

# The Impact Of Talent Management On Enhancing Creativity And Innovation, Moderated By Organizational Culture In Public-Sector Universities

Jawad Karamat<sup>1</sup>, Muhammad Anees ul Husnain Shah<sup>2</sup>, Muhammad Imran Shah<sup>3</sup>, Ume Ruqia Saadat<sup>4</sup>, Nazim Ali<sup>5</sup>, Dr. Shams ur Rahman<sup>6</sup>

## Abstract

*The objective of this study is to evaluate the influence of talent management (TM) on the levels of creativity and innovativeness at public universities located in Khyber Pakhtunkhwa, Pakistan. The study used a quantitative approach to test and verify the stated hypotheses, including a survey and descriptive and inferential statistical analyses. Furthermore, Hierarchical Multiple Regression analysis revealed that corporate culture is the relationship between innovation and TM. There is a significant positive relationship between TM, organizational culture, creativity, and innovativeness. TM boosts creativity and innovation and it is a significant positive effect of TM on creativity & innovativeness. The organizational culture's moderating effect on TM, creativity and innovation. The research found that organizational culture moderates TM's effect on creativity and innovation. The findings have significant implications for researchers and academics as they can assist in aligning TM strategies with organizational strategic objectives and establishing employee engagement benchmarks to tackle the challenges associated with implementing TM methods at public universities in Khyber Pakhtunkhwa, Pakistan.*

**Keywords:** Organizational culture, Creativity & innovativeness, KP, Pakistan.

## Introduction

In this information economy, TM (TM) is a key strategy for investing in human capital rather than land, buildings, and plants (Taamneh et al., 2021). Globalization and the opening of new markets have prompted universities and businesses to compete for highly educated workers worldwide. In 2000, McKinsey called TM a "war of talents. After that, TM became a primary answer for many business difficulties and garnered global attention from scholars (Abdullahi, Raman & Solarin, 2022). University and higher education institutions are strategic, and research-based education pays off in technologically advanced fields. Khattak (2012) said that public policies prioritize education, which boosts economies. Most significantly, higher education produces skilled workers. It becomes an organization's core competency. TM differs the business from rivals (Ashton & Morton, 2005). If the proper people are in critical roles at the right moment, an organization can launch more successful, innovative, and profitable initiatives. Despite the importance of TM, some educational institutions lack both quantity and quality. Capital expansion and staff management are essential to universities' tangible and intangible assets. These assets are crucial to their education. Financial capital, manpower, and machinery are resources.

---

<sup>1</sup>Assistant Professor, Center For Management Science And Commerce, University Of Swat.

<sup>2</sup>Associate Professor, Department of Education, University of Education Lahore, D.G Khan Campus.

<sup>3</sup>Assistant Professor, Department of Commerce, Institute of Business Administration, Gomal University, D.I. Khan

<sup>4</sup>Lecturer in Economics, Department of Commerce, GU, D.I. Khan

<sup>5</sup>Associate Professor, Department of Commerce and Management Sciences, University of Malakand.

<sup>6</sup>Assistant professor IBMS, University of Agriculture Peshawar.

For companies to function, human capital is their most significant asset, according to Kahinde (2012).

An organization contributes 45% of our skilled energy and significantly impacts national economic growth. TM in non-Western societies characterizes creativity using this information (Chaturvedi et al.2022). Deloitte (2010) found various challenges in non-Western countries. More specifically, upstream organizations have increased their TM efforts, but they still face challenges like low organizational awareness, a shortage of entry-level talent, limited appeal to potential employees, favorable opportunities abroad, limited government understanding, cyclical organizational patterns, and an aging workforce. Human resources professionals know that hiring talented workers boosts corporate performance and growth. This assumption is wrong. The gap requires strategic TM (STM), according to Schreuder and Noorman (2019) TM, organizational innovation, creativity, context, and innovation skill practices are examined. The validity scale and TM strategies' impact on HR outcomes are shown. Three strong factors led universities to pursue this research, plus additional motives. First, most TM (TM) research has come from Western countries (Mousa & Ayoubi, 2019), with not much thought paid to non-Western contexts like Pakistan (Taamneh et al., 2021). Second, universities are actively attracting and retaining top academic talent to improve educational and research quality. Lastly, teaching faculty typically seek potential in other schools, indicating a dynamic employment market where they seek better prospects. In the Pakistani context, the study was investigated that evaluate the impact of TM methods on long-term organizational performance. In addition, this study investigates the potential moderating effect of process innovation (PI) in the context of Pakistan's automotive sector. This study includes theoretical frameworks for TM techniques and sustainable organizational performance models, followed by empirical evaluations of these frameworks (Tunio, 2024). This study aims to analyze the effect of TM on, creativity & innovativeness with the moderated role of organizational culture in the public sectors Universities of Khyber Pakhtunkhwa

## Literature

The values of the people hired by institutions to do their jobs make them production factors. Meanwhile, corporations value skilled workers (Kahinde, 2012). Intellectual capital defines human resources as not tangible assets tied to people. Financial capital, market presence, human capital, and physical assets boost the company's market value (Armstrong, 2011). TM entails skillfully matching candidates to jobs (Devine, 2008).

It also guarantees that workers are using their skills to maximize the institution's success. Organizational TM includes hiring, keeping, and developing people. Public and commercial organizations recruit and help candidates set goals for roles in the developing industry (Baheshtiffar, 2011). TM is becoming more important in business and literature worldwide, especially as universities grow. TM is essential for fast-growing economies to attain institutional strategic success. Innovation affects all parts of an institution's activities, internal and external. Strategy goals, approaches to execution, and operational methods are included. It describes employment creation, living standard improvement, development, and economic growth in addition to the methods for maintaining people and organizations (Raytcheva & Hermel, 2010).

Bedi (2019) classifies decision-making management as innovation. Saunila (2017) found a clear link between innovation performance and operational performance, supporting previous studies. De Leede and Looise (2005) describe creativity as intentionally changing products and processes to beat the competition. Becker and Matthews (2008) describe innovation as implementing fresh and creative ideas within an organization and valuable

when abused. Non-Western countries have been innovation hubs in recent decades.

Thunnissen, M. (2016), The study identifies and explains what happens in TM to help construct a larger and more balanced theoretical framework that considers the organizational context and its actors. An explorative, longitudinal study on TM policies and practices at five Dutch university departments provided the empirical data. Organizations and gifted employees have differing views of TM's planned and actual value. TM works for the organization since it can design and implement a TM system. TM has less value for talented individuals because intended and real TM practices don't meet their needs. We identify institutional, organizational, and individual impacting factors

Adeinat, and Abdul Fatah, (2019), the study examines higher education knowledge management interrelationships and how university culture affects knowledge management activities including generation, dissemination, exchange, and application. The suggested paradigm connects organizational culture (OC) with knowledge management procedures. The study used the organizational culture assessment instrument to determine culture type and employed structural equation modeling to assess the linkages between the knowledge management process and OC. The factor analysis in this study suggests that an adhocracy organizational culture, which emphasizes individual initiative and employee empowerment, may not affect all knowledge management procedures equally. In a public institution, culture mostly impacts knowledge creation and sharing. The higher education adhocracy culture affects knowledge management in one cultural environment. This is also the first study to examine how OC affects knowledge management in a Saudi public university.

Tunio et al. (2024) examine the impact of people management on the long-term performance of automotive businesses in Pakistan. The study employs data gathered from 309 automotive groups to look into the relationship between employee management and sustainable performance, with a focus on how this relationship is influenced by process innovation. The current study utilized partial least-square structural equation modeling (PLS-SEM) as the method of choice for analyzing the data. The study's results are as follows: The findings indicate that TM positively influences sustainable performance, thereby supporting hypothesis H1. In addition, the study reveals that process innovation acts as a moderator, showing a statistically significant connection between TM and sustainable performance, thus supporting H2.

## **Methods and Materials**

### **Study Population, Sampling Technique and Sample Size**

#### **Data Collection Instrument**

The study population consists of a total of thirty-two universities. Furthermore, a total of five hundred and fifty questionnaires were distributed to the academic members of KP. Out of the 485 questionnaires, 400 were useable, resulting in a response percentage of 78.3%. The independent variable (TM) includes the following facets: There are a total of 05 elements that are connected to the TM system. There are 5 things that pertain to important responsibilities or positions, 5 items that pertain to recruiting talented individuals, and 5 items that pertain to nurturing talent. There are six items that pertain to succession and retention, six items that pertain to performance management and reward, six items that pertain to the identification of talent pool, and six items that pertain to executive commitment and engagement. These items have been adapted from the works of Yuniati et al. (2021), Al Aina & Atan (2020), and Abdollahbeigi et al. (2017). Regarding the moderating variable, which is organizational culture, and the dependent variables, which are HR outcomes specifically creativity and innovativeness, there are seven items related to the former and five items related to the latter (Sabri et al.2020).

**Hypotheses**

**Hypothesis 1:** "There is a significant positive relationship between TM, organizational culture, creativity, and innovativeness".

**Hypothesis 2:** "There is a significant positive effect of TM on creativity & innovativeness".

**Hypothesis 3:** "Organizational culture significantly moderates the relationship between TM and creativity and innovativeness".

**Data Analysis Techniques.**

The data was analyzed using SPSS,25 and factor analysis, which is regarded as the most stable and commonly utilized methodologies for this purpose. The surveys used to gather the data for this study's compilation contained questionnaires. In this quantitative research, the analysis methods used to evaluate the data include Validity, Reliability, Normality, Hierarchical Multiple Regression, and Pearson's Correlation. These tools were applied to examine TM, organizational culture, creativity, and innovation.

**Data Analysis(Result and Discussions)**

**Validity of the instrument**

**Table 1: Exploratory Factor Analysis**

Variables	KMO	BTS	Sig	Total Factors	No: of Base don Eigen Values
Talent Management	.743	1438.103	0.00	13	
Organizational culture	.834	683.383	0.00	01	
Creativity & Innovativeness	.743	373.843	0.00	01	

The KMO values for all variables met the requirements of being over 0.5 when assessed with the BTS. Additionally, their values were below the 0.05 threshold, and the total variation explained by the variables was larger than zero. Eigen-values showed 13 components for TM, 1 for organizational culture, and 1 for creativity and innovativeness. All item results showed factor loadings over the factor analysis threshold (Field, 2013).

**Table 2: Data Reliability**

Variables	Cronbach's Alpha	No of Items
-----------	------------------	-------------

T. Mgt	.813	44
Org. Cult	.808	7
Creat & innt	.803	5

Assessing the dependability of the information is crucial to guaranteeing the accuracy and consistency of subsequent data analysis. Cronbach's alpha is employed in the field of social sciences to assess the internal consistency and reliability of parametric data. Usually, a Cronbach's alpha coefficient of 0.6 or above indicates the dependable instrument employed. The study yielded Cronbach's alpha values of 0.813, 0.808, and 0.803 for 44 items, 7 items, and 5 items about TM, organizational culture, creativity, and innovativeness. Hence, it is evident that using the resources to analyze company culture, TM, creativity, and innovation will produce reliable outcomes.

**Table 3: SLR (Model-I)**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F	Sig.
1	.632 <sup>a</sup>	.386	.384	.3564	226.231	.000 <sup>b</sup>

Prior to doing moderation analysis, simple linear regression is used. The implementation of TM resulted in a 38% rise in creativity and innovativeness. This outcome is considered significant since the probability statistics satisfy the threshold at a 95% confidence range. The study supports H2.

**Table 4: Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1.189	.207		5.752	.000
1 TM	.7342	.050	.614	14.6	.000

TM has a beta of 0.734, according to the model coefficient. Changing TM by one unit leads to 0.734 unit changes in creativity and innovativeness ( $t = 5.752, p < 0.05$ ).

**Table 5: Multpl Hiercl Regr (Model-II)**

Variables	Coeff:	SE(B)	R <sup>2</sup>	R <sup>2</sup>	Model Summary(P)	T	P
-----------	--------	-------	----------------	----------------	------------------	---	---

	Change					
Constant	4.2727	.0203	.4093	.0142	.0000	210.1030 .0000
Organizational culture	.2024	.0513				3.9438 .0001
Talent Management (Organizational culture*Talent Management) Int	.6560	.0536				12.2492 .0000
	.4180	.1395				2.9953 .0029

The findings indicated a statistically significant relationship between TM changes and innovation, with an R-squared value of 0.41 and a p-value of less than 0.05. This suggests that TM changes account for about 40.93% of the variation in innovation. The model as a whole is statistically significant at a 95% confidence level. This research utilizes organizational culture as a means to alter the connection between TM and creativity and innovation. The observed alteration in R2 was used to examine the moderating impact and was discovered to substantiate Hypothesis H3. The research of moderation demonstrates a statistically significant relationship with a p-value of less than 0.05. The change in R2 is equal to 0.0142. The model coefficient indicates that the beta score for TM, which is an independent variable, is 0.6560. Additionally, the beta score for organizational culture, which is a modifier, is 0.2024. Furthermore, the p-value is less than 0.05. The findings indicate that there is a positive correlation between TM and creativity, with a coefficient of 0.6560. This means that for every one unit increase in TM, there is a corresponding 0.6560 unit increase in creativity. The study found that there is a positive relationship between creativity and innovativeness and the beta score of organizational culture. Specifically, for every unit change in the moderator, there is a corresponding 0.2024 unit change in creativity and innovativeness. Ultimately, the beta coefficient of the interaction term (TM \* organizational culture) indicates that for each unit increase in the interaction term, there is a corresponding increase of 4180 units in the dependent variable. I concur with the moderation criteria outlined by Aiken and West (1991) for the effective performance of a moderator, as elucidated by the authors of the notable encounter. The findings not only demonstrate the impact of adding a filter to the model, but also elucidate its effect on creativity and innovation management. The impact of a hat is similar to that of an accessory worn on the head. In other words, corporate culture serves as a mediator to mitigate the effects on individuals. Aiken and West (1991) suggest that researchers should classify the mediator into one of three groups (Low organizational culture, Moderate organizational culture, and High organizational culture) before investigating its influence on the dependent variable. It was determined that the blue line signifies a deficient organizational culture, the green line signifies a mediocre one, and the yellow line signifies a deficient one. The R2 score of 0.566 for the organizational culture suggests a poor correlation. Furthermore, there was a significant correlation of 0.752 seen between TM (task management) and creativity and invention. The coefficient of determination (R2 value) for an average organizational environment is 0.334, suggesting a modest degree of correlation. Furthermore, there exists a connection coefficient of 0.577 between TM (task management) and creativity and invention. The business culture at a high level has an R2 value of 0.381 and a correlation of 0.617.

## Discussions

According to the findings, the coefficient of determination (R2) was found to be 0.4093, and the significance level (p) was less than 0.05. This indicates that TM has a significant

impact on creativity and innovation, with a 40.93% change. The statistical significance of the model as a whole can be established with a degree of certainty of 95%. Within the scope of this investigation, organizational culture is utilized as a means of altering the connection that exists between TM and creativity and innovation. According to Jaccard et al. (1989), the reported change in R<sup>2</sup> was utilized to investigate the moderating influence, and the results of this investigation were found to provide support for Hypothesis H3. According to the findings of the moderation study, the R<sup>2</sup> change is equal to 0.0142, and the p-value is lower than 0.05. The model coefficient reveals that the beta score for TM, which is an independent variable, is 0.6560, and the beta score for organisational culture, which is a modifier, is 0.2024. Furthermore, the p-value is less than 0.05. Based on the findings, it was determined that there will be a 0.6560 unit change in creativity for every one unit change in TM. There will be a 0.2024 unit change in creativity and innovativeness for every unit change in the moderator, according to a beta score of organisational culture. This was found to be the case for both creativity and innovativeness. Additionally, the beta value of the interaction term (TM \* organisational culture) demonstrated that there is a 4180 unit change in the dependent variable for every unit change in the interaction term. This was the conclusion reached by the researchers. According to the authors of the substantial interaction, I concur with the criteria for moderation that were presented by Aiken and West (1991). These criteria are necessary for a moderator to be able to do their duties effectively. Not only do the findings demonstrate what occurs when a filter is incorporated into the model, but they also provide an explanation of the impact that management has on creative efforts and innovative ideas. Similar to the hat effect. To put it another way, the culture of an organization serves as a moderator to reduce the influence on individuals. Prior to investigating the impact of the mediator on the dependent variable, researchers must categorize the mediator into one of three groups: low organizational culture, moderate organizational culture, or high organizational culture, as suggested by Aiken and West (1991). The prevalence of a weak organizational culture is widespread. The blue line represents a low organizational culture, the green line represents a moderate organizational culture, and the yellow line represents a terrible organizational culture. A poor organizational culture was shown to have an R<sup>2</sup> value of 0.566, whereas a correlation of 0.752 was detected between TM and creativity and innovation. The organizational environment, which is deemed average, has an R<sup>2</sup> value of 0.334 and a correlation of 0.577 between TM (teamwork) and creativity and invention. The coefficient of determination (R<sup>2</sup>) for high corporate culture is 0.381, but the correlation coefficient at the root level is 0.617. Both of these values are significant. Talking Points When it comes to the tangible and intangible instruments that institutions have at their disposal, TM is one of the most prominent issues of discussion in the knowledge economy. Dhanalakshmi and Gurunathan (2014) state that assets are used to manage staff and that human capital is prioritized over physical capital. The researchers then went on to inferential statistics after ensuring that the assumptions of descriptive statistics were satisfied.

Pearson's Correlation is utilized in this study to evaluate the correlations between the variables under investigation and fulfil the research's primary purpose. The presence of a positive R-value and a p-value less than 0.05 highlights the existence of a significant correlation between TM, creativity, innovation, and organizational culture. The hypothesis "H1" has been confirmed in light of these observations. This indicates that the university's competitiveness will be increased through TM and a supportive culture and that it will be able to keep seniors, which will allow it to offer outstanding education and research and differentiate itself from other institutions. Higher education institutions should make investments in TM by modifying their human resource policies to reflect the significance of TM, the culture of the organization, and the beneficial influence it has on creativity and innovation. This would make it easier for these institutions to acquire a competitive advantage. Chaturvedi et al. (2022) all agree that the findings of this study provide credence to Miner's (1973) theory. The second objective of the study was to evaluate the influence that TM has on creative thinking and innovation. Using a straightforward linear regression analysis, the researcher investigated the influence that TM has on creative and innovative

thinking. The results revealed that TM had a considerable impact on creativity and innovation, with a correlation coefficient of 37.7% ( $p < 0.05$ ). When it comes to TM, every unit change increases "0.755" units in creative and innovative output, which indicates a positive influence. In light of the facts, hypothesis two (H2) is supported. Several studies, including Hewitt Associate (2003), Chaturvedi (2021), and Bounfour and Miyagawa (2015), provided evidence in favor of the findings of the research.

The third objective of this research was to investigate how organizational culture influences TM, creativity, and innovativeness. In the current inquiry, multiple hierarchical regression and a Model-1 process file were utilized (Hayes, 2013). All aspects of the model have a significant influence on creative and inventive thinking ( $R^2 = 40.93\%$ ,  $p < 0.05$ ). The results of the moderation analysis indicate that organizational culture acts as a buffer for the relationship between TM and creativity and innovativeness. The  $R^2$  change for TM was found to be 0.0142, with a p-value of less than 0.05. The beta value for organizational culture was found to be 0.6560, with a p-value of less than 0.05. The beta value for the interaction term was found to be 0.2024, with a p-value of less than 0.05. Existing evidence lends support to the third hypothesis, which is H3. The researcher will investigate the conditional impact of the moderator and the independent variable on the dependent variable. An interaction plot was utilized by Aiken and West (1991) in order to investigate conditional effects. They discovered that there were large, moderate, and low organisational culture impacts. In addition, the current research discovered that organisational culture acts as a buffer between TM and HR outcomes such as creativity and innovativeness. Nevertheless, the research also revealed a significant moderating impact between creativity and innovativeness, indicating that TM had a role in enhancing university innovativeness.

### Conclusions

Western and non-western universities are facing shortages in TM which adversely affect education and research quality and result in the departure of senior professors. To address these issues, TM strategies offer a framework and effective solutions to enhance HR outcomes through skilled employees. To achieve the main goal, the researcher performed a correlation study to assess the connection between TM, creativity and innovativeness, and organizational culture. There is a strong and positive correlation between the parameters. Evidence indicates that the initial goal of the research has been achieved. The study's second goal was to evaluate how TM affects originality and inventiveness. Simple linear regression was applied. The study's second goal is achieved by showing that TM boosts creativity and innovation. Hayes' process was used to analyze organizational culture's moderating effect on TM, creativity and innovation. The research found that company culture moderates TM's effect on creativity and innovation, achieving aim three. The first and second objectives show that TM helps public-sector institutions KP benefit from their qualified faculty. Managers, administrators, policymakers, and academics should prioritize TM activities in both practical and academic settings. Talented university employees contribute to innovation, creativity, academic work, research, and overall performance. Research has shown that university cultures failing to support or retain talented personnel hinder performance and do not have suitable replacements for senior staff.

### Implications

The study increased my comprehension of human management, corporate culture, creativity, and innovation. These results have significance for researchers, colleges, institutions, and academics. Miner's theory (1973) and its underlying hypotheses are used to examine whether organizational culture moderates the connection between TM and HR outcomes in public sector institutions in emerging economies such as Pakistan. By citing



Miner's work, the author contextualizes their discovery historically. and shows a deep comprehension of the fundamentals. The theory benefits from this broad and contextualized framework for contemporary investigation. This intentional relationship allows the author to use Miner's findings to illuminate new dimensions, expanding comprehension and advancing theory. Multiple studies have explored how the behaviors and abilities of organizational members, as well as human resource development practices within organizations, contribute to the improvement of HR outcomes in public-sector universities in developing economies. It is crucial to establish a connection to understand how human behaviors and organizational HR practices can enhance HR outcomes, particularly within public-sector organizations in developing countries. This study recommends that public university leaders recognize the possibilities member networks create. It encourages public-sector university top management, administrations, managers, and policymakers to recognize the many scenarios created by networked organizational relationships (Lombardi, 2017; Neri & Wilkins, 2019). Organizations must also respond to various internal and external data and social pressures to implement new TM techniques to improve HR performance.

## References

- Abdollahbeigi, B., Salehi, F., & Jayashree, S. (2017). The effect of recruitment, selection and development on talent management in IKCO company in Iran. *International Journal of Advanced Engineering and Management*, 2(3), 69-77.
- Abdullahi, M. S., Raman, K., & Solarin, S. A. (2022). Talent management practices on employee performance among academic staff of Malaysian private universities: employee engagement as a mediator. *Journal of Applied Research in Higher Education*, 14(1), 135-158
- Adeinat, I. M., & Abdulfatah, F. H. (2019). Organizational culture and knowledge management processes: case study in a public university. *VINE Journal of Information and Knowledge Management Systems*, 49(1), 35-53.
- Aiken, L. S. & West, S. G. (1991). *Multiple Regression: Testing and Interpreting Interactions*.
- Al Aina, R., & Atan, T. (2020). The Impact of Implementing eTalent Management Practices on Sustainable Organizational Performance. *Sustainability*, 12(20), 8372.
- Armstrong, M. (2011). *A handbook of Human Resource Management practices* (10th ed).
- Ashton, C., & Morton, L. (2005). *Managing talent for competitive advantage: Taking a systemic approach to talent management*. Strategic HR review.
- Baheshtiffar, M. (2011) Role of Career Competencies in Organization. *European Journal of Economics Finance and Administrative Sciences*, 42(1) pp 201-221.
- Becker, K.L. and Matthews, J.H. (2008) 'Linking HRM and innovation: formulating the research agenda', in 22nd ANZAM Conference 2008: *Managing in the Pacific Century*, Auckland, New Zealand, 2-5 December.
- Bedi (2019) Saunila (2017) De Leede and Looise (2005), . Becker and Matthews (2008) Thunnissen, M. (2016),
- Bedi, H.S. (2019) 'Innovativeness, business performance and environmental uncertainty: a multivariate configuration', *International Journal of Business Innovation and Research*, 18(3), pp.328-345.
- Chaturvedi, S., Bahuguna, P. C., & Raman, U. (2022). Developing innovativeness and competency through talent management in Indian oil and gas sector. *International Journal of Business Innovation and Research*, 27(2), 223-241.
- De Leede, J. and Looise, J.K. (2005) 'Innovation and HRM: towards an integrated framework', *Creativity and Innovation Management*, 14(2), pp.108-117.
- Deloitte (2010) *Talent Edge (2020): Blueprints for the New Normal*.
- Devine, M.P. (2008) *Talent Management in Public Sector*. Ashridge business School. Retrieved on 22nd May 2013 from [Http/www.ashridge.org.UK](http://www.ashridge.org.UK).
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. sage.
- Kahinde J. S. (2012). Talent management effect on organization performance. *Journal of management research* volume 4 (2) 76-88.
- Khandekar, A. and Sharma, A. (2005) 'Managing human resource capabilities for sustainable competitive advantage: an empirical analysis from Indian global organisations', *Education and Training*, 47(8), pp.628-639.
- Khattak, N. U. R. (2012). The contribution of education to economic growth: evidence from Pakistan. *International Journal of Business and Social Science*, 3(4),145-151
- London & Philadelphia: Kogan Page Limited.

- Mousa, M. and Ayoubi, R.M. (2019), "Talent management practices: perceptions of academics in Egyptian public business schools", *Journal of Management Development*, 38(10), pp. 833-846. Newbury Park, CA: Sage.
- Raytcheva, S. and Hermel, P. (2010) 'Does human resource management based on creativity enhance the innovation capability? An exploratory study of French firms', *International Journal of Engineering*, 40(2), pp.231–238.
- Sabri, P. S. U., Ilyas, M., & Amjad, Z. (2011). Organizational culture and its impact on the job satisfaction of the University teachers of Lahore. *International Journal of Business and Social Science*, 2(24), 121-128.
- Saunila, M. (2017) 'Is innovation performance measurement beneficial for performance in services?', *International Journal of Business and Globalisation*, Vol. 18, No. 1, pp.27– 41.
- Schreuder, R. and Noorman, S. (2019), "Strategic talent management: creating strategic value by placing top talents in key positions", *Development and Learning in Organizations*, 33(1), pp. 1-4.
- Taamneh, A. M., Taamneh, M., Alsaad, A., & Al-Okaily, M. (2021). Talent management and academic context: A comparative study of public and private universities. *EuroMed Journal of Business*
- Thunnissen, M. (2016). Talent management: For what, how and how well? An empirical exploration of talent management in practice. *Employee Relations*, 38(1), 57-72.
- Tunio, M. K., Hamid, A. B. A., Latiff, T. D. A. S. A., Hafeez, M., & Tunio, F. M. (2024). Impact Of Talent Management On Organizational Sustainable Performance: A Moderating Role Of Process Innovation. *Educational Administration: Theory And Practice*, 30(5), 3375-3390.
- Yuniati, E., Soetjipto, B., Wardoyo, T., Sudarmiatin, S., & Nikmah, F. (2021). Talent management and organizational performance: The mediating role of employee engagement. *Management Science Letters*, 11(9), 2341-2346.