

An Investigation into the Relationship between HRM, Transformational Leadership and Teachers' Well-being in Educational Institutions

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Today's dynamic and competitive environment requires our educational sector to be growing. In order to have successful educational institutes, there is a dire need to pay attention on the overall well-being of teachers. Thus, this research aims to provide empirical evidence of the impact of Human Resource Management strategies and transformational leadership on teachers' well-being. Data were collected from 246 full-time working teachers in the educational institutes of Lahore. Whereby, results revealed the positive significant impact of both HRM Strategies and Transformational leadership on teachers' well-being, the TL association with teacher's well-being found to be stronger as compared to HRM Strategies. The insights offer valuable practical implications to assess the level of well-being of teachers and the ways to increase it.

1. Introduction

Education plays a vital role in any nation's development and teachers are at the forefront of enabling learning for shaping future generations. Reported as one of the most stressful occupation (Kidger *et al.*, 2016), teacher's well-being (TWB) greatly impacts their performance (Aryanti *et al.*, 2020) and thus crucial for sustainable development for themselves, institutions and society as a whole (Zhang *et al.*, 2024). Recently emerged as big challenge for managers, researchers are trying to find the strategies aimed to boost employees' well-being (Aboobaker, N *et al.*, 2021; Hascher and Waber, 2021). Earlier work on teachers' well-being were predominantly focused on its consequences side such as increase effectiveness (Carolan *et al.*, 2017), job satisfaction (Dreer-Goethe, Benjamin, 2021), students' happiness (Gray *et al.*, 2017). However, the well-being antecedent spectrum appears to be largely unaddressed (Kun & Gadancz, 2022; Hascher, T. & Waber, J. 2023). In this regard, various studies have emphasized the crucial role of human resource management (HRM) in enhancing employees well-being in other organizational settings, yet its impact on driving teachers' well-being requires careful attention. This study attempts to look into this relation from the perspective of Job Demand- Resource theory (Demerouti *et al.*, 2001). The theory suggests that the characteristics of any job comprises of two factors (i.e. job demands & job resources). Thus, HRM strategies of job design, work pressures, work-life balance etc. can play as important job demands, where by autonomy, compensation & promotion opportunities reflect job resources. In context of educators, when teachers perceive that HRM strategies of educational institutes offers better job resources than their job demands, they will be in a better psychological and physical state, thus their well-being will increase. Hence, the foremost objective of this study is to investigate the impact of HRM strategies on teachers' well-being.

In addition to the impact of HRM strategies, leadership within the educational institution has a significant impact on teachers' well-being (Prestiadi *et al.*, 2020). To be specific, among other leadership styles, researchers emphasized the importance of transformational leadership (TL) in fostering teachers' well-being (G. Maheshwari, 2022; Meidelina *et al.*, 2023). When teachers get support, guidance, appreciation and credit of what they do, their well-being increases. Idealized encouragement and inspirational motivation are two of the central characteristics of transformational leadership. It has been seen that, in institutions where teachers are given leaders who help and support them, they get more satisfied and happy, thus increases their psychological well-being (Bryant *et al.*, 2018). In line with this, our second objective is to investigate the impact of transformational leadership on teachers' well-being.

This research aims to contribute to the literature by investigating the impact of HRM strategies, that is, whether they are in interest of teachers or not, and Transformational Leadership on well-being of teachers. Although, the importance of HRM strategies and leadership has been discussed in literature along with their impact on education (i.e. students and teachers' performance) but to the authors' best knowledge, their impact on teachers' well-being has not been tested in context of Pakistan's educational institutions.

2. Literature Review and Hypotheses Development

2.1 Human Resource Management Strategies (HRMS) & Teachers Well-being (TWB)

Human Resource Management is defined as the interrelated policies and strategies for the facilitation of the most valued asset of any organization i.e. Human Resource. In order to have a well performing workforce for any organization, HRM needs to develop strategies which support the people working there. Likewise, human resource management in educational system plays a significant role for overall performance of the institute (Mishra, A., & Biswal, S. 2023). The ability of management to motivate its personnel and to provide them with development opportunities helps people to get satisfied with their jobs and perform better. A study conducted in Cross River state, Nigeria showed Human Resource Management and development strategies are important to the effectiveness of teachers in schools (Mera, 2023). Likewise, their findings demonstrate that, the more training and development opportunities are given to teachers, the more motivated they are and the more effective their performance is. Along with that, it not only enhances the teachers' overall satisfaction but also increases the students' performance and reinforces the better outcome from the whole system (Runhaar, 2017). Thereby, framing well-related strategies plays a significant role in enhancing workers' performance. Likewise, the research also reveals that well-being related HR practices have direct and significant impact on employee satisfaction which reinforces the well-being of the people who work in the organization (Khan et al., 2020). The role of Human Resource Management is to benefit the people within organization where the implementation of HRM strategies has positive impact on employees' well-being and organizational performance. Likewise, strategies designed specifically for the concern of employees have strong positive relationship on employees' performance whereby well-being is one of the successors of the HRM strategies (Guest, 2017).

Well-being is defined as someone being satisfied, contented and relaxed. According to Viac and Fraser (2020), teachers' well-being is generally defined as "teachers' responses to the cognitive, emotional, health and social conditions pertaining to their work and their profession". Whereby, in an educational institution the working life of teachers plays a key role for their happiness at work. Teachers' well-being in this context means that, they are provided with the supporting environment, helping leadership and most importantly the working conditions which fulfills their professional needs. Drawing from job demand-resource theory, employees will be in better position to fulfill job demands, when provided with supportive resources. Similarly, HRM strategies can act job resource and thus may buffer the job demands, leaving teachers more satisfied and relaxed and enhanced their' well-being. A study conducted in Chinese Banking Sector revealed that the Human Resource Strategies designed to enhance the well-being of employees actually contributes to their enhanced well-being and eventually their performance. Moreover, it creates a well-established social climate where employees feel free to share knowledge and develop mutual understanding to work on their growth (Cooper et al., 2019). Similarly, a study in China revealed that teachers who received mentoring by their institute's HR department tend to show better well-being than those who did not received. So, HRM strategies especially mentoring

related have a positive relationship with overall well-being of teachers if exercised properly (Kutsyuruba et al., 2019). Where majority of the earlier work showed a positive association between HRM and well-being, a research found a significant negative relationship between the perceptions of HRM and employee well-being (Peccei & Van De Voorde, 2019; Truss & Gratton, 1994). Thus, the contradictory results need further investigation. Following the dominant lead from the literature, we hypothesize that:

H1: Human Resource Management positively impacts teachers' Well-being.

2.2 Transformational Leadership (TL) and Teachers Well-being (TWB)

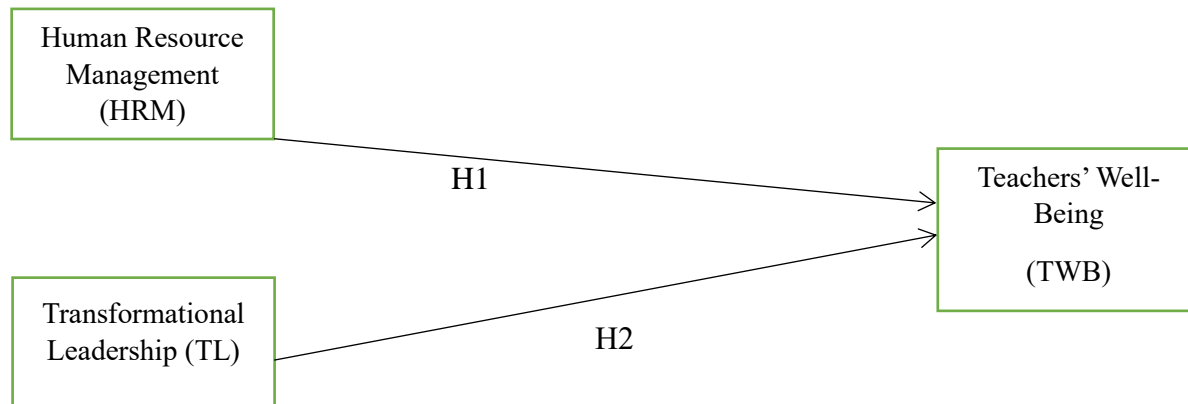
Transformational Leadership is an approach where leaders pay attention to their teams, try to motivate them by appreciating them, supporting them and providing necessary guidance (Khan et al., 2020). It is of great importance that principles of educational institutions act as leaders to support and guide their staff (Prestiadi et al., 2020). Moreover, it not only increases or helps in creating and maintaining teachers' well-being but by presenting themselves being good supporters to their followers, it also increases their own psychological well-being when they see their people working happily and satisfied (Arnold & Connelly, 2013).

A research done to explore the well-being of faculty of universities has shown that transformational leadership plays a vital role in enhancing teachers' well-being where self-efficacy behaves as mediator (Malik & Tariq, 2015). A study conducted in International schools of Thailand, where mixed method of analysis has been used shows interesting results. Likewise, it has revealed that the Transformational Leadership is the cause of reducing factors causing stress among teachers and hence is significant to create and enhance the well-being of teachers (Matthew R, 2022). Another research revealed that transformational leadership is the way through which their well-being can be improved. Thereby, when teachers are supported well, they are helped by the organization and are made feel valued, their well-being increases (Meidelina et al., 2023). A study conducted in Indonesia's educational sector has revealed that the organizational culture, Transformational Leadership and employees engagement with work have a strong positive relationship with teachers' feelings at work and their performance (Arifin et al., 2014).

Another study investigated different leadership styles on teachers' well-being and revealed that institutes where supportive leadership style is exhibited, attention has been paid to teachers' development and their advancement is the top priority of organization, these kinds of institutes have more satisfied teachers. Thereby, these activities contributes to their well-being (Ferolino et al., 2024). On the contrary, a research shows that there is no significant impact of Transformational Leadership on lecturers' subjective well-being (Harefa et al., 2022). Based on above literature, we hypothesize that:

H2: There is a positive impact of transformational leadership on teachers' Well-being.

Figure No 1: The Conceptual Framework



3. Research Design

3.1 Study Context

Based on positivist philosophy, the study employed quantitative method to examine the impact of HRMS & Transformational Leadership on teachers' well-being in the educational sector of Pakistan. The main reason to select education sector as a population understudy is as follows First limited research is available regarding teacher's well-being in education landscape of Pakistan. Unfortunately, the literacy rate of Pakistan is quite low, that half of its population do not know how to write their names. Due to the fact that, very low attention paid to this factor of a country's growth, very low portion of budget is allocated to the education sector. Likewise, the compensation system, monitoring systems etc. for teachers are not that well that can motivate teachers to give best of them. In Pakistan, teaching has been reported as one of the least paid professions (Ayub et al., 2018). A study by Tahir (2011) revealed educators' wellbeing are very poor at all educational levels in Pakistan. Similarly, Ozu et a., (2017) reported lowest level of educators' well-being in Pakistan as compared to middle- and high-income countries such as Tukey and USA. Hence it presents a dire need to find how TWB can be enhanced.

3.2 Sample Selection & Measures

Data was gathered from a sample of 246 teachers across educational institutes of Punjab utilizing self-administered questionnaire through convenience sampling. The questionnaire items were assessed using a 5-point Likert-Scale, allowing respondents to indicate their level of agreement from strongly Disagree to strongly agree. These items were sourced from previous studies conducted on the three variables under investigation. Items for HRM strategies have been taken from previous study(Runhaar & Sanders, 2015). There are six questions intended to measure how HRM strategies within institutes are in favor of teachers. To measure teachers' well-being, five items were adapted from the work of (Gluyas et al., 2017). Transformational leadership measure is measured by 7-items from the work of (Carless et al., 2000). The data is analyzed using statistical methods in IBM SPSS Statistics & AMOS.

4. Results

Table I presents the sample demographics. It shows that sample consists of 165 males & 81 females which is 67.0 % and 32.9% respectively. The ages data show 50 teacher belong to age bracket of 20-30 which is 20.3 %, 82 belong to 31-40 (33.3%), 45 belong to 41-50 (18.2), and 69 fall in 51 and above age limit (i.e. 28.0%). The highest educational level is Masters (73.1%, and goes to 40 PhDs, 16 others and 10 Bachelors. The highest income group is 86k-95k (80%), and the lowest group belongs to 25k-45K (17%).

Table No 1: Demographics Statistics (N=246)

Variable	Category	Frequency	Percentage (%)	Cumulative Percentage (%)
Gender	Male	165	67.0	60.7
	Female	81	32.9	100.0
Age	20-30 Year	50	20.3	20.3
	31-40 Years	82	33.3	53.6
	41-50 Years	45	18.2	71.8
	51 and above	69	28.0	100.0
Educational Level	Bachelors	10	4.0	4.0
	Masters	180	73.1	77.1
	PhD	40	16.2	93.3
	Others	16	6.5	100.0
Income	25k – 45k Rs.	17	6.9	6.9
	46k – 65k Rs.	55	22.3	29.2
	65k – 85k Rs.	50	20.3	49.5
	86k – 95k Rs.	80	32.5	82.0
	96k and above	44	17.8	100.0

Confirmatory factor analysis is conducted to check the reflective indicators loading. All the items loading were significant and above 0.5 (Samuels, 2017). Construct convergent validity is tested through calculating AVE which are also above 0.5. The composite reliability of all three variables are also above 0.5, which is an acceptable level (Hair Jr *et al.*, 2017).

Table No 2: Confirmatory Factor Analysis & Reliability

Items	Estimate			Cronbach's Alpha	AVE	CR
	HRM	TL	WB			
HRM1	0.914			0.944	0.781	0.955
HRM2	0.906					
HRM3	0.915					
HRM4	0.836					
HRM5	0.865					
HRM6	0.865					
TL1		0.806		0.910	0.643	0.927
TL2		0.793				
TL3		0.814				
TL4		0.787				
TL5		0.815				
TL6		0.779				
TL7		0.819				
TWB1			0.691	0.878	0.619	0.907
TWB2			0.777			
TWB3			0.823			
TWB4			0.838			
TWB5			0.815			
TWB6			0.768			

HRM= Human Resource Management, TL= Transformational Leadership, TWB= Teachers' Well-being.

Table 3 shows the mean, standard deviation, AVE and square root of AVE for each variable. All the variables are significantly correlated at 0.05 p-value. Moreover, discriminant validity for each variable is confirmed as the square root of AVE is greater than variables off-diagonal correlations.

Study hypotheses are tested through simple linear regression analysis. Table 4, beta values (B) are showing the slope of the proposed relationships. It shows that by increasing one unit change in HRMS, Teachers' well-being is increased by 0.241 units. Likewise, one unit increase in Transformational Leadership leads to 0.625 units increase in Teachers' Well-Being. Moreover, both of the p-values are less than 0.005 which means there exists a significantly strong and positive relationship between independent and dependent variables (Figure II). In addition to this, 60% of the dependent variable can be predicted by both of the independent variables (Humpage, 2000). So, our study hypotheses are substantiated.

Table No 3: Means, Std. Deviation, AVE & Correlation of Study Variables

Variables	Mean	Std. Deviation	AVE			
			1	2	3	
HRM	2.67	0.99	0.781	(0.883)	-	
TL	2.92	0.98	0.643	. 0.512**	(0.801)	
TWB	2.499	0.85	0.619	0.599**	0.684	(0.786)

**Significant at 0.05 Level

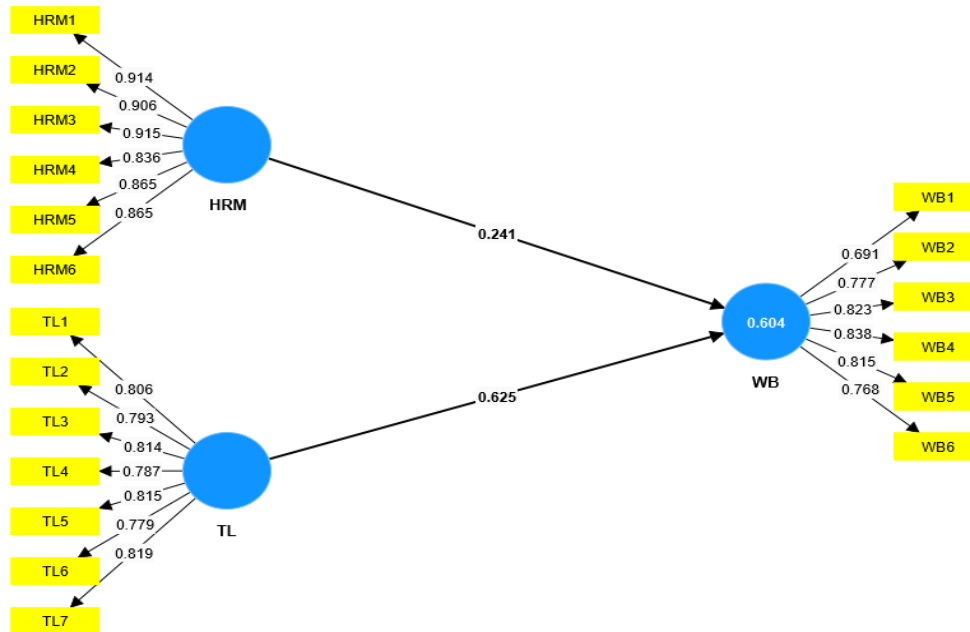
- Square root of AVE is represented by bold diagonal values, Discriminant Validity is confirmed when diagonal value against each variable is greater than it corresponding off-diagonal correlations.

Table No 4: Regression weights, P-value & Results

Hypotheses	Regression weights	B	p-value	Results
H1	HRM→Teachers' Well-Being	0.241	0.001	Supported
H2	Transformational Leadership→Teachers' Well-Being	0.625	0.001	Supported
R Square	0.60			

Notes: p-value is less than 0.05

Figure No 2: Study Model along with Loadings



5. Discussion & Conclusion

This research aimed to investigate the impact of HRM Strategies and Transformational Leadership on Teachers’ Well-Being. According to (Pagán-Castaño et al., 2021), the association of HRM Strategies with Well-Being is strong. Moreover, previous literature also confirmed the direct relationship between HRM Strategies and Well-Being (Clarke & Hill, 2012), thus confirming our first hypothesis. In addition, the relationship between Transformational Leadership and teachers’ well-being is also confirmed by other researches (Harefa et al., 2022).Meidolina et al., 2023), thus substantiated our second hypothesis as well. Whereby, some of the literature of leadership’s association with well-being supports the existence of relationship and some contradicts with it, our study supports the dominant view. There are few practical implications that can be derived from this research. Since data for this study has been collected from the educational sector employees (teachers) of different institutes; it can be argued that HRM Strategies are beneficial for the well-being of teachers in their workplaces. Moreover, it is also recommended for the institutes to make use of HRM practices for better performance of their teachers and in extension their institutes. Teachers’ performance by being satisfied as it is highly likely that if their well-being is maintained, it will be helpful for the institutes to grow further in many ways that future study can prove. According to the authors’ best knowledge the relationships between HRM Strategies,

Transformational Leadership and Teachers' well-being have not been tested before in the context of Pakistan's educational institutes. So, our study adds to the contextual gap.

5.1 Limitations and Future Direction

It is imperative to acknowledge and address the limitations inherent in this study concerning the research methodologies utilized. Firstly, the reliance on convenience sampling for data collection, predominantly sourced from teachers in the Lahore region, inherently limits the extent to which causal relationships can be inferred from the gathered data. Future researcher can opt for more geographically dispersed samples. Second, the cross-sectional nature of the data limits its causality, so future researchers may choose longitudinal design in studies. Third, examining moderating and mediating factors may help to clarify the intricate processes at work in this connection. Intervention studies might assess how well teacher well-being is affected by specific changes in HRM or leadership. Lastly, research conducted across cultural boundaries may provide light on how cultural variables affect successful HRM and leadership techniques to impact teachers' well-being.

6. References

- Aboobaker, N., Edward, M., & KA, Z. (2019). Workplace spirituality, employee wellbeing and intention to stay: A multi-group analysis of teachers' career choice. *International Journal of Educational Management*, 33(1), 28-44.
- Aryanti, R. D., Sari, E. Y. D., & Widiana, H. S. (2020, October). A literature review of workplace well-being. In *International Conference on Community Development (ICCD 2020)* (pp. 605-609). Atlantis Press.
- Arifin, F., Troena, E. A., Djumahir, & Rahayu, M. (2014). Organizational Culture, Transformational Leadership, Work Engagement and Teacher's Performance : Test of a Model. *International Journal of Education and Research*, 2(1), 1-14. www.ijern.com
- Alfes, K., Shantz, A., & Truss, C. (2012). The link between perceived HRM practices, performance and well-being: The moderating effect of trust in the employer. *Human Resource Management Journal*, 22(4), 409-427.
- Arnold, K. A., & Connelly, C. E. (2013). Transformational Leadership and Psychological Well-being. *The Wiley-Blackwell Handbook of the Psychology of Leadership, Change, and Organizational Development*, 175-194. <https://doi.org/10.1002/9781118326404.ch9>
- Ayub, A., Hussain, M. A., & Ghulamullah, N. (2018). Causes and impact of work stress on teacher's performance in urban primary schools. *Journal of Research in Social Sciences*, 6(1), 81-100.
- Bryant, P., Butcher, J., & O'Connor, J. (2018). Improving School Leadership: The Connection of Transformational Leadership and Psychological Well-Being of the Followers. *School Leadership Review*, 11(2). <https://scholarworks.sfasu.edu/slr/vol11/iss2/6>



Carolan, S., Harris, P. R., & Cavanagh, K. (2017). Improving employee well-being and effectiveness: systematic review and meta-analysis of web-based psychological interventions delivered in the workplace. *Journal of medical Internet research*, 19(7), e271.

Carless, S. A., Wearing, A. J., & Mann, L. (2000). A short measure of transformational leadership. *Journal of business and psychology*, 14, 389-405.

Clarke, M. A., & Hill, S. R. (2012). Promoting employee wellbeing and quality service outcomes: The role of HRM practices. *Journal of Management & Organization*, 18(5), 702–713. <https://doi.org/10.5172/JMO.2012.18.5.702>

Cooper, B., Wang, J., Bartram, T., & Cooke, F. L. (2019). Well-being-oriented human resource management practices and employee performance in the Chinese banking sector: The role of social climate and resilience. *Human Resource Management*, 58(1), 85–97. <https://doi.org/10.1002/hrm.21934>

Dreer-Goethe, Benjamin. (2021). Teachers' well-being and job satisfaction: the important role of positive emotions in the workplace. *Educational Studies*. 50. 1-17. [10.1080/03055698.2021.1940872](https://doi.org/10.1080/03055698.2021.1940872).

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied psychology*, 86(3), 499.

Ferolino, A., Peñalosa, A., Gerunda, L., Denopol, R., & Barreto, R. (2024). Exploring the Effects of School Administrators' Leadership Styles on Teacher Well-being: A Focus on Efficacy and Job Satisfaction. *International Multidisciplinary Journal of Research for Innovation, Sustainability, and Excellence (IMJRISE)* - ISSN: 3028-032X, 1(2), 201–206. <https://risejournals.org/index.php/imjrise/article/view/128>

Gluyas Fitch, R. I., Cadena Pedraza, Y. T., Sánchez, M. del C. R. S., & Cinco Basurto, M. G. (2017). Measuring the Subjective Well-being of Teachers. *Journal of Educational, Health and Community Psychology*, 6(3), 25. <https://doi.org/10.12928/JEHCP.V6I3.8316>

Gray, C., Wilcox, G., & Nordstokke, D. (2017). Teacher mental health, school climate, inclusive education and student learning: A review. *Canadian Psychology/psychologie canadienne*, 58(3), 203.

G. Maheshwari, “Influence of Teacher-Perceived Transformational and Transactional School Leadership on Teachers' Job Satisfaction and Performance: A Case of Vietnam,” *Leadership and Policy in Schools*, vol. 21, no. 4, pp. 876–890, 2022, doi: [10.1080/15700763.2020.1866020](https://doi.org/10.1080/15700763.2020.1866020).

Guest, D. E. (2017). Human resource management and employee well-being: towards a new analytic framework. *Human Resource Management Journal*, 27(1), 22–38. <https://doi.org/10.1111/1748-8583.12139>

- Hascher, T., & Waber, J. (2021). Teacher well-being: A systematic review of the research literature from the year 2000–2019. *Educational research review*, 34, 100411.
- Hair Jr, J. F., Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: updated guidelines on which method to use. *International Journal of Multivariate Data Analysis*, 1(2), 107-123.
- Harefa, A. R., Sitanggang, N., & Nainggolan, E. (2022). The Influence of Transformational Leadership on Teaching Performance and Subjective Well-being of Lecturers. *Indonesian Journal of Educational Research and Review*, 5(3), 502–513. <https://doi.org/10.23887/IJERR.V5I3.54821>
- Humpage, S. (2000). An introduction to regression analysis. *Sensors (Peterborough, NH)*, 17(9), 68–74. <https://doi.org/10.1002/9781118267912.ch6>
- Kun A., Gadancz P. (2022). Workplace happiness, well-being and their relationship with psychological capital: A study of Hungarian teachers. *Current Psychology: A Journal for Diverse Perspectives on Diverse Psychological Issues*, 41(1), 185–199.
- Khan, S., Khan, M. H., Mohmand, A. M., & Misbah, S. (2020). Impact of HR practices on employee turnover and job satisfaction: Evidence from Pakistani Universities. *Review of Economics and Development Studies*, 6(3), 607-624.
- Kutsyuruba, B., Godden, L., & Bosica, J. (2019). The impact of mentoring on the Canadian early career teachers' well-being. *International Journal of Mentoring and Coaching in Education*, 8(4), 285–309. <https://doi.org/10.1108/IJMCE-02-2019-0035>
- Mishra, A., & Biswal, S. (2023). Case Studies on Impact of HRM Practices on Organizational Performance in Educational Institutes. *Journal of Engineering Education Transformations*, 36(3).
- Malik, S. Z., & Tariq, S. (2015). Relationship of transformational leadership, psychological well-being and self-efficacy: A mediation analysis in university faculty. *Journal of Quality and Technology Management*, XI(Ii), 93–109.
- Matthew R, M. (2022). Transformational Leadership's Influence on Teacher Well-Being in International Schools. *Philosophy International Journal*. <https://doi.org/10.23880/phij-16000235>
- Meidelina, O., Saleh, A. Y., Cathlin, C. A., & Winesa, S. A. (2023). Transformational leadership and teacher well-being: A systematic review. *Journal of Education and Learning (EduLearn)*, 17(3), 417–424. <https://doi.org/10.11591/EDULEARN.V17I3.20858>
- Mera, M. S. (2023). Relationship Between Human Resource Management And Teacher Effectiveness In Some Selected Secondary Schools In Cross River State , Nigeria. *RESEARCH JOURNAL ON TEACHER PROFESSIONAL DEVELOPMENT*, 1(2), 148–159. <https://doi.org/2988-0432>
- Nura, A. A. (2014). *Human resource management practices and employee performance management in Nigerian higher educational institutions* (Doctoral dissertation, Universiti Utara Malaysia).



- Pagán-Castaño, E., Sánchez-García, J., Garrigos-Simon, F. J., & Guijarro-García, M. (2021). The influence of management on teacher well-being and the development of sustainable schools. *Sustainability (Switzerland)*, 13(5), 1–23. <https://doi.org/10.3390/su13052909>
- Prestiadi, D., Gunawan, I., & Sumarsono, R. B. (2020, December). Role of transformational leadership in education 4.0. In *6th International conference on education and technology (ICET 2020)* (pp. 120-124). Atlantis Press.
- Peccei, R., & Van De Voorde, K. (2019). Human resource management–well-being–performance research revisited: Past, present, and future. *Human resource management journal*, 29(4), 539-563.
- Runhaar, P., & Sanders, K. (2015). Promoting teachers' knowledge sharing. The fostering roles of occupational self-efficacy and Human Resources Management. *Http://Dx.Doi.Org/10.1177/1741143214564773*, 44(5), 794–813. <https://doi.org/10.1177/1741143214564773>
- Samuels, P. (2017). (PDF) *Advice on Exploratory Factor Analysis*. https://www.researchgate.net/publication/319165677_Advice_on_Exploratory_Factor_Analysis
- Tahir, A. Q. (2011). Effectiveness of teaching stress on academic performance of college teachers in Pakistan. *International Journal of Humanities and Social Science*, 1(3), 123-129.
- Viac C., Fraser P. (2020). Teachers Well-being: A Framework for Data Collection and Analysis. OECD Education Working Paper No. 213. Organisation for Economic Co-operation and Development. Available online at: <http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/>
- Zhang, L., Chen, J., Li, X., & Zhan, Y. (2024). A scope review of the teacher well-being research between 1968 and 2021. *The Asia-Pacific Education Researcher*, 33(open in a new window)(1(open in a new window)), 171–186. <https://doi.org/10.1007/s40299-023-00717-1>