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Workplace Environment as Predictor of Burnout in Academicians and The Moderating Role of Personality and Organizational Sector

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Theoretical orientation of Moos's (1994) psychosocial model of work environment and outcomes was investigated in context of academic settings of Pakistan. In explaining the relative effect of work environment in predicting burnout, the present study addressed the question of moderating role of personality which so far was remained open. The operating work environment of public and private universities was assessed on basis of ten psychosocial dimensions including Involvement, Co-worker Cohesion, Supervisor Support, Autonomy, Task Orientation, Work Pressure, Clarity, Managerial Control, Innovation and physical Comfort. Burnout among university teachers was assessed on dimensions of emotional exhaustion, depersonalization and personal accomplishment. Findings highlighted that work involvement as negative predictor and work pressure as positive predictor contributed in emotional exhaustion. Similarly, involvement as negative predictor explained variance in depersonalization scores. Co-worker cohesion and work pressure as positive predictors and physical comfort as negative predictor explained variance in reduced personal accomplishment. Teachers' personality and affiliation with public and private sector institutions provided significant explanation of burnout. Findings stressed the need to monitor the work environment of academic settings as a means of improving the quality of work life of teachers.

Keywords: academic work environment, teachers' burnout, personality, public and private sector

The research drift in occupational psychology from last two decades has focused the construct of work environment as a mean for assessing employees' perceptions about organizational processes influencing the employee and organizational related outcomes (Carr, Schmidt, Ford, & DeShon, 2003; Hyvones, Feldt, Tolvanen, & Kinnunen, 2010; Kopelman, Brief, & Guzzo, 1990; Parker et al., 2003; Stansfeld & Candy, 2006). Different theoretical approaches (Brown & Leigh, 1996; James & Sells, 1981; Moos, 1986; Ostroff, 1993) have put forth the construct of work environment as of multidimensional nature describing the various psychosocial attributes of the workplaces. In understanding the interplay between work environment and its outcomes, Moos's socio-ecological model (1994) posited that perceived environment in which individuals live and work tends to have a significant impact on attitudes and behaviors of employees. The model further explains that understanding of environment-to-outcome relationship is a complex one i.e. routed through the complex interplay of employees' personal agency that includes personal and organizational factors.

Assessing the impeding influences of academic work environment, burnout as a negative attitude has remained the focus of attention (Dorman, 2003; Fong, 1993; Kim, Lee, & Kim, 2009; Lindblom, Linton, Fedeli, & Bryngelsson, 2006; Pandey & Tripathi, 2001). In context of human service professionals, burnout as a psychological syndrome of emotional exhaustion, depersonalization, and a reduced sense of personal

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accomplishment (Maslach, 1993) has taken as a consequence of interaction with clients, organizational demands, inadequate support, and personal vulnerabilities (Wilber & Specht, 1994). The relationship dynamics at workplace e.g., low work involvement (Robinson et al., 1991), supervisors' and co-workers' support (Escribà-Agüir, Martín-Beena, & Pérez-Hoyos, 2006) predict emotional exhaustion. Work environment facets including work load, coworkers support, were found to explain significant variance in emotional exhaustion and depersonalization (Brown & Pranger, 1992; Levert, Lucas, & Ortlepp, 2000). High work pressure and less emphasis on innovation predict increases in emotional exhaustion and depersonalization and a decline in personal accomplishment (Goddard et al., 2006).

Examining burnout among teachers is particularly important to examine because studies in Pakistan have mentioned burnout as important concern reported by the teachers (Khurshid, Butt, & Malik, 2011; Qureshi & Hijazi, 2006). In predicting teachers' burnout, personality as a contextual variable of an organizational environment was pointed out to further investigate the association between type of personality and its possible outcomes (Kim-Wan, 1991; Kokkins, 2007; Otero-López, Mariño, & Bolaño, 2008; Sahu & Misra, 2004). Interaction effects of work environment factors and organizational sector (Kim, 2011) influence burnout. A systematic literature review on burnout among university teaching staff (Watts & Robertson, 2011) pointed out lack of comparative studies across organizational sectors.

The present study addressed the role of work environment and its outcomes in context of how certain psychosocial attributes of academic work environment may possibly explain burnout among University teachers. In explaining the environment to outcome relationships, the possible moderating influences of personality types and organizational sector were thoroughly explored to deduce the possible implications for improving the work environment of the Universities.

Method

The Work Environment Scale: It is a cross-cultural valid measure for assessing employees' perceptions of operating attributes of the workplaces (Moos, 1994). Original version of scale comprises ten subscales with nine items in each. Using data of present sample, confirmatory factor analysis suggested a modified 63-item version while retaining each subscales. Cronbach's alpha coefficient for total scores was reported high (α = .88). For subscales, alpha coefficients ranged from moderate for Clarity (α = .69) to low for Coworker Cohesion (α = .42). The measure has yielded the moderate level of internal consistency when assessed for a sample of university teachers of Pakistan (Rehman & Maqsood, 2008) from a lower for work pressure (α = .29) to substantial for task orientation (α = .63)

The Maslach Burnout Inventory- Educator Survey: The inventory (Maslach, Jackson, & Leiter, 1996) measures the frequency of experiences of feeling on three subscales. The emotional exhaustion subscale assesses feelings of being emotionally over-extended and exhausted by one's work. The depersonalization subscale measures an unfeeling and impersonal response toward recipients of one's service, care, treatment, or instruction. The reduced personal accomplishment assesses the extent of competence and successful achievement in one's work with people. Based on results of confirmatory factor analysis, a modified 21-item measure was used. Cronbach's alpha coefficient for total scores on burnout was reported high (α = .86). For subscales, coefficients are as follows: Emotional Exhaustion (α = .74), Depersonalization (α = .69), and Personal Accomplishment (α = .76).

The Mini-Markers Set: Saucier's Mini-Markers (1994), an abbreviated version of Goldberg's Big Five theory of personality (1992), comprises five relatively independent dimensions: Extraversion, Agreeableness, Conscientiousness, Emotional Stability, and Openness to Experience. Confirmatory factor analysis suggested the modification by excluding two adjectives leaving the 38 item inventory compared to original 40 items. Both items showed poor association along with high residuals with corresponding factor of emotional stability. On current sample, Cronbach's alpha coefficients for subscales range from moderately high for Agreeableness (α = .79), up to slight variation for Extroversion (α = .76), subscale.

Participants

The participants comprises University teachers (*N* = 426) from public (*n* = 212) and private (*n* = 214) sector universities of three cities i.e., Islamabad, Rawalpindi and Lahore. The mean age of participants was *M* = 36.57. The 575 test booklets (containing measures of the study) were handed over to teachers after obtaining their informed consent. The response rate in non-random opportunity/convenient sampling was 77.4%.

Procedure

Formal written approval from the management of the selected universities was secured. Teachers were approached individually. The respondents were given average time of 3 days as sufficient to respond. Follow-up procedure was adopted via telephonic contact. The questionnaires were accessed back personally by the researcher and in some cases these were sent to the researcher via post.

Results

Factorial Validity of Study Measures using Confirmatory Factor Analysis (CFA)

To see how well the existing structure of study measure may confirm with sample of university teachers of Pakistan, CFA was performed using Linear Structural Relations- LISREL. Using the standardized factor loadings along with residuals, criteria for factor loadings was set as above .30. In evaluating the factor loadings, the extent of variance that items of one factor can explain for another factor was also examined using inter-correlations between subscales. This overlap of explaining variance was also considered as one of the possible explanations while examining the strength of factor loadings. The items were cross checked in multiple solutions e.g., examining the sub-samples along with considering the unstandardized solutions and the psychometric properties before deciding to delete from the measure.

Table 1

Goodness-of-fit statistics for Measures of the Study (N = 426)

Fit statistic	WES-Ten-Factor Model	MBI- Three-Factor Model	Mini Markers- Five Factor Model
χ^2	8755.36*	572.91*	2896.77*
Df	3870	206	730
RMSEA	.07	0.07	.09
GFI	.62	0.89	.72
AGFI	.60	0.86	.68
IFI	.78	0.93	.83
NFI	.66	0.90	.79
CFI	.78	0.93	.83
CAIC	13238.85	917.87	3971.60

**p = 0.0,*

Note. χ^2 = chi-square; df = degree of freedom; RMSEA = root mean square error of approximation; GFI = goodness-of-fit index; AGFI = adjusted goodness-of-fit index; IFI = incremental fit index; NFI = normed fit index; CFI = comparative fit index; and CAIC = Consistent Version of AIC.

CFA highlighted significant values of chi-square, which thereof is undesirable because in large samples it is more likely to fall under unacceptable range, even though the residual matrix is small (Kline, 1993). To have better estimate of model fit, the root mean square error of approximation (RMSEA) as one of the most informative fit indices with coefficient values fall between 0.05 and under 0.08 indicates reasonable model support and values between 0.08 and 0.10 indicates mediocre support (Diamantopoulos & Siguaw, 2000). For WES and burnout models, RMSEA falls under reasonable fit. For Mini Mrakers, coefficient RMSEA indicates mediocre fit. The values closer to 1 for goodness of fit (GFI), adjusted goodness of fit (AGFI), incremental fit index (IFI), normed fit index (NFI), and the comparative fit index (CFI) are acceptable (Diamantopoulos & Siguaw,

2000). The index namely consistent version of Akaike's Information Criterion (CAIC) that adjusts the sample size effects proposes to consider the smaller value of CAIC denoted as *Model CAIC* compared to *Independence* and *Saturated CAICs* (Byrne, 2013). For WES, the obtained value of Model CAIC (13238.85) is smaller than Independence (26532.52) and Saturated (28887.93). For MBI, Model CAIC (717.45) is smaller compared to Independence (4587.67) and Saturated (1340.34). For Mini Markers, the value of CAIC is smaller (3971.60) than Independence (16151.49) and Saturated CAICs (5784.64). The obtained values of CAIC are well supportive for all measures.

Table 2

Multiple Regression on scores of Emotional Exhaustion, Depersonalization, and Reduced Personal Accomplishment by Work Environment Scores (N = 426)

	EE					DP					PA				
				95% CI					95% CI					95% CI	
WES	*B*	*SE B*	*β*	LL	UL	*B*	*SE B*	*β*	LL	UL	*B*	*SE B*	*β*	LL	UL
IN	-.97	.42	-.15*	-1.79	-.16	-.56	.29	-.13*	-1.12	.01	.16	.40	.03	-.64	.95
CC	-.52	.47	-.07	-1.45	.41	-.50	.33	-.09	-1.14	.15	.93	.46	.12*	.03	1.84
SS	-.15	.38	-.03	-.90	.61	-.27	.27	-.07	-.79	.25	.44	.37	.08	-.29	1.17
AT	-.39	.32	-.07	-1.01	.23	.18	.22	.05	-.25	.61	-.39	.31	-.08	-1.00	.21
TO	-.56	.33	-.11	-1.20	.09	-.31	.23	-.09	-.76	.13	.38	.32	.08	-.25	1.00
WP	.64	.29	.11*	.07	1.22	-.22	.20	-.06	-.62	.18	.76	.28	.14*	.20	1.32
CT	-.28	.30	-.06	-.87	.31	-.08	.21	-.03	-.49	.32	-.06	.29	-.02	-.64	.51
MC	-.25	.33	-.04	-.90	.41	-.36	.23	-.08	-.81	.10	.55	.32	.09	-.08	1.19
INV	.17	.33	.03	-.47	.81	.11	.23	.03	-.33	.55	.21	.32	.04	-.41	.83
PC	-.03	.42	-.01	-.86	.79	.38	.29	.08	-.19	.95	-.79	.41	-.12*	-1.59	.00
	R = .36, R^2= .13, F = 6.09**					R = .29, R^2= .08, F = 3.67					R = .28, R^2= .08, F = 3.65**				

*$p \leq .05$, **$p = .00$

Note. IN = involvement, CC = co-worker cohesion, SS = Supervisor Support, AT = autonomy, TO = task orientation, WP = work pressure, CL = clarity, MC = managerial control, INN = innovation, and PC = physical comfort.

Multiple regression (Enter method) revealed that *involvement* and *work pressure* produced significant equation (F = 6.09, p = .00) when regressed against scores of emotional exhaustion accounting for 13% variance. For depersonalization, *involvement* as a negative predictor *(*B = -.56, t = 1.93, p = .05) explains 8% variance in depersonalization (F = 3.67, p = .00). For reduced sense of personal accomplishment, coworker cohesion, work pressure, and physical comfort accounts for 8% variance in personal accomplishment (F = 3.65, p = .00). Co-worker cohesion (B = .93, t = 2.03, p < .05) and work pressure (B = .76, t = 2.67, p < .05) are positive predictors; whereas, physical comfort is a negative predictor (B = -.79, t = 1.96, p = .05).

The Moderating Role of Personality and Organizational Sector

Multiple Moderated Regression Analysis based on approach of Aguinis and Stone-Romero (1997) was used. For moderation effects, centering was done which involves removing mean from raw score leaving the deviation scores (Aiken & West, 1991). This may also act as an advantage to reduce multicollinearity among predictor variables. Moreover, following the procedure recommended by Jose (2008), the interaction plot along with significance test of slopes was used for interpretation. The graphical display of interaction make use of computed scores of high, moderate, and low levels of the main effect of independent and of moderator variables computed by using the mean as the medium value, one standard deviation above the mean as high value, and one standard deviation below the mean as the low value.

Table 3

Moderating Effects of Extraversion, Agreeableness, and Openness in predicting Burnout (N = 426)

Predictors	*B*	*SE B*	*β*	95% CI	
				LL	UL
Block 1					
Work Environment	-.55	.08	-.28**	-.72	-.39
Extraversion	-.70	.08	-.38**	-.86	-.54
R = .47, R^2 = .22, F = 60.93**					
Block 2					
Work Environment	-.60	.09	-.31**	-.77	-.43
Extraversion	-.67	.08	-.36**	-.83	-.51
Work Environment × Extraversion	.02	.01	.11*	.00	.03
R = .48, R^2 = .24, F = 43.11**					
Block 1					
Work Environment	-.48	.08	-.24**	-.62	-.33
Agreeableness	-1.01	.07	-.56**	-1.15	-.88
R = .63, R^2 = .39, F = 135.26**					
Block 2					
Work Environment	-.62	.08	-.31**	-.77	-.46
Agreeableness	-.99	.07	-.54**	-1.13	-.86
Work Environment × Agreeableness	.04	.01	.19**	.02	.05
R = .65, R^2 = .42, F = 101.57**					
Block 1					
Work Environment	-.45	.07	-.25**	-.59	-.31
Openness	-.84	.07	-.47**	-.98	-.69
R = .55, R^2 = .30, F = 89.24**					
Block 2					
Work Environment	-.57	.08	-.32**	-.72	-.42
Openness	-.80	.07	-.45**	-.94	-.66
Work Environment × Openness	.03	.01	.19**	.02	.05
R = .57, R^2 = .33, F = 68.14**					

*p < .05, **p = .00

Assessing the personality typology, significant interaction effects have obtained only for extroversion (B = .02, t = 2.43, p = .02), agreeableness (B = .04, t = 4.61, p = .00), and openness (B = .03, t = 4.14, p = .00). The magnitude of incremental effects in R^2 after introducing interaction term showed the slight increase. However, the statistical significance of moderation was not well supported when results were further analyzed using interaction analysis and plots. This revealed that high, medium, and low levels of personality dimensions were not significantly explaining moderation effects over and above statistical main effects of the work environment.

Table 4

Moderating Effects of Public vs. Private Sector in predicting Burnout (N = 426)

Predictors	*B*	*SE B*	*β*	95% CI	
				LL	UL
	Burnout				
Block 1					
Work Environment	-.58	.09	-.30*	-.77	-.40
Sector	-1.51	1.92	-.04	-5.29	2.26
R = .29, R^2 = .09, F = 19.54*					
Block 2					
Work Environment	-.95	.14	-.48*	-1.23	-.67
Sector	-1.73	1.90	-.04	-5.46	2.00
Work Environment × Sector	.63	.19	.24*	.26	.99
R = .33, R^2 = .11, F = 17.05*					

*p = .00

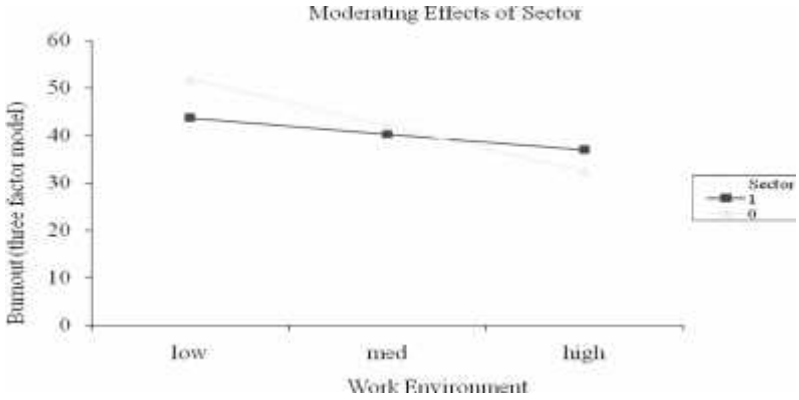

Figure 1. Moderating Effects of Sector in predicting Burnout

Results (Table 4) demonstrated significant model fit and incremental change in R^2 indicating the moderation effects of public vs. private sector (B = .63, t = 3.34, p = .00). The slope computation indicated that slopes representing public and private sector significantly differ from zero. Interaction plot (Figure 1) reflects that work environment more strongly relates to explain burnout within the private sector universities (slope = -.95, SE = .15, t = 6.55, p = .00) compared to public sector (slope = -.32, SE = .12, t = 2.74, p < .05).

Discussion

Factorial Validity of Study Measures

The findings suggested that indices of model fit for work environment, burnout, and personality measures are within an acceptable range supporting the cross-cultural validity of the instruments used in source language i.e. the English versions. Work Environment Scale has been used in English language with different samples of working groups in Pakistan (Imam, 1993; Maqsood & Rehman, 2004; Rehman & Maqsood, 2008). Present sample of university teachers provided moderate support for work environment model along with retaining all ten factors and suggesting the exclusion of certain items. Moos (1994) suggested that ten factor model of WES is desirable as it provides information about each of underlying dimensions. A meta-analytic study (Worley et al., 2008) based on 45 factor analytic studies reported support for three factor structure of MBI measure. For sample of university teachers, CFA revealed prominent support for three-factor burnout model. However, only item 14 "I feel I am working too hard on my job' was deleted from subscale of emotional exhaustion. This item might not translate that well to the Pakistani culture. The Mini Markers carries adequate evidence of factorial validity (John & Srivastava, 1999). On present sample, two of items of emotional stability failed to show up desirable association. For example, adjective 'Un-envious' might be a confusing concept for respondents in terms of what it means. But, interestingly, a high loading for adjective of 'envious' (.61) has obtained. So this seems to overlap with people's ups-and-downs emotionally, but this item (un-envious) is probably not associated with participants' levels of emotional stability. For adjective 'Relaxed' is also not much surprising to show low factor loading possibly due to sensitivities in admitting to certain psychological experiences within the Pakistani culture. Overall, it is satisfying to note that there still seems to be a clear factor structure, in the most part, for all of the assessments tools of the study and the findings have got a decent level of fit for these models.

Work Environment Facets Predicting Teachers' Burnout

The pattern of interpersonal relationships at work has remained a potential contributor to influence depersonalization (Leiter & Maslach, 1988). Given that work environment influences teachers' burnout, work environment facets including involvement and work pressure have found to be explaining variance in emotional exhaustion. Together these facets account for somewhat low but a concerning level i.e., 13% variance in emotional exhaustion. Findings demonstrated *involvement* as negative predictor of emotional exhaustion. For depersonalization, *involvement* as negative predictor has explained somewhat low variation up to 8%. Previous studies also reported that emotional exhaustion and depersonalization are inversely linked with involvement

(Adali et al., 2003; Robinson et al., 1991). Employees' involvement and commitment in job related concerns are what management always needs to look for. The findings strongly emphases that management of universities should prioritize and plan strategies aiming to enhance employees' involvement in work related aspects. There might not be one shot strategy for increasing employees' involvement but considering a combination of human relations and tasks oriented based management styles that penetrate in various workplace policies so that together these contribute in a healthier workplace.

Empirical studies demonstrated work pressure as a potential contributor in experiencing emotional exhaustion (Chan & Huak, 2004; De Croone, Sluiter, & Blonk, 2004; Goddard, O'Brien, & Goddard, 2006; Levert, Lucas, & Ortlepp, 2000). Present study highlighted that work places dominant on work demands and time pressure contribute in feeling of being emotionally exhausted from one's work. Due to strong predictive influence of work pressure, it seems essential to recognize the nature of teaching job itself and the potential harm that work pressure may exert on health related outcomes. Teaching as a profession requires heavy interaction with students (Wood & McCarthy, 2002) along with other job requirements. For instance, teachers' contribution in outside work assignments and contribution in community related activities are the indicators of their performance evaluation. If teachers are reporting work pressure in performing their routine office job, then concerning question about their expected outstanding contribution in the field of education may arise. Teachers' attempt to reduce work stressors and their coping mechanism may result in influencing the emotional exhaustion. It is encouraging to note that teachers' feeling of depersonalization is not being influenced by work pressure.

Teachers have reported high scores on reduced personal accomplishment. Extending its causal factors with workplace characteristics, coworker cohesion, work pressure, and physical comfort are explaining considerable variance in personal accomplishment. Coworker cohesion and work pressure as positive predictors and physical comfort as negative predictor are explaining variance 8% though minimal variance in reduced personal accomplishment. Generally, cohesiveness with coworkers is linked to explain burnout experience (Kim, Lee, & Kim, 2009; Turnipseed, 1994) and particularly the sense of personal accomplishment (Savicki, 2002). Looking at workplace cohesion as a positive predictor of burnout, efforts should concentrate on examining how co-worker cohesion may interrupt individual's career progression keeping in view the competitive nature of the teaching profession itself. Along with promoting team work that is conducive for departments and universities to progress, management needs to be cautious about fair and equitable feedback and reward system enchained with the hierarchical system of the workplace. In line with empirical studies (Goddard, O'Brien, & Goddard, 2006; Robinson et al., 1991), work pressure stands out as a stronger predictor explaining teachers' reduced self-personal accomplishment. Moreover, the importance of physical pleasant and comfortable environment in reducing burnout (Constable & Russell, 1986; Salyers & Bond, 2001) has also demonstrated negative predictive association with reduced personal accomplishment for teachers.

Moderating Effects of Personality and Organizational Sector

In organizational research, understanding the dispositional basis provides an explanation of how employees perceive differences in the workplace environment (McManus, Keeling, & Paice, 2004). Workplace factors including social support, workload (Dodd & Jacobs, 2003), role expectations (Huebner & Mills, 1994), peer support (Eastburg et al., 1994) showed significant associations of personality in explaining burnout. Big Five factor personality model has been used in studies in relation to predict burnout (Hochwarter, Zellars, Perrewé, Hoffman, & Ford, 2004; Swider & Zimmerman, 2010). In current study, teachers reported high scores on conscientiousness domain. Individuals with conscientiousness profile relate well to dependability reflected in individuals' degree of organization, persistence, responsible and goal directed behavior (Saucier, 1994). The conscientiousness dimension demonstrated direct negative predictive association with burnout but a non-significant moderating influence. Teachers also have reported higher scores on Agreeableness dimension. This seems encouraging that teachers working at higher education institutions are dominant on desirable personality traits. Agreeableness profile dominantly relates to the nature of one's relationship with others (Rolland, 2002) primarily through compliance and associates with traits including cooperative, courteous, flexible, trusting, and tolerant (Barrick & Mount, 1991). In present study, agreeableness trait showed strong association to influence workplace perceptions explaining 42% variance in burnout. Extroverts being high on traits e.g., active,

assertiveness, and sociability (Barrick & Mount, 1991) are considered to be prone for maintaining interpersonal relationships with enthusiasm in a given social environment (Rolland, 2002). These tendencies of extrovert in turn may put oneself more vulnerable to influence from workplace stressors especially within professions that require excessive contact with service recipients (Maslach, Schaufeli, & Leiter, 2001). In present study, extraversion profile reasonably influences workplace perceptions and explains 24% variance in burnout. Openness to experience is manifested in a wide range of interest and eagerness to appreciate experiences without being anxious (Rolland, 2002). The typical behavioral tendencies associated to openness include being imaginative, cultured, curious, broad-minded, and intelligent (Digman, 1990). For current sample of teachers, Openness as moderator explained 33% variance in burnout. Previous studies have demonstrated that extraversion and openness relates to burnout (Bakker, Van Der Zee, Lewig, & Dollard, 2006; Rothman & Storm, 2003). Subsequently, Swider and Zimmerman (2010) also suggested that openness relates to burnout. It is important to note that moderation effect of certain personality dimensions reached at statistical significance but were not further supported when tested through extending the analysis on moderation effects. Examining the significance of slope tests highlighted that when variations in personality dimensions (i.e. high, medium, and low levels) were observed, perceptions of work environment are not likely to influence the variations in burnout. This further directs the future research to explore how personality along with contextual variables of workplace environment influences employees' perceptions and the subsequent behaviors.

Controlling the status variables, the moderating effects of demographics (gender, education, marital status) and organizational related variables (hierarchical status, job duration, faculties, side paid jobs) demonstrated the non-significant interaction effects except for sector. Rehman and Maqsood (2008) highlighted the need for exploring differences in operating institutional attributes of public and private sector universities in Pakistan. The findings of the current study explained the moderating influence of belongingness to public and private sector though somewhat minimal up to 11% variance in predicting burnout. Findings suggested that work environment more strongly relates to explain burnout within the private sector universities. With caution note and by considering the host of other relevant organizational aspects e.g., organizational structure and work policies and procedures, the study calls for attention to systematically diagnose, monitor, and manage the work environment of private sector universities.

Conclusion

The predictive influence of work environment on teachers' burnout draws attention of the management towards monitoring the psychosocial aspects of the workplace using systematic diagnose of attitudinal issues and subsequently planning the remedial actions. The study highlighted that academic institutes require emphasis on *relationship* dynamics of the workplace particularly aiming to enhance teachers' involvement to their jobs. It is highly needed to carefully manage the time pressure and work demands for the faculty as a mean to maintain an optimal level of work pressure. In addition, provision of pleasant physical aspects of workplace architect and facilities should also be considered. These aspects may contribute to healthy workplaces conducive to prevent teachers' burnout. Considering teachers' personality orientation along with contextual operating mechanisms of public and private sector universities provides meaningful implications to manage the burnout among academicians.

References

Adali, E., Priami, M., Evagelou, H., Mouglia, V., Ifanti, M., & Alevizopoulos, G. (2003). Burnout in psychiatric nursing personnel in Greek hospitals. *European Journal of Psychiatry*, *17*(3), 173-181.

Aguinis, H., & Stone-Romero, E. (1997). Methodological artifacts in moderated multiple regression and their effects on statistical power. *Journal of Applied Psychology, 82,* 192-206.

Aiken, L., & West, S. (1991). *Multiple Regression: Testing and Interpreting Interactions*. Newbury Park, CA: Sage.

Bakker, A., Van Der Zee, K., Lewig, K., & Dollard, M. (2006). The relationship between the Big Five personality factors and burnout: a study among volunteer counselors. *The Journal of Social Psychology, 146*, 31 – 50.

Barrick, M., & Mount, M. (1991). The Big Five personality dimensions and job performance: A meta-analysis. *Personnel Psychology*, *44*, 1-26.

Byrne, B. M. (2013). *Structural Equation Modeling with AMOS: Basic concepts, applications, and programming* (2nd. ed.). London: Routledge.

Brown, G., & Pranger, T. (1992). Predictors of burnout for psychiatric occupational therapy personnel. *Canadian Journal of Occupational Therapy, 59*, 258-267

Brown, S., & Leigh, T. (1996). A new look at psychological climate and its relationship to job involvement, effort, and performance. *Journal of Applied Psychology, 81*, 358-368.

Carr, J., Schmidt, A., Ford, J., & DeShon, R. (2003). Climate Perceptions Matter: A Meta-Analytic Path Analysis Relating Molar Climate, Cognitive and Affective States, and Individual Level Work Outcomes. *Journal of Applied Psychology, 88*(4), 605–619

Chan, A., & Huak, C. (2004). Influence of work environment on emotional health in a health care setting. *Occupational Medicine, 54*(3), 207-212.

Constable, J., & Russell, D. (1986). The effect of social support and the work environment upon burnout among nurses. *Journal of Human Stress, 12*(1), 20-26. doi: 10. 1080/0097840X. 1986. 9936762.

De Croone, E., Sluiter, J., & Blonk, R. (2004). Stressful work, psychological job strain, and turnover: a 2-year prospective cohort study of truck drivers. *Journal of Applied Psychology, 89*, 442-454.

Diamantopoulos, A., & Siguaw, J. (2000). *Introducing Liseral: A guide for uninitiated*. London: Sage Publications.

Digman, J. (1997). Higher Order Factor of Big Five. *Journal of Personality and Social Psychology. 73*, 1246-1256.

Digman, J. (1990). Personality Structure: Emergence of the Five-Factor Model. *Annual Review of Psychology. 41,*417– 440.

Dodd, D., & Jacobs, S. (2003). Student burnout as a function of personality, social support, and workload. *Journal of College Student Development*, *44*(3), 291-303.

Dorman, J. (2003). Relationship between school and class room environment & teacher burnout: A lisrel analysis. *Social Psychology of Education, 6,* 107-127.

Eastburg, M., Williamson, M., Gorsuch, R., & Ridley, C. (1994). Social support, Personality, and Burnout in Nurses. *Journal of Applied Social Psychology, 24*(14), 1233-1250.

Escribà-Agüir, V., Martín-Beena, D., & Pérez-Hoyos, S. (2006). Psychosocial work environment and burnout among emergency medical and nursing staff. *International Archives of Occupational and Environmental Health, 80*(2), 127-133. doi: 10. 1007/s00420-006-0110-y.

Fong, C. (1993). A longitudinal study of the relationships between overload, social support, and burnout among nursing educators. *Journal of Nursing Education, 32*, 24-29.

Goddard, R., O'Brien, P., & Goddard, M. (2006). Work environment predictors of beginning teacher burnout. *British Educational Research Journal, 32*(6), 857- 874.

Goldberg, L. (1992). Development of markers for the big five factor structure. *Psychological Assessment, 4,* 26 – 42.

Hochwarter, W., Zellars, K., Perrewé, P., Hoffman, N., & Ford, E. (2004). Experiencing job burnout: The roles of positive and negative traits and states. *Journal of Applied Social Psychology, 34*(5), 887-911.

Huebner, E., & Mills, L. (1994). Burnout in school psychology: The contribution of personality characteristics and role expectations. *Special Services in the Schools, 8*, 53-67.

Hyvonen, K., Feldt, T., Tolvenen, A., & Kinnunen, U. (2010). The role of goal pursuit in the interaction between psychosocial work environment and occupational well being. *Journal of Vocational Behavior, 76,* 406-418.

Imam, S. (1993). Work environment of college teachers: *Pakistan Journal of Psychological Research, 8*(3-4), 77-88.

James, L., & Sells, S. (1981). Psychological Climate: Theoretical perceptive and empirical research. In D. Magnusson (Ed), *Toward a psychology of situations: An Interactional perceptive.* (pp. 275-295). Hillsdale, NJ: Erlbaum.

John, O. P., & Srivastava, S. (1999). The Big-Five trait taxonomy: history, measurement, and theoretical perspectives. In L. Pervin & O. P. John (Eds.), *Handbook of personality: Theory & research* (2nd ed.). New York: Guilford.

Jose, P. (2008). *ModGraph-I: A programme to compute cell means for the graphical display of moderational analyses: The internet version, Version 2. 0.* Victoria University of Wellington, Wellington, New Zealand. Retrieved from http://www. victoria. ac. nz/psyc/staff/paul-jose-files/modgraph/modgraph. php

Khurshid, F., Butt, Z., & Malik, S. (2011). Occupational role stress of the public and private sector universities teachers. *Language In India*: *Strength for today and Bright Hope for Tomorrow, 11*. Retrieved from: http://www.languageinindia.com/aug2011/stressmanagementpakistanfinalpaid.pdf

Kim, H. (2011). Job conditions, unmet expectations, and burnout in public child welfare workers: How different from other social workers? *Children & Youth Services Review, 33*(20), 358-67.

Kim, M., Lee, J., & Kim, J. (2009). Relationships among Burnout, Social Support, and Negative Mood Regulation Expectancies of Elementary School Teachers in Korea. *Asia Pacific Education Review, 10*(4), 475-482.

Kim Wan, M. (1991). Teacher Burnout: Relations with stress, personality and social support. *Chinese University of Hong Kong Educational Journal, 19*(1), 3-11. Retrieved from http://sunzi.lib.hku.hk/hkjo/view/33/3300476.pdf.

Kline, P. (1993). *An easy guide to factor analysis*. London: Routledge.

Kokkins, C. (2007). Job stressors, personality and burnout in primary school teachers. *British Journal of Educational Psychology*. 77(1), 229-43. Abstract retrieved from http://www.ncbi.nlm.nih.gov/pubmed/17411497

Kopelman, R., Brief, A., & Guzzo, R. (1990). The role of climate and culture in productivity. In B. Schneider (Ed.), *Organizational climate and culture* (pp. 282–318). San Francisco: Jossey-Bass.

Leiter, M., & Maslach, C. (1988). The impact of interpersonal environment on burnout and organizational commitment. J*ournal of Organizational Behavior, 9,* 297-308.

Levert, T., Lucas, M., & Ortlepp, K. (2000). Burnout in psychiatric nurses. Contribution of the work environment and a sense of coherence. *South African Journal of Psychology, 30*(2)*,* 36-43. Abstract retrieved form http://psycnet. apa. org/psycinfo/2000-05552-004

Lindblom, K., Linton, S., Fedeli, C., & Bryngelsson, I. (2006). Burnout in the working population: relations to psychosocial work factors. *International Journal of Behavioral medicine, 13*(1)*,* 51–59.

Maqsood, A., & Rehman, G. (2004). Employees' perceptions of real and ideal work environment. *Bangladesh Psychological Studies, 14*, 1-18.

Maslach, C. (1993). Burnout: A multidimensional perspective. In W. B. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional burnout: Recent developments in theory and research* (pp. 19-32). New York: Hemisphere.

Maslach, C., Jackson, S., & Leiter, M. (1996). *Maslach Burnout Inventory Manual* (3rd ed.). Palo Alto, Calif: Consulting Psychologists Press.

Maslach, C., Schaufeli, W., & Leiter, M. (2001). Job burnout. *Annual Review of Psychology, 52,* 397 – 422.

McManus, I., Keeling, A., & Paice, E. (2004). Stress, burnout and doctors' attitudes to work are determined by personality and learning style: A twelve year longitudinal study of UK medical graduates. *BMC Medicine, 2*, 29. doi: 10. 1186/1741-7015-2-29

Moos, R. (1986). Work as a human context. In M. S. Pallack & R. Perloff (Eds.), *Psychology and work: Productivity, change, and employment*: *Vol 5. Master lecture series* (pp. 9-52). Washington, DC: American Psychological Association.

Moos, R. (1994). *Work Environment Scale Manual* (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.

Ostroff, C. (1993). The effects of climate and personal influences on individual behavior and attitudes in organizations. *Organizational Behavior and Human Decision Processes, 56,* 56–90.

Otero-López, J., Mariño, M., & Bolaño, C. (2008). An integrating approach to study of burnout in university professors. *Psicothema. 20*(4):766-72. Retrieved from http://www.psicothema.com/PDF/3553.pdf

Pandey, R., & Tripathi, S. (2001). Occupational stress and burnout in engineering college teachers. *Journal of the Indian Academy of Applied Psychology, 27*, 67 – 73.

Parker, C., Baltes, B., Young, S., Huff, J., Altmann, R., Lacost, H., et al. (2003). Relationship between psychological climate perceptions and work outcomes: A meta- analytic review. *Journal of Organizational Behavior, 24*, 389 – 416.

Qureshi. M., & Hijazi. T. (2006). "Testing Teachers Burnout Level In Pakistan" *Pakistan Journal of Education*, *xx111*(1), 95-103.

Rehman, G., & Maqsood, A. (2008). *Impact of work environment on organizational and personal outcomes among private and public sector employees*. Research Report. Higher Education Commission, Social Sciences and Humanities Research Council, Pakistan.

Robinson, S., Roth, S., Keim, J., Levenson, M., Flentje, J., & Bashor, K. (1991). Nurse burnout: Work related and demographic factors as culprits. *Research in Nursing and Health, 14*, 223 – 228.

Rolland, J. (2002). Cross-cultural generalizability of the Five Factor model of Personality, in McCrae, R., & Allik, J. (eds). *The Five-Factor Model of personality across cultures*. New York: Kluwer Academic. Retrieved from, http://books.google.com.pk/books?id=y3xJuUzNLg8C&printsec=frontcover#v=onepage&q&f=true

Rothman, S., & Storm, K. (2003). Burnout in the South African police service. *European Congress on Work and Organizational Psychology*. Retrieved from http://www. workwellness. co. za/pages/publications. aspx

Sahu, K., & Misra, N. (2004). Personality Hardiness and Coping as Correlations of Burnout. *Personality study and Group Behavior, 24,* 143-154.

Salyers, M., & Bond, G. (2001). An exploratory analysis of racial factors in staff burnout among assertive community treatment workers. *Community Mental Health Journal, 37*(5), 393-404.

Saucier, G. (1994). Mini Marker: A brief version of Goldberg's unipolar big-five markers. *Journal of Personality Assessment, 63*(3), 506-516.

Savicki, V. (2002). *Burnout across thirteen cultures: Stress and coping in child and youth care workers*. Westport, CT: Praeger/Greenwood.

Stansfeld, S., & Candy, B. (2006). Psychosocial work environment and mental health- a meta analytic review. *Scandinavian Journal of Work Environment & Health, 32*, 443- 462.

Swider, B., & Zimmerman, R. (2010). Born to burnout: A meta-analytic path model of personality, job burnout, and work outcomes. *Journal of Vocational Behavior, 76*, 487 – 506.

Turnipseed, D. (1994). An analysis of the influence of work environment variables and Moderators on Burnout Syndrome. *Journal of Applied Social Psychology, 24*(9)*,* 782- 800. Abstract Retrieved from http://onlinelibrary. wiley.com/doi/10. 1111/j. 1559-1816. 1994. tb00612. x/abstract

Watts, J., & Robertson, N. (2011). Burnout in university teaching staff: A systematic literature review *Educational Research, 53*(1), 33-50. doi: 10.1080/00131881.2011.552235

Wilber, K. & Specht, C. (1994). Prevalence and Predictors of Burnout among Adult Day Care Providers. *The Journal of Applied Gerontology, 13*(3), 282-298.

Wood, T. & McCarthy, C. (2002). Understanding and Preventing Teacher Burnout. Retrieved from http://www.ericdigests.org/2004-1/burnout.htm.

Worley, J., Vassar, M., Wheeler, D., & Barnes, L. (2008). Factor structure of scores from Maslach Burnout Inventory: A review and meta-analysis of 45 exploratory and confirmatory factor analytic studies. *Educational and Psychological Measurement, 68*, 797 – 823.

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