

The Role of Human Resource Management (HRM) in Enhancing Teachers' Teaching Competencies (TTC) During Pandemic Situation

Sadia Abdul Ghaffar

Department of Education,
BUIEMS, Quetta

Sadiaabdulghaffar73@gmail.com

Syeda Sana Zaidi

PhD Scholar,
Department of Education,
IOBM, Karachi

Syedazaidi.sana@gmail.com

Abid Ali

Department of Education,
BUIEMS, Quetta

abid.ali1@buiems.edu.pk

Abstract

Introduction: This research explores the impact of Human Resource Management (HRM) on improving teachers' teaching practices amidst pandemic challenges. The study investigates the relationship between HRM and teachers' teaching competencies, aiming to contribute insights into the crucial role of HRM in fostering effective teaching during unprecedented situations.

Problem Statement: Unprecedented situations, such as the ongoing pandemic, have posed challenges to teachers, necessitating adaptability in teaching practices. This study addresses the need to examine how HRM interventions can enhance teachers' competencies in navigating these challenges, ultimately benefiting both educators and students.

Methodology: The research employed a quantitative approach, utilizing a survey questionnaire with Likert scale responses from 120 elementary school teachers.

Data analysis involved statistical techniques using SPSS, including frequency tests, descriptive statistics, reliability analysis, Pearson correlation, and regression analysis.

Results: *Analysis of respondents' profiles revealed a predominantly female, married, and academically diverse group of teachers. Descriptive statistics indicated moderate levels of Human Resource Management (Mean=1.7575) and Teachers' Teaching Competencies (Mean=1.7150). The reliability analysis confirmed the consistency of the data (Cronbach's Alpha HRM=0.869, TTC=0.861). Correlation analysis demonstrated a significant positive relationship between HRM and TTC ($r=0.527$, $p<0.01$). Regression analysis further supported a significant impact of HRM on TTC ($R=0.278$, $p<0.05$).*

Recommendations: *Based on the findings, it is recommended that educational institutions and policymakers prioritize HRM strategies to enhance teachers' teaching competencies during challenging circumstances. Continuous professional development and support from HRM can contribute to improved teaching practices, ultimately benefiting the overall quality of education. This research provides valuable insights for educators, administrators, and policymakers seeking effective strategies to navigate educational challenges during pandemics.*

Keywords: *Human Resource Management (HRM), Teaching Competencies, Pandemic Teacher Development, Educational Resilience*

Introduction

Globally there is a rapid change in the existing situation of teaching and learning process. Surprisingly little work has been done on teachers' teaching competencies, pedagogies and instructional strategies, due to lack of awareness of communication, information, and interaction between teachers', communities and societies (Çayak, & Eskici, 2018). These are the key factor of any educational institution that bring improvements (Ahmad, Sewani, & Ali, 2021). Globally is having an impact on teachers' and their learning in the ways of educational professional development, standardized teaching and learning and being used as a tool in order to improve teachers' teaching skills (Jabeen, Ali, & Ahmad, 2023). Unqualified teachers have many obligations but lack the abilities to handle them (Ali, et al., 2023). Teachers' lack of abilities shows in their students. Professional development encompasses a person's career development, which is crucial to their field (Jansen, et al., 2022). Professional learning activities improve schools, students, teachers, skills, knowledge, capabilities, abilities, competencies, and classroom practices (Pak, et al., 2019). Human resource management has helped teachers enhance their teaching.

Workshops, mentorship, coaching, short courses, certificate courses, conferences, seminars, observations, peer coaching, school visits, and INSET training programs are professional learning activities (Raza & Ahmed, 2017). These exercises improved teachers' interest and teaching (Sorensen, & Dumay, 2021). Literature aids teacher training programs to improve classroom practices by improving abilities, knowledge, competencies, and experiences (Ahmad, Sewani, & Ali, 2021). Many national and international academics have emphasized teachers' personal and professional development. This study aims to increase teachers' skills, knowledge, abilities, competencies, experiences, and learning practices through professional training. HR plays a significant role in assisting teachers by offering training that improves their teaching practices, learning experiences, and professional and personal development during pandemics. Duy, (2015) also suggests that students' teachers should like getting to know students, planning, organizing, and managing classroom tasks. Teaching is difficult, but teacher training is an art to build teachers' skills, knowledge, competences, abilities, experiences, and classroom practices to improve student accomplishment and learning. Teachers must learn more effectively to promote high-order thinking and scaffolding to improve student performance and learning experiences (Andersen, S., Leon, Patel, Lee, & Simanton, 2022). Teachers must have basic and advanced professional development to achieve it (Hafeez, Iqbal, & Imran, 2021).

Teacher professional and technological development is a hot topic today. Teachers are overburdened and lack the abilities to handle them (Ali, et al., 2023). This lack of abilities shows in their students (Ahmed, Ahmed, & Buriro, 2023). Teachers should gain more complicated analytical and digital abilities to help students develop higher-order thinking and improve their performance and learning experiences. Staff development is needed to transform the school system nationally and globally. The major initiative in this pandemic situation is to bring improvement in teachers,' their self-efficiency and effectiveness that highly related to quality of education and classroom practices (Karademas, & Thomadakis, 2023).

For this mission, *HR management* system offer professional development programs, courses and short and long term sessions in order to improve teachers teaching practices, lesson planning's, assessments, observations, activities and methodologies (Silvhiany, 2022) that help teachers to improve their instructional skills to teach specific kind of contents. Professional development as a systematic, beginning, and ongoing process of educator professional development based on professional skills. To introduce innovations that improve teachers and

managers' roles in education, teachers' professional programs will include training. The core motive of this study / research is to explore the notions of teachers' professionalism, teaching practices and professional development by investigating the views of in-service primary teachers in Pakistani Context (Mohebi, AlMohsen, & Alshamsi, 2023).

Literature Review

Globalization has a huge impact on teaching because countries share knowledge, technologies, experiences, implications, and applications to solve problems and serve common human values (human rights, equality, justice, etc.) to lead understanding and provide opportunities for teachers. Irfan et al. (2023) found that workplace training is becoming more important, focusing on teachers' learning to achieve results. This study emphasized workplace professional learning issues (Imran, et al., 2023). Human resource management may help promote teachers' involvement in school growth, which is crucial for sustained transformation. This will encourage instructors to be learning-oriented, setting an example for lifelong learning (Hussain, et al., 2023).

According to Afzal, & Crawford, (2022) projects teachers' education's role in various publications throughout the past decade. This survey shows teachers' professional growth and educates them personally and professionally. This paper outlines teacher education and personal and professional growth. Oo, & Alonzo, (2023) propose a training and development theory to improve AFL. The goal of this study is to work on CBE for in-service teachers. AFL is improved by reflecting on idea of improvement and CBE. This study used inquiry, personal, and other cycles. In her Greece case study, Kalman, Kalender, and Cesur, (2022) emphasizes teachers' professionalism in training and growth. This empirical study examined in-service teachers in Greece to see if they needed training to improve results. Professional learning needs are rising in every educational institution. Continuous learning and development are needed for effective results.

Human resource management must take initiatives and measure actions to meet teachers' professional needs, such as online courses and workshops, to improve teachers' competencies and skills. Professional development trainings promote teacher learning, hence all schools should priorities them (Gao et al., 2022). Teacher competencies as knowledge (declarative, procedural, and conditional), meta cognition, skills, and social recognition. Declarative knowledge is what you know, procedural knowledge is how to perform, and conditional knowledge is when and where to

use it. Meta cognition is self-awareness. He/she obtains social acknowledgment from management, coworkers, students, parents, and community members for doing jobs well. Professional expertise is crucial for career growth and greatly enhances employability potential (Muhaimin, Verry, & Sabarudin, 2022).

Dew (2022) explain how two scientific studies affected LAUSD teaching practises. This project trains instructors to promote scientific inquiry in study. This study aims to improve elementary school science instruction. Workshop reflection, classroom observation, and immersion coefficient were used to collect data for the study. Scientific investigation should be used in classrooms, according to this research.

Ali, et al., (2023) emphasize ICT professional growth of teachers. The expanding requirement for high-speed internet helps learners learn and understand technology and improves teachers' self-efficiency and effectiveness in enhancing teaching practices. Teacher training was intended to impart IT knowledge. Two simultaneous aspect-based models focused on collaborative teacher learning and practical use of their learning were constructed to test such a theory. These ideas focused on social cognitive outcomes including teachers' organizational commitment and student influence/responsibility. This survey included 246 primary finishing school instructors. This study found that teacher involvement in communities of practice is positive and that external supportive groups boost instructor influence on students. Internal involvement in communities of learning increases teachers' organizational commitment, according to this study. Involving teachers in external support groups helps them gain fresh teaching ideas.

Noor & Nawab (2022) aimed to study teacher's workplace learning and the barriers they face or the factors which influence their learning in private schools of Pakistan. The findings show that teacher's workload which inhibits their participation in learning activities; lack of awareness that decreases their participation as they do not know that an opportunity is available for their professional development, and lack of rewards which do not motivate employee to attend such training programs are the factors inhibiting teachers from the training program (Gao et al., 2022). The researcher suggests the facilities and culture should be made in the school so that workplace learning can be effective.

Patfield, Gore and Harris (2023) suggests that a professional development is a core feature to effect professional expertise. That provides a starting to the researchers and school administrators can evaluate its effectiveness. This research focuses on a content, active learning,

coherence, duration, and collective participation of teachers. Teacher professional development is the key to improve the quality and learning standard of schools. Many educationists focused on teachers learning to improved instructions, practices and learning experiences in order to increase student learning. Professional development programs make teachers effective positively to improve their teaching practices and understanding of success or failure of the system.

Methodology

The purpose of this research study was to investigate the role of human resource management and their active involvement in order to improve teachers' teaching practices during pandemic situation. This study aims to investigate the relationship between human resource management and teachers' teaching practices. Further this research study was conducted to examine the impact of human resource management on teachers' teaching practices. Therefore, survey questionnaire was used to collect the data based on five likert scale from seven elementary school teachers through Google form on social media and 120 teachers participated actively with completed forms. According to the Brahman (2001) quantitative approach is scientific in nature and it is also used to analyze the statistical data for saving time and resources by using SPSS to calculate numbers, percentages and charts or figures. The data was analyzed through SPSS. Following test was run to analyze the data. Frequency, to take out the percentages and Descriptive statistics to observed the variances between mean and standard deviation, Reliability analysis used to examine the consistency of the data, Pearson Correlation used to see the exist relationship between variables and Regression was used to see the impact of variables.

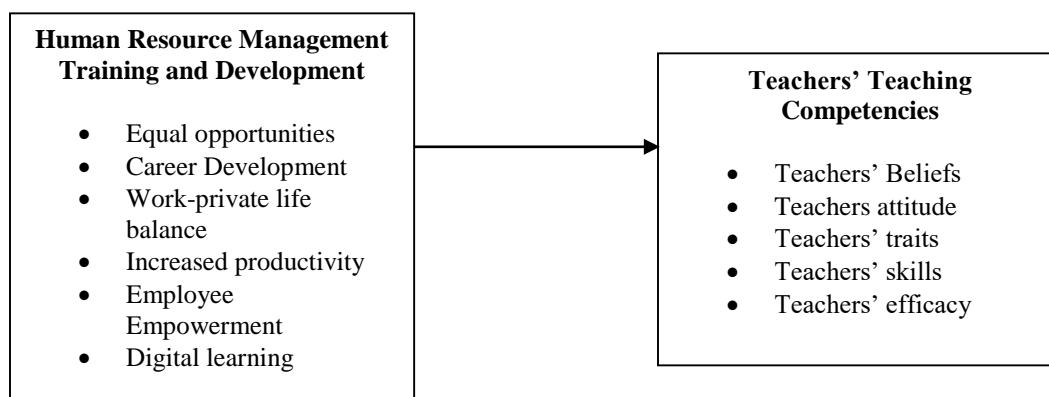


Figure 1: Research framework

Results and Data Analysis

This study used frequency test to get participation percentages. The background showed that 8.3% (10) of 120 participants were male and 91.7% (110) female. Marital status was 33.3% (40) married and 66.7% (80) single. 5.0% (6) had intermediate academic qualifications, the survey questionnaire's minimum. 20.0% (24) were bachelors, 53.0% (64) masters, 20.0% (24) MBAs, and 1.7% (2) M.Phils.

In terms of professional qualifications, 28.3% (34) were Montessori Directress, 26.7% (32) had B.Ed degrees from various institutions, 3.3% (4) had diplomas in early years education, 13.3% (16) had certificate courses, and 28.3% (34) had not engaged in any learning

Regarding their age, 60.0% (72) respondents were 20-25 years old, 15.0% (18) were 26-30 years old, 8.3% (10) were 31-35 years old, 11.7% (14) were 36-40 years old, 5.0% (6) were 41-45 years old, and none were 46-50 years old. 38.5 % (46) had less than a year of experience, 23.3% (28) had 1-3 years, 15.0% (18) had 4-6 years, 11.17.0% (14) had 7-9 years, 10.0% (12) had 10-12 years, and 1.7% (2) had 13-15 years.

Table1: Respondents' profile

Variables	Category	Frequency	Valid Percent
Age	20 to 25	72	60.0
	26 to 30	18	15.0
	31 to 35	10	8.3
	36 to 40	14	11.7
	41to 45	06	5.0
Education	Intermediate	06	5.0
	Bachelors	24	20.0
	Masters	64	53.0
	MBA	24	20.0
	M.Phil	02	1.7
Experience	Below one Year	46	38.5
	1 to 3 Years	28	23.3
	4 to 6 Years	18	15.0
	7 to 9 Years	14	11.7
	10 to12 Years	12	10.0
	13 to15 Years	02	1.7
Professional Education	Montessori Directress	34	28.3

	B.Ed	32	26.7
	EYE	04	3.3
	Others	16	13.3
	None	34	28.3
Marital Status	Married	40	33.3
	Unmarried	80	66.7
Gender	Male	10	8.3
	Female	110	91.7
Total		120	100.0

Descriptive Statistics

The following table shows the analyses of descriptive statistics which is between 1-5 considered the values at moderate level.

Table 2: Descriptive Statistics

Variables	Mean	Standard Deviation
Human Resource Management	1.7575	0.40160
Teachers Teaching Competencies	1.7150	0.43539

Reliability analysis

According to Sekaran (2006) the acceptable Cronbach's Alpha values should be greater than 0.7 which indicates the consistency reliability of the variables are acceptable for further analysis. The result of reliability analysis is shown in the below table 3.

Table 3: Reliability score

Variables	Items	Cronbach's Alpha
Human Resource Management	20	0.869
Teachers' Teaching Competencies	20	0.861

Analysis of Research Objective One

The primary purpose of this study is to "To examine the relationship between human resource management and teachers' teaching competencies" using the research question "Is there any relationship?" The Research Question becomes a Hypothesis.

H₀₁: There is no significant relationship between human resource management and teachers' teaching competencies.

Ha1: *There is a significant relationship between human resource management and teachers' teaching competencies.*

Table 4:

		Correlation	
		HRM	TTC
HRM	Pearson Correlation	1	
	Sig. (2-tailed)		
TTC	Pearson Correlation	.527**	1
	Sig. (2-tailed)	.000	

** . Correlation is significant at the 0.01 level (2-tailed).

Pearson's Correlation Statistics (r) showed the link between variables, according to Hair (2005). In the above table 4 the result has shown the value of correlation coefficient is 1 this mean that there is a perfect moderate correlation between human resource management and teachers' teaching competencies, ($r=0.527^{**}$ respectively) with the *p-value* 0.000 which is < 0.05 which means that the relationship is significantly positive and correlated with each other. Hence, the alternative hypothesis of this study has been accepted.

Objective Two analysis

The second purpose of this study is to “To investigate the effects of human resource management on teachers' teaching competencies”—in other words, “Does human resource management have any impact on teachers' teaching competencies”. The Research Question becomes a Hypothesis.

H02: There is no significant effects of human resource management on teachers' teaching competencies.

Ha2: There is a significant effects of human resource management on teachers' teaching competencies.

For the examination of Hypothesis, linear regression is used for further findings. The outcomes of regression are stated below.

4.5.1 Regression

Table 4.5.1

		Model Summary b			
Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate

How to Cite: Ghaffar, S. A., Zaidi, S. S., & Ali, A., (2023). The Role of Human Resource Management (HRM) in Enhancing Teachers' Teaching Competencies (TTC) During Pandemic Situation. *Spry Contemporary Educational Practices (SCEP)*, 2(2), 223-236. <https://doi.org/10.62681/srvpublishers.scep/2/2/7>

1	.527a	.278	.272	.34268
---	-------	------	------	--------

a. Predictors: (Constant), HRM

b. Depended Variable: TTC

The above table gives us the values of 'R', 'R Square' and 'Adjusted R Square'. The value of R represents the correlation between human resource management and teachers teaching competencies. Whereas the value of 'R Square' which is 27.8% shows the adequacy of the model. Hence Adjusted R-Square gives the more accurate information about the model fitness.

ANOVA

Table 5

ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	5.336	1	5.336	45.441	.000b
	Residual	13.857	118	.117		
	Total	19.193	119			

a. Dependent Variable: TTC

b. Predictors: (Constant), HRM

The table above shows three rows of test results. In the first row, regression shows model variability due to known factors. The second-row residual represents random error or unknown causes of variability. Based on the F-value of 45.441 and p-value of 0.000 (< 0.05), we reject the null hypothesis and accept the alternative hypothesis, concluding that human resource management does not equal instructors' teaching competencies.

Coefficient

Table 6

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.860	.131		6.586	.000
	HRM	.486	.072	0.527	6.741	.000

a. DV: TTC

The coefficient table above shows constant and coefficient values and importance. Create an ordinary least square (OLS) equation and test the independent variable hypothesis using the regression coefficient and constant term in column B.

. Thus, we can represent the regression equation as:

$$TTC = (0.860) + (0.486) HRM$$

After testing our hypothesis, the regression coefficient p-value is 0.000, which is <0.05 .

Therefore, we can reject the Null hypothesis and accept the Alternative hypothesis. We found that the regression coefficient is not zero.

Discussion

Workplace learning encompasses organized and unstructured on-the-job activities that develop new skills needed for effective work practices and the conditions impacting workplace learning in a Pakistani private school. Some workplace learning activities are started by management or teachers (Raza & Ahmed, 2017). HRM and teachers' teaching competencies are the focus of this study. This study details and displays HR management. Human resource management involves organizing teacher training programs to encourage professional development. HR management comprises learning opportunities, work routine relaxation, friendly environment, advice, and facilitation.

Teaching competences (TTC) must be organized and supported by all educational institutions. This pandemic study emphasizes teacher professional development. However, this study's findings imply that instructors are less driven to improve professionally, although human resource management can assist professional learning activities.

From the findings of the study, suggest that when professional learning activities organized by human resource management itself for their teachers in order to improve their teachers' instructional learning, competencies, skills by providing them a feasible learning environment with efficiency and effectiveness in order to meet the need of the student during pandemic situation. There is a huge lacking during lockdown. Most of the teachers were not IT (Information technology) literate and were not familiar with the usage of software's. In this peak time when everybody stressed, depressed, frustrated and have anxiety of being alone and bound to not to go outside, not to meet someone nor allow to visit mall, organizations, family, friends and relatives. In this worst situation where everybody got fired or terminated from their institutions and mostly were school teachers who didn't get their salaries too. Some of the school's human resource management played a vital role to encourage their teachers by providing them learning opportunities as well as to facilitate and guide them about the uses of software's and technology

as a tool to work from their home with safety and healthy. According to this study the relationship between human resource management and teachers' teaching competencies were positively significantly correlated with each other and was proven through findings and the research objectives, research questions and hypothesis is highly yielding the positive outcome of this study.

Conclusion, Recommendation and Implications

During the world stage, Global education was needed to educate students and instructors on experienced changes (Ali, Ahmad, & Sewani, 2022). The study found that school organizations should foster teacher learning and professional growth. Our study found that human resource management best predicts teacher participation in professional learning. Teacher competency improvement was favorably connected with human resource management in organizing professional learning events. This may suggest that workplace learning activities affect instructors' classroom practices more than professional development trainings. Prolonged, cohesive, and intense professional development also improves teaching and learning (Shulman & Shulman, 2009). As an independent variable, human resource management has a considerable impact on teachers' instructional competencies. Human resource management advises that teachers' professional development should be well-planned and organized for ongoing teaching practices. Human resource management provides facilities, social support, and supervisor attention for career development to improve instructors' teaching skills. HRM includes moral and ethical assistance for teachers as well as physical and logistical help. HRM provides teachers with professional development to meet their needs throughout the pandemic and to help them learn. These possibilities helped teachers develop (Darling-Hammond & McLaughlin, 1995). Active learning allows teachers to implement new tactics in this setting Patfield, Gore and Harris (2023). HR wanted to strengthen teacher teaching practices to improve classroom management by offering alternate or extra professional development. New teachers or those with low self-efficacy in student engagement or instructional tactics may benefit from professional learning events. Human resource management dominates instructors' instructional practices, according to research. This study showed the importance of professional development learning activities and human resource management in reforming and improving teacher practices. Teacher learning is inspired by this process. Experience and practice allow people to learn from and with others in professional development. Future study may include private, public, madrasa, community-based, college, and

university settings. This topic could be explored by studying internal and external constraints to professional development and career advancement at work. In order to promote student learning, teacher education, career, professional development, career progression, and equitable opportunities, pay scale, remuneration, and benefits must be understood. Organizational transformation is driven by HRM. To encourage learning, teachers might be verbally motivated, given incentives and allowances, and given certificates, salary increases, and grade promotions.

References

- A., Verry, V., & Sabarudin, R. (2022). Increasing Teachers' Competence Through Human Resources Management in Implementing Online Learning. *Jurnal Pendidikan dan Konseling (JPDK)*, 4(3), 1624-1633.
- Afzal, F., & Crawford, L. (2022). Student's perception of engagement in online project management education and its impact on performance: The mediating role of self-motivation. *Project Leadership and Society*, 3, 100057.
- Ahmad, N., Sewani, R., & Ali, Z. (2021). Impact of Head-teachers' Instructional Approaches on Teachers competencies at Campus Schools in Karachi. *Pakistan Social Sciences Review*, 5(4), 131-146.
- Ahmed, S., Ahmed, S., & Buriro, A. (2023). Strategies and Best Practices for Managing Cost Overruns in the Construction Industry of Pakistan. *Propel Journal of Academic Research*, 3(1), 28-55.
- Ali, Z., Ahmad, N., Rehman, H. U., Ullah, N., & Zahra, T. (2023). Investigating Teacher Educators' Perceptions on Technology Integration in Teacher Preparation Programs. *Journal of Social Sciences Review*, 3(2), 341-355.
- Ali, Z., Ullah, N., Ahmad, N., Yaqoob, N., & Saba, F. (2023). Teachers' Perceptions of Curriculum Change and the Need of Professional Development for Effective Teaching Practices. *Multicultural Education*, 9(1). 83-90.
- Andersen, S., Leon, G., Patel, D., Lee, C., & Simanton, E. (2022). The impact of COVID-19 on academic performance and personal experience among first-year medical students. *Medical Science Educator*, 32(2), 389-397.
- Çayak, S., & Eskici, M. (2018). Globalization: In Terms of Teachers' Opinion and Metaphorical Perceptions. *World Journal of Education*, 8(3), 44-55.
- Cochran-Smith, M., and S. L. Lytle. 1999. "Relationships of Knowledge and Practice: Teacher Learning in Communities." *Review of Research in Education* 24 (1): 249–305.
- Cordingley, P. 2013. The Contribution of Research to Teachers' Professional Learning and
- Darling-Hammond, L., & McLaughlin, M. W. (1995). Policies that support professional development in an era of reform. *Phi delta kappan*, 76(8), 597-604.

- Darling-Hammond, L., & Richardson, N. (2009). Teacher learning: What matters? How teachers learn. *Research Review*, 66(5), 46-53.
- Dew, Z. (2022). *Relationship Between Classroom Environments and Social Emotional Learning in LAUSD High Schools Amidst the COVID-19 Pandemic* (Doctoral dissertation, California State University, Northridge).
- Duy, T. B. (2015). The Effects of Teacher Professional Development on Teaching Practice and Student Learning Outcome. *EDUCARE*, 7(2).
- Gao, Y., Zeng, G., Wang, Y., Khan, A. A., & Wang, X. (2022). Exploring educational planning, teacher beliefs, and teacher practices during the pandemic: a study of science and technology-based universities in China. *Frontiers in psychology*, 13, 903244.
- Hafeez, A., Iqbal, S., & Imran, M. (2021). Impact of Devolution of Power on School Education Performance in Sindh after 18th Constitutional Amendment; *Journal of Development and Social Sciences*, Vol. 2, No. IV, 273-285.
- Hussain, A., Jat, Z. G., Hassan, M., Hafeez, A., Iqbal, S., & Imran, M. (2022). Curriculum Reforms in School Education Sector in Sindh; What Has Changed? *Journal of Positive School Psychology*, 6(9), 2675-2687.
- Imran, M., Kazmi, H. H., Rauf, M. B., Hafeez, A., Iqbal, S., & Solangi, S. U. R. (2022). Internationalization Education Leadership of Public Universities of Karachi. *Journal of Positive School Psychology*, 6(11), 1175-1188.
- Irfan, M., Khurshid, N., Khurshid, J., & Khokhar, A. M. (2023). Human resource development and organisational performance: Evidence from Pakistan. *SA Journal of Human Resource Management*, 21, 10.
- Jabeen, M., Ali, Z., & Ahmad, N. (2023). Factor Effecting on Quality Teaching Learning at Public Sector Schools in Karachi Pakistan. *Journal of Educational Research and Social Sciences Review (JERSSR)*, 3(1), 92-98.
- Jansen in de Wal, J., van den Beemt, A., Martens, R. L., & den Brok, P. J. (2020). The relationship between job demands, job resources and teachers' professional learning: Is it explained by self-determination theory? *Studies in Continuing Education*, 42(1), 17-39.
- Kalman, M., Kalender, B., & Cesur, B. (2022). Teacher Learning and Professional Development during the COVID-19 Pandemic: A Descriptive Study. *Educational Research: Theory and Practice*, 33(2), 1-22.
- Karademas, E. C., & Thomadakis, C. (2023). COVID-19 pandemic-related representations, self-efficacy, and psychological well-being in the general population during lockdown. *Current Psychology*, 42(6), 4523-4530.
- Mohebi, L., AlMohsen, F., & Alshamsi, A. (2023). Realigning online teacher training modules to COVID-19: An evaluation of the online training module among pre-service and in-service teachers in Pakistan. *Journal of Education and e-Learning Research*, 10(4), 702-710.
- N., Rehman, H. U., Ullah, N., & Zahra, T. (2023). Investigating Teacher Educators' Perceptions on Technology Integration in Teacher Preparation Programs. *Journal of Social Sciences Review*, 3(2), 341-355. <https://doi.org/10.54183/jssr.v3i2.272>

- Noor, T., & Nawab, A. (2022). Are school leaders working as instructional leaders? Exploration of school leadership practices in rural Pakistan. *Cogent Education*, 9(1), 2109315.
- Oo, C. Z., & Alonzo, D. (2023). Developing pre-service teachers' skills in assessment for learning (AfL): A plan using design-based research. *Issues in Educational Research*, 33(2), 693-712.
- Pak, K., Kooij, D. T., De Lange, A. H., & Van Veldhoven, M. J. (2019). Human Resource Management and the ability, motivation and opportunity to continue working: A review of quantitative studies. *Human Resource Management Review*, 29(3), 336-352.
- Patfield, S., Gore, J., & Harris, J. (2023). Shifting the focus of research on effective professional development: Insights from a case study of implementation. *Journal of Educational Change*, 24(2), 345-363.
- Raza, S. A., & Ahmed, N. (2017). Measuring Employees' Commitment through Job Satisfaction: Perception of Public Primary School Teachers. *Bulletin of Education and Research*, 39(1), 129-144.
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. John Wiley & Sons.
- Sorensen Silvhiany, S. (2022). Indonesian teachers' professional development practices and needs in post pandemic education. *VELES (Voices of English Language Education Society)*, 6(1), 215-232.
- T. B., & Dumay, X. (2021). The teaching professions and globalization: A scoping review of the anglo phone research literature. *Comparative Education Review*, 65(4), 725-749.