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RESEARCH PAPER

Unleashing Employees' Creativity: Responsible Leadership in Public Sector Universities of Punjab, Pakistan

¹Hafiz Muhammad Waqas * and ²Dr. Arfan Ali

- 1. Ph. D Scholar National Business School, The University of Faisalabad, Faisalabad, Punjab, Pakistan
- 2. Assistant Professor, National Business School, The University of Faisalabad, Faisalabad, Punjab, Pakistan

*Corresponding Author: Hafizwaqas79@gmail.cpm

ABSTRACT

The purpose of this research is to investigate the influence of responsible leadership on employee creativity. It has been pointed out that employee creativity has been examined from different leadership styles but rarely from a responsive leadership perspective. It also examines the moderating role of perceived organizational support between responsible leadership and employee creativity. This research is based on social exchange and social learning theories. The data were collected from administrative employees of public sector higher education institutions (universities) of Punjab province, Pakistan and analyzed using SPSS and SMERT PLS 4. The measurement model ensures the validity and reliability of the focal constructs. The results show that responsible leadership has a significant effect on employee creativity. The results also found that perceived organizational support moderates the relationship between responsible leadership and employee creativity. The current research adds to leadership knowledge by creating an integrated framework that increases understanding of how responsible leadership is more effective in providing resources for employee creativity in a public sector higher education institution.

KEYWORDS Employees Creativity, Higher Education Institution, Perceived Organizational Support, Responsible Leadership

Introduction

Organizations always strive for excellence and competition, but this competition is advanced from performance to creativity in the 21st century. Now, every organization strives for creativity as its only solution for survival, growth and organizational innovation (Hassan & Din, 2019). In the Global Innovation Index, Pakistan is ranked 113th out of 127 countries, making it the least innovative country in the world (Tribune, 2017) the GII survey uses Over 81 indicators covering a range of topics, including infrastructure, institutions, and a commitment to knowledge and creativity. Innovation results from a creative process that is creativity (Leonard-Barton & Swap, 1999).

According to (GII 2022), Pakistan secured 87th position and led the Central and Southern Asia region for the first time. GII 2022 ranked Pakistan 87th, an impressive rise in the rankings for Pakistan, which outperformed 26 countries on innovation in relation to their development. In Pakistan, the Higher Education Commission (HEC) and other collaborative agencies grasped the dire need for innovation throughout Pakistani HEIs and contributed to the improvement of Pakistani higher education institutions through their policies and innovations. A Technology and Innovation Support Center (TISC) was established in 39 higher education institutions by HEC in collaboration with IPO Pakistan and the Ministry of Science & Technology (Rasheed & Iqbal, 2022)

Educational organizations should focus more on creativity than other service sectors since educational institutions have become an important source of innovation and creativity. In addition, creative behaviors and knowledge sharing are essential for developing positive work attitudes (Hassan & Din 2019). Universities embrace human intellectual capital as knowledge-based institutions providing students, faculty, researchers, and staff opportunities to learn and grow. Thus, innovation, creativity, and ideas can be continually reaped in a university's organizational culture, and a wide variety of skills and potentials are available. University executive administrations work to ensure utilization of human intellectual capital and proper management. It could be a challenging task for university administration but the biggest challenge is to transform the ideas into intellectual or operationalize for work i.e. knowledge in general. It represents the conversion of thinking and creativity (AI-Youbi et al., 2021). Pakistan's culture and working circumstances are distinct from advanced nations. It's a dire need to understand different measures to enhance creativity in the universities of Pakistan (Ishaque, Iqbal, Zafar, & Tufail, 2014). Employees creativity can be viewed as their capability to come up with novel concepts for practices, procedures, products and services to solve various organizational challenges (Amabile, 1996). It is therefore, important to examine more closely the aspects which deeply contribute to creativity (Imamoglu, Erat, & Turkcan, 2022).

Wong, and Ladkin, 2008 recommended that it's important to relate different leadership styles with employees' creativity in academics and management. Currently, 51 public and 31 private Higher Education Institutions are working duly chartered by Punjab Higher Education Commission (PHEC, 2023) Pakistan. Achieving global university rankings and being creative is essential for higher education institutions. (Siswanto, Supriyanto, Suprayitno, Ekowati, Sujianto, Johari, & Ridwan, 2022) only 11, 13 and 14 Pakistani Universities Feature in QS World University Rankings (QS World University Ranking, 2022a; QS World University Ranking, 2022b) respectively that is possible with creative capabilities of teaching and particularly the administrative staff. Prior studies have emphasized the creativity of faculty (Bakr & Almagati, 2023; Al-Husseini, Beltagi, & Moizer, 2021; Alonderiene & Majauskaite, 2016; Sadeghi, & Pihie, 2012; Hirst, Van Dick, & Van Knippenberg, 2009, and Amabile & Khaire, 2008) and students (Saidov, Qudratov, Islikov, Normatova & Monasipova, 2023; Toyirovna; Eringfeld; Laguía, Moriano & Gorgievski 2019; Toyirovna, 2022 and Siburian, Corebima, & Saptasari 2019), but there is a paucity of literature highlighting creativity or creative capabilities of administrative staff as all the administrative staff members play their vital role to support the academic and research activates possible. Therefore, to examine the factors determinative for enhancing creativity, it is substantial (Imamoglu et al., 2022). Leadership is considered as a social exchange mechanism that encourages employees to meet performance objectives shared by leaders and employees (Han, Wang, & Yan, 2019).

In prior research, authentic, ethical, transactional and transformational Leadership have been examined as factors contributing to employee creativity (Javed, Khan, Bashir & Arjoon, 2017; Paracha, Qamar, Mirza, Hassan & Waqas, 2012; Yeh & Hong, 2012; Rasool, 2015; and Jamali, Bhutto, Khaskhely & Sethar, 2022). Irrespective of whether leadership effect on job satisfaction, performance of employees or commitment, transformational leadership is always conducive to better productivity, specifically in the education sector. (Rasool et al., 2015; Khan & Adnan, 2014). A small number of scholars such as (Shah, & Pathan, 2017; Torlak & Kuzey, 2019) have addressed the performance influenced by styles of Leadership. Moreover, several studies independently have found that the culture of organization affects the style of Leadership or style of Leadership affects the culture of the organization or organizational culture influences the employees' performance as well. Yet, there is a lack of evidence about the role of responsible Leadership in encouraging employee creativity (Castro-González, Bande, & Fernández, 2019). Responsible Leadership promotes a sense of respect for employees' perspectives encourage them to perform well in their jobs (Han et al., 2019). In the age of competition, survival of the organizations depends upon employee's creativity, so it cannot be ignored. which is why responsible Leadership has become a dynamic concept to carry out transactions efficiently (Zulfiqar, Khan, & Huo, 2022).

To identify the significant effects of responsible leadership on employee creativity and examine the moderating effect of POS in public universities of Punjab, Pakistan to eliminate the gap between them. Current research explores the moderating role of POS. The current study emphasizes the significance of administrative employees' creativity, which is the universities' most important part according to Zulfigar, Khan & Huo (2022). In order to perform well, (employees and organizations) creativity among employees and in the workplace is crucial. Taking risks and embracing challenges is essential for creating creative solutions in organization. Employees that can think outside the box aid greatly in the discovery of novel tactics to problem solutions. A company's ability to thrive can be attributed to employee creativity. Employees' overall perception that their employer values their work is related to their well-being, as well as the positive treatment they have received (i.e. Fairness in dealing, supervisory encouragement, organizational benefits, and excellent working conditions) are linked to perceived organizational support; as workers believe that their leader values their work, they like to support creativity (Rhoades, and Eisenberger 2002; Islam, Zahra, Rehman, & Jamil, 2022) suggested to investigate how POS acts as a moderator.

Theoretical underpinning

According to social exchange theory, when an organization and its supervisors' are having healthy relationships in the workplace, reciprocity-based interactions are predicted to lead to excellent behavior at workplace, motivating employees to pay back through creative behavior (Hughes et al., 2018). Social Exchange theory posits that making conclusions purposely or accidentally assessing a relationship's expected risks and return is human nature. An honest concept, SET is thought to be the best durable framework for use in the workplace (Zulfiqar, Khan & Huo 2022). Additionally, whenever workers find organization and leader as responsible, they give the company their whole attention so that they are treated properly (Chen & Khuangga, 2021). SET contends that if worker of the organization found their leader appreciate their job, employees will frequently give back by engaging in charitable endeavors (Eisenberger, et al., 2020); Blau, PM (1964) cited by Imamoglu, et al., (2022). In response to the call for a more comprehensive research on lack of evidence of Responsible Leadership towards creative employees' behavior (Castro et al., 2019). Theoretical framework demonstrated as:

Responsible Leadership and employees' creativity

Understand, how Leadership influences creativity is very important (Tierney, Farmer & Graen 1999) as Leadership is being considered as a social exchange process which inspires employees' to meet shared performance objectives. In particular, Responsible Leadership develops the perception that the leader values employees' perspectives, boosting them to complete the tasks properly (Han, Wang, & Yan, 2019). Employee creativity and Responsible Leadership are significantly related. The emphasis on RL can ultimately lead to better performance by employees in the area of creativity. Raising employee innovation is now essential for executives if they want to ensure the sustainability of their organization Zulfiqar et al., (2022).

An organization's internal and external interactions can be balanced and coordinated with Responsible Leadership, which also encourages a situation that is receptive to new ideas and supports employee creativity (Lv, Chen & Ruan, 2021). As a novel leadership style, through self-awareness and high ethical standards, responsible leaders can stimulate passion of employees to be proactive towards task as this kind of Leadership has

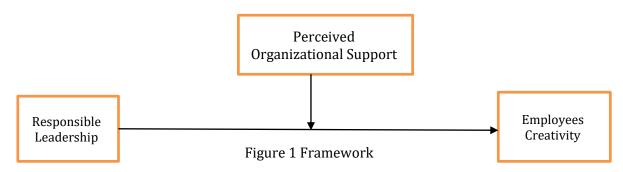
a social, relational, and ethical phenomenon. Furthermore, RL provides a setting that inspires people with a strong sense of purpose to work creatively (Chen et al., 2021). In addition, Zulfiqar et al., (2022) in an organization employee's creativity was found positively correlated with Responsible Leadership. In universities administrative employees striving for excellence to support the faculty under their responsible leaders, following is the proposed hypotheses based on the arguments above:

H1. Responsible Leadership has a momentous impact on employee creativity

POS moderates the relationship between Responsible Leadership and Employees' Creativity

George and Brief (1992) stated as the workers devoted themselves for the progress of the organization by securing skills and capabilities which are the dire need of creativity. POS recommended that Employees can develop themselves to work for beneficent to the organization by acquiring capability required for creativity The term "perceived organizational support" describes how employees feel about the company's concern for the welfare and value their work (Rhoades & Eisenberger, 2002). In response to perceived organizational support, employees frequently exert additional effort. From this perspective, organizational support is seen as a hidden mechanism whose influence must be revealed and may impact how creative an organization is (Imamoglu, et al., 2022). Regarding POS and EC, Employee-employer relationships are supported by perceptions of organizational support, which can affect employee well-being and alignment with organizational objectives (Kurtessis et al., 2017). There is a positive relationship between perceived organizational support and employee creativity (Duan et al., 2020). Creative support is defined as the perception among employees that their employers encourage, respect, reward, and recognize creative behavior (Zhou & George, 2001). In light of the previous considerations, the hypothesis is suggested as follows:

H2. POS moderates the relationship between Responsible Leadership and employee creativity.



Material and Methods

The purpose of the study was to test a quantitative hypothesis testing method to confirm our research hypotheses. Data were collected from administrative employees (nonteaching employees) working in public sector universities chartered by the Punjab Higher Education Commission, Pakistan. With an online platform, you can reach more respondents, and this is appropriate for cross-sectional studies because it provides a wider net of respondent (Newman, Bavik, Mount & Shao 2021). Google Forms was used in the study and its link has been shared on various social media platforms. The study used convenient sampling for data collection. In the first section of the questionnaire, the first part of the

survey, respondents were requested to submit demographic data (e.g. gender, education level, age, work experience, etc.) In the subsequent section, participants were asked to rate how important certain characteristics were to them based on a seven point Likert scale. 434 questionnaires were considered valid for analysis. The demographics of respondents are presented in table 1

Table 1
Respondents Profile of the respondents

Respondents Profile of the respondents				
Variables	Frequencies	Percentages		
Age				
18-25	111	26		
26-33	146	34		
34-41	116	27		
42 and above	61	13		
Gender				
Male	248	57		
Female	186	43		
Education				
Bachelors	129	30		
Masters	135	31		
MS/M.Phil	107	25		
PhD	63	14		
Marital status				
Unmarried	176	41		
Married	258	59		
Experience				
01 - 5 years	139	32		
06 - 10 years	130	30		
11 - 15 years	119	27		
16 and above	46	11		

Measures

(Fig. 1) shows that variables were used to measure employees' creativity. One variable was selected as an independent variable: Responsible Leadership (RL). Employee creativity (EC) was set as a dependent variable, and POS served as the moderating variable of this study. All measurement items were found in the literature, along with the means used to measure the variables, which are shown in Appendix A. All measures received responses on a 7-point Likert scale (strongly disagree – strongly agree). Data analysis was performed using Smart-PLS 3.8 software. PLS-SEM was used to obtain path coefficient results and bootstrapping was performed as suggested by Hare, Sarstad, Ringel and Mena, (2012).

Measurement Model

Convergent validity was checked, and all values of loadings, composite reliability (CR), Cronbach's alpha, and average variance extracted (AVE) were satisfactory. All factor loadings were above 0.7, and factor loadings below the minimum threshold were deleted as recommended by Hair, Ringle and Sarstedt, (2011). All AVE values were above 0.5 (Kline, 2023), CR values were above 0.6 (Bagozzi & Yi, 1988), and Cronbach's alpha was above 0.7 (Hardy and Bryman, 2009) for all variables (Table 2 see). Additionally, discriminant validity was performed according to the criteria of Fornell and Larcker (1981) presented in Table 3. Values of square roots of all variables are less than the values of average variance extracted from the variables. PLS algorithm is presented in figure 2.

Table 2 AVE, CR, Factor Loadings, Cronbach's alpha.

Constructs	Items	Factor Loadings
Responsible Leadership	RL1	0.784
AVE= 0.589	RL2	0.718
Cronbach's Alpha= 0.86	RL3	0.727
Composite Reliability= .865	RL4	0.820
	RL5	0.771
	RL6	0.720
Perceived Organizational Support	POS1	0.752
AVE = 0.556	POS2	0.802
Cronbach's Alpha= 0.836	POS3	0.706
Composite Reliability= 0.741	POS4	0.720
	POS5	0.60*
Employees Creativity	EC1	0.729
AVE= 566	EC2	0.800
Cronbach's Alpha= 0.745	EC3	0.770
Composite Reliability= 0.745	EC4	0.707

Note. *Item was deleted.

Table 3 **Discriminant Validity**

	EC	POS	RL
EC	0.752		
POS	0.609	0.746	
RL	0.779	0.647	0.767

Notes: EC: employees' creativity; POS: perceived organizational purport; RL: responsible Leadership. Diagonal elements are the square root of the AVE for each variable.

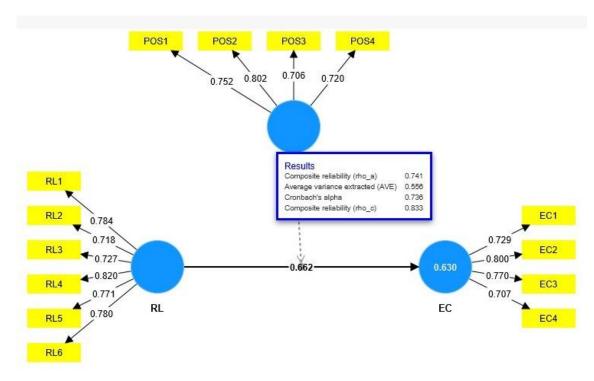


Figure 2. PLS Algorithum Path 458

Structural Model

Path coefficients were analyzed by using PLS-SEM. Path coefficients of variables presented in Table 4. The results shows that RL has significant effect on employees' creativity (β =0.049, <0.001), hence H1 is supported. POS has moderating effect on EC (β =0.05, <0.001), hence H2 is supported. Bootstrapping is presented in figure 3.

Table 4
Direct Path coefficient

Measure		t-value	p-value		
Responsible Leadership → Employees creativity	0.049	13.477	0.000		
Perceived Organizational Support → Employees creativity	0.05	3.521	0.000		
Moderation					
POS x RL→EC	0.033	2.221	0.026		

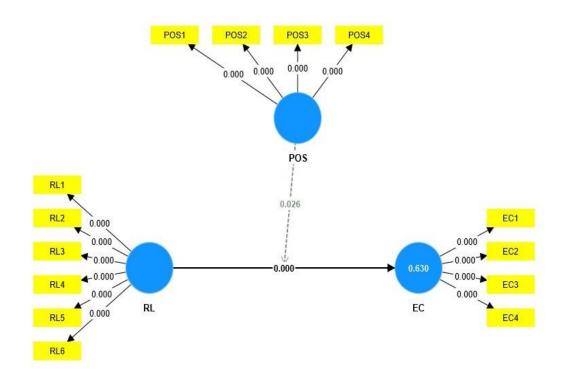


Figure 3. Bootstrapping

Discussion

H1 was developed to highlight the positive role of RL on employee's creativity (administrative employees) in public sector universities of the province Punjab, Pakistan. This positive relationship indicates that the creativity of employees is based on Responsible Leadership. The results of this hypothesis highlighted the relevance of the study of responsible leadership for employee creativity. The results of H1 are also supported by a prior study by Zulfiqar et al., (2022), who found that RL in organizations has a positive and significant effect on employee creative behavior.

H2 was developed to confirm the moderating role of perceived organizational support between responsible leadership and employee creativity. The study demonstrated that perceived organizational support significantly moderates the relationship between responsible leadership and employee creativity. The results of this hypothesis highlight the

relevance of the study of responsible leadership for employee creativity. The results of H2 are supported by previous research (Rhoades & Eisenberger, 2002). Employee creativity may be influenced by perceived organizational support as POS refers to employees' perceptions of how much the organization appreciates their efforts and cares about their well-being (Duan, et al., 2020). Creativity can be expressed through organizational support, because through POS employees feel that the organization encourages their work (Zhou & George, 2001). The present study also contradicted the findings of (Sifan, Abdallah, & Al Janini, 2018) who found a marginal effect of organizational support and employee creativity. The current study confirms that POS moderates the relationship between RL and EC.

Conclusion

SET, the current study carefully examined the effects of responsible leadership on employee creativity through the moderation of perceived organizational support. As the results of the study showed that RL has a significant effect on EC in higher education institution. Moreover, the results also proved that responsible leadership is the appropriate leadership style to enhance the creativity of managerial employees in educational environment. Additionally, perceived organizational support moderates the relationship between RL as EC.

Recommendations

HEIs (public sector universities) should focus not only on the creativity of the teaching staff (faculty) but also on the administrative staff because administrative offices play a vital role in the progress and growth of HEIs. Administrative office provide assistance not only to the students/scholars but also make the teaching activates possible and support research and development which leads towards national and international ranking.

References

- AI-Youbi, A. O., Zahed, A. H. M., Nahas, M. N., & Hegazy, A. A. (2021). *The leading world's most innovative universities* (p. 106). Springer Nature.
- Al-Husseini, S., El Beltagi, I., & Moizer, J. (2021). Transformational Leadership and Innovation: the mediating role of knowledge sharing amongst higher education faculty. *International Journal of Leadership in Education*, 24(5), 670-693.
- Alonderiene, R., & Majauskaite, M. (2016). Leadership style and job satisfaction in higher education institutions. *International Journal of Educational Management*, 30(1), 140-164.
- Amabile, T. M., & Khaire, M. (2008). Creativity and the role of the leader. *Journal of the Management Training Institute, SAIL, Ranchi, 36*(3), 48-51.
- Asgari, A., Mezginejad, S., & Taherpour, F. (2020). The role of leadership styles in organizational citizenship behavior through the mediation of perceived organizational support and job satisfaction. *Innovar*, *30*(75), 87-98.
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. Journal of the academy of marketing science, 16, 74-94.
- Bakr, M. B. B., & Almagati, H. T. (2023). Job Empowerment and Its Relationship to Job Satisfaction Among Faculty Members in Higher Education-Saudi Arabia. *Journal of Positive Psychology and Wellbeing*, 126-148.
- Blau, PM (1964). Exchange and power in social life. New York: Wiley. Carmack, JJ (2019). Motivation to Lead: Preparing Leaders of the Future through an Understanding of Role Ambiguity and Perceived Organizational Support. Journal of Leadership Studies, 13: 2-17 CNBC Indonesia.(2020). Pertamina Kerugian Rp 11 Triliun karena pandemi. *Psychology*, 86, 42-51.
- Carmeli, A., Sheaffer, Z., Binyamin, G., Reiter-Palmon, R., & Shimoni, T. (2014). Transformational Leadership and creative problem-solving: The mediating role of psychological safety and reflexivity. *The Journal of Creative Behavior*, 48(2), 115-135.
- Castro-González, S., Bande, B., & Fernández-Ferrín, P. (2019). Responsible Leadership and salespeople's creativity: the mediating effects of CSR perceptions. *Sustainability*, 11(7), 2053.
- Chen, L. F., & Khuangga, D. L. (2021). Configurational paths of employee reactions to corporate social responsibility: An organizational justice perspective. *Corporate Social Responsibility and Environmental Management*, 28(1), 389-403.
- Duan, W., Tang, X., Li, Y., Cheng, X., & Zhang, H. (2020). Perceived organizational support and employee creativity: The mediation role of calling. *Creativity Research Journal*, 32(4), 403-411.
- Eisenberger, R., Armeli, S., Rexwinkel, B., Lynch, P. D., Rhoades, L., Shanock, L. R., ... & Sarstedt, M. (2020).

- Eringfeld, S. (2021). Higher education and its post-coronial future: utopian hopes and dystopian fears at Cambridge University during Covid-19. *Studies in Higher Education*, 46(1), 146-157.
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics.
- Franzosi, R. P., Hardy, M., & Bryman, A. (2009). *Handbook of data analysis*. Dokumen Publisher
- George, J. M., & Brief, A. P. (1992). Feeling good-doing good: A conceptual analysis of the mood at work-organizational spontaneity relationship. *Psychological bulletin*, *112*(2), 310.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing theory and Practice*, 19(2), 139-152.
- Hair, J. F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the academy of marketing science*, 40, 414-433.
- Han, Z., Wang, Q., & Yan, X. (2019). How responsible Leadership motivates employees to engage in organizational citizenship behaviour for the environment: A double-mediation model, *Sustainability*, 11(3), 605.
- Hardy. M., and Bryman, A. (2009). The Handbook of Data Analysis. London: Sage Publications
- Hassan, S., & Din, B. (2019). The mediating effect of knowledge sharing among intrinsic motivation, high-performance work system and authentic Leadership on university faculty members' creativity. *Management Science Letters*, *9*(6), 887-898.
- Hirst, G., Van Dick, R., & Van Knippenberg, D. (2009). A social identity perspective on Leadership and employee creativity. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 30(7), 963-982.
- Hughes, D. J., Lee, A., Tian, A. W., Newman, A., & Legood, A. (2018). Leadership, creativity, and Innovation: A critical review and practical recommendations. The Leadership Quarterly,
- Imamoglu, S. Z., Erat, S., & Turkcan, H. (2022). How organizational identity relates to knowledge sharing and creativity: moderating effect of perceived organizational support. *Kybernetes*, (ahead-of-print).
- Ishaque, A., Iqbal, H., Zafar, M. A., & Tufail, M. (2014). Creative Workplace: A Support for Creativity Case of a Pakistani Private Sector University. *Abasyn University Journal of Social Sciences*, 7(2).
- Islam, T., Zahra, I., Rehman, S. U., & Jamil, S. (2022). How knowledge sharing encourages innovative work behavior through occupational self-efficacy? The moderating role of entrepreneurial Leadership. *Global Knowledge, Memory and Communication*, (ahead-of-print).

- Jamali, A., Bhutto, A., Khaskhely, M., & Sethar, W. (2022). Impact of leadership styles on faculty performance: Moderating role of organizational culture in higher education. *Management Science Letters*, *12*(1), 1-20.
- Javed, Khan, Bashir and Arjoon. (2017), "Impact of ethical leadership on creativity: the role of psychological empowerment", *Current Issues in Tourism*, *20*, 839-851
- Khan, A. Z., & Adnan, N. (2014). Impact of leadership styles on organizational performance. *International Journal of Management Sciences*, *2*(11), 501-515.
- Kline, R. B. (2023). Principles and practice of structural equation modeling. Guilford publications.
- Kurtessis, J. N., Eisenberger, R., Ford, M. T., Buffardi, L. C., Stewart, K. A., & Adis, C. S. (2017). Perceived organizational support: A meta-analytic evaluation of organizational support theory. *Journal of Management*, 43(6), 1854-1884.
- Laguía, A., Moriano, J. A., & Gorgievski, M. J. (2019). A psychosocial study of self-perceived creativity and entrepreneurial intentions in a sample of university students. *Thinking Skills and Creativity*, *31*, 44-57.
- Leonard-Barton, D., & Swap, W. C. (1999). *When sparks fly: Igniting creativity in groups*. Harvard Business Press.
- Newman, A., Bavik, Y. L., Mount, M., & Shao, B. (2021). Data collection via online platforms: Challenges and recommendations for future research. *Applied Psychology*, 70(3), 1380
- Paracha, M. U., Qamar, A., Mirza, A., Hassan, I. U., & Waqas, H. (2012). Impact of leadership style (transformational & transactional leadership) on employee performance & mediating role of job satisfaction. Study of private school (educator) in Pakistan. *Global Journal of Management and Business Research*, 12(4), 55-64.
- PHEC. (2023). *Universities (Public & Private HEIs)*. Higher Education Commission https://punjabhec.gov.pk/recognized-universities-and-subcampuses/
- Ranking, Q. W. (2022a). *QS World University Rankings 2022*. topuniversities: https://www.topuniversities.com/world-university-rankings/2022
- Ranking, Q. W. (2022b). QS World University Ranking. Retrieved August 1, 2023, from Topuniversities: https://www.topuniversities.com/university-rankings/world-university%20rankings/2023?®ion=Asia&countries=pk
- Rasheed, D., & Iqbal, D. (2022, November 1). Global Innovation Index 2022. *The Nation*, https://www.nation.com.pk/01-Nov-2022/global-innovation-index-2022
- Rasool, H. F. (2015). Leadership styles and its impact on employee's performance in health sector of Pakistan. *City University Research Journal*, *5*(1), 97-109
- Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: a review of the literature. *Journal of applied psychology*, 87(4), 698.
- Sadeghi, A., & Pihie, Z. A. L. (2012). Transformational Leadership and its predictive effects on leadership effectiveness. *International Journal of Business and Social Science*, *3*(7), 186-197

- Saidov, J. D., Qudratov, A. N., Islikov, S. X., Normatova, M. N., & Monasipova, R. F. (2023). Problems of Competency Approach in Developing Students' Creativity Qualities for Creating a Database. *Journal of Higher Education Theory & Practice*, 23(1), 142-149
- Shah, S. S., Shah, A. A., & Pathan, S. K. (2017). The relationship of perceived leadership styles of department heads to job satisfaction and job performance of faculty members. *Journal of Business Strategies*, 11(2), 35-56.
- Siburian, J., Corebima, A. D., & Saptasari, M. (2019). The correlation between critical and creative thinking skills on cognitive learning results. *Eurasian Journal of Educational Research*, 19(81), 99-114.
- Siswanto, S., Supriyanto, A. S., Suprayitno, E., Ekowati, V. M., Sujianto, A. E., Johari, F. B., & Ridwan, M. (2022). The effects of leadership styles on organizational innovation in universities in Indonesia and Malaysia. *The Journal of Behavioral Science*, 17(2), 90-103.
- Tierney, P., Farmer, S. M., & Graen, G. B. (1999). An examination of Leadership and employee creativity: The relevance of traits and relationships. *Personnel psychology*, *52*(3), 591-620.
- Torlak, N. G., & Kuzey, C. (2019). Leadership, job satisfaction and performance links in private education institutes of Pakistan. *International Journal of Productivity and Performance Management*. 68(2), 276-295
- Toyirovna, Y. S. (2022). The importance of integrative and creative capabilities of students of medical institutes. *BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI*, 2(1), 450-462.
- Tribune, T. E. (2017, July 5). Pakistan among least innovative countries in the world: survey. *TRIBUNE*.
- Wong, S. C. K., & Ladkin, A. (2008). Exploring the relationship between employee creativity and job-related motivators in the Hong Kong hotel industry. *International Journal of Hospitality Management*, *27*(3), 426-437.
- Yeh, H., & Hong, D. (2012). The mediating effect of organizational commitment on leadership type and job performance. *The journal of human resource and adult learning*, 8(2), 50.
- Zhou, J., & George, J. M. (2001). When job dissatisfaction leads to creativity: Encouraging the expression of voice. *Academy of Management Journal*, 44(4), 682–696.
- Zulfiqar, S., Khan, Z., & Huo, C. (2022). Uncovering the effect of responsible Leadership on employee creative behaviour: from the perspective of knowledge-based pathway. *Kybernetes*, (ahead-of-print).