Workplace Stress And Employee Job Satisfaction Among University Teachers: Role Of Work Engagement

Najma Iqbal Malik (PhD)[1] , Subham Khalid[2] , Muhammad Sohaib Haleem[3] , Aasim Munir Dad[4]

Abstract

Purpose - *Compared to other professions, teaching encounters workplace stressors that disturb teachers' performance. Stress at work has always been a source of job dissatisfaction in the education sector, and the proposed study intends to explore the impact of workplace stress on job satisfaction among university teachers. The current study further analyzed the role of work engagement in workplace stress and employee job satisfaction among university teachers.*

Design/methodology/approach - *In this article, the authors used quantitative methods employing a questionnaire survey that analyses workplace stress, employee job satisfaction and work engagement among purposively selected 200 university teachers from private (n= 120) and government (n= 80) universities of Sargodha City. The Workplace Stress Scale by Marlin Company (2001), the Job Satisfaction Scale (Brayfield & Rothe, 1951) and the Utrecht Work Engagement Scale (Schaufeli et al., 2006) were used to measure the constructs of the study.*

Findings - *The collected data from 200 university teachers showed that male teachers were 55.5% (n = 111) of the total sample, whereas female teachers were 44.5 % (n = 89). Around 60% (n = 120) were from the private sector, and 40% (n = 80) were government teachers. 56.5% (n = 113) were married whereas 43.5% (n = 87) were unmarried. 74.5% (n = 149) have experience of fewer than eleven years, whereas 25.5% (n = 51) have experience of more than ten years. Teachers from government universities tend to have more workplace stress than private university teachers. Meanwhile, teachers from private universities have more job satisfaction and work engagement than government teachers.*

Originality/value *- This study demonstrates how workplace stress impacts university teachers' job satisfaction. It adds valuable knowledge by examining the differences between private and public institutions. The results offer practical insights for academics and policy-makers, boosting comprehension and well-being in the educational field by applying recognized measures for validity.*

Keywords: *Workplace Stress, Job Satisfaction, Work Engagement, University Teachers.*

1. Introduction

Teachers play a significant part in the education and progress of their students. Teachers are important because they can counsel, assist, and motivate their students. As educators, university professors deal with significant challenges and conflicts. While providing students with a high-quality education and support, they must juggle their teaching responsibilit[1]ies with other professional commitments, such as research and writing.

[1]Professor, Department of Psychology, University of Sargodha, Sargodha, (Corresponding Author) ORCID ID: https://orcid.org/0000-0002-3521-1014
[2]MS Scholar, Department of Psychology, University of Sargodha, Pakistan.

Additionally, university teachers may feel pressured to generate income, draw in students, and maintain stellar relationships with colleagues and authorities. Extreme stress may harm their well-being, health, and contentment.

The ability of university teachers to perform their jobs is severely hampered by workplace stress (WPS), which lowers employee job satisfaction (EJS). Teachers have enormous responsibilities and expectations, which may affect their capacity to interact with students and perform at a high level (Acosta-Fernández et al., 2020). Teachers may become less motivated to perform their jobs when they are subjected to significant levels of anxiety at work, resulting in poorer job satisfaction manifesting in several ways, including lower productivity, delay, and a lack of responsibility for the job. In extreme cases, occupational stress can lead to teacher turnover, harming the institution and the students.

Work engagement (WE) is a condition of being wholly absorbed and excited about one's tasks, expressing vigour, devotion, and absorption towards one's job. It acts as a mediator in learning the complicated interaction within the framework of university teaching, in addition to workplace stress and employee job satisfaction. On the contrary, work engagement acts as a moderator between workplace stress and job satisfaction. Work engagement alludes to a person's desire, enthusiasm, and devotion to their profession (Kristiana et al., 2018). Teachers deeply committed to their jobs are prone to experience a sense of purpose and satisfaction, even when faced with higher job stress. In numerous ways, work involvement can modulate the association between stress and satisfaction in the workplace (Gkliati & Saiti, 2022). Teachers highly involved in their profession are more prone to experience a feeling of meaning and purpose in employment, which might lessen the damaging effects of stress. Even under stress, engaged instructors are more likely to feel gratified by their influence on their students. This study explores the role of work engagement in stress and satisfaction in the workplace.

2. Literature Review

The association between stress at the workplace and employee satisfaction at the job has been researched extensively. However, the importance of job engagement in this relationship has received little attention, particularly among university teachers in Sargodha, Pakistan. This literature attempts to synthesize the prior research findings on the impact of workplace stress on university teachers' job satisfaction and to investigate the function of work engagement in this context.

Employee job satisfaction and engagement are key characteristics that can influence organizational productivity and success. University professors are one type of employee who is especially vulnerable to workplace stress, which affects their satisfaction and engagement levels at work. As a result, understanding the link between the study variables among university teachers is essential.

Stress in the workplace and job satisfaction are two main aspects that affect the productivity and well-being of employees. Numerous research studies have investigated the connection between these two factors and the impact of various interventions on improving work satisfaction and reducing workplace stress. A study by Handayani and Pebriyani (2020) found that burnout is a chronic condition caused by non-adequately controlled working stress. When employees often experience burnout due to stress, their level of satisfaction decreases, leading to low job satisfaction. Another study discovered the consequences of job anxiety, job engagement, satisfaction at work, and commitment on police officers' life satisfaction. Those with severe stress levels at the workplace reported lower satisfaction levels. Furthermore, Xie et al. (2021) discovered that workplace stress has a detrimental influence on job satisfaction.

Work engagement performs a significant role in stress at the workplace and employee satisfaction at the job. Rai and Maheshwari (2020) suggest that when university teachers face high-stress levels at work, their work engagement decreases; as a result, work

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[3]M.Phil Scholar, University of Sargodha, Pakistan.
[4]Chartered Institute of Marketing, UK; Market Consultant, Pakistan.

satisfaction suffers. However, when it is high, it can reduce the negative influence of stress on satisfaction at work. Another research by Orgambídez and Extremera (2020) found that work engagement moderates stress and satisfaction. According to the study's findings, role stressors like ambiguity and conflict might operate as interruption demands in the link between satisfaction and engagement at work.

Kock and Pienaar (2018) performed a study to evaluate the correlation between turnover intentions, satisfaction, and engagement at work among university professors in South Africa. The study discovered that involvement at work had a favourable influence on satisfaction but a negative effect on the intention to leave. Furthermore, it discovered that satisfaction at the job acts as a moderator between turnover intention and engagement at work, implying that work engagement might increase job satisfaction while reducing turnover intentions among university professors.

Furthermore, another study assessed the association between stress, job engagement, and satisfaction among Hong Kong university instructors. The study revealed that work participation somewhat mitigated the correlation between stress and satisfaction at the job. A study also discovered that work involvement positively impacts job satisfaction. According to these findings, work involvement can function as a stress buffer and boost job satisfaction among university professors (Xu et al., 2023).

Chishty and Zafar (2021) studied the correlation between stress, engagement, and satisfaction at work among university professors in Pakistan. Workplace stress negatively impacts satisfaction at the job, while engagement at work somewhat moderated the link between satisfaction and stress at the job. These findings imply that engagement at work can be crucial in increasing satisfaction at work and mitigating the detrimental effects of workplace stress on university teachers.

Overall, the existing research highlights the importance of engagement at work as a moderator and a mediator between stress and satisfaction at the job among university teachers. Understanding these relationships can help organizations develop strategies to promote work engagement and job satisfaction among university teachers, ultimately leading to a more productive and successful work environment.

2.1 Research hypotheses

H1- WPS would be a significant positive predictor of EJS among University Teachers.

H2- WE would significantly moderate the relationship between WPS and EJS among University Teachers.

H3- WE would significantly mediate the relationship between WPS and EJS among University Teachers.

H4- Demographic factors would have significant mean differences in the study variables.

3. Method

3.1 Research sample & design

The purposive sample of teachers in the current research was extracted from private (n =120) and government (n =80) universities of Sargodha city. Furthermore, the sample was further segregated into male (n = 111) and female (n = 89) teachers. The baseline for the selection of the sample was at minimum post-graduation level education, and the age ranged from 25 to 65 years. However, teachers who had less education than post-graduation were excluded from the research.

3.2 Measures

3.2.1 Workplace stress scale (WSS). It was used to outline the level of stress among teachers. This scale from North Haven and the American Institute of Stress, Marlin Company NY (2001) had been used and adapted by the present study requirements. It comprised eight items with a five-point response pattern, i.e., 1-5 (never to very often). For

the total scale WSS in the proposed investigation, an alpha reliability coefficient of.85 was reported.

3.2.2 Job Satisfaction Scale (JSS). It comprised 05 items with five possible responses (Brayfield and Rothe, 1951). There are two reverse-scoring items on the scale. The scale does not have any subscale. The responses' ratings ranged from 1-5 (Disagree completely to Agree). Cronbach alpha (α) coefficient reported by the authors is .88.

3.2.3 Utrecht work engagement scale (UWES). Schaufeli et al. (2006) developed this scale. It comprised seventeen items divided into three subscales, i.e., Vigor (items no. 3, 6, 9, 11, 14 and 16), Dedication (items no. 2, 5, 7, 10 and 13), and Absorption (items no. 1, 4, 8, 12, 15 and 17). The scale has a 7-point response pattern [never (0) to always (7)]. The literature reports excellent reliability for all three subscales, i.e., Absorption (six items) a = .78, Dedication (five items) a = .89 and Vigor (six items) a = .78.

3.3 Procedure & ethical consideration

Later, after getting the authors' permission for the scales, the questionnaires were ready. The selected study sample (N = 200) and concerned authorities were made aware of the ongoing study's goals, reason and meaning to ensure APA ethical considerations. Afterwards, permission letters and informed consent were taken from study respondents and concerned authorities. Respondents were briefed regarding questionnaire response formats. Finally, data were collected from the research respondents, and their interest and collaboration were acknowledged.

3.4 Statistical analysis

Descriptive and Alpha Coefficients were enumerated to ensure the scales' psychometric soundness. Further, Pearson Correlation, Linear Regression, Moderation, Mediation, and t-test analyses were conducted to test the hypotheses.

4. Results

Table 1. Descriptive statistics and correlation analysis for study variables (N=200)

Variables	M	SD	Range	Cronbach's a	WS	JS	WE	VIG	DED	ABS
WSS	20.4	5.6	8-32	.85	-	-.15*	-.28**	-.18*	-.14*	-.30**
JSS	15.5	3.6	5-25	.82		-	.57**	.51**	.41**	.38**
WES	53.1	9.1	31-77	.86			-	.74**	.72**	.79**
Vigor	18.7	3.8	9-27	.78				-	.33**	.39**
Dedication	16.4	3.8	7-30	.84					-	.34**
Absorption	17.9	4.5	6-31	.85						-

Note(s): WSS = workplace stress scale; JSS = job satisfaction scale; WE = work engagement scale.
*p < .05. **p < .01.
Source(s): Own elaboration

Table 1 hypothesizes the statistical descriptions and correlations between the variables. All the variables have excellent internal consistency. The findings of correlation analysis depict that workplace stresses significantly negatively correlated with employee satisfaction at the job (r = -.14, p < .05) and engagement at work (r = -.27, p < .01). It also showed a significantly negative correlation with all subscales of work engagement. Work

engagement and its subscales were substantially positively correlated with job satisfaction ($r = .57$, $p < .01$).

Table 2. Regression coefficients of workplace stress on job satisfaction (N = 200)

Variable	B	β	SE
(Constant)	17.5***		.96
Workplace Stress	-.09*	-.14*	.05
R^2		.02	
Note(s): *$p < .05$. **$p < .01$.			
Source(s): Own elaboration			

Table 2 presents the results of the linear regression analysis to predict job satisfaction from workplace stress. The overall model showed significance at (F= 4.38, p< .05). Results suggested that job satisfaction is predicted by workplace stress among university teachers (β= -.14, t= -2.09, p <.05).

Table 3. Moderation of work engagement between workplace stress and job satisfaction (N=200)

Predictors	B	SE	P	95% CI LL	UL
Constant	-9.45	5.97	.115	-21.22	2.31
Workplace stress	0.69	0.11	.084	.08	1.30
Work engagement	0.46	0.07	.000	.25	.66
Workplace stress × Work Engagement	-0.01	0.01	.027	-.02	-.01
Note(s): *$p < .05$. **$p < .01$.					
Source(s): Own elaboration					

Table 3 depicts the moderation of work engagement between stress and job satisfaction among university teachers. The value of R^2 (.34) revealed that 34% variance was explained by the predictor in the outcome with F (3, 196) = 34.13, p < .001. Results also showed that workplace stress (B = 0.69, p > .05) is non-significantly correlated to job satisfaction. While engagement at work (B = 0.46, p < .001) significantly affected job satisfaction. Workplace stress × WE negatively predicted job satisfaction (B = -0.01, p < .05). Findings indicate that engagement at work moderates the association between stress and satisfaction at the job.

Figure 1. Mod-graph with the moderating effect of WE between WPS and EJS
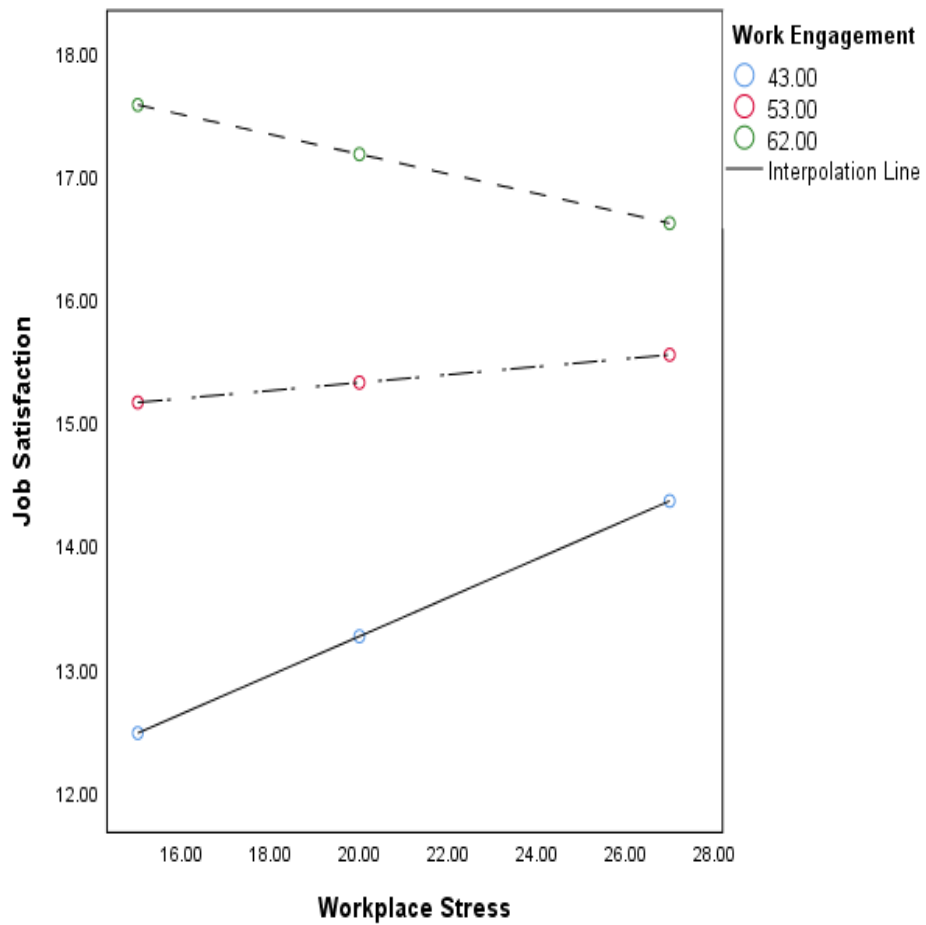
Source(s): Own elaboration

Figure 1 demonstrates how different WE levels influence the relationship between WPS and EJS. The Mod Graph demonstrates that low and moderate WE levels altered the link between WPS and EJS. High engagement levels strengthened the relationship between satisfaction and stress at work.

Table 4. Mediating Role of WE between WPS and EJS (N=200)

Effects	Paths	B	95%CI for B	
			LL	UL
Direct Effect	WS → WE	-.456***	-.676	-.236
Direct Effect	WE → JS	.226***	.178	.273
Direct Effect	WS → JS	.008	-.068	.085
Indirect Effect	WS → WE → JS	-.103***	-.156	-.055
Total Effect	WS → JS	-.045*	-.184	-.005

Note(s): WS = workplace stress; WE = work engagement; JS = job satisfaction
***p < .001, *p<.05.
Source(s): Own elaboration

Table 4 demonstrates the mediation of engagement at work between workplace stress and satisfaction at the job. Workplace stress (predictor variable) negatively predicted work engagement (mediator variable, $B = -.45$, $t = -4.08$, $p<.001$) and showed 8% variance in work engagement ($R^2 = .08$, $F (1, 198) = 16.71$, $p<.001$). Work engagement (mediator) positively predicted job satisfaction (outcome variable, $B = .226$, $t = 9.44$, $p<.001$). Workplace stress (predictor variable) has a non-significant impact on satisfaction (outcome variable, $B = .008$, $t = .217$, $p>.05$). Overall, workplace stress and work engagement explained a 32% variance in job satisfaction {$R^2= .32$, $F (2, 197) =47.72$, $p<.001$}. Figure 2 depicts the conceptual framework of this mediation, along with the path coefficients.

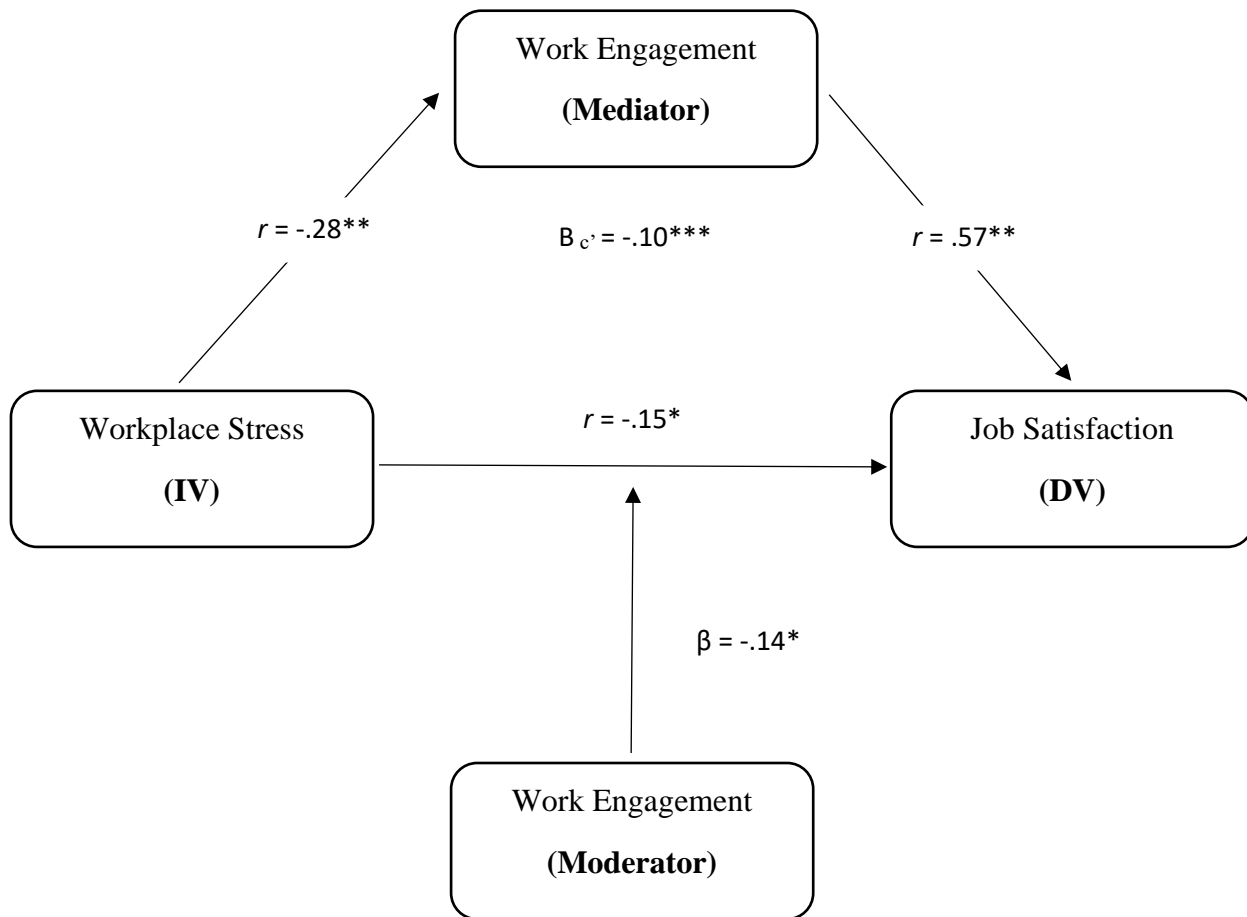**Figure 2.** Mediation of WE between WPS and EJS
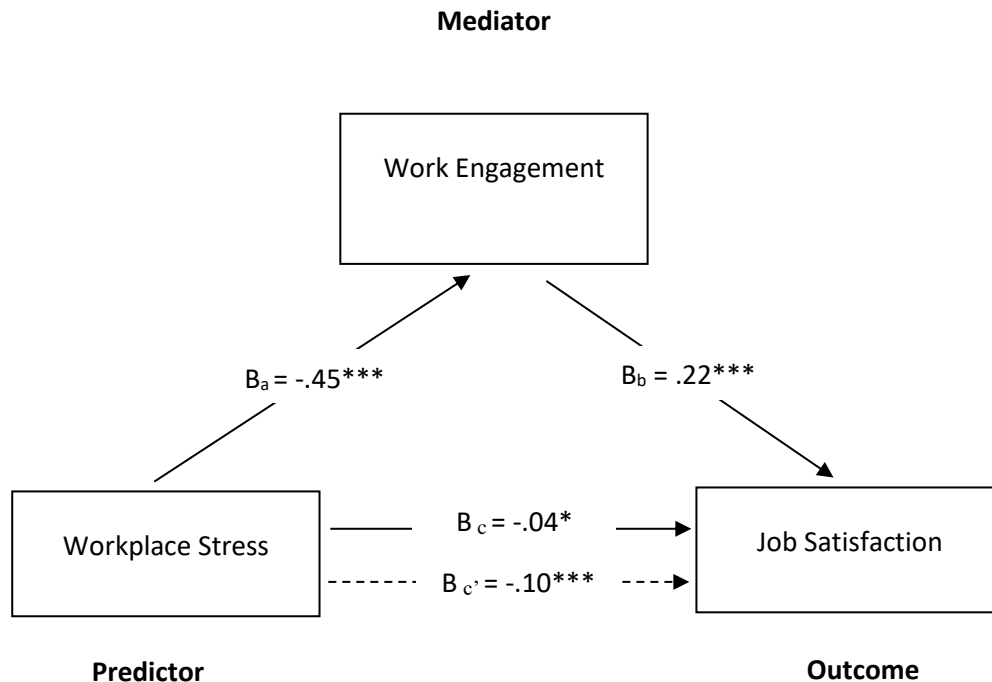
***p<.001, *p < .05.

Source(s): Own elaboration

Figure 2 shows that workplace stress predicted job satisfaction through work engagement. Work engagement significantly mediated between workplace stress and satisfaction at the job.

Figure 3
Outcome model of the study

Source(s): Own elaboration

Figure 3 portrays the relationships between the variables of the proposed study. It illustrates that WPS is significantly negatively related to EJS and WE. Job satisfaction is significantly positively correlated with engagement at work. Work engagement significantly negatively moderated stress and employee satisfaction at the workplace. Additionally, engagement at work is fully mediated between stress and satisfaction at work.

5. Discussion
The research was planned to assess the impact of WPS on EJS among university teachers. The current study further analyzed the WE role between stress at the workplace and EJS. A significantly positive association was seen between EJS and WE and its subscales. It was observed that workplace stress was significantly negatively correlated to satisfaction at the job, engagement at work and its subscales (see Table 1). Workplace stress significantly predicted job satisfaction (Table 2), which supported the hypothesis that WPS would positively predict EJS. Furthermore, WPS and moderator WE significantly predicted EJS

among university teachers (see Table 3). Additionally, WE mediated the relationship between EJS and WPS (see Table 4).

The concept of work has significantly changed in numerous industry areas over the decade. Organizations today consider workplace stress and their subordinates' job satisfaction to be two significant issues in the workplace (Shen et al., 2018). According to ongoing studies, work-related stress denotes 50-60% of all lost working days. Workplace stress is observed as destructive when enthusiastic reactions occur when there is a crisscross between job necessities and the workers' capacities, requirements, or assets (Sheta et al., 2022).

Workplace stress impacts hierarchical and individual issues, including conduct, mental and physical results, execution, authoritative responsibility, and job satisfaction (Perwe, 2021). Applied research demonstrates solid connections between components of stress and satisfaction at work. Significant levels of stress at work are correlated to low degrees of satisfaction. Work pressures sometimes lead to job discontent and a higher risk of quitting the company (Anis & Emil, 2022).

There is developing proof that pathological patterns in work conditions may effectively impact job satisfaction and harm subordinates' psychological and psychological well-being (Pitariu & Budean, 2020). Job satisfaction may shield employees from stressors. A significant factor in stress management is satisfaction. Employees may become undesirable, less inspired, productive, and secure at work due to high levels of work stress (Pitariu & Budean, 2020). Work stress influences their well-being and work execution, prompting turnover or deficiencies. Work stress is generally viewed as the distressing component of satisfaction at the job. A progression of studies uncovered that work stress has corresponded to job satisfaction (Orgambídez & Extremera, 2020).

Empirical evidence to help the importance of workplace stress on job satisfaction is significant. According to one study, job satisfaction and work stress positively influenced employees' performance and work environment, a crucial role that workers may accept to attain their performance objectives. On the other hand, work stress and working circumstances might indirectly boost performance by increasing job happiness (Rachman, 2021).

Employee satisfaction and engagement are the degrees of commitment and participation employees have in their organization and its principles. Organizational success depends on increasing staff productivity via employee engagement (Shweta, 2021). Additionally, increased productivity and a feeling of belonging to the firm are linked to higher employee satisfaction (Fithriyana et al., 2022). The current study's findings revealed a substantial association between work engagement and satisfaction at the job. The results are supported by the findings of Fithriyana et al. (2022), which found that work engagement positively impacted job satisfaction. The survey of 110 employees found that EJS has an immediate and considerable impact on employee performance and WE.

When people are engaged at work, they are prone to fulfil their obligations, carry out their tasks, and develop a sense of loyalty to the company. The effect of workers' job dedication on the hierarchical variable, such as work fulfilment, is inextricably linked. The more the representatives are busy with their work, the more satisfied they are. It is agreeable with the findings of Supriyanto et al. (2021), communicating that the engagement of an employee at work (commitment toward work and association) is positively correlated with experiences of job satisfaction. Subordinates with a major preoccupation with their job also have responsibility and soul, which helps them consistently overcome challenges, consider their work important, and consistently maintain their fixation and attention in their tasks. According to Rai and Maheshwari (2020), when university professors experience high-stress levels at work, their participation at work declines, resulting in reduced EJS.

The study's results that engagement at work moderated the correlation between satisfaction and stress at work are consistent with earlier studies. According to research on Palestinian teachers, their degrees of work involvement moderated the relationship between teachers' satisfaction at their jobs and psychological suffering (Pepe et al., 2021). Another

study on nurses in Northern Cyprus discovered that workplace stress moderated the effect of satisfaction and workplace stress on nurses' perceptions of training. The study revealed that workplace stress moderated training perceived and job satisfaction (Şeşen & Ertan, 2021).

6. Conclusion

A significant relationship has been found among all the study variables. WPS negatively predicted satisfaction and engagement at work. We showed significant moderation in the relationship between WPS and EJS.

Furthermore, engagement at work also fully mediated the association between the WPS and EJS variables. It is also observed that significant gender mean differences were present in workplace stress, job satisfaction, and work engagement, among other subscales. Male teachers tend to have more workplace stress than female teachers.

7. Limitation

It's important to keep in mind the limitations of this study. First, the results might not generalize well to other situations because only university teachers from Sargodha City were included in the sample.

Future research should include a diverse sample to ensure the result's external validity. Second, the research depends on self-report measures that are subject to response biases. Including objective measures or multiple data sources would strengthen the findings' rationality. Finally, the cross-sectional study design restricts the ability to show causal relationships between variables. Experimental or longitudinal designs would further support the identified correlations in this investigation.

8. Implications

The current study has significant implications for understanding university teachers' well-being and performance. The study highlights the significance of institutions addressing workplace stress and creating supportive environments encouraging job engagement.

Universities may improve job happiness among instructors by lowering workplace stress and encouraging work engagement, resulting in higher productivity, retention, and overall job satisfaction.

References

Acosta-Fernández, M., Parra-Osorio, L., Molina, C.B., Aguilera-Velasco, M.D. and Pozos-Radillo, B.E. (2020), "Occupational stress, burnout, mental health and its relationship with workplace violence in university teachers", Salud Uninorte. https://doi.org/10.14482/SUN.35.3.613.62

Agho, A.O., Price, J. L. & Mueller, C.W. (1992). Discriminant Validity of Measures of Job Satisfaction, Positive Affectivity and Negative Affectivity. Journal of Occupational and Organizational Psychology, Vol. 65, pp. 185-195.

Ahsan, N., Abdullah, Z., Yong, D., Yong, G. F. & Alam, S. (2008). A Study of Job Stress on Job Satisfaction among University Staff in Malaysia: Empirical Study. European Journal of Social Science, Vol. 8.

Anis, M. & Emil, D. (2022). The Impact of Job Stress on Deviant Workplace Behavior: The Mediating Role of Job Satisfaction. American Journal of Industrial and Business Management. https://doi.org/10.4236/ajibm.2022.121008

Brayfield, A.H. & Rothe, H.F. (1951). An index of job satisfaction. Journal of Applied Psychology, Vol. 35 No. 5, pp. 307–311. https://doi.org/10.1037/h0055617

Burke, R.J. and MacDermid, G. (1999), "Are workaholics' jobs satisfied and successful in their careers?", Career Development International, Vol. 4, pp. 277-282.

Caldwell, D.F. and O'Reilly, C.A. (1990), "Measuringperson–job fit with a profile-comparison process", Journal of Applied Psychology, Vol. 75, pp. 648-657.

Catteeuw, F., Flynn, E. and Vonderhorst, J. (2007), "Employee engagement: boosting productivity in turbulent times", Organization Development Journal, Vol. 25 No. 2, pp. 151-157.

Fairbrother, K. and Warn, J. (2003), "Workplace dimensions, stress and job satisfaction", Journal of Managerial Psychology, Vol. 18 No. 1, pp. 8-21. https://doi.org/10.1108/02683940310459565

Faragher, E.B., Cass, M. and Cooper, C.L. (2013), "The Relationship between Job Satisfaction and Health: A Meta-Analysis", From Stress to Well-being, Vol. 1, pp. 254-271. https://doi.org/10.1057/9781137310651_12

Fithriyana, I., Maria, S. and Hidayati, T. (2022), "The Relationship between Employee Satisfaction and Employee Performance is mediated by Employee Engagement", Frontiers in Business and Economics. https://doi.org/10.56225/finbe.v1i3.120

Fletcher, B. C. and Payne, R.L. (1980), "Stress and Work: A Review and Theoretical Framework, I", Personnel Review, Vol. 9 No. 1, pp. 19-29. https://doi.org/10.1108/eb055400

Garg, K., Nagpal, T. and Luthra, S. (2016), "A study of job satisfaction among managers in ICICI and HDFC bank in Jalandhar", International Journal of Applied Business and Economic Research, Vol. 14, pp. 5255-5263.

Gibbons, J.M. (2006), Employee Engagement: A Review of Current Research and Its Implications. The Conference Board. New York, NY.

Gkliati, A. and Saiti, A. (2022), "Work engagement and job satisfaction in the medical sector", International Journal of Health Sciences. https://doi.org/10.53730/ijhs.v6ns6.11070

Gupta, M. (2017), "Corporate social responsibility, employee–company identification, and organizational commitment: Mediation by employee engagement", Current Psychology, Vol. 36, pp. 101-109.

Hackman, JR and Lawler, E.E. (1971), "Employee reactions to job characteristics", Journal of Applied Psychology, Vol. 55, pp. 259-286.

Halbesleben, J.R.B. and Wheeler, A.R. (2008), "The relative roles of engagement and embeddedness in predicting job performance and intention to leave", Work & Stress, Vol. 22, pp. 242-256.

Handayani, D.F. and Pebriyani, D. (2020), "Flexible Working Arrangement and Job Satisfaction in Mitigating Burnout: A Literature Review" https://doi.org/10.2991/aebmr.k.201126.001

Imam, A. and Shafique, M. (2014), "Impact of employee engagement in retaining employees through the mediating effect of job satisfaction and organizational commitment and the moderating effect of job stress: a corporate banking sector study of Pakistan", Journal of Applied Environmental and Biological. Sciences, Vol. 4 No. 12, pp. 1-15.

Jain, R. and Kaur, S. (2014), "Impact of work environment on job satisfaction", International Journal of Scientific and Research Publication, Vol. 44, No. 1, pp. 1-8.

Jepson, E. and Forrest, S. (2006), "Individual contributory factors in teacher stress: The role of achievement striving and occupational commitment", British Journal of Educational Psychology, Vol. 76, pp. 183-197.

Judge, T.A. (1994), "Review of the book Job Satisfaction: How people feel about their jobs and how it affects their performance", by CJ Cranny, P.C. Smith, & E.F. Stone, Administrative Science Quarterly, Vol. 39, pp. 186-189

Juraini J. (2007), "Faktor Penyumbang Tekanan Dan Tahap-Tahap Tekanan Dalam Kalangan Guru-Guru Muzik Di Sekolah Rendah Di Negeri Selangor", Malaysia. Unpublished Masters Thesis, UPM.

Karanika-Murray, M., Duncan, N., Pontes, H.M. and Griffiths, M.D. (2015), "Organizational identification, work engagement, and job satisfaction", Journal of Managerial Psychology, Vol. 30, pp. 1019-1033.

Karatepe, O.M. (2013), "High-performance work practices and hotel employee performance: The mediation of work engagement", International Journal of Hospitality Management, Vol. 32, pp. 132-140.

Khaleque, A. (1981), "Job Satisfaction, Perceived Effort and Heart Rate in Light Industrial Work", Ergonomics, Vol. 24, pp. 735-742. doi:10.1080/00140138108924895

Khaleque, A. (1984), "Job Satisfaction and Work in Industry", University of Dhaka, Dhaka.

Kristiana, I. F., Ardi, R. and Hendriani, W. (2018), "What's behind Work Engagement in Teaching Practice?" https://doi.org/10.5220/0008588102670275

Kyriacou, C. and Sutcliffe, J. (1978), "Teacher stress: Prevalence, sources, and symptoms", British Journal of Educational Psychology, Vol. 48 No. 2, pp. 159–167. https://doi.org/10.1111/j.2044-8279.1978.tb02381.x

Lambert, E.G., Qureshi, H. and Frank, J. (2021), "The good life: Exploring the Effects of job stress, job involvement, job satisfaction, and organizational commitment on the life satisfaction of police officers", International Journal of Police Science & Management, Vol. 23, pp. 279 - 292. https://doi.org/10.1177/14613557211016494

Lu, L., Lu, A. C. C., Gursoy, D., & Neale, N. R. (2016), "Work engagement, job satisfaction, and turnover intentions: A comparison between supervisors and line-level employees", International Journal of Contemporary Hospitality Management, Vol. 28, pp. 737-761.

Macey, W. and Schneider, B. (2008), "The Meaning of Employee Engagement. Industrial and Organizational Psychology", Vol. 1, pp. 3-30. 10.1111/j.1754-9434.2007.0002.x.

Mache, S., Vitzthum, K., Klapp, B.F. and Groneberg, D.A. (2012), "Stress, Health and Satisfaction of Australian and German Doctors--A Comparative Study", World Hospitals and Health Services: The Official Journal of the International Hospital Federation, Vol. 48 No. 1, pp. 21–27.

Malikeh, B. (2011), "Study of organizational socialization and its relationship on employees' performance", AFRICAN JOURNAL OF BUSINESS MANAGEMENT, Vol. 5 No. 26. https://doi.org/10.5897/ajbm11.502

Mauno, S., Kinnunen, U. and Ruokolainen, M. (2007), "Job demands and resources as antecedents of work engagement: A longitudinal study", Journal of Vocational Behavior, Vol. 70, pp. 149-171.

Mursali, A., Basuki, E. and Dharmono, S. (2009), "Relationship between Noise and Job Stress at a Private Thread Spinning Company", Universa Medicina, Vol. 28, pp. 8–16. doi: 10.18051/UnivMed.2009.v28.8-16

Oginyi, R.C., Ofoke, S.M. and Chia, F.J. (2016), "Occupational Stress, Work Environment and Job Embeddedness as Predictors of Job Satisfaction among female teaching staff of Ebonyi State University", American International Journal of Research in Humanities, Arts and Social Sciences, Vol. 15, No. 1,2, pp. 161-170.

Orgambídez, A. and Extremera, N. (2020), "Understanding the link between work engagement and job satisfaction: Do role stressors underlie this relationship?", Scandinavian Journal of Psychology, Vol. 61 No 3, pp. 443–449. https://doi.org/10.1111/sjop.12613

Orgambídez-Ramos, A. and de Almeida, H. (2017), "Work Engagement, Social Support, And Job Satisfaction in Portuguese Nursing Staff: A Winning Combination", Applied Nursing Research: ANR, Vol. 36, pp. 37–41. https://doi.org/10.1016/j.apnr.2017.05.012

Pepe, A., Addimando, L., Dagdukee, J. and Veronese, G. (2021), "Psychological distress, job satisfaction and work engagement: a cross-sectional mediation study with a sample of Palestinian teachers", Educational Studies, Vol. 47, pp. 275 - 291. https://doi.org/10.1080/03055698.2019.1701990

Perwe, A. (2021), "Effect of Stress on Employee Performance and Job Satisfaction", Turkish Journal of Computer and Mathematics Education, Vol. 12 No. 3, pp. 3276-3281.

Pitariu, H.D. and Budean, A. (2020), "The Impact of Occupational Stress on Job Satisfaction and Counterproductive Work Behaviour". https://doi.org/10.24837/PRU.V7I2.437

Rachman, MM (2021), "The Impact of Work Stress and the Work Environment in the Organization: How Job Satisfaction Affects Employee Performance?", Journal of Human Resource and Sustainability Studies. https://doi.org/10.4236/jhrss.2021.92021

Rai, A. and Maheshwari, S. (2020), "Exploring the mediating role of work engagement between the linkages of job characteristics with organizational engagement and job satisfaction", Management Research Review. https://doi.org/10.1108/mrr-10-2019-0442

Rochoelofsen, P. (2002), "The Impact of Office Environments on Employee's Performance: The Design of The Work Place as A Strategy for Productivity Enhancement", Journal Of Facilities Management, Vol. 1 No. 3, pp. 247-264.

Saks, A.M. (2006), "Antecedents and Consequences of Employee Engagement," Journal of Managerial Psychology, Vol. 21 No. 7, pp. 600-619. https://doi.org/10.1108/02683940610690169

Schaufeli, W.B. and Bakker, A.B. (2004), "Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study", Journal of Organizational Behavior, Vol. 25, pp. 293-315.

Schaufeli, W.B., Salanova, M., Gonzalez-Roma, V. and Bakker, A.B. (2002), "The measurement of engagement and burnout: a two-sample confirmatory factor analytic approach", Journal of Applied Psychology, Vol. 43 No. 56, pp. 124-135.

Schaufeli, W., Bakker, A. and Salanova, M. (2006), "The Measurement of Work Engagement with a Short Questionnaire: A Cross-National Study", Educational and Psychological Measurement, Vol. 66, pp. 701-716. https://doi.org/10.1177/0013164405282471

Şeşen, H. and Ertan, Ş.S. (2021), "The effect of the employee perceived training on job satisfaction: the mediating role of workplace stress", European Journal of Training and Development. https://doi.org/10.1108/ejtd-01-2021-0014

Shen, H.J., Basri, R. and Asimiran, S. (2018), "Relationship between Job Stress and Job Satisfaction among Teachers in Private and International Schools in Malaysia", International Journal of Academic Research in Business and Social Sciences, Vol. 8 No.12. https://doi.org/10.6007/ijarbss/v8-i12/5012

Sheta, S.S., Sam, M.M. and Abdalla, N. (2022), "Effect of Mental Health Promotion Program Application on Workplace Stress Parameters among Academic Working Staff Women", The Egyptian Journal of Hospital Medicine. https://doi.org/10.21608/ejhm.2022.256598

Shweta (2021), "Enhancement in productivity due to employee satisfaction and engagement", Journal of emerging technologies and innovative research.

Supriyanto, A.S., Ekowati, V.M., Pujianto, Z.T. and Masyhuri (2021), "Employee Engagement: A Quantitative Review and Its Relationship with Job Satisfaction and Employee Performance". https://doi.org/10.2991/ASSEHR.K.210421.038

Terry, D.J., Nielsen, M. and Perchard, L. (1993), "Effects of Work Stress on Psychological Well-being and Job Satisfaction: The Stress-Buffering Role of Social Support", Australian Journal of Psychology, Vol. 45, pp. 168-175. https://doi.org/10.1080/00049539308259135

The Work Place Stress Scale (WSS) (2001), "The Marlin Company, North Haven, Connecticut and the American Institute of Stress", Yonkers, New York.

Xie, Y., Tian, J., Jiao, Y., Liu, Y., Yu, H. and Shi, L. (2021), "The impact of work stress on job satisfaction and sleep quality for couriers in China: The role of psychological capital", Frontiers in Psychology, Vol. 12, pp. 730147.

Xu, L., Guo, J., Zheng, L. and Zhang, Q. (2023), "Teacher Well-being in Chinese Universities: Examining the Relationship between Challenge-Hindrance Stressors, Job Satisfaction, and Teaching Engagement", International journal of environmental research and public health, Vol. 20 No. 2, pp. 1523. https://doi.org/10.3390/ijerph20021523