A Cross-Sectional Analysis of Factors Affecting Teacher's Work Performance in China

Yueqin Chen[1], Lubna Ali Mohammed[2]

Abstract

China is a country renowned for its robust education system and one with the best education system in the world particularly in STEM education as reported by international assessments entities like PISA. The country is also known for adopting teachers' centric education framework and recognizing their crucial role in shaping talents within the education system. Despite these, teachers face several obstacles while discharging their duties. These includes intense competition and pressure within the system which can result in student stress and neglect of holistic development. This study aims to explore challenges faced by teachers within the education system by both primary quantitative and secondary methods. It focuses on the influence of principal leadership, work culture and teacher motivation on teacher performance in Chinese schools which were found to have significant influence of performance. This provide guidance and suggestions for improving the quality of education in China.

Keywords: *Teacher Performance Factors, Education System, Mixed-Methods Research.*

Introduction

The education system of the country is witnessing several issues increased poverty being the most recent and influential phenomena. High education expenses have impacted rural families the most, as some families often fall into poverty due to high cost of education which takes great portion of their investments and savings. They therefore expect high performance from the education system (Lutfah, 2019).

The secondary education system in China has a focus on the STEM system which refers to the emphasis on subjects such as Science, Technology, Engineering and Mathematics. However, the country is currently facing significant challenges regarding to performance in some institutions and limited seats in the prestigious streams of postgraduate schools which are known to offer the best education. (Cheng, Davis & Wilson, 2020). The education system in China is highly dependent on qualities of teachers which also affect the performance of the students across various institutions China. There is significant progress that can be seen in the learning institution at every stage geared toward harmonizing performance of the students, teachers and the institutions in all regions, but there are some institutions which are not meeting the expected performance. This study therefore aims to explore the factors that affect the teacher's performance factor which can be used as a guide in improving the education system in China.

Research Background

Higher education in China began with the building of a university called Shanghai Jiaotong University in 1896. The university is located in Xujiahui, China. In 1949, the higher education system in China changed and developed into a more modern system. This modern education system is adopted from Western university culture by equating their curriculum such as from America, England, Canada, Australia, South Korea, Japan, Thailand, India and others (Binmohsen & Abrahams, 2022). This system is also referred to as a comparative study system because it is equivalent to the international education system. As a result, this system has succeeded in bringing students in China from all education groups to have broad knowledge and insight into different aspects of life, such as the dynamic world culture and socio-economics (Stronge ,2018).

[1] PhD in Education Faculty of Social Science, Arts, and Humanities, Lincoln University College，Malaysia, Email:Chenyueqin1981@163.com

[2] PhD in Education Faculty of Social Science, Arts, and Humanities, Lincoln University College，Malaysia, Email: lubnaali@lincoln.edu.my

In the 1950s, Chinese education underwent a reorganization and returned to an education system that was more modern and in accordance with the world's educational standards at that time. China has 7 main language dialects, but Mandarin is the most widely spoken language. Mandarin is written in two forms: traditional and simple characters. China is a country with a huge education system and teachers play a vital role in the field of education. Teachers' work performance directly affects students' learning outcomes and educational quality. Understanding the factors that affects teacher performance is therefore critical to improving the education system (Mulyasa, 2019).

As a province of China, Shandong Province has a wide geographical distribution and diversified socio-economic background. The region is home to a large number of schools and teachers, so conducting research here provides a representative data to understand the factors that contribute to the performance of Chinese teachers (Baptiste, 2019). This study focuses on 100 primary and secondary school teachers from more than 150 primary and secondary schools in Shandong Province, China, such as Jinan Licheng No. 3 Middle School and Jinan Jingwu Road Primary School where data was collected In Podsakaff addition, review of past research particularly on teachers' job performance was reviewed. This helped in understanding the existing knowledge and findings and build on existing theoretical frameworks providing useful insights into education reform and teacher training in China.

Proof of the implementation of performance, especially a teacher in primary education schools, can be seen in teachers' main tasks, namely "teachers are professionals with the main task of educating, teaching, guiding, directing, training, assessing and evaluating students (Yue et al, 2023). The main task of the teacher is carried out in early childhood education units and formal education starts from Kindergarten, High/Vocational High School and Special School (Mulyasa,2019). This study aims to explore the predictors of teacher performance in China through a cross-sectional study conducted in Shandong Province, China. Through this study empirical suggestions and guidance for improving the quality of education and teacher training are provided.

Statement of the Problem

The goal of China's National Education is to prepare individuals for future professions. The adopted pattern of the education management system is centralized, extending from small areas to the city center, ensuring even distribution of education throughout the country (Cheng, Davis & Wilson, 2020). Teachers, as professionals, hold a crucial position in education and must possess competence in carrying out their duties to ensure optimal performance. They are expected to provide professional education services, fostering a generation that is literate, competent and characterized by quality work implementation (Garner & Kaplan, 2021).

School leadership is linked to various motivational outcomes for teachers, including empowerment, aligning task implementation with the vision and mission expectations. However, teachers encounter obstacles in delivering quality education, such as intense competition and pressure within the system, leading to student stress and neglect of holistic development. Some typical teaching strategies may stifle critical thinking and innovation. China has initiated school reforms to reduce emphasis on high-stakes tests, promote holistic growth and elevate vocational education standards.

According to Toropova, Myrberg and Johansson (2022), factors like gender, age and years of experience influence a teacher's performance. In a different study, Stronge (2018) suggests that multiple factors make the investigation process complex and multifaceted. Previous studies have not concentrated on the variables explored in this paper and there is limited research on factors affecting teachers' performance in China. Hence, it is necessary to conduct research to analyze specific factors, providing guidance and suggestions for enhancing the quality of education. This study aimed to fill this gap by offering an understanding of the complexities surrounding education in China and the factors shaping the performance of its schoolteachers.

Research Gap

Teachers are education implementers who are obliged to develop and educate the life of the nation in countries that value education like China (Mulyasa,2019). Due to this, comprehensive study on the impact of principals' leadership, work culture and incentives on teacher performance has been examined. However, previous studies focused on single aspect ignoring the interactions and combined effects of these factors which was filled by this study.

Research Objectives

The general objective is to explore factors including teachers' performance In China. Specific objectives are.

To investigate the influence of gender, age and years of experience on teacher performance

To assess the impact of Continuous Professional Development (CPD) programs on teacher performance

To find out the effect of Principal leadership on the performance of the teachers

To evaluate the effect of work culture on teacher performance

To explore the effect of job satisfaction on teacher performance

To investigate the impact of motivation on teacher performance

Significance of the Study

Competence is a harmonious combination of several elements, including knowledge, skills, values, and attitudes which are reflected in the habits of thinking and acting; therefore, they are closely related to personal quality. In the education system, ideally, teachers have the required competencies to carry out their duties and functions properly and responsibly (Baptiste, 2019). However not having the right aspects in place, the teacher's performance is greatly headered. This study therefore aims to explores these crucial factors which can schools and their management in improvement of teachers' personal development, job satisfaction, work culture in the school as well the quality of the educational system. Moreover, it adds to the existing knowledge on teacher performance for future researchers.

Literature Review

Education plays a vital role in shaping the development and progress of any nation. China, with its rich history and rapid economic growth, has garnered global attention for its education system. This research provides a comprehensive overview of the education system in China, highlighting its structure, key features, strengths, challenges and recent reforms referencing the existing literature.
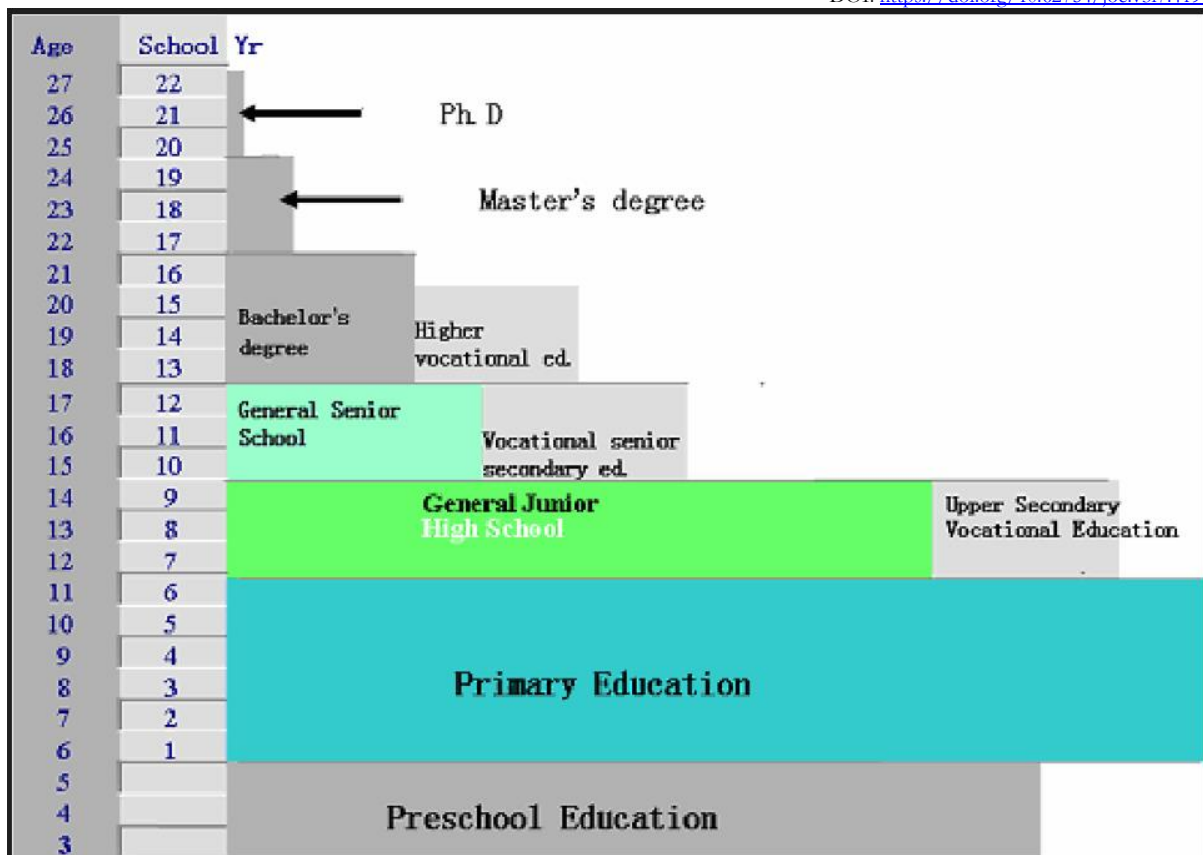
Figure 1: The Education System in China (Kim & Hong, 2020)

The above image is the breakdown structure of the entire education system of China from preschool education to postgraduate and PhD level of education. The preschooling stage starts from 3 years to 5 years. After that primary schooling of a child begins which includes from 1 to 6 years. Further, a child gets enrolled into higher school which is called General Junior which includes 7 to 9 school years (Kim & Hong, 2020). Along with that, there is an option of vocational education in China which is called Higher Secondary Vocational Education. The next level of education in China is General Senior School and Vocational Senior Secondary Education which encompasses 10 to 12 school years. Further, the next stage of education is Bachelor's degree and Higher Vocational Education which incorporates 13 to 16 school years. 17 to 19 school years come under the Master's degree in China. Further, 3 years comes under a PhD degree. Thus, the entire education system in China can be completed in a minimum of 22 years of a student's life (Kim & Hong, 2020).

Theoretical Framework

Utaut Theory

UTAUT theory proposes four constructs as antecedent variables to usage behavior which include, performance expectancy, effort expectancy, facilitating conditions and social influence (Cavalcanti et al, 2021). This model is extended by addressing the link between actual usage, user satisfaction and performance impact as a second-order model which contains five first-order constructs (efficiency, knowledge acquisition, communication quality, decision quality and increases competence). The main factors that directly impact the feeling of job `` expectancy, effort expectancy, facilitating conditions and social influence as antecedent variables to technology usage behavior hence relevant to this study.

Education Theory

According to Muhammad (2020), Education theory is a set of organized principles regarding certain events in the environment. It is a simplification of the symptoms of life so that it is easy for us to understand and explain. According to Langeveld, education is every effort, influence, protection and assistance given to children helping them to be able to sufficiently capable of carrying out their own life tasks (Cavalcanti et al, 2021). The influence comes from adults or those created by adults such as schools, books, daily life cycles and is directed at people who are not yet mature. According to Adeyem (2020), Education is the process of forming fundamental intellectual and emotional skills towards nature and fellow human beings. The most important thing of all is that education must be carried out consciously, have clear goals and guarantee changes for the better.

Leadership Theory

The study by Purwanto (2020) defines leadership as the process of influencing determination of organizational goals, motivating follower behavior and influencing to improve the group and its culture. Leadership as a tool, means or process to persuade people to be willing to do something voluntarily. leadership has also been defined as an effort of influencing groups to work together to achieve organizational or group goals. emphasizes the relationship between the leaders and members of a certain organization (Sudrajat, 2021). This theory helps to evaluate the support, trust and other resources provided by the principals of a school to its teachers to enhance their teaching performance.

Critical Review of Relevant Literature

Teacher Performance

Teacher performance is a very important factor in improving the quality of education. Binmohsen and Abrahams (2022) state that teacher performance is the ability and success of teachers in carrying out their duties and this performance is influenced by several factors that come from outside and within the teacher. (Sudjana, 2004) states that every teacher must possess teacher competence as an ability in their profession to deliver their best performance for improving educational quality. Teacher competence, in this perspective, is considered a description of what the teacher should do in their professional life (Sudrajat, 2021). In this aspect, the professional development plan can assist them in achieving competence in their teaching professions. However, teacher work performance is measured by spending their time in a certain period to achieve the organisational goal (Adeyem, 2020). In this aspect, the initiation of workplace-related burnout or stress can restrict them from reaching the organizational goals where they show demotivation for spending a particular period within the working environment. The performance of the teachers highly depends on the appropriate resources and materials to perform their job effectively. The performance of the teacher is influenced by the educational tasks and in this aspect, the teacher can improve their educational tasks as well as their skills with the proper resources and materials (Gusman, 2014).

Motivation

Motivation signifies an internal phenomenon that awakens an individual to carry out a particular task to attain certain objectives and keeps them interested in such activities (Leithwood, Jantzi & Steinbach 2021). It is a crucial factor in the education system, as it influences students' engagement, participation and overall learning outcomes. Teachers and principals can be the best motivators for the students as they have leadership qualities (Toropova et al, 2021).

Teachers who are driven to succeed in their respective positions are more likely to benefit the overall academic and personal development of themselves and their students (Stronge, 2018 Administrations of various educational institutions are required to offer fair salary packages, create and conducive environment as acknowledgement for their (Hussain, Salam & Farid, 2020). Effective feedback is another important factor as can help teachers identify their weak areas and work on them which acts as a contributing factor in increasing the satisfaction level regarding the job (Ariyanto, Mukminatien & Tresnadewi, 2019). Further,

the teachers also believe that feedback helps in increasing their motivation, promotes collaboration, teamwork and fosters a sense of continuous growth in them. Although the motivation is acknowledged as a performance factor, overall identification of these practices regarding China education situation needs further investigation.

Principal

Principals are very important determinant of how teachers remain motivated which has directly influence on their performance. As leaders they often face various obstacles such as limited insight, lack of relevant qualifications and innovation power. They can also be affected second factor is students, including very diverse abilities (Hussain, Salam & Farid, 2020). Other factors include limited resources, support from community and parents and regulations surrounding education that may limit their decision making.

Work Culture in School

Work culture is a philosophy based on a view of life as values that become traits, habits and driving forces, rooted in the life of community groups or organizations, then reflected from attitudes into behaviors, beliefs, ideals, opinions, and actions that manifest as work or work (Sudrajat, 2021).

In essence, teacher performance is closely related to the learning process which consists of two complementary activities, namely teaching activities (teachers) and learning activities (students). In learning activities, the party who plays the most role is the teacher, so it is often said that the teacher as a class manager, especially plays a major role in trying to create a learning atmosphere (Binmohsen & Abrahams 2022).

Socialization and internalization of work culture should be the main program. In addition, emotional intelligence and social intelligence must be a priority in addition to technical skills. Support for other human resource management functions should not be neglected. If it is not programmed in a planned manner, then the denial of commitment is tantamount to showing the existence of an organization's porousness.

Job Satisfaction

According to Park and Johnson (2019), job satisfaction is defined as a state of mind determined by the extent to which the individual perceived her/his job-related needs to be met. Two primary components for job satisfaction among teachers are job fulfillment and job comfort. Job comfort refers to the satisfaction level and circumstances from the conditions of job for an individual and the former is the extent of an individuals' satisfaction level based on the meaningful aspect from their personal accomplishment from the job.

High job satisfaction improves teachers' inspiration, prompting more devoted teachers who are focused on their jobs and students' accomplishments. This alignment of individual fulfilment with proficient obligation adds to better education, a positive classroom climate and further developed student commitment (Song, Gu & Zhang, 2022).

China puts an immense emphasis on academic excellence and motivated and committed teachers are significant in accomplishing this objective. In alignment with the country's educational goals, this attempt holds the possibility to yield significant advantages for both the teachers and students (Park & Johnson, 2019).

Leadership

leadership has also been defined as an effort of influencing groups to work together to achieve organizational or group goals. Leader-Member Exchange Theory. It forms basis of studying the cultural context of China over the leadership of the school principals and their impact on the performance of the teachers at different Chinese schools. Support and proper leadership from the school administration are

crucial for the success of the teacher and the overall school improvement. The pattern of leadership used by school principals is responsible for setting different tones for the overall learning environment, which could either result in motivating and empowering teachers or restricting their rate of productivity (Phogat, 2022).
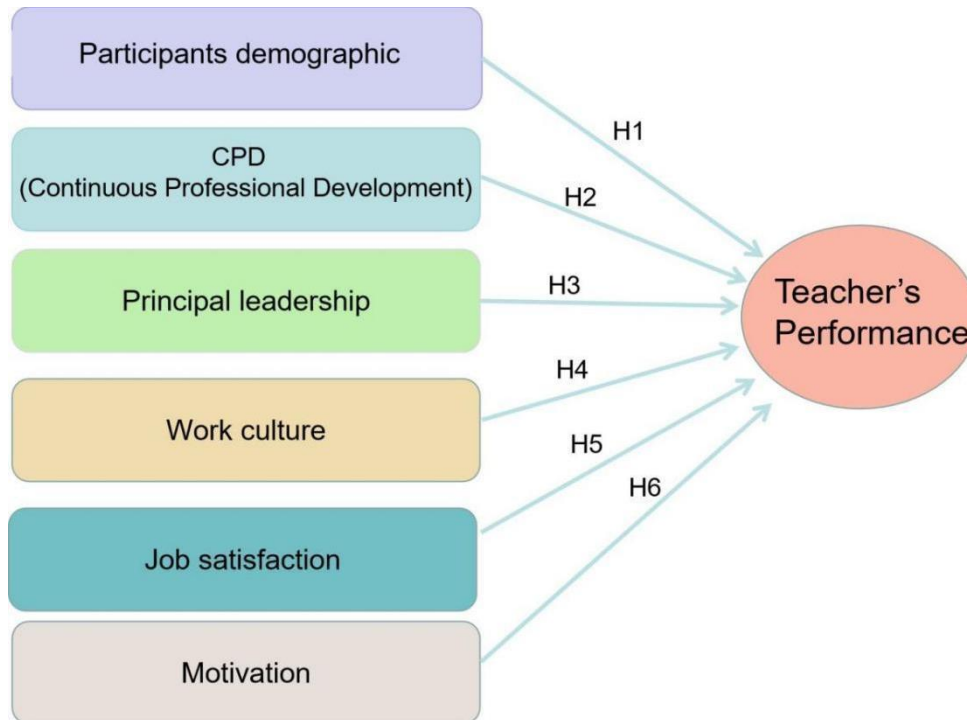
Conceptual Framework

Figure 2.1 The Conceptual Framework of This Study

Participant demographics (gender, age and years of experience), along with CPD programs, principal leadership styles, work culture, job satisfaction and motivation, collectively influence teacher performance through their impacts on instructional practices, pedagogical knowledge, communication, engagement and overall well-being. Understanding and addressing these factors are essential for creating an environment that supports effective teaching and enhances student outcomes.

Hypothesis

Hypothesis 1: Gender, age and years of experience have a significant influence on teacher performance, with experienced teachers and a balanced gender representation demonstrating higher performance levels.

Hypothesis 2: Continuous Professional Development (CPD) programs positively impact teacher performance, leading to improved instructional practices, pedagogical knowledge and student outcomes.

Hypothesis 3: Principal leadership styles significantly influence teacher performance, with supportive, communicative and collaborative leadership leading to higher instructional quality and job satisfaction.

Hypothesis 4: Work culture have a significant effect on teacher performance, with positive work culture factors such as collaboration, trust and organizational support enhancing teacher effectiveness and well-being.

*Hypothesis 5***:** Job satisfaction positively correlate with teacher performance, as high levels of satisfaction will result in increased engagement, motivation and overall performance.

Hypothesis 6: Motivation have a significant impact on teacher performance, with higher levels of intrinsic and extrinsic motivation leading to increased engagement, self-efficacy and instructional effectiveness.

Methodology

The research is be based on the positivism paradigm to test and verify the hypothesis using quantitative methods. This interprets the observations of human behaviors and social reality in determining and predicting potential impacts independent variables against dependent variable using motivation as a *moderator factor.* Positivism, utilises concise, clear and brief analysis and prevents utilizing any descriptive story from the subjective interpretation or human feelings hence appropriate for this study (García & Weiss 2020).

The research employs quantitative methods to gather and analyses data. Survey questionnaires were administered to representative samples of Chinese State Elementary School teachers. Cross-sectional research strategy was used since it permits the researcher to garner vital pieces of information from a wide range of data from the related research topic (Kabo, et al, 2023).

The target sample size for this study was 100 participants, selected by following 20 % rule of thumb from the entire population of 1000 primary and secondary school teachers in China. participants were required to have a minimum of two years of teaching experience. This sample size was achieved by employing probability sampling which is defined as the selection of a sample size from a large population based on the principles of randomization Brown (2019).

This approach is like other studies that have used questionnaires to collect data from teachers. For example, a study by Phogat (2022) suggest that a questionnaire was an effective way to gather information on teacher attitudes towards professional development.

The research questionnaire developed out of theoretical framework and based on *Likert scaling* to get a better understanding of respondents' behavior and attitude towards the research topic. A pilot study involving a few numbers of participants was done to understand whether the entire research project is working in the right direction or not (Williams, 2019).

The data collected was subordinated to statistical analysis using advanced quantitative ways, allowing for a thorough examination of the connections among variables (Robert &Owan, 2019).

Results and Discussion

The primary purpose of this study was to gain an understanding of the factors that influences the job performance of teachers in educational institutions in China.

Table 1: Teachers Demographic, Education and Performance

Demographic Characteristic	Categories	Number of Participants
Gender	Male, Female	150 (75 Male, 75 Female)
Age	25-30, 31-40, 41-50, 50+	40, 60, 30, 20
Teaching Experience	1-5 years, 6-10 years, 10+ years	50, 70, 80
Educational Background	Bachelor's, Master's, PhD	80, 60, 10
Region	North, South, East, West	40, 30, 50, 30

There is a clear correlation between the amount of professionalism that teachers exhibit and the educational experiences that their pupils have. Institutions should invest in career growth of their teachers to enhance their performance (Cheng, Davis & Wilson, 2020

A teacher must possess an extraordinary amount of zeal, passion and endurance for their profession because teaching is more than just a job. The factors contributing to teachers' feelings of stress, burnout or dissatisfaction may significantly affect their overall performance. According to the findings of the study, leadership has a major impact on teachers' performance.

Table 2: Leadership styles and Performance

Leadership Styles	Mean (1-5 Likert Scale)	Standard Deviation
Autocratic Leadership	3.8	0.6
Transformational Leadership	4.2	0.5
Laissez-faire Leadership	2.5	0.7

A Transformational Leadership received an overwhelming amount of positive feedback compared to others with mean score of 4.2 and a standard deviation of 0.5.

A leadership style that emphasizes the reciprocal connection between personal factors, environmental impacts and behavior is crucial in enhancing teachers' performance (Cook,2019). An effective leadership style is characterized by a work culture that is highly empowered and shared values and beliefs contribute to the success of teachers.

Table 3: Motivation and Performance

Motivational Factors	Mean (1-5 Likert Scale)	Standard Deviation
Intrinsic Motivation	4.1	0.3
Recognition	3.8	0.4
Career Development	3.9	0.5

According to table 2 above, individuals clearly place a high level of importance and regard for intrinsic motivation, as seen by the fact that it has received an average rating of 4.1

In order to achieve greater levels of performance, teachers need to be motivated. This motivational drive extends across the educational environment, influencing the workplace culture and ultimately reflected in the teachers' performance.

Table 4: Work Culture and Performance

Work Culture Aspects	Mean (1-5 Likert Scale)	Standard Deviation
Collaboration	4.0	0.4
Communication	3.9	0.5
Innovation	3.5	0.6

Instructors greatly priorities collaboration and communication as a fundamental part of the work culture with recorded mean of 4.0 and 3.9 respectively. The study highlights the critical role of a good work culture in improving motivation. Work environments that encourage collaboration and provide support result in better performance.

Table 5: Job Satisfaction and Performance

Performance Metrics	Mean (1-5 Likert Scale)	Standard Deviation
Classroom Effectiveness	4.2	0.4
Student Engagement	4.0	0.5
Professional Development	3.9	0.6

With a mean score ranging from 3.9- 4.2, teachers value the above 3 variables when it comes to performance with classroom effectiveness receiving the highest score.

The study identified interconnected dynamics among leadership, work culture, motivation and teacher performance. These variables, both individually and collectively, have an effect on the instructive story, contradicting the notion that variables are distinct from one another. This emphasizes the significance of having a comprehensive understanding to bring about major and effective transformative changes. The findings of this research indicate that the dynamic relationship between leadership, motivation and culture have a considerable influence on the future of education, particularly regarding the enhancement of the performance of educators. The educators and administrators need to consider all these factors when making reforms in the education system aimed at enhancing teacher's performance.

The finding of this research is consistent with findings of the study done by Prasanna and Mohammed (2023) in a survey aiming to identify the most effective Continuous Professional Development program for teachers in Abu Dhabi private schools. The findings suggest that in-service training sessions are the most effective in motivating teachers, enhancing academic excellence and improving performance of teachers and their learners

Future research should conduct extensive studies on the interplay between leadership, work culture and motivation to enhance teacher effectiveness, given the intricate relationship among these components especially in other countries.

References

Adeyemi, T. O. (2010). Adeyemi, T O. Principals ' leadership styles and teachers ' job performance in senior secondary schools in Ondo State , Nigeria.

Ariyanto, M. S. A., Mukminatien, N., & Tresnadewi, S. (2019). Students' and teacher's perceptions towards the implementation of ProWritingAid and teacher feedback. Jurnal Pendidikan: Teori, Penelitian, dan Pengembangan, 4(10), 1353-1363. Retrieved on 2 September 2023 from http://journal.um.ac.id/index.php/jptpp/article/download/12843/5920

Arofiq A. (2020). Effect of Work Culture on Performance through Work Motivation: Study in Teachers of Public Senior High Schools in Mataram City.

Baptiste, M. (2019). No Teacher Left Behind: The Impact of Principal Leadership Styles on Teacher Job Satisfaction and Student Success. Journal of International education and leadership, 9(1), p.n1. Retrieved on 2 September 2023 fromhttps://files.eric.ed.gov/fulltext/EJ1212519.pdf

Binmohsen, S.A. & Abrahams, I. (2022). Science teachers' continuing professional development: online vs face-to-face. Research in Science & Technological Education, 40(3), pp.291-319. Retrieved on 2 September 2023 fromhttps://pure.roehampton.ac.uk/ws/files/3144783/Science_teachers_continuing_professional_development_Online_vs_face_to_face_AAM.pdf

Cavalcanti, A. P., Barbosa, A., Carvalho, R., Freitas, F., Tsai, Y. S., Gašević, D., & Mello, R. F. (2021). Automatic feedback in online learning environments: A systematic literature review. Computers and Education: Artificial Intelligence, 2, 100027. Retrived on 02 September 2023 from: https://doi.org/10.1016/j.caeai.2021.100027

Chang, C.M., Hsieh, H.H., Chou, Y.H. & Huang, H.C., (2021). The relationship between physical education teachers' perceptions of principals' transformational leadership and creative teaching behavior at junior and senior high schools: A cross-level moderating effect on innovative school climates. Sustainability, 13(15), p.8184. Retrieved on 2 September 2023 from:t:https://www.mdpi.com/2071-1050/13/15/8184/pdf

Cheng, I., Davis, C.L. & Wilson, M.O. eds., (2020). Race and modern architecture: A critical history from the Enlightenment to the present. University of Pittsburgh Press. Retrieved on 2 September 2023 from:https://www.daniels.utoronto.ca/sites/default/files/race_and_modern_architecture_chapter_5_excerpt.pdf

Cook, O. J. (2019). Beyond the Skin: How African American Women Senior Administrators Describe Their Experiences of Developing an Authentic Leadership Style (Doctoral dissertation, Auburn University). Retrieved on 2 September 2023 from:https://etd.auburn.edu/bitstream/handle/10415/6975/Cook_Dissertation.pdf?sequence=2&isAllowed=n

García, E. & Weiss, E. (2020). A Policy Agenda to Address the Teacher Shortage in US Public Schools: The Sixth and Final Report in the'Perfect Storm in the Teacher Labor Market'Series. Economic Policy Institute. Retrieved on 2 September 2023 fromhttps://files.eric.ed.gov/fulltext/ED611178.pdf [Accessed on 2 September 2023

Garner, J. K., & Kaplan, A. (2021). A complex dynamic systems approach to the design and evaluation of teacher professional development. Professional development in education, 47(2-3), 289-314. Retrieved on 2 September from https://www.tandfonline.com/doi/abs/10.1080/19415257.2021.1879231

Gusman. ((2014).). Gusman. Dasar- Dasar Manajemen Pendidikan [Fundamentals of Educational Management]. Bandung: PT. Remaja.

Kabo, R., Bourgault, M. A., Bissonnette, J. F., Barrette, N., & Tanguay, L. (2023). Use of Mixed Methods in the Science of Hydrological Extremes: What Are Their Contributions?. Hydrology, 10(6), 130. Retrieved on 09 September 2023 from https://doi.org/10.3390/hydrology10060130

Kim, H. J., Yi, P., & Hong, J. I. (2020). Students' academic use of mobile technology and higher-order thinking skills: The role of active engagement. Education Sciences, 10(3), 47. Retrieved on 09 September 2023 from http://dx.doi.org/10.3390/educsci10030047

Leithwood, K., Jantzi, D. & Steinbach, R. (2021). Leadership and other conditions which foster organizational learning in schools. In Organizational learning in schools (pp. 67-90). Taylor & Francis. Retrieved on 2 September 2023 from https://www.academia.edu/download/46678198/Leithwood_-_ConditionsFosteringOrganizationalLearninginSchools_retrieved-2016-06-21_.pdf

Lutfah, A. N. (2019). Lutfah, A Hariyati N, handayaningrum W. Improved Teacher Performance Through Work Culture And Environment, 859-863.

Mulyasa, E. (, 2019.). Mulyasa, E,. "Becoming a professional teacher: Creating creative and fun learning", Bandung: Remaja Rodaskarya.

Park, K.A. & Johnson, K.R. (2019). Job Satisfaction, Work Engagement, and Turnover Intention of CTE Health Science Teachers. International journal for research in vocational education and training, 6(3), pp.224-242. Retrieved on 2 September 2023 from https://files.eric.ed.gov/fulltext/EJ1238322.pdf

PHOGAT, N. (2022). The Role of School Leaders in Facilitating Continuous Professional Development to Empower Teachers in Private Schools in Dubai (Doctoral dissertation, The British University in Dubai (BUiD)). Retrieved on 2 September 2023 from https://bspace.buid.ac.ae/bitstream/handle/1234/2034/20000727%20.pdf?sequence=4&isAllowed=y

Prasanna, S. P., & Mohammed, L. A. (2023). An Analysis Study of the Effective Continuous Professional Development Programs on Teaching in UAE. International Journal of Emerging Issues in Social Science, Arts and Humanities (IJEISSAH), 1(3). https://doi.org/10.60072/ijeissah.2023.v1i03.004

Purwanto, A., Purba, J. T., Bernarto, I., & Sijabat, R. (2021). Effect of transformational leadership, job satisfaction, and organizational commitments on organizational citizenship behavior. Inovbiz: Jurnal Inovasi Bisnis, 9, 61-69. Retrieved on 2 September 2023 from http://ejournal.polbeng.ac.id/index.php/IBP/article/download/1801/872

Robert, I. A., & Owan, V. J. (2019). Students' perception of teachers effectiveness and learning outcomes in Mathematics and Economics in secondary schools of Cross River State, Nigeria

Stronge, J.H., 2018. Qualities of effective teachers. Ascd. Retrieved on 2 September 2023 from https://www.hunter.cuny.edu/shp/centers/nycnect/greenteam/docs/qualities_of_effective_teachers.pdf

Sudjana, N. (2004). Sudjana, N. The Basics of the Teaching-Learning Process. Bandung: Sinar Baru Algensido.

Sudrajat, A. (2011.). Sudrajat, Akhmad. . Curriculum and Learning in a New Paradigm. Yogyakarta: Paramitra Publishing.

Toropova, A., Myrberg, E. & Johansson, S., 2021. Teacher job satisfaction: the importance of school working conditions and teacher characteristics. Educational review, 73(1), pp.71-97. Retrieved on 2 September 2023 from https://www.tandfonline.com/doi/pdf/10.1080/00131911.2019.1705247

Williams-McBean, C.T., 2019. The value of a qualitative pilot study in a multi-phase mixed methods research. The Qualitative Report, 24(5), pp.1055-1064. Retrieved on 09 September 2023 from https://www.researchgate.net/profile/Clavia-Williams/publication/333200988_The_Value_of_a_Qualitative_Pilot_Study_in_a_Multi-Phase_Mixed_Methods_Research/links/5ce157e9458515712eb5ffc7/The-Value-of-a-Qualitative-Pilot-Study-in-a-Multi-Phase-Mixed-Methods-Research.pdf

Yue, G., Wei, H., Khan, N. U., Saufi, R. A., Yaziz, M. F. A., & Bazkiaei, H. A. (2023). Does the environmental management system predict tbl performance of manufacturers? The role of green HRM practices and OCBE as serial mediators. Sustainability, 15(3), 2436. Retrieved on 09 September 2023 from https://doi.org/10.3390/su15032436Kabo, R.,.