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Organizational Climate and Innovative Work Behaviour: The Mediating Role of Workload and Teaching Motivation

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Present study aims to investigate how workload and teaching motivation influence teachers in context of the relationship between the organizational climate, its dimensions, and the innovative work behavior exhibited by teachers in a university setting. The research sample comprised of 313 teachers from both public and private universities. Findings indicated that organizational climate has significant positive relationship with innovative work behaviour, and teaching motivation (overall), including extrinsic, intrinsic and subject matter motivation as well. Additionally, universities' organizational climate is also directly related with all types of teaching motivation. Further, workload has significant and positive relationship with extrinsic and altruistic motivation. In a comparison between public and private universities data, the private universities are significantly higher on organizational climate, teaching motivation (overall), extrinsic, intrinsic and subject matter motivations, and innovative behaviour as well. The study also highlighted the significant mediating roles of both the extrinsic and intrinsic motivation, emphasizing their importance in fostering teachers' intention to engage in innovative work behavior. The study results support the highly positive effects of organizational climate and teaching motivation in creating innovative work behaviour. The study suggests that promoting healthy organizational climate and moderate workload may enhance university teachers' motivation and consequently, the innovative work behaviour. The study findings may ultimately benefit the university teachers, their students and the organizations in particular, and the higher educational system and society in general.

Keywords. Organizational climate, innovative work behaviour, workload, teaching motivation, university teachers

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In the modern global turbulent socioeconomic environment, higher education organizations need to inculcate motivation and creativity/innovation for gaining a competitive edge in the fast-paced business world. This is particularly true for employee-driven initiatives, as the organizational challenges of the competitive modern world have increased many folds (Alfy & Naithani, 2021; Rathore et al., 2024). The critical role of teachers in higher education emphasizes the importance of organizational environment on teacher performance to uplift the education system (Anwar et al., 2020). Educational organizations' aspiring vision, mission, plans and goals require their execution and through their innovations achievements. In Pakistan, organizational climate and innovation capabilities of new technology-based firms facilitate adaptation to dynamic environments (Shahzad et al., 2017). Organizational climate help employees to increase motivation which leads to effective job performance and generate new creative ideas (Noviyanti et al., 2021; Rozman & Strukelj, 2021). Conversely, the Organizations understand that a bad organizational climate not only inhibits innovation but also reduces learning and development activities among employees (Balkar, 2015; Canli & Ozdemir, 2022). According to US Innovation Survey (2015), 84 percent of executives' success was dependent on innovative ideas (Nieminen, 2018).

McKinsey Global Innovation Survey (2020) and European Central Bank (2017) highlighted that innovation is crucial to increase the organizations' business and productivity growth that bring vast benefits for the end users. Presently, intellectual capital is considered as one of the most important resources for employee capabilities to develop innovation in various aspects such as products, processes, and organizational structures. Like others, the educational organizations' education environment is strengthened by examining and improving teaching/learning process which sharpens knowledge management strategies (Munna & Kalam, 2021). Additionally, innovative work behaviour in educational settings can help to obtain and maintain a competitive advantage of acquiring, processing, developing knowledge, and managing their workload effectively. Considering organizations new business approach, the main emphasis depends on the exchange between employers and knowledge workers (Tokarski & Oleksa-Marewska, 2019).

A positive organizational climate in educational settings fosters an environment where teachers feel valued, supported, and equipped to manage their responsibilities. This not only enhances their holistic well-being but also leads to better workload management, ultimately benefiting the entire educational community (Hao & Wang, 2022).

The teachers, inspired with innovation may create the essential conditions to encourage innovative work behaviour in classrooms/ laboratories (Johari et al., 2021; Matser, 2022). The ability for innovative work behaviour becomes crucial to adapt to the challenging and competent environment for the survival of organizations in the modern world (Pasha et al., 2022). Many scholars have addressed the importance of organizational climate influencing creativity (Mutonyi et al., 2020). To accomplish and sustain a competitive lead in today's fluctuating and difficult economic environment, the higher educational institutions have a great responsibility for research, knowledge creation and innovation for human development and so, they should promote healthy organizational climate with moderate workload, and encourage teachers' motivation for innovative work behaviour. On the other hand, the negative working environment and high workload pressure may lead to low motivation, job stressors, use of hazardous substances, absenteeism, loss of productivity and other psychological problems (Bowling et al., 2015; Khedhaouria et al., 2017). To cope with the quality and quantity of workload, the motivation and effective management strategies for healthy organizational climate may play their crucial role to boost the abilities of employees' innovative work behaviour (Xu et al., 2022).

The nature of organizational climate has its roots in organizational climate theory which clarifies that employees' behavior is influenced by their perception of the organizational environment, which fosters individuality and creativity in job performance (Lewin et al., 1939; Solomon et al., 2004). Organizational climate plays a crucial role in facilitating high job performance among teachers and promoting innovative behavior, both within classrooms and across educational settings (Anwar et al., 2020; Balkar, 2015).

In Pakistan, the quality of education has implications for strategic human resource issues, as it contributes towards building a reliable organizational structure and maintaining organizational functionality which in turn, facilitates the development of highly skilled teachers and consequently, the students. According to the Italian Ministry of Education, a healthy environment can sustain quality human resources which influence the behaviour of teachers in shaping an organization's climate and creative work excellence (Bonacci et al., 2020; Don et al., 2021). The teachers working in education sectors are always perceived and responded to their attitudes and behavior in surrounding organizational climate and particularly, by their students. A positive and supportive organizational climate encourages teachers to use innovative ideas to

improve student learning outcomes (Gemnafle et al., 2018). According to Industrial Psychology and Organizational Behaviour, the climate of organization is defined as a set of specific attributes towards a particular organization that distinguish it from other organizations on aspects of how it deals with its workers and work conditions (Berberoglu, 2018; Khan & Sharma, 2020).

Workload refers to the amount of work assigned to workers for accomplishment within time. It depends on the perception of employees how they show interest and enjoy the task completion (Anwar et al., 2022; Nwinyokpugi, 2018). The workplace plays an important role in achieving organizational or personal goals by allowing employees to work in a relaxed and healthy atmosphere. Several studies have emphasized the importance of a stress-free workplace including workload. Professionals in Pakistan's public sector are frequently confronted with workload-related challenges during their careers. The climate of an organization depends on the employees' workload, which ultimately affects their performance (Herdiana & Sary, 2023; Tinggi, et al., 2021). The workload is an opportunity for the employees to adapt successfully to a rapidly changing environment.

In educational institutions, teachers who are open to change according to climate do their work actively, and enrich their exposure while workless employees have to leave the organization.it is also observed that workload pressure may be positively leading towards their increased productivity (Swedana, 2023). But, time pressure emerges as a significant contributor to heightened stress among employees when they lack sufficient time to fulfill their task and responsibilities (Kanwal et al., 2023). Frequent interruptions during tasks, particularly when teachers are involved in additional academic duties, may lead to stress and diminished innovation as different tasks may be compromised, causing pressure to complete all assignments within the given time frame. However, interruptions impede the ability to perform the initial work effectively, negatively impacting teachers' innovative behavior in the classroom and exacerbating job stress (Gkontelos et al., 2023).

Motivation is a psychological force that energizes the behaviour of an individual and directs it towards obtaining predetermined objectives (Fang et al., 2018). As far as teaching motivation is concerned, it plays a central role in the education system which directly influences teachers' learning outcomes, academic achievements and promotes innovative work behaviour. Teaching motivation involves the desire to teach effectively and the willingness to engage students in learning activities (Reeve & Cheon, 2021). It is a

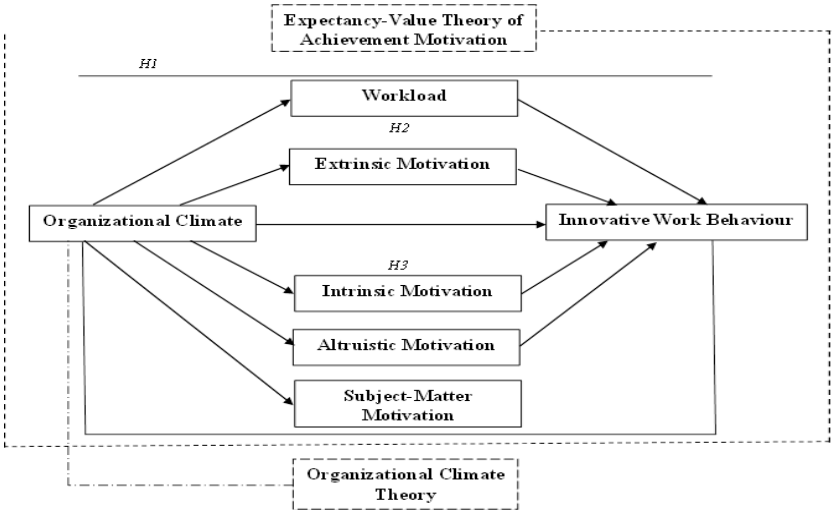
process to promote and enhance students' learning by motivating them to accomplish their career goals. Some psychopathological factors such as an inability to concentrate, low energy levels, changes in mood, and undesirable behaviour may influence teachers' motivation (Kakar & Pathan, 2017; Wang et al., 2023). However, it is essential to know the effects of organizational variables (i.e., organizational climate, group cohesiveness, flexibility and decision making) on teaching motivation as they indicate the teachers' belongingness to the educational institutions (Pourtousi & Ghanizadeh, 2020). Hamid et al. (2020) indicated that organizational climate influences teachers' self-esteem and motivation level such as provision of adequate university climate promotes and enhances teachers' motivation to teach effectively.

According to organizational psychology, innovative work behaviour is a proactive approach to adapt to stay competitive in today's environment (Shahab & Imran, 2018; Sharif et al., 2024). Innovation plays an essential role to discover and develop new methods which enhance students' and teachers' learning strategies (Awan et al., 2020; Shin et al., 2017). The globalization process has explained that continuous innovation is a determinant factor for various challenges in the development of organizations (Skare & Soriano, 2021). To promote a dynamic and globalized environment, an in-depth analysis of organisational factors play critical role to carry out innovative accomplishments that are important for substantial survival (Zhang et al., 2023). Some recent researches have emphasized the innovative work behavior's pivotal role in enhancing employees' knowledge, sustainable performance, and creativity within organizational climate, highlighting its significant success and adaptation in educational settings (e.g., Ebrahim et al., 2023; Hosseini & Shirazi, 2021). The present study focuses on organizational climate, workload, teaching motivation, and innovative work behavior. In addition, the function of teaching motivation is to foster a positive organizational climate, and enhance teachers' innovative work behavior. This study focused on teachers working in both public and private sector universities in Pakistan. The study offers valuable insights for teachers and university administrators by suggesting s to promote a supportive organizational climate. It also sheds light on factors influencing teachers' innovative work behavior, such as workload management and teaching motivation, thereby enhancing understanding and improving educational settings (Aslam & Qayyum, 2022).

Conceptual Framework

Organizational climate is likely to induce innovative work behaviour in university teachers. Workload and teaching motivation mediates the relationship between organizational climate and innovative work behaviour. Employees who are working in positive and healthy organizational climate are likely to become more innovative. However, teaching motivation and workload may play meditating role to improve organizational climate and innovative work behaviour. The whole model is supported by the expectancy-value theory of achievement motivation (Wigfield & Eccles, 2000). The theory explains that expectancies relevant to healthy organizational climate promotes IWB and increase motivation to manage workload effectively (Purvis et al., 2015). The interaction between organizational climate and innovation work behaviour is supported by organizational climate theory (Solomon et al., 2004).

Figure 1: *Proposed Model of Research*



Objectives

1. To see the relationship between organizational climate, innovative work behaviour, workload, and teaching motivation among university teachers.
2. To explore the mediating role of workload, and teaching motivation on the relationship between organizational climate and innovative work behaviour among university teachers.

3. To see the organizational climate, innovative work behaviour, workload, and teaching motivation related differences between public and private sector university teachers.

Hypotheses

1. Organizational climate is likely to be positively related with workload, teaching motivation and innovative work behaviour among university teachers.
2. Workload is likely to mediate the relationship between organizational climate and innovative work behaviour among university teachers.
3. Intrinsic and extrinsic motivations are likely to mediate the relationship between organizational climate and innovative work behaviour among university teachers.
4. Private sector university teachers score higher on organizational climate, innovative work behaviour, workload and teaching motivation as compared to public sector university teachers.

Method

Sample

The sample of university teachers (N = 313) was recruited for the present research including men (n = 170) and women (n = 143) within the age range of 25 to 65 years from five different public and private sector universities of Pakistan during the time period of April 2021 to July 2021. University teachers working for at least one year as it is considered the minimum time period to adjust in the university environment, were included in this research.

Measures

Organizational Climate Questionnaire (CLIOR Scale)

The Organizational Climate Questionnaire was used to measure the working environment of organizations. A short version of the scale was developed, made up of 15 items, with discrimination indexes higher than 0.40, an alpha coefficient of .94, and its structure was clearly one-dimensional that measures the set of perceptions shared by the workers who occupy the same workplace (Peña-Suárez et al., 2013).

Quantitative Work Inventory (QWI)

The Quantitative Work Inventory is a method for evaluating the quantity of work being assigned to the employees which refers to volume, pace, and difficulty of the task with the time of completion. This instrument helps in the measure of the overall workload. The Quantitative Workload Inventory includes 5 items, the QWI score system produces averaged items such that higher scores indicate a heavier workload in employees. The Quantitative Workload Inventory has a Cronbach's reliability of .82 (Spector & Jex, 1998).

Teaching Motivation Scale

The Teaching Motivation Scale is a method for measuring teachers' motivation to teach and remain in the profession. The scale included four dimensions: (1) extrinsic motivation (2) altruistic motivation (3) intrinsic motivation and (4) subject-matter motivation. The Cronbach alpha of subscales reported by author is .76 for extrinsic motivation, .85 for altruistic motivation, .75 for intrinsic motivation, and .88 for subject-matter motivation (Roness 2011).

The Innovative Work Behaviour Scale (IWB)

The Innovative Work Behaviour Scale is based on the generation of new ideas, products, solutions, and implementations that promote and support workers. IWB is a four-dimensional scale with 10 items consisting of idea exploration (2 items), generation (3 items), championing (2 items) and implementation of ideas (3 items). The innovative work behaviour has a Cronbach's reliability of .82. Cronbach's alpha coefficient for the scale is .91 (De Jong & Hartog, 2010).

Procedure

In the present study, permission was sought from the respective authors to use their assessment measures prior to collecting data. Only those teachers who gave informed consent and met the researchers inclusion criteria were approached. The researchers explained the study's purpose and process to the participants and obtained informed consent for data collection. Participants were assured of the confidentiality of the personal information. The participants were also

informed that their information would only be used for academic research and they could withdraw at any moment during the study if they desired. The study was approved by the Departmental Board of Studies and Board of Advance Studies and Research of the researchers' university.

Results

Descriptive variables analysis and Pearson product-moment correlation were used to assess the relationships in organizational climate, workload, teaching motivation, and innovative work behaviour. Parallel mediation analysis by using SEM in AMOS, and independent sample *t*-test were applied to carry out the results of the study. The psychometric properties of all the scales and sub-scales showed moderate to very good reliability values.

Relationship between Demographics, Organizational Climate, Workload, Teaching Motivation and Innovative Work Behaviour

Results presented in Table 1 showed in correlation analysis that education (i.e., Ph.D. and MS/MPhil) has significant positive relationship with types of universities and extrinsic motivation whereas, negative relationship with level of teaching. Both public and private sectors universities have positive relationship with organizational climate and teaching motivation except altruistic motivation. Intrinsic and extrinsic motivation has positive relationship with innovative work behaviour.

Organizational climate has significant positive relationship with teaching motivation factors (i.e., extrinsic, altruistic, intrinsic and subject-matter motivation) and innovative work behaviour in university teachers. Workload has significant positive relationship with extrinsic and altruistic motivation. Teaching motivation (overall) has positive relationship with innovative work behaviour (See Table 1).

Subsequently, parallel mediation analysis using AMOS was carried out on the basis of steps by Baron and Kenny (1986). The assumptions of Baron and Kenny were tested before running the analysis, which states that organizational climate predicts innovative work behaviour; organizational climate predicts workload and teaching motivation subscales i.e., extrinsic motivation, altruistic motivation, intrinsic motivation and subject matter motivation predict innovative work behaviour. Workload and teaching motivation predict innovative work behaviour.

Table 1: *Relationship between Demographics, Organizational Climate, Workload, Teaching Motivation and Subscales and Innovative Work Behaviour in University Teachers (N = 313)*

	1	2	3	4	5	6	7	8	9	10	11
1. Education[a]	-										
2. Type of Universities[b]	.15**	-									
3. Level of Teaching [c]	-.47***	.02	-								
4. Organizational Climate	-.05	.34***	.11	-							
5. Workload	-.06	.02	.02	.05	-						
6. Teaching Motivation (overall)	.10	.46***	.03	.42***	.10	-					
7. Extrinsic Motivation	.13*	.49***	-.01	.32***	.14*	.83***	-				
8. Altruistic Motivation	.02	-.12*	-.04	.19**	.13*	.52***	.18**	-			
9. Intrinsic Motivation	.03	.35***	.08	.33***	-.04	.66***	.33***	.26***	-		
10. Subject-matter Motivation	.06	.48***	.10	.35***	-.04	.69***	.48***	.12*	.44***	-	
11. Innovative Behaviour	-.04	.39***	.14*	.45***	.05	.42***	.37***	.11	.39***	.29***	-

Note. [a]0 = PhD, 1= MS/MPhil. [b] 0 = Private, 1= Public. [c] 0 = Undergraduate, 1 = Both Graduate and Postgraduate .

*$p \leq .05$; **$p \leq .01$; ***$p \leq .001$.

Mediation of Workload and Teaching Motivation on Organizational Climate and Innovative Work Behavior

Assumptions for normality including detecting outliers, skewness and kurtosis indicated that the data is normally distributed. There were no missing values found in the entry. The data did not have multicollinearity based on the values of VIF (less than 3). The assumption of homoscedasticity is that the variability scores for one continuous variable are roughly the same at all values of another continuous variable. It is assumed that the data was homoscedastic. The results of the AMOS mediation assumptions are presented in Tables 2, 3, and 4 respectively.

Table 2: *Indices of Model Fit in Predicting Innovative Work Behaviour in University Teachers with Teaching Motivation Via Organizational Climate (N = 313)*

	$\chi^2(df)$	$\Delta\chi^2$	GFI	IFI	CFI	RMSEA
Model	4.78(7)	0.68	1.00	1.01	1.00	.00

Table 2 shows model fitness wherein, initially a baseline (unconstrained) model with a maximum likelihood approach is tested. The model fits the data reasonably well. All fit indices were .95 or above and RMSEA value is .00 (less than .08). The value of delta chi-square effect by sample size is .68 (less than 3). The indexes of GFI (1.00), IFI (1.01) and CFI (1.00) were greater than .90 which showed that model is good fit for predicting innovative work behaviour in university teachers with organizational climate and teaching motivation subscales.

Model presented in Figure 2 is explaining that organizational climate is likely to induce innovative work behaviour in university teachers. However, the workload has no mediating role on the relationship between organizational climate and innovative work behaviour whereas, teaching motivation factors i.e., extrinsic and intrinsic motivation partially mediate the relationship between organizational climate and innovative work behaviour except altruistic and subject-matter motivation. Teachers working in positive and healthy organizational climate are likely to demonstrate more innovative work behaviour.

Figure 2: *Prediction of Innovative Work Behaviour in University Teachers with Teaching Motivation via Organizational Climate (N = 313)*

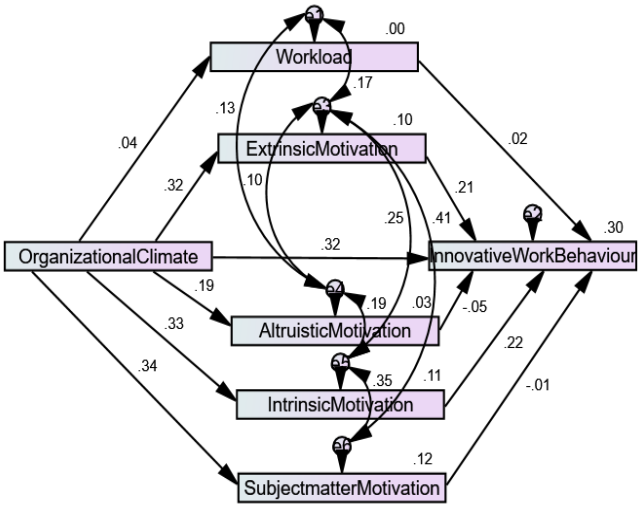


Table 3: *Standardized Regression Coefficient of Parallel Mediation (N = 313) by using AMOS*

Outcomes	*B*	*β*	*CR*	*p*
OC ----> WL	.04	.04	.80	.43
OC ----> EM	.31	.32	5.87	.001
OC ----> AM	.18	.19	3.27	.001
OC ----> IM	.33	.33	6.16	.001
OC ----> SMM	.35	.34	6.49	.001
WL ----> IWB	.02	.02	.43	.67
EM ----> IWB	.20	.21	3.88	.001
AM ----> IWB	-.05	-.05	-.98	.33
IM ----> IWB	.21	.22	3.97	.001
SMM ----> IWB	-.01	-.01	-.22	.83
OC ----> IWB	.32	.32	6.13	.001

Note. OC = Organizational Climate; EM = Extrinsic Motivation; AM = Altruistic Motivation; IWB = Innovative Work Behaviour; IM = Intrinsic Motivation; SMM = Subject Matter Motivation; WL = Work Load.

$^{*}p \leq .05$, $^{**}p \leq .01$, $^{***}p \leq .001$.

Table 3 shows that organizational climate positively predicts extrinsic motivation (β = 0.32, p < 0.001), altruistic motivation (β = 0.19, p < 0.01), intrinsic motivation (β = 0.33, p < 0.001) and subject-matter motivation (β = 0.34, p < 0.001). Moreover, organizational climate significantly positively predicts with innovative

work behaviour (β = 0.32, p < 0.001). Results of parallel mediation analysis using AMOS showed that when controlling the effect of teaching motivation, organizational climate significantly predicted innovative work behaviour among university teachers which showed partial mediation.

Table 4**:** *Standardized Indirect effect of Extrinsic Motivation and Intrinsic Motivation with Innovative Work Behaviour via Organizational Climate (N = 313)*

Pathways	*B*
OC→EM→IWB	.26***
OC→IM→IWB	.55***

Note. OC = Organizational Climate; EM = Extrinsic Motivation; IWB = Innovative Work Behaviour; IM = Intrinsic Motivation.

Results presented in Table 4 showed that indirect effect of organizational climate was statistically significant with innovative work behaviour via extrinsic motivation and intrinsic motivation. Extrinsic and intrinsic motivation showed partial mediation with organizational climate and innovative work behaviour.

Table 5**:** *Public and Private University Types Related Differences in Organizational Climate, Workload, Teaching Motivation and Innovative Behaviour among University Teachers (N = 313)*

	Public[a] (*n* =148)		Private[b] (*n* = 165)				*Cohen's*
Variables	*M*	*SD*	*M*	*SD*	*t*	*p*	*d*
Organizational Climate	53.57	5.12	57.24	5.04	-6.37	.00	0.72
Workload	14.97	3.98	15.12	3.80	-.35	.73	
Teaching Motivation (overall)	50.46	6.25	56.70	5.80	-9.13	.00	1.03
Extrinsic motivation	11.41	3.48	15.15	3.17	-9.88	.00	1.12
Altruistic motivation	16.26	2.20	15.76	2.12	2.07	.04	0.23
Intrinsic motivation	16.14	1.75	17.43	1.78	-6.49	.00	0.73
Subject-matter motivation	6.65	1.94	8.37	1.12	-9.46	.00	1.09
Innovative Behaviour	36.52	4.22	40.38	4.82	-7.50	.00	0.85

Table 5 showed that there were substantial differences in organizational climate, teaching motivation factors (i.e., overall, as well as extrinsic, altruistic, intrinsic, and subject-matter motivation) and innovative behaviour between public and private sector universities. However, in term of workload there were no major

disparities between public and private universities. Organizational climate, extrinsic motivation, intrinsic motivation, subject-matter motivation, and innovative work behaviour were found to be higher in private sector universities. However, altruistic motivation was higher in public sector universities.

Discussion

The present study has indicated that there is a significant relationship between organizational climate and innovative work behavior. This is consistent with previous researches conducted across various organizations (Ali et al., 2020; Sharif et al., 2024). A broad range of literature supported that organizational climate has a significant positive relationship with teaching motivation that influences innovative work behaviour of teachers (Chen & Pongtornkulpanish, 2024; Irnidayanti et al., 2020). Organizations that acquire and sustain better climate improve their system deficiencies that become the valuable assets for innovations (Moslehpour et al., 2018). Additionally, supportive organizational climate enhances teaching motivation which is related with effective job performance (Anwar et al., 2020; You et al., 2022).

In Pakistan, there is a need to investigate the importance of organizational climate which influences the quality of education and teachers innovative behaviour (Rahman & Ali, 2021). However, a recent study showed that teachers' daily work assignment become becomes more demanding and complex to address diverse students population need which may be the cause of their stress (Kanwal et al., 2023). In this regard, teaching profession requires intrinsic and extrinsic motivation to complete their work assignments responsibilities in pursuit of organization effectiveness (Rashid et al., 2023; Yasmeen et al, 2019).

Further, teachers' workload has a significant positive relationship with extrinsic and altruistic motivation. It was observed in a study on Pakistani culture that extrinsic and altruistic motivation play essential role when employees choose teaching as profession (Noor et al., 2021). Teaching motivation is crucial for enhancing quality education and improving student learning outcomes (Reeve & Su, 2014). The better provision of university climate enhances teachers' motivation as well as self-esteem leading towards country development and wellbeing (Hamid et al., 2020). It may be justified in light of research by Ahmad et al. (2023) which reported that work motivation sustains better performance and increased motivation among employees.

The current study observed that workload is not mediated in relationship between organizational climate and innovative work behaviour which did not support our hypothesis (*H2*). Previous studies by Pecino et al. (2019) and Razzaq (2022) found that the positive organizational climate reduces workload stress and burnout among workers and enhances teachers' overall well-being. This suggests that perhaps a positive organizational climate does not impact the workload of university teachers. This finding may be attributed to university teachers that by efficiently managing their academic workload, effectively balancing teaching and research responsibilities, while engaging in supportive interactions with students and receiving assistance from university staff and administration may alleviate their workload stress.

Present research supported the hypothesis (*H3*) that intrinsic and extrinsic teaching motivation mediated between climate and innovative work behaviour. Past studies have shown that teachers with high intrinsic motivation, innovative self-efficacy, altruistic, subject-matter and extrinsic motivations have better work performance as professional teachers (Johari et al., 2021; Nadeem & Hashmi, 2022). Extrinsic motivation stimulates the creativity and innovation of intrinsically motivated teachers in educational sectors. Intrinsic motivation and extrinsic motivation acting as relational rewards for transactional teaching may have greater influence on innovative performance (Yasmeen et al., 2019). This could be because the feeling of extrinsic motivation in higher education is extremely essential to realize the regular flow of innovative work behaviour. Similarly, in order with social exchange theory, extrinsic motivation positively affects innovative behaviour. Likewise, the learning environment is an essential contextual factor for higher educational institutions as it affects the innovative work behaviour of teachers (Abdullatif, 2016). However, organizational climate such as open-mindedness, self-analysis, problem-solving and communication are associated with innovative behaviour (Shanker et al., 2017). Present research showed a significant positive relationship between organizational climate and innovative work behaviour.

Improving extrinsic and intrinsic motivation had been shown to increase the frequency of innovative work behaviours such as self-initiated ideas, activities and actions bringing ahead, flourishing, applying, developing evaluating and modifying new ideas (Karadeniz et al., 2021; Trapitsin et al., 2018). Current study showed that teaching motivation factors i.e., extrinsic and intrinsic motivation have a significant positive relationship with innovative work behaviour among university teachers.

Results of independent sample t-test showed that private sector universities have better organizational climate, workload, teaching motivation and innovative work behaviour. This could be justified as private education sectors have friendly environment, learning resources to motivate teachers with handsome salary (Nawaz & Yasin, 2015). However, some studies indicated that private sector universities have high workload on employees causes stress and reduces their efficiency (Ishaq & Mahmood, 2017) but in our study, there was no significant difference found between public and private universities on workload. However, altruistic motivation was higher in public and private sector universities. In this regard, a recent study has shown that the teachers' altruistic motivation promotes students' personal achievements and solves their difficulties that subsequently, improve teachers' self-efficacy (Li & Guo, 2024).

Conclusion

The findings of this study emphasized the importance of educational climate in boosting teachers' motivation and innovative work behavior. Further, the study has highlighted the critical role of teachers intrinsic and extrinsic motivation in sparking innovative behaviour. Healthy organizational climate had a significant positive relationship with teaching motivation factors and innovative work behaviour. Workload had a positive relationship with extrinsic and altruistic motivation. Both extrinsic and intrinsic motivation partially mediated the relationship between organizational climate and innovative work behaviour. However, organizational climate did not predict workload. Interestingly, private sector universities had higher scores on organizational climate, teaching motivation (overall), extrinsic, intrinsic, subject-matter motivations, and innovative work behaviour as compared to public sector universities but altruistic motivation was higher in public sector universities.

Limitations and Suggestions

Present study did not investigate how particular organizational features such as organizational structure and design, communication with CEO administrative staff, directors and heads of the departments, and intuition, training and development, pay perks, added compensations, and related legal and ethical issues can play important role in developing healthy environment. So, it is recommended in future researches to add organizational climate factors as predictors of innovative work behaviour. Moreover, the research did not compare

the mild, moderate and severe workload. In future researches, it is recommended to add the levels of workload to know which factors are mainly responsible for the increase/decrease of organizational climate and innovative work behaviour. Cultural, social, national and international higher education climate factors that are important for innovative work behaviour among university teachers may also be studied in future.

Implications

The study has important implications for the higher education commission, universities CEOs, university teachers, government and policymakers to develop an effective educational reform agenda to improve the universities' organizational climate and innovative work behaviour by promoting teachers' motivation for socioeconomic development of the country. Present research expands understanding that supportive and healthy organizational climate predicts teachers' extrinsic and intrinsic motivation that may lead to innovative work behaviour among university teachers which may consequently enhance the quality of education in Pakistan that remains the dire need have all times.

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