0.108, 0.301]	0.058
CJE x Stress \rightarrow Teacher Performance	-0.063	0.059	1.073	0.283	[-0.179, 0.053]	0.007
Mentoring \rightarrow Teacher Performance	0.172	0.060	2.859	0.003	[0.042, 0.279]	0.029
CJE x Mentoring \rightarrow Teacher Performance	0.156	0.060	2.608	0.009	[0.036, 0.270]	0.035

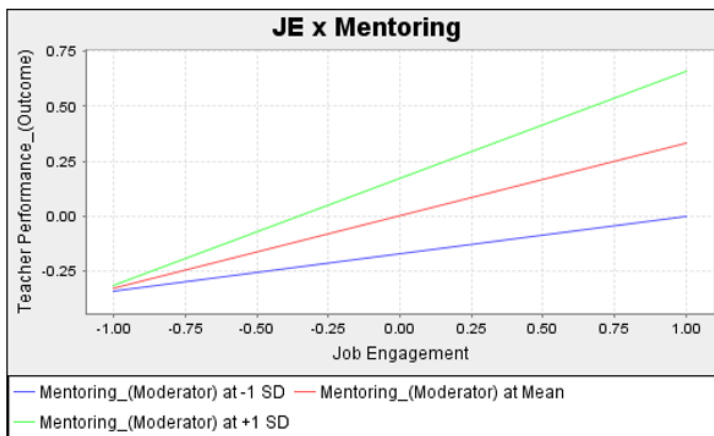
Figure 2
Interaction Effect of Occupational Stress



Out-of-sample (OOS) Predictive Validity using PLSpredict

Since, Q^2 coefficient is a partial estimate of the “out-of-sample” (OOS) prediction due to its estimation procedure (Nitzl & Chin, 2017), we ascertained the predictive power of complete structural model using PLSpredict algorithm (Shmueli et al., 2019). It is used to assess whether a structural model of a study has the ability to predict new cases rather than merely assessing whether the parameter estimates are statistically significant, useful, and the direction of hypothesized relationships (Hofman, Sharma, & Watts, 2017). The managerial implications can truly reflect the actual findings of an empirical examination when the model bears acceptable predictive validity (power).

Figure 3
Interaction Effect of Mentoring



We followed the three-step decision flow diagram (Shmueli et al., 2019). In step 1, we found that the values of Q^2 predict for both LVs and their respective indicators are greater than zero (Table 8) suggesting that “the PLS path model’s prediction error is smaller than the prediction error given by the (most) naïve benchmark” and the structural model of this study does have sufficient and meaningful predictive power. In step 2, we found that distribution of prediction errors for both endogenous LVs is almost symmetrical (Figure 4 & 5) therefore, we preferred to use Root Mean Squared Error (RMSE). However, following the recent practice of Shmueli, Ray, Estrada, and Chatla (2016), Mean Absolute Error (MAE) is also included for a comparative analysis.

Finally, in the last step we compared the RMSE values of PLS model with the RMSE value of the LM. The PLSpredict algorithm develops a simple linear model (LM) by considering all exogenous LV i.e. organizational climate, supervisor support, OCB-I and CJE as simply as IVs to predict the final outcome LV i.e. teacher performance in one regression equation. Table 8 shows that the RMSE of PLS Model is less than the RMSE of LM for the majority of indicators. Similarly, MAE of PLS Model is less than the MAE of LM for the same majority of indicators. It leads us to conclude that the structural model of this study bears medium predictive power (Shmueli et al., 2019).

Figure 4
Distribution of Prediction Errors (Cognitive Job Engagement)

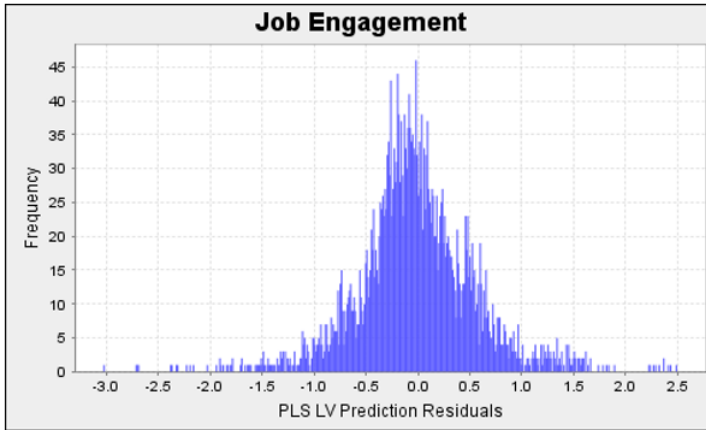
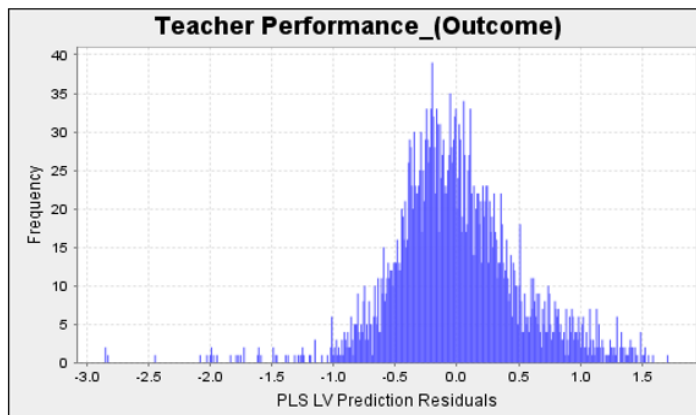


Figure 5
Distribution of Prediction Errors (Teacher Performance)



Discussion

Admittedly, teachers are the most treasured asset of an educational institution (Goyal, Shah, & Naidu, 2015) who serve as service providers as well as clients. Moreover, teaching has now become a very demanding profession because teachers need to transform their conventional teaching and learning practices into contemporary requirements such as creativity and innovation, problem-solving skills, critical thinking skills, eagerness to optimize self-performance in collaboration with industries using ICT, etc. (Voogt & Roblin, 2012). They need to demonstrate varying level of resilience in terms of negotiating, adapting and adequately managing disparate sources of occupational stress by willingly

adapting to the required changes based on their type of experiences regarding changes (Sammons et al., 2007). They ought to be resilient. Consequently, it would enable them to successfully control over and positively affect the changing learning environment (Akram & Shah, 2018) in today's hyper-competitive era (Hermelo & Vassolo, 2010).

Table 8
Predictive Power Using PLSpredict

Endogenous LV Indicators	Q^2_{predict} (LV)	Q^2_{predict} (Indicators)	RMSE (PLS)	RMSE (LM)	Is RMSE (PLS) less than RMSE (LM)?	MAE (PLS)	MAE (LM)	Is MAE (PLS) less than MAE (LM)?
Engagement.6	0.549	0.277	0.860	0.846	No	0.671	0.671	No
Engagement.3		0.347	0.854	0.857	Yes	0.654	0.674	Yes
Engagement.5	0.014	0.399	0.812	0.826	Yes	0.636	0.654	Yes
Engagement.2		0.355	0.832	0.784	No	0.628	0.601	No
Engagement.1		0.388	0.832	0.752	No	0.648	0.576	No
Engagement.7		0.205	0.906	0.908	Yes	0.685	0.693	Yes
Engagement.4		0.391	0.781	0.798	Yes	0.611	0.629	Yes
TP.9		0.078	0.714	0.698	No	0.543	0.537	No
TP.6		0.104	0.757	0.770	Yes	0.565	0.580	Yes
TP.4		0.106	0.758	0.776	Yes	0.559	0.590	Yes
TP.3		0.170	0.693	0.715	Yes	0.512	0.553	Yes
TP.7		0.074	0.645	0.672	Yes	0.499	0.528	Yes
TP.8	0.086	0.655	0.712	Yes	0.514	0.553	Yes	
TP.2	0.114	0.812	0.868	Yes	0.592	0.645	Yes	
TP.5	0.080	0.698	0.714	Yes	0.520	0.556	Yes	

Organizational climate is a job resource which has shown a positive effect on CJE ($\beta=0.113$; $t\text{-value}=2.217^*$) thus, H_1 is supported. In fact, teachers spend more than one-third of their entire lives in teaching profession which poses numerous challenges to them during their tenure of service including a thorough understanding of the implicit and explicit requirements of the profession in today's era. Teachers in higher education bear relatively more responsibility in shaping the society in which they operate, thus they are required to keep themselves updated with the requirements of modern times. All of these necessary requirements may possibly be streamlined and materialized in an educational institution if a conducive organizational climate is provided to teachers.

Theoretically, supervisor support is another job resource which buffers the negative repercussions of job demands, however, this study reports that the supervisor support does not have any significant effect on CJE ($\beta=0.004$; $t\text{-value}=0.088$) thus, H_2 is not supported. It might be attributed to the fact that 74.8% of the sample is comprised of those teachers who were associated with private universities where the degree of teaching loads is greatly different from what the teachers in public universities. The most recent report of British Council (2019) revealed different facts about these anomalies in Pakistan. For instance, teachers in private-sector universities are generally made responsible to teach six to eight courses in a semester as well as thesis or project supervision of dozens of graduate students. Besides, the HEC takes 'research publication' as the most important criterion for faculty promotions. Consequently, career-oriented teachers in HEIs strive hard to meet the minimum number of publications needed for their next promotion in addition to said teaching loads and thesis supervisions irrespective of the fact that their research is making any contribution in addressing any meaningful social problems. In the Western context, despite the fact that teachers intend to leave their teaching profession,

one-third of them prefer to stay in the profession. Similarly, due to very high unemployment rate in Pakistan, teachers cannot afford to quit their teaching profession until they find better position either in another university or in corporate world. In other words, teachers have to be cognitively engaged in their job to meet their annual KPIs even in case of minimal support from their supervisors.

OCB-I shows a positive effect on CJE ($\beta=0.699$; $t\text{-value}=17.162^{***}$) thus, H_3 is supported. Teachers with a higher sense of OCB-I tend to be more cognitively engaged in their job. The effect size of H_3 bears high practical significant ($f^2 = 0.914$). It might be attributed to the fact that approximately one-third of the sample (33.2%) accounts for those full-time teachers who reported up to 5 years of teaching experience while 87.5% of the sample stood at mid-career path and 81.5% respondents were up to 40 years of age. It means that majority of the respondents are middle-aged teachers which ideally possess more learning attitude than those teachers who are at the verge of their retirement. Thus, CJE relies on job experience too which seems to be more visible in early and middle-aged teachers because they are generally more career-centric and are likely to bear more work pressure than old-aged teachers.

CJE has shown a positive effect on teacher performance ($\beta=0.329$; $t\text{-value}=4.709^{***}$) thus, H_4 is supported. Indeed, employees with high CJE make substantial difference for their organizations (Bakker & Hakanen, 2019) because instead of passively becoming a part of the prevailing situations, a teacher with high job engagement follows his/her proactive motivation to challenge the status quo in order to improve the circumstances. The proactive motivation may be classified into three cognitive states namely, 'I can do', 'I have reason(s) to be proactive', and 'I am energized to be proactive' (Parker, Bindl, & Strauss, 2010).

This study tested a joint moderating effects of occupational stress and mentoring in the context of an Asian developing country. Job demands (such as workload and time pressure) may positively affect job engagement provided that sufficient job resources buffer against these job demands (Bakker & Demerouti, 2007). Similarly, we also found that occupational stress (an outcome of job demands) has a significant positive effect on teacher performance ($\beta=0.219$; $t\text{-value}=4.438^{***}$), whereas its interaction with CJE, though statistically nonsignificant, dampens the positive relationship between CJE and teacher performance. H_5 should be concluded as 'supported', however, the interaction effect may not be generalized to a larger population due to its almost negligible effect size ($f^2=.007$).

Teachers in today's prevailing educational system face tremendous occupational stress due to various, sometimes unavoidable, facts of teaching e.g. lack of available resources such as annual paid subscriptions of best research databases for basic and applied research, an increased level of accountability of teachers' academic and extra-curricular performance what are considered as norms in a good multinational organization, very negative attitudes of students towards their self-development and education, very low or noncompetitive salaries, and above all, extremely low status of the teaching profession (or even teacher) in developing countries (Akinyele, Epetimehin, Ogbari, Adesola, & Akinyele, 2014). Irrespective of minimal or no supervisor support, we found that university teachers can be cognitively engaged in their work in presence of conducive organizational climate which serves as a buffering mechanism to alleviate the negative effect of

occupational stress.

Finally, we found that the second moderator 'mentoring' also has a significant positive effect on teacher performance ($\beta=0.172$; $t\text{-value}=2.589^{**}$) and its interaction with CJE strengthens the positive relationship between CJE and teacher performance with low effect size ($f^2=.035$) thus, H_6 is supported. Mentoring is a useful tool for socializing within and outside an organization. Mentoring relationship gives benefits to both the mentor and the protégé. In particular, mentored employees receive various positive outcomes such as better job satisfaction, higher financial gains, rapid career progression and higher in-role motivation, and improved self-confidence and teachers' motivation for creative performance as compared to those employees who have not received mentoring facility.

Conclusion

Undoubtedly, teachers are the most important biological assets of academic institutions where their skills and competencies are equally important and needed for the development of all concerned entities such as academic institutions, students, peers, supervisors, and above all, the society. In particular, higher (or tertiary) education is somewhat different from primary and secondary-level education because full-time teachers in universities are responsible to create, acquire and disseminate new and useful knowledge, and deeper insights of practical phenomena through their basic and applied research prowess. In short, teacher performance has been and will continue to remain one of the critical and integral parts of higher education.

We argue that teachers are more likely to better perform when they are cognitively engaged in their job which depends on organizational climate and morale as well as their organizational citizenship behavior in their individual capacity (i.e. OCB-I). Besides, this study is the first report that extends the generalizability of the five-dimensional latent construct of OCB-I to the higher education institutions of a developing country. On contrary to our hypothesis, supervisor support has been found completely unrelated with CJE. Occupational stress weakens the positive relationship between CJE and teacher performance, whereas mentoring strengthens the same relationship. This study is among the first to report predictive validity of the structural model using PLSpredict algorithm. At the end, we believe that this study opens new front in engagement and performance literature for developing as well as developed countries.

Managerial Implications

The HEIs should revisit their vision, mission and core values in line with the requirements of modern era which could guide teachers in building innovative teaching practices. For instance, in order to obtain a good ranking or even sustain the top position in HEC recognized list of universities, a business school routinely should encourage its full-time teachers to concentrate more on writing good quality research papers in addition to their teaching responsibilities. It is because HEC allocates the highest points to the institutions whose faculty members produce the highest number of research papers in

HEC-recognized academic journals (British Council, 2019). It makes sense on part of the university because it enables the university to sustain its higher HEC ranking, however, on the other hand, it starts to deviate a business school from one of its main objectives i.e. to produce business graduates with good analytical, conceptual, and human skills as well as entrepreneurial intentions. Hence, HEIs should not overlook the significance of developing an entrusting organizational climate for improving CJE by keeping in view that teachers are highly-qualified individuals with different academic and professional background. They are more motivated towards self and peer learning for the sole purpose of human development rather than merely chasing financial rewards.

It is also a sour fact that university teachers find it very difficult to seek appropriate jobs in corporate world once they have spent several years in the teaching profession. A likely reason is the increasing expectancy gaps between industry and universities. The hiring authorities of a corporate business believe that university teachers might exhibit a high quality of teaching skills in classroom, however, they widely lack the competitive skills that are needed in a corporate world. This problem gets intensified when the opportunity for university teachers of working on management consultancy projects is too rare.

We maintain that young teachers may find change initiatives quite useful and be comfortable in receiving their in-role support for improved teacher performance. Therefore, we suggest that the management of HEIs should encourage OCB-I amid teachers such that teachers find it meaningful for themselves and for other stakeholders including students, peers, and the institution.

We cautiously argue that all of these three cognitive states are quite relevant and applicable to university management because considering the aforementioned findings of British Council (2019) report, there is a serious need to transform the HEIs in such a way that they could substantially contribute in developing a knowledge-based economy in the country where teachers are cognitively engaged in acquiring, creating and disseminating novel and useful knowledge to all concerned. In short, HEIs should concentrate more on developing CJE of their academic staff such that their performance should be aligned with academic and industries' demands.

Since mentoring affects more on the attitude than on the behavior of and health-related outcomes to protégé, we suggest that the mentoring function should be emphasized in both public and private sector universities in order to sublimate teacher performance. But, there is also a need to subtly obliterate the wide-spread, yet an incorrect perception in Pakistan that those who could not get a job in a corporate world on merit, they start teaching. In other words, teaching is generally perceived as a profession for those who remain unsuccessful or cannot survive in corporate world. We argue that mentoring can play a meaningful role in eradicating this wrong perception of a developing country.

Limitations and Directions for Future Studies

Despite the fact that this study makes substantial theoretical and methodological contributions to literature of education, the findings of this study should be viewed in light of the following limitations. This study used a cross-sectional data to test six research hy-

potheses which preclude its ability to test cause-and-effect relationship or even reverse causality between study variables (Bogler & Somech, 2019). Although, due to CFA of OCB-I, we are certain that the model was uni-dimensional, the potential presence of reverse causality between rests of the hypothesized relationships may not be over ruled. Therefore, future studies should apply a longitudinal research design to comment on the said objective. Notably, the measurement model of this study retained only one indicator of 'Sportsmanship' (Table 3a) because it possessed very high statistical as well as practical significance denoted by its effect size (Table 5). Therefore, future studies need to revisit its original items of this dimension of OCB-I by adequately performing context-specific content validity to adapt instrument items.

Besides, abundant amount of literature suggests that extrinsic rewards tend to emasculate intrinsic motivation (Deci & Ryan, 1964; Mehta, Dahl, & Zhu, 2017), however, in the context of a developing country such as Pakistan, Adil and Fatima (2013) has reported that an appropriate reward system has its own importance in developing teacher motivation in private school education. Therefore, we anticipate some interesting findings if future studies analyze the moderating effect of extrinsic rewards for the positive relationship between CJE and teacher performance. Similarly, the moderating role of teacher's creative self-efficacy is yet to be examined for the same relationship in the context of higher education. In this regard, (Adil & Ab Hamid, 2019) presents a useful conceptual framework. Besides, the histograms (Figure 5 & 6) could reveal some very interesting facts because there were some notable differences in predictive accuracy of the scales of residuals in CJE and teacher performance. Therefore, future studies could suggest further interesting knowledge by a deeper analysis of these implicit yet latent patterns which may be due to some cultural differences. Moreover, future studies may integrate the principle of Pygmalion effect, emotional labor, and social and economic leader-member exchange with CJE. We found that these relationships are also untapped research domain especially in the context of higher education.

Appendix - A

Descriptive Variable	Characteristics	Frequency	Percent	Cumulative %
Gender	Female	91	29.1	29.1
	Male	222	70.9	100
Age (in Years)	25-30	106	33.9	33.9
	31-35	105	33.5	67.4
	36-40	44	14.1	81.5
	41-45	29	9.3	90.7
	46-50	14	4.5	95.2
	Above 50	15	4.8	100
Qualification	MPhil/MS	225	71.9	71.9
	Doctorate	88	28.1	100
Designation	Lecturer	173	55.3	55.3
	Assistant Professor	101	32.3	87.5
	Associate Professor	30	9.6	97.1
	Professor	9	2.9	100
Experience (In Years)	01-May	104	33.2	33.2
	06-Oct	94	30	63.3
	Nov-15	55	17.6	80.8
	16-20	44	14.1	94.9
	21-25	12	3.8	98.7
Ownership	Above 25	4	1.3	100
	Public	79	25.2	25.2
	Private	234	74.8	100

Note: n = 313

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