

---

**Relationship of Organizational Structure, Physical Facilities and Leadership Practices  
of Principals with School improvement: An Evidence from Pakistan**

\* Abdul Malik, PhD Scholar (Corresponding Author)

\*\* Dr. Habib Elahi, Assistant Professor

\*\*\* Dr. Syed Afzal Shah, Assistant Professor

---

**Abstract**

*The present study was focused to know about the relationship of organizational structure, physical facilities, and leadership practices with school improvement. A survey research method was adopted with questionnaires. The sample included 224 principals, 896 senior school teachers from the seven districts of Khyber Pakhtunkhwa. The stratified random sampling technique was used for the selection of participating institutions among 7 divisions of the province. For the collection of research data, the researcher developed the questionnaires. For this instrument, after passing through the pilot testing and experts' opinions, all the instructed improvements and modifications worked out. The analysis of data revealed that there is a positive significant correlation of organizational structure, physical facilities, and leadership practices with school improvement.*

**Keywords:** Facilities, Leadership, Organizational Structure, School Improvement.

**Introduction**

An organization is a structured and established group of people who have specific skills besides having material resources. Its objective is to work diligently for the provision of services to the society besides fulfilling some specific needs of the society. In consonance with human nature, two or more people work together for attaining a common aim or objective that forms an organization. An organization is a social structure that is aimed at directing consciously a system of an activity having specific parameters. An organization is formed following its objectives because a social organization and business organization have their own goals, objectives, and working mechanism (Hall & Tolbert, 2009).

Educational organization can be defined as an organization that focuses on learning experiences as a major aspect of its values, visions, goals, and other functions (Messarra & El-Kassar, 2013). These are those organizations that continuously and effectively enhance the teaching-learning activities and develop strategies, plans, and methodologies to improve learning experiences within them (Dahanayake & Gamlath, 2013). Therefore, they develop the culture and learning environment that affects both the learner and the organization. However, currently, educational organizations have been considered as the key to provide a competitive learning environment to meet the future needs of society (Maniam, 2013). A school organization is a system of interaction with society because interacting personalities are bound in school in an organic relationship (Ogawa., & Bossert, 1995). A school, being a social system, has clearly defined interdependent parts. Its population is unique because it is differentiated from its environment (Tilbury, 1995). Besides this, it has an intricate network of relationships with society and its own unique culture. Therefore, being an organization, a school system has planned and unplanned, formal, and informal aspects of organizational life (McEvily. Soda., & Tortoriello, 2014). Tasks, technology, and the environment are determined by the strategy of an organization. The variables, complemented by power distribution and growth rates, greatly affect the structure of an organization (Miles, Snow, Meyer & Coleman, 2011).

**Objective of the Study**

The objective of the study was to find out the relationship between organizational structure, physical facilities, and leadership practices of the principals with school improvement.

---

\* Department of Education, Hazara University Mansehra Email: [abdulmalikasmai@gmail.com](mailto:abdulmalikasmai@gmail.com)

\*\* Department of Education, Hazara University Mansehra

\*\*\* Department of Education, the University of Haripur, Pakistan

### **Hypothesis of the Study**

1. Organizational structure has a positive relationship with school improvement.
2. Physical facilities have a positive relationship with school improvement.
3. Leadership practices have positive relationships with school improvement,

### **Significance of the Study**

The policymakers, curriculum planners, parents, and other stakeholders may benefit from effective school structure because it provides them a framework through which they achieve the targeted goals of education at the national and international levels. Moreover, when the defined hierarchy is in place, the curriculum planners and policymakers are better equipped to make important decisions and adjust teaching practices to meet the demands and aspirations of the nation. In addition to these, this study is useful for provincial and district level managers of schools, educationalists, curriculum planners, policymakers, and other stakeholders who will incorporate the suggestions in the subsequent education policies and curriculum outlines for the holistic development of the personalities of the youth.

### **Literature Review**

Naz, et al. (2013) opined that physical facilities in a school setting are helpful for students to motivate them for learning. School facilities are necessary tools to enhance and improve learning programs in schools because teachers need the facilities for a better working environment and high performance of students (Caprara, Barbaranelli., Steca., & Malone, 2006). The most important among the physical facilities is the school plant i.e. the school building. Besides this, classrooms, school laboratories, school libraries, facilities of information technology, health facility, washrooms, playground, and audio-visual aids are significant to motivate students for learning. In the public secondary schools, physical facilities that are essential for effective teaching-learning and academic performance of students are not sufficiently provided (Souck, & Nji, 2017). The available physical facilities are misused and lack proper maintenance, while some are in a miserable condition which is an issue of concern for educators (Singer, 2017). The dilapidated condition of physical facilities in public schools is due to an increasing number of enrolment in the schools (Saeed, & Wain, 2011). Hussain et al. (2012) viewed that lack of physical facilities badly affects the motivating learning environment which results in low academic performance of secondary school students. Lack of physical facilities hurts students' level of interest which weakens their academic performance naturally (Cao, Masood, Luqman, & Ali, 2018). Moreover, in a situation where students have no access to the common physical facilities like libraries, science equipment, and proper seating availability, this proves a hurdle in their learning progress. For enhancing the level of academic performance and motivation of students, the school needs to have formal facilities like adequate seating arrangement, laboratory, library, internet, and a host of other facilities (Leiringer, & Cardellino, 2011). Saeed and Wain, (2011) viewed that physical facilities in a school play a significant role in providing a creative educational environment that is conducive to higher achievements of students. So the provision of such facilities results in a comfortable environment where they learn peacefully by undergoing concrete experience.

World Bank (2009) stated that a well-sited school building is built keeping in mind the aesthetic conditions, playground, and laboratory which can improve performance in the school system. Moreover, better school plants besides other necessary physical facilities can improve the teaching-learning practices in a school (Irmayani, Wardiah, & Kristiawan, 2018). Owuamanam (2005) stated that several academic facilities are necessary for the better performance of teachers and students. By using adequate physical facilities, the performance of the learners and teaching practices can be made more effective in the educational setting. Adewunmi (2000) opined that adequate physical facilities significantly influence students' academic achievement. So, adequate physical facilities should be provided to the schools. Ademilua (2002) believes that inadequate provision of physical resources causes great hindrance in the academic achievement of students.

Northhouse (2013) viewed that leadership is a systematic process in which a leader influences a group for achieving some common objectives. Bloisi et al. (2007) documented that leadership is the act of giving directions to others, involving them in organizational tasks voluntarily, and energizing them to achieve the common objectives or a leader's vision. Moreover, leadership is combining official and unofficial relationship to motivate others to grow and evolve and complete the assigned task (Dörnyei, & Muir, 2019).

Supovitz, Sirinides, and May (2009) proposed that tasks of the effective school principal is to translate the mission into practice, learn to evolve and grow to complete the assigned tasks, influence over other people to guide, structure and facilitate the activities and relationships in a group or organization. Leadership is the other name of discipline which creates an environment of learning for teachers which become conducive for creativity by following new direction which is helpful to promote students' learning (White, Guthrie, & Torres, 2019).

The position of a principal is of great importance in a school where teaching and learning activities are conducted and work is done for the academic enhancement of students (Dinham, 2005). He/she is responsible for extracurricular and curricular activities in a school. The leadership and managerial skills of principals are helpful for teachers to work in a thoroughly professional environment which results in formal and informal outcomes for the school system (Choy, & Chua, 2019). Principals also provide leadership in curriculum, guide and facilitate the teachers in the teaching-learning process for effective teaching, evaluation of staff, and communicate the aim of the school to staff by providing instructional feedback to teachers (Hester & Geert, 2011).

Principals are the chief contributors in an efficient school because they intervene for improving the performance of the school by actively participating in activities of the school (Webber, Catellier, Lytle, Murray, Pratt, Young, & Pate, 2008)). He/ she maintains collegial atmosphere, and complete the courses and ideology which concentrate on academic, work for correction of mistakes and help teachers in teaching through their professional and unbiased feedback (Dunaway, Bird, Wang, & Hancock, 2014). Intervention of principals in the teaching-learning process at schools helps in achieving excellence in their schools (Gurr., Drysdale., & Mulford, 2005). Principal intervention is based on systematic strategies to bring behavioral changes in teachers and students. A successful principal knows activities to promote the teaching and learning process besides having skills and the ability to implement those abilities in school-based decisions (Sharma, 2011).

School improvement is a planned, continuous, and combined effort to increase the capability of school principals and instructors to achieve the set objectives of school (Schmoker, 1999). Improvement is a positive change in the day to day affairs of school as compared to its past condition. Improving the school situation positively, therefore implies mapping and analyzing the current situation of the school. School improvement is inherently related to the commitment of individuals to bring a change for better results (Crowther, 2011).

School improvement is possible only when a positive change is brought in the culture of the school and responsibilities are shared with the staff by the school leadership (Glover, Rainwater, Friedman, & Jones, 2002). School can only be improved when it is taken as a combined unit because it is not enough to bring changes in the outward structure of the school without making change as an integral part of school culture. For school improvement, the culture of the school along with the people who run the business of school like principal and teachers should also be transformed positively (Hargreaves & Fink, 2008). School improvement involves some important elements which cause a positive change in school. Better academic performance of students is most important for improving a school. Moreover, school improvement is a process that requires clear future vision and expectations and a clear role of individuals to fulfill the assigned responsibilities (Mithani & Khan, 2010). For improving a school the principal of the school has to lead from the front by tackling the challenges faced by the school for the betterment of the school (Jacobson, Johnson, Ylimaki, & Giles, 2005). Besides this, he/she being an active head of the institution has to be engaged in implementing the changes and program of improvement. An institution becomes inefficient due to the lack of competency of administration and incompetent head of institution (Sani, & Musa, 2019). A principal has to lead from the front because being a principal as a hard-working and honest man, he/she can demand hard work and honesty from his/her teachers too. On the contrary, an idle principal who shirk hard work cannot demand his/her colleagues to work hard and devotedly (Riaz, 2012).

Therefore, this study is designed to investigate the effect of organizational structure, physical facilities, and leadership practices of the principals' on school improvement. The research in this area is scarce in Pakistan. It was, therefore, rationally, reasonably, and logically justified to conduct a systematic study on the contribution and effect of important components of the school system. The present research meant finding out the relationship of different factors with school improvement: Evidence from Pakistan.

**Methodology**

**Research Design**

The present study focused on to know about the relationship of organizational structure, physical facilities, and leadership practices with school improvement. In conducting this research, the survey research design method was used.

**Population and Sample of the Study**

The target population of the study was 2108 secondary school principals/headmasters (government Boys' and Girls' secondary schools) and 7856 senior teachers of secondary schools (male/female) working in the urban and the rural set up of the Khyber Pakhtunkhwa province of Pakistan. The sample included 224 principals, 896 senior school teachers from the seven districts of Khyber Pakhtunkhwa. These targeted districts include Bannu, Charsadda, Dera Ismail Khan, Kohat, Malakand, Mardan, and district Mansehra. One district from each division was selected. The total sample size was 1120. The stratified random sampling technique was used for the selection of participating institutions from 7 divisions of the province.

**Data Collection Tools**

For the collection of research data, the researcher developed the questionnaires. For this instrument, after passing through the pilot testing and expert opinions, all the instructed improvements and modifications were made. To ensure the accuracy and transparency in the process of data collection, the researcher visited the sampled schools himself and administered the questionnaire to the respondents. The respondents were requested to think and mark the answer about each statement sincerely as well as cautiously. The researcher also requested them to return the filled questionnaire as soon as possible. The collaboration as well as the keen interest of the respondents about the questionnaire was a 100% return rate. The four questionnaires comprising of 115 statements are based on selected indicators. Survey method was used to collect the data for this study. For data collection, the researcher distributed the questionnaires between the principals and senior teachers of Government secondary schools of Khyber Pakhtunkhwa province of Pakistan.

**Data Analysis**

Spearman correlation coefficient was used for the analysis of the collected data. Findings and conclusions were drawn based on the analysis of data. The recommendations of the study were made in the light of findings and conclusions. The analysis and interpretation regarding this research is given in the following table.

**Results**

To know about the relationship of different factors with school quality four questionnaires consisting of 115 statements were used. The respondents were given a choice of five-point Likert scale on the questionnaire. The score in which respondents have been ranked is analyzed in the following tables.

**Table 1**

**Relationship of factors of Organizational structure with school improvement**

factors	r	p
School head	.115	.000
Teaching faculty	.168	.000
Disciplinary board	.170	.000
Literary society	.034	.239
Guidance and counseling	.038	.207
Examination cell	.121	.000
Parents teachers association	.145	.000
All factors of organizational structure	.170	.000

\*P is < 0.05

Table 1 reflects the result of analysis that sum of all the indicators of school improvement have significant correlation with some factors of organizational structure: school head (r = 0.115, p < 0.05), teaching faculty (r = 0.168, p < 0.05), disciplinary board (r = 0.170, p < 0.05), examination cell (r = 0.121, p < 0.05), parents teachers association (r = 0.145, p < 0.05) and sum of all the factors of organizational structure (r = 0.170, p < 0.05). Whereas the factors, literary society (r = 0.034, p >

0.05), and guidance and counseling ( $r = 0.038$ ,  $p > 0.05$ ) have no significant correlation with sum of all the indicators of school improvement.

**Table 2**  
**Relationship of factors of physical facilities with school improvement**

Physical facilities	r	p
Building and space	0.219	0.000
Health facilities	0.130	0.000
Classroom facilities	0.170	0.000
Learning resources	0.174	0.000
Communication technology	0.202	0.000
Sports facilities	0.130	0.000
total of physical facilities of the school	0.264	0.000

\*P is  $< 0.05$

Table 2 shows the analysis of data of the relationship of the factors of physical facilities of the school with the school improvement indicators/factors that sum of all indicators of school improvement have significant correlation with all factors of physical facilities of the school: building and space ( $r = 0.219$ ,  $p < 0.05$ ), health facilities ( $r = 0.130$ ,  $p < 0.05$ ), classroom facilities ( $r = 0.170$ ,  $p < 0.05$ ) learning resources ( $r = 0.174$ ,  $p < 0.05$ ), communication technology ( $r = 0.202$ ,  $p < 0.05$ ), sports facilities ( $r = 0.130$ ,  $p < 0.05$ ) and sum of all the factors of physical facilities of the school ( $r = 0.264$ ,  $p < 0.05$ ).

**Table 3**  
**Relationship of factors of leadership practices with school improvement**

Factors of Leadership practices	r	p
Visionary leader	.098	.001
instructional leader	.150	.000
Problem solver	.217	.000
An evaluator	.208	.000
Administrator of the school	.208	.000
Sum of all the factors of leadership practices	.220	.000

\*P is  $< 0.05$

Table 3 showed the result of analysis of data of the relationship of the factors of leadership practices of principal of the secondary school with the school improvement factors/indicators that sum of all the /factors/indicators of school improvement have significant correlation with all the factors of leadership practices of the principal of secondary school: visionary leader ( $r = 0.098$ ,  $p < 0.05$ ) instructional leader ( $r = 0.150$ ,  $p < 0.05$ ), problem solver ( $r = 0.217$ ,  $p < 0.05$ ), an evaluator ( $r = 0.208$ ,  $p < 0.05$ ), administrative of the school ( $r = 0.208$ ,  $p < 0.05$ ) and sum of all the factors of leadership practices of principal of the secondary school ( $r = 0.220$ ,  $p < 0.05$ ).

**Discussion**

The analysis of data showed that sum of all the factors of school improvement has significant correlation with some factors of organizational structure: school head ( $r = 0.115$ ,  $p < 0.05$ ), teaching faculty has a positive relationship with the school quality ( $r = 0.168$ ,  $p < 0.05$ ). One of the qualities of teaching faculty is the maintenance of the quality of the relationship of the faculty with their students. It is an important part of the quality of the social system of the school (Goddard et al. 2009). Disciplinary board has a positive and significant relationship with the school quality/ improvement ( $r = 0.170$ ,  $p < 0.05$ ). A board for maintenance of discipline among the students will improve the school quality. Examination cell ( $r = 0.121$ ,  $p < 0.05$ ), parents teachers association ( $r = 0.145$ ,  $p < 0.05$ ) and sum of all the factors of organizational structure ( $r = 0.170$ ,  $p < 0.05$ ). Leadership is the other name of discipline which creates an environment of learning for teachers which become conducive for creativity by following new direction which is helpful to promote students' learning (White, Guthrie, & Torres, 2019).

The analysis of data revealed that the sum of all factors of school improvement has a significant correlation with all factors of physical facilities of the school: building and space ( $r = 0.219$ ,  $p < 0.05$ ). One of the important aspects of the school building is the structure of the classroom. The classroom plays a significant role in enhancing the quality of the school (Akubue, 1991). Health facilities has a positive relation with school quality ( $r = 0.130$ ,  $p < 0.05$ ). Since the child spends most

of his/ her time at school, it is important to have health care facilities at schools (Aljanakh et al., 2016). Unavailability of school-based health facilities has a bad impact on school quality including poor academic performance (Geierstanger et al., 2004). Classroom facilities ( $r = 0.170$ ,  $p < 0.05$ ). Literature states that classrooms are important in the provision of a productive learning environment Davis (2013). One of the important qualities of classrooms is that they are not overcrowded. It is because the teachers need special skills to cope with the overcrowded classroom and hence badly affects the school quality (Khan, & Iqbal, 2012). Learning resources has a positive relationship with school quality/ improvement ( $r = 0.174$ ,  $p < 0.05$ ). Adequate learning resources indeed facilitate the school quality in the form of better teaching and learning processes (Nurdin, 2011). These results are in line with the results of Meiristiya and Purwaningsih (2016) who stated that the learning resources can affect the school quality/improvement in the form of better academic achievement. Communication technology has a significant positive relationship with school quality/ improvement ( $r = 0.202$ ,  $p < 0.05$ ). It means that communication technology, if available, can be effectively used by the teachers and improve the school quality (Akuegwu, Ntukidem, Ntukidem & Jaja 2013). Sports facilities has a positive and significant relationship with school quality ( $r = 0.130$ ,  $p < 0.05$ ). Similar results were produced by Rhodes *et al.* who say that sports facilities play a significant role in developing the school quality in the form of behavior modification of the students. Sum of all the factors of the physical facilities of the school ( $r = 0.264$ ,  $p < 0.05$ ). According to Musa and Baharum, (2012), the availability of educational infrastructures contributes directly to school quality/ improvement in the form of an effective teaching-learning process.

The analysis of data showed that the sum of all the factors of school improvement has a significant correlation with all the factors of leadership practices of the secondary school principal: visionary leader ( $r = 0.098$ ,  $p < 0.05$ ). It is a fact that an institution becomes inefficient due to the lack of competency of administration and incompetent head of institution (Sani, & Musa, 2019). Instructional leader ( $r = 0.150$ ,  $p < 0.05$ ) has positive relationship with the school improvement. For improving a school the principal of the school has to lead from the front by tackling the challenges faced by the school for the betterment of the school (Jacobson, Johnson, Ylimaki, & Giles, 2005). Head of the institution as a problem solver ( $r = 0.217$ ,  $p < 0.05$ ) has a positive relationship with the school improvement. It is because the expert principals are better in regulating the problem-solving processes and they are more sensitive to the demands of the tasks as well as the social context between which the problems are to be solved (Leithwood & Steinbach, 1995). An evaluator ( $r = 0.208$ ,  $p < 0.05$ ). The successful principals keep their minds open to learn from others. He/she must evaluate his/ her teachers and try to improve the quality of school learning (Guterman, 2010) and school effectiveness (Leithwood et al., 2007). Administrative role of the school ( $r = 0.208$ ,  $p < 0.05$ ). The role of the school principal is to plan, direct, coordinate, and evaluate (Maduabuchi, 2002). And sum of all the factors of leadership practices of secondary school principal ( $r = 0.220$ ,  $p < 0.05$ ). Besides this, he/she being an active head of the institution has to be engaged in implementing the changes and program of improvement. An idle principal who shirk hard work cannot demand his/her colleagues to work hard and devotedly (Riaz, 2012).

### **Conclusion**

There is a stronger link between the factors of organizational structure in terms of the school head, teaching faculty, disciplinary board, examination cell, parent-teachers association with school improvement. It implies that the Proper organization structure of the school plays a profound role in the success of the school.

Furthermore, a stronger link has been shown between the physical facilities of the school from building and space, health facilities, classroom facilities, learning resources, communication technology, and sports facilities point of view with school improvement. This indicates that the proper functioning of school require all essential physical facilities. They are ultimately helpful in an effective teaching-learning process and enhancement of the efficiency of the school.

Furthermore, the factors of leadership practices of the principal of secondary school including the visionary leader, instructional leader, problem solver, an evaluator, and administrator of the school show a stronger link with school improvement. This indicates that Effective leadership practices of the principal of secondary school do contribute positively to school improvement.

## References

- Adewunmi, T. B. (2000). *The influence of physical resources on pupils academic performance in Lagos State primary school*. Unpublished M.Ed. Dissertation, University of Benin.
- Ademilua, A. A. (2002). *Factors affecting students' academic performance in some selected schools in Ekiti state*. Unpublished M.Ed. Dissertation. University of Ilorin, Nigeria.
- Akabue, A. U. (1991). *Classroom Organization and Management: A 5-point Strategy*. Ibadan: Wisdom Publishers Ltd.
- Akuegwu, B. A., Ntukidem, E. P., Ntukidem, P. J. & Jaja, G. (2013). Information and communication technology (ICT) facilities utilization for quality instruction service delivery among University lecturers in Nigeria, *Review of Higher Education in Africa*, 3(1), 33-53.
- Aljanakh, M., Siddiqui, A. A., & Mirza, A. J. (2016). Teachers' knowledge about oral health and their interest in oral health education in Hail, Saudi Arabia. *International journal of health sciences*, 10(1), 87.
- Bloisi, W., Cook, C.W., & Hunsaker, P. L. (2007). *Management & organizational behavior*. 2nd edition. Maidenhead: McGraw-Hill.
- Cao, X., Masood, A., Luqman, A., & Ali, A. (2018). Excessive use of mobile social networking sites and poor academic performance: Antecedents and consequences from stressor-strain-outcome perspective. *Computers in Human Behavior*, 85, 163-174.
- Caprara, G. V., Barbaranelli, C., Steca, P., & Malone, P. S. (2006). Teachers' self-efficacy beliefs as determinants of job satisfaction and students' academic achievement: A study at the school level. *Journal of school psychology*, 44(6), 473-490.
- Choy, W. K., & Chua, P. M. (2019). Professional development. In *School Leadership and Educational Change in Singapore* (pp. 69-86). Springer, Cham.
- Crowther, F. (2011). *From school improvement to sustained capacity*. Thousand Oaks, California: Corwin.
- Dahanayake, N.D., & Gamlath, S. (2013). Learning organization dimensions of the Sri Lanka Army. *The Learning Organization*, 20 (3), 195- 215.
- Davis, R. (2013). Equal education to SA government: Lay down basic standards for schools. *Daily Maverick*, 18.
- Dinham, S. (2005). "Principal leadership for outstanding educational outcomes", *Journal of Educational Administration*, 43(4), 338-356.
- Dörnyei, Z., & Muir, C. (2019). Creating a motivating classroom environment. *Second Handbook of English Language Teaching*, 719-736.
- Geierstanger, S. P., Amaral, G., Mansour, M., & Walters, S. R. (2004). School-based health centers and academic performance: research, challenges, and recommendations. *Journal of School Health*, 74(9), 347-352.
- Glover, J., Rainwater, K., Friedman, H., & Jones, G. (2002). Four principles for being adaptive (Part Two). *Organizational Development Journal*, 20(4), 18-38.
- Gurr, D., Drysdale, L. and Mulford, B. (2005), "Successful principal leadership: Australian case studies", *Journal of Educational Administration*, 43 (6), 539-551.
- Guterman, K. (2010). On the road to educational leadership: The next step, teaching observations and pedagogical discourse as the focus of the educational process and pedagogical growth in the school. In: Hahinuch Vesvivo (Education and Context): The Kibbutzim College of Education, Technology and Arts, 32, 149-167 (Hebrew).
- Hargreaves, A., & Fink, D. (2008). Distributed leadership: Democracy or delivery? *Journal of Educational Administration*, 46(2), 229--240.
- Hall, R. H., & Tolbert, P. S. (2009). *Organizations: Structures, processes, and outcomes* (9th ed.). Upper Saddle River, NJ: Prentice-Hall.
- Hester, H., & Geert, D. (2011). *How does leadership affect teachers' organizational commitment: Examining the mediating effects of distributed leadership*. Department of Educational Studies. Ghent: Belgium University.
- Hussain, I., Ahmad, M., Ahmad, S., Suleman, Q., Din, M. Q. & Khalid, N. (2012). A study to investigate the availability of educational facilities at the secondary school level in District Karak. *Language in India, Strength for Today and Bright Hope for Tomorrow, India*, 12 (10), 234-250.

- Irmayani, H., Wardiah, D., & Kristiawan, M. (2018). The Strategy of SD Pusri In Improving Educational Quality. *International Journal of Scientific & Technology Research*, 7(7), 113-121.
- Jacobson, S.L., Johnson, L., Ylimaki, R. and Giles, C. (2005), "Successful leadership in challenging US schools: enabling principles, enabling schools", *Journal of Educational Administration*, 43 (6), 607-618.
- Khan, P., & Iqbal, M. (2012). Overcrowded classroom: A serious problem for teachers. *University of Science and Information Technology*, 49, 10162-10165.
- Leiringer, R., & Cardellino, P. (2011). Schools for the twenty-first century: School design and educational transformation. *British Educational Research Journal*, 37(6), 915-934.
- Leithwood, K., & Steinbach, R. (1995). *Expert problem solving: Evidence from school and district leaders*. SUNY Press.
- Leithwood, K., Day, C., Sammons, P., Harris, A., & Hopkins, D. (2007). Seven strong claims about successful school leadership, Birmingham: NCSL.
- Maduabuchi, M. A. (2002). Occupational stress factors among secondary school principals in Abia State, Nigeria. *International Journal of Educational Planning and Administration*. 1(1), 17-27.
- Maniam, V.A., (2013). The link between managers' career success perceptions and the learning organization. Vilakshan, *XIMB Journal*, 10 (1), 68-78.
- McEvily, B., Soda, G., & Tortoriello, M. (2014). More formally: Rediscovering the missing link between formal organization and informal social structure. *Academy of Management Annals*, 8(1), 299-345.
- Meiristiya, V. & S. M. Purwaningsih. 2016. Pengaruh Sumber Belajar (Learning Resources by Design dan Learning Resources by Utilization) terhadap Prestasi Belajar Siswa pada Mata Pelajaran Sejarah Kelas X IPS di SMA Negeri 2 Mojokerto E- Journal Pendidikan Sejarah, 4(3): 1046-1058.
- Messarra, L.C., & El-Kassar, A. N. (2013). Identifying organizational climate affecting learning organization. *Business Studies Journal*, 5 (1), 19-27.
- Miles, R. E., Snow, C. C., Meyer, A. D., & Coleman, H. J. (2011). *Organizational strategy, structure, and process*. Palo Alto, CA: Stanford University Press.
- Mithani, S. S. & Khan, R. (2010). *School leadership imperatives: Using purposeful data to improve schools*. Educational leadership in Pakistan. Karachi: Oxford University Press.
- Musa, M. F., & Ahmad, Z. (2012). Higher education physical assets and facilities. *Procedia-Social and Behavioral Sciences*, 50, 472-478.
- Naz, A., Khan, W., Daraz, U., Hussain, M., Alam, I., & Alam, H. (2012). Assessing the Consequential Role of Infrastructural Facilities in Academic Performance of Students in Pakistan. *International Journal of Social Sciences & Education*, 3(2). 463-472.
- Northouse, P.G. (2013). *Leadership: Theory and practice*. (6th ed.). Thousand Oaks: CA: Sage.
- Ogawa, R. T., & Bossert, S. T. (1995). Leadership as an organizational quality. *Educational administration quarterly*, 31(2), 224-243.
- Owuamanam, D. O. (2005). *Threats to academic integrity in Nigerian Universities*. Lead paper presented at the conference of the National Association of Educational Researchers and Evaluators. University of Ado-Ekiti.
- Riaz, M. (2012). Pakistani nation at decline due to its antiquated education system (an interview). Karachi: *Ghazi (Monthly Magazine of May 2012)*, 42(12), 8.
- Rhodes, R. E., Courneya, K. S., Blanchard, C. M., & Plotnikoff, R. C. (2007). Prediction of leisure-time walking: an integration of social cognitive, perceived environmental, and personality factors. *International Journal of Behavioral Nutrition and Physical Activity*, 4(1), 51.
- Saeed, M., & Wain, K. U. R. (2011). Status of Missing Physical Facilities in Government Schools of Punjab. *Journal of Research & Reflections in Education (JRRE)*, 5(2), 105-127.
- Sani, O. J., & Musa, A. (2019). Influence of ICT competencies on job performance among library personnel in tertiary institutions in Lokoja, Kogi State, Nigeria. *Samaru Journal of Information Studies*, 19(1), 62-76.
- Schmoker, M. J. (1999). *Results: The key to continuous school improvement*. ASCD.



- Sharma, S. (2011). *Attributes of school principals' leadership qualities and capacities Institute of principalship studies*. Malaysia: University of Malaya, Kuala Lumpur.
- SOUCK, E. N., & NJI, M. G. (2017). The effects of school facilities on internal efficiency: The case of selected bilingual secondary schools in Yaoundé center. *World Journal of Research and Review*, 4(4), 41-48.
- Supovitz, J., Sirinides, P. & May, H. (2009). How the principal and peers influence teaching and learning. *Educational Administration Quarterly*, 46(1):31-56.
- Tilbury, D. (1995). Environmental education for sustainability: Defining the new focus of environmental education in the 1990s. *Environmental education research*, 1(2), 195-212.
- Webber, L. S., Catellier, D. J., Lytle, L. A., Murray, D. M., Pratt, C. A., Young, D. R., ... & Pate, R. R. (2008). Promoting physical activity in middle school girls: Trial of Activity for Adolescent Girls. *American journal of preventive medicine*, 34(3), 173-184.
- White, J. M. V., Guthrie, K. L., & Torres, M. (2019). *Thinking to Transform: Reflection in Leadership Learning*. IAP.
- World Bank (2009). *(Forthcoming) Education performance rating: How do African countries score? A multi-dimensional tool for benchmarking education outcomes and system policies*. Washington, DC: World Bank, USA.