

Pakistan Journal of Humanities and Social Sciences

Volume 9, Number 2, 2021, Pages 141 – 149 Journal Homepage: https://journals.internationalrasd.org/index.php/pjhss PAKISTAN JOURNAL OF HUMANITIES AND SOCIAL SCIENCES (PJHSS)

INATIONAL RESEARCH ASSOCIATION FOR SUSTAINABLE DEVELOP

# The Role, Professional Development, and Challenges of Principals: Key Ingredients of School Leadership

Syed Kaleem Ullah Shah Bukhari<sup>1</sup>, Muhammad Abiodullah<sup>2</sup>, Rafaquat Ali<sup>3</sup>, Ayesha Kanwal<sup>4</sup>

- <sup>1</sup> Assistant Professor, Department of Education, The Islamia University of Bahawalpur, Pakistan, Bahawalnagar Campus, Email: adnan\_kalim@yahoo.com
- <sup>2</sup> Associate Professor, Institute of Education and Research, University of the Punjab, Lahore, Pakistan Email: abiodullah.ier@pu.edu.pk
- <sup>3</sup> Assistant Professor, Department of Education, The Islamia University of Bahawalpur, Pakistan, Bahawalnagar Campus, Email: rafaquatiub@yahoo.com
- <sup>4</sup> PhD Scholar, University of Education, Lahore, Punjab, Pakistan, Email: Ayesha.kanwallch@gmail.com

### **ARTICLE INFO**

### ABSTRACT

Article History:			٦
Received:	August 25	, 2021	i
Revised:	September 28	, 2021	j:
Accepted:	September 29	, 2021	S
Available Online:	September 30	, 2021	C

Keywords:

Professional Development School Leadership Financial Resources School Improvement School Planning

The success of schools in the current era demands everincreasing efforts from their principals. Professional development is an essential ingredient that enables them to work in diverse scenarios and deal with competing, complex, and unprecedented challenges and issues. The present study intends to explore principals' professional development and its relationship with their roles and the challenges they face. Quantitative approach was employed to conduct this study. One hundred principals were selected based on the purposive sampling technique. Data were collected on a five-point rating scale from the principals of higher secondary schools in Lahore through a physically administered survey method. The questionnaire measured the participants' perceptions on three dimensions: professional development, roles, and challenges. Data were analyzed using the IBM Statistical Package for Social Sciences (SPSS) version 25. The impact of the professional development on the role participants' play and the challenges they face in schools' leadership were calculated using the regression analysis technique. The study found that professional development was a significant predictor in school efficiency/improvement, and school success depends heavily upon the professional development and the role of schools' principals. It also shows a need to reprioritize the roles that principals play in leading their schools. The challenges about students show that further professional development is required for principals to improve their efficiency in school improvement. The challenges due to financial resources also indicate the need for financial management. study concluded that The professional development should be monitored and kept updated to improve schools' leadership.

© 2021 The Authors, Published by iRASD. This is an Open Access Article under the Creative Common Attribution Non-Commercial 4.0

Corresponding Author's Email: adnan\_kalim@yahoo.com

## 1. Introduction

Success of schools in current era demands ever increasing efforts from their principals. Professional development (PD) prepares them to work in diverse scenarios and deal with competing, complex, and unprecedented challenges and issues (Balyer, Karatas, & Alci, 2015; Valli, Stefanski, & Jacobson, 2014; Vélez, Lorenzo, & Garrido, 2017). Their leadership role in planning, supervising, advising, instructing and maintaining the relations with teachers to leave ever-lasting impact on the school, society and nation is challenged more than ever before (Pont, Nusche, & Moorman, 2008). Thus, school leaders are under pressure, least facilitated and most accountable to provide access of high quality education to all students.

They are also required to ensure that all educators are equipped with knowledge, skills and attitudes to enhance students' learning (OECD, 2018). However, there is lack of such studies that shed light on school leaders while they are in a state of flux. This study aims to understand that how school principals perceive their professional development and play their role to combat with the challenges and succeed in every situation.

The role of principals is multi-dimensional in nature. They are simultaneously expected to perform new and complex tasks employing less resources but with extra-ordinary outcomes (Rice, Monk, & Zhang, 2020). They play their role to be an advisor of the staff, a manager of the finance project, and instructional and transformational leader for teaching, learning and mentoring of teachers (Balver et al., 2015; Ibrahim, Razak, & Kenavathulla, 2013). Such exceptional roles are hard to play and easy for outsiders to criticize with reference to their performance and progress of the school. Corcoran (2016) is of the view that principals must have extraordinary characteristics in order to cope with every situation. Navaridas-Nalda, Clavel-San Emeterio, Fernández-Ortiz, and Arias-Oliva (2020) found that principals are the custodians of the national trust which is revealed in the form of training the citizens who contribute in the economy. Huang, Zhang, and Huang (2020) argued the role of principals with regard to creating and maintaining a strong bonding among the professional learning communities so that schools can be entitled as learning organizations. Khan (2012) stated that the role of principals can lead or mislead the schools. This debate reveals that principals' role is associated with sustainable success of school which needs to be re-examined and researched.

Professional development is a key to success for school leaders. Its need and importance for secondary school principals in relation to students' success is far greater than that of elementary and higher secondary level, as secondary school is a turning point for students to choose a path for their career (Coelli & Green, 2012; Lee, Nie, & Bai, 2020; Pina, Cabral, & Alves, 2015). As students' success is implied to the school leadership success which cannot be possible without professional development. Conceptually, there are two kinds of forces for principals' professional development. Firstly, character, interest, motivation, positive stress, and ownership of responsibility are the intrinsic forces (Bates, Swennen, & Jones, 2014). Secondly, culture, resources, and supportive and cooperative faculty are extrinsic forces for professional development (Kanokorn, Wallapha, & Ngang, 2013; Piaw, Hee, Ismail, & Ying, 2014). Theoretically, it is the continuum of nature versus nurture. Though internal forces work for more motivation than internal ones yet the context plays a pivotal role. Thus, nature can be nurtured by virtue of these forces. Eventually, life-long learning becomes a habit of school leaders.

The success of student and school depends upon a gamut of the above discussed forces—professional development of school leaders. Van Vugt and von Rueden (2020) and Balyer et al. (2015) are of the view that if collectively these forces can be driven appropriately then development is the fate of school. While, Kanat-Maymon, Elimelech, and Roth (2020) and Hancock, Müller, Wang, and Hachen (2019) argued that leaders' intrinsic characteristics critically play a role in characterizing the school success. This debate reveals that professional development is required not only for principals' personal development but also for the collective success of schools.

Leadership plays a fundamental role in the success of school (Ferdig, 2007). Charismatic and transformational leadership are contextually related to the professional development of school leaders (Simola, Barling, & Turner, 2010). Considering charismatic leadership, charisma is less important than transformation in order to determine the path of success for schools, as transformational leaders focus on the long-term impact of school on society and nation (Daniëls, Hondeghem, & Dochy, 2019; Vélez et al., 2017). Moreover, age of charisma is lesser than transformation. This impact is mutually related to the professional development of principals by virtue of its inclusivity of the relevant stakeholders, such as teachers, supportive or IT staff, students and parents. Under the purview of professional development, principals' decision making, interpersonal, communication and leadership skills enable them to coordinate with these stakeholders to realize the vision of school and transform the nation (Berson, Shamir, Avolio, & Popper, 2001; Bukhari, Gilani, & Waheed, 2020; Dimmock, 2013; Huang et al., 2020). Thus, principals' professional development can be

#### Pakistan Journal of Humanities and Social Sciences, 9(2), 2021

viewed as one of the ingredients of leadership (Ali, Bukhari, & Muhammad, 2021) that enables them to create not only communities of practice (Wenger, 1998) but also sets goals for themselves when intrinsic forces work positively. However, this is least investigated that how principals (in Pakistan) perceive their own professional development with regard to the success of their schools.

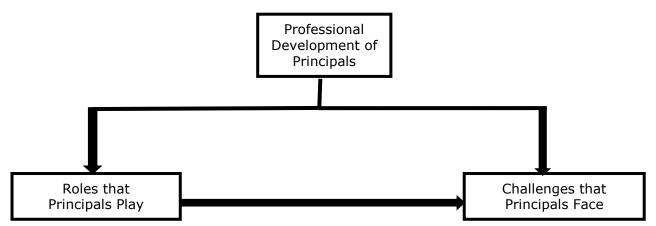
Schools are more dependent on state funding than colleges and universities. This is one of the reasons that school principals do not take interest in developing their skills for financial effectiveness (Khan, 2012). Taking into account the issues of financial management, securing funds and managing funds are two main areas of heads in general and educational leaders in particular. On the contrary to it, school principals are least expert in managing the provided finance. Thus, securing sufficient budget for school development is one problem but how to skillfully consume it is another problem (Rice, 2015; Rice et al., 2020). Principals' efficiency is challenged in the state of constant stress of doing more with less. Literature (e. g. Baker, Punswick, & Belt, 2010; Balyer et al., 2015; Corcoran, 2016; Eacott, 2015) highlights that though professional development enables the principals to be an ethical and transformational leaders yet how financial performance is linked with it (professional development) is least investigated. The existing literature on the subject does not guide us in this confusing situation. Thus, there is a need to explore further that how professional development can prepare principals to secure sufficient budget to fulfill academic activities and improve schools. It is also an important point of inquiry that how professional development supports them to spend whatever budget is approved.

Principals are faced with the long-standing and unique challenges. Dealing professionally the key internal stakeholders such as teachers and students is on top of all the challenges. Sincar (2013) U-Sayee and Adomako (2021) argued that teachers can challenge principal in making grouping, lobbying, and creating hurdles for school improvement. Wise (2015) discussed that students' challenges can be of taking no interest in studies, disciplinary issues, increasing dropout rate and teachers' ineffective methodologies in their teaching. These challenges not only test the leadership and relationship skills of principals but can also direct them to abort the academic activities. Paulsson (2019) found that lack of professionalism and professional development challenge the principals in the process of improving the schools. Another challenge can be from the state organization in the form of intervention where principals are not professionally prepared to deal with it (Ng & Pun, 2013; Ong, 2015; U-Sayee & Adomako, 2021). This shows that insufficient preparation and training, limited career prospects, inadequate support and rewards put greater pressure on principals in terms of improving the schools.

Above discussion proves that there is paucity of such research that can comprehensively enlighten the research community on the role, challenges, and professional development of principals. The need of these key ingredients cannot be ignored as principals are mandated with the state's demand to enable students to become well-educated citizens and build a nation that has well-trained youth. Principals' professional development and leadership roles work as the key ingredients for their success recipe to achieve these aims and translate every emerging issue and challenge into opportunities. Additionally, it can be conceptualized that professional development work as a scaffolding for principals to put schools on the path of sustainable development by coping with unprecedented challenges efficiently. Thus, it is established from the above background and review that principals' professional development and role are critically important and closely aligned to deal with the challenges. Based on this, the authors propose the following conceptual framework for this study.

Figure 1 consists of three parts of the conceptual framework of this study. The first part is of professional development of the principals. Based on the literature reviewed above, it can be conceptualized that if the principals are more professional then they are more capable to play their roles and translate challenges into opportunities. On the other hand, the less professional they are, the less they are concerned to play their roles and meet the challenges. The second part is directional towards the third part that is of challenges. It can be conceptualized that principals can play their roles more efficiently if they are more trained professionally. Moreover, their role playing can enable them to face the challenges effectively. Thus, having appropriate professional development enables principals to play their roles in order to reduce the intensity of the challenges they face. This conceptual framework, in one way, is a graphical presentation of the above reviewed literature. In another way, it is a base to reach the findings through analysis.





## 2. Research Methods

This study is quantitative in nature where survey design was used to collect data from the principals of higher secondary schools. One hundred principals were selected, from the total population, based on purposive sampling technique, as the objective of this study was to investigate/ explore the status of higher secondary schools' principals' professional development and its effect on the roles they play and challenges they face. The survey to collect the data was divided into two parts.

The first part collected demographic information from the participants that included gender, academic qualification, professional qualification, and experience of the secondary school principals in district Lahore. The second part consisted of the questionnaire that was based on three main dimensions and twelve sub-dimensions. The main dimensions were professional development, roles of the principals, and the challenges. While, the sub-dimensions under professional development were professional development of school leadership, and for school improvement/effectiveness; under role, role in planning, role in school organization, teaching role, role in supervision, role in guidance, role in maintaining relations and role in general; and under challenges, challenges due to financial resources, challenges about teachers, and challenges about students.

The questionnaire measured the perceptions of the participants on the dimensions discussed above. Participants responded on a five-point rating scale, ranging from 1 (Never) to 5 (Always). The questionnaire was comprised of 47 test items, in which perception of the participants about their professional development was taken as the first factor, perception of the participants about their role was taken as the second factor and perceptions about the challenges were taken as the third factor. The effect of professional development on the role performance of principals was taken as the fourth factor. The following research question was addressed in response to the objective of this study:

**Q1:** How do the professional development and role of school leaders work to combat with the challenges for school success?

Data were collected through physically administered survey method. The questionnaire was distributed among the participants and collected upon their completion. The participants were made aware of their voluntary participation in the study. Thus, they had the opportunity to participate or not to participate without any consequences following the research ethics. Using the IBM Statistical Package for Social Sciences (SPSS) version 25, descriptive and inferential statistics were used. With reference to the objective of the study, descriptive analysis were done to reach the summary and description of the entire data. While, regression analysis technique was used to find the impact of the professional development on the role participants play and the challenges they face in the leadership of schools. The following

section discusses the results of the study.

### 3. Results

Table 1 displays the description of the sample who filled in the questionnaire. Out of 100 principals, the predominant number was of females that is 60 principals were females and 40 were males. Considering the qualification of the principals, quite a greater number of principals that is 79 were holding master degree while 21 principals were holding M.Phil. Degree. Similarly, 65 principals were M.Ed. and 35 principals were B.Ed. The statistics with regard to experience divided the principals into three categories: 30 principals had the experience from 1 to 5 years, 41 principals had the experience from 6 to 10 years, while 29 principals had the experience less than 10 years. Thus, accumulatively, 71% had experience less than 10 years while 29 % had more than 10 years' experience.

Variables	%	Variables	%	
Sex		Academic Qualification		
Male	40	Masters	79	
Female	60	M. Phil.	21	
Professional Q	ualification	Experience (Years)		
B.Ed.	35	1-5	30	
M.Ed.	65	6-10	41	
		11>	29	

### Table 1: Frequency of Participant's Demographics (N=100)

#### Table 2: Role of School Principals

Elements of Role of School principals	Min.	Max.	Mean	SD
Role in Planning	2.5	5	4.25	0.53
Role in School Organization	2.5	5	4.37	0.48
Teaching Role	3.0	5	4.42	0.49
Role in Supervision	1.0	5	4.34	0.74
Role in Guidance	3.0	5	4.27	0.44
Role in Maintaining Relations	3.5	5	4.52	0.34
Role in General	2.5	5	4.25	0.53
Overall role	3.5	5	4.34	0.30

Table 2 provides an overview of the descriptive statistics about the role of the principals at the school in various areas. The most important role is maintaining relations (M=4.52, SD=0.34), the 2<sup>nd</sup> most important role is Teaching (M=4.42, SD=0.49) and the least important role principals play is planning. Variation in playing role in different elements is not high. The mean scores of every element of role of School principal is between agree and strongly agree.

### Table 3: Professional Development of Principals

Professional Development	Min.	Max.	Mean	SD
PD For school Leadership	2.75	5.0	4.31	0.53
PD for school improvement/effectiveness	2.38	5.0	4.20	0.53
Overall	2.75	5.0	4.23	0.47

Table 3 reflects the Professional Development of Principals. Professional development for school leadership is higher (M=4.31, SD=0.53) than to Professional development for school improvement (M=4.20, SD=0.53).

Table 4: Challenges faced by school Principals

Challenges	Min.	Max.	Mean	SD
Challenges due to Financial Resources	1.00	5.00	3.60	0.76
Challenges about Teachers	1.00	4.80	2.96	0.82
Challenges about Students	1.50	5.00	3.76	0.87
Overall	1.71	4.59	3.47	0.65

Table 4 shows the challenge that school principals face in leading and managing their schools. The challenges about Students is higher (M=3.76, SD=0.53) than the challenges they

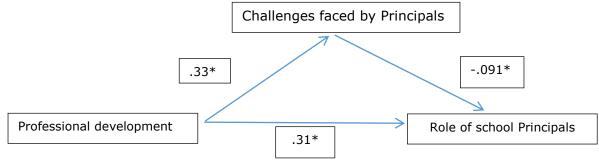
face due to financial resources (M=3.60, SD=0.76). The table also shows that principals are facing least challenges about teachers (M=3.60, SD=0.76).

	Professional development				
	For School Leadership	For school Improvement	Overall		
Role	.463**	.310**	.449**		
Role in Planning	.497**	.359**	.460**		
Role in School Organization	.183	.200*	.160		
Role in Teaching	.284**	.124	.296**		
Role in Supervision	.323**	.304**	.285**		
Role in Guidance	.267**	.173	.288**		
Role in Maintaining Relations	.085	.110	.065		
Challenges	.123	.046	.122		
Challenges due financial resources	.003	020	.022		
Challenges about teachers	.060	042	.078		
Challenges about students	.228*	.188	.189		

Table 5:	Spearman	rho	coefficient	of	correlation	between	Professional
	developme	nt, Rol					

Table 5 depicts the Spearman rho coefficient of correlation between professional development, role and challenges. Results show that professional development was statistically significant with all elements of role of school principal except role in school organization and role in maintaining relations. Professional development was statistically positive correlated with role in planning, role in teaching, role in supervision, role in guidance (p<.05).

#### Figure 2: Effect of Professional Development on Role and Challenges as mediator



Regression analysis was used to investigate the hypothesis that challenges negatively moderate the effect of professional development on role of principals. Results indicated that professional development is significant predictor of challenges (b=.33, Se=, 1349, p<.05 and that professional development is significant predictor r of role of Principals. (b=.307, Se=.068, p<.001). The challenges are significant negative predictor of role of school principals.

### 4. Discussion

The objective of this study was to understand that how school principals perceive their professional development and play their role to deal with the challenges. School leadership is becoming a complex and challenging phenomenon where it is very hard to draw confirm conclusions with respect to the nexus of role and professional development to ensure the success of schools. However, the results of this study show the conclusions that are considered beyond reasonable doubt. The results show that principals' professional development plays a pivotal role in leading schools for success. Their professional development can determine the success of school. Considering the contributing value of this study, it is worthwhile to mention that professional development is a good predictor in refining the role and dealing with the challenges. This study shows that school leadership depends heavily upon the professional development and the role of schools' principals (e.g. Lee et al., 2020; Ng & Pun, 2013). Another distinctive feather of this study is that in Pakistan perspectives, where lack of resources is a major hurdle, professional development can reduce this barrier (e.g Corcoran, 2016; Eacott, 2015). Thus, the discussion on the results of key ingredients of principals' success focuses on their relationship and the magnitude of their impact on each other.

#### Pakistan Journal of Humanities and Social Sciences, 9(2), 2021

This study provides insights regarding the role school principals play to succeed schools. Among these roles, maintaining relations is the top most role. The second important role is teaching while, planning the main ingredients of leadership and management is the least bothered by the school principals. This shows that there is a need of reprioritizing the roles that principals play in leading their schools. Since, roles are the expectations of teachers, parents and other society members, this study has pointed out a critical gap to be addressed. The findings are negatively consistent with the study conducted by Coelli and Green (2012). This finding also guides the academia to further study the relationship of roles with the supervision of schools.

The study has shown that professional development is important in two major areas: professional development for school leadership and for school improvement/effectiveness. While the third area is general one, that discusses the importance of professional development other than leadership and school improvement/effectiveness. Specifically, professional development for school leadership is of great significance in this study. The second most required area where professional development can contribute well is improvement/ effectiveness. This finding is consistent with the study conducted by Hancock et al. (2019). It can be deduced that though leadership is important yet the efficiency of principals is of second priority. It can be implied that professional development of principals for school leadership is perceived culturally different from other countries where leadership is closely aligned with school improvement/effectiveness. It can also be implied that professional development can work best when it is associated with school improvement/effectiveness.

The study has shown that in leading schools effectively challenges are found with different level of intensity. For example, two are the major challenges: challenges about students and challenges due to financial resources while, the challenges about teachers are the least bothered in this study. Critically observing, the challenges about students shows that further professional development is required for principals to improve their efficiency in school improvement. The challenges due to financial resources also indicate the need of financial management so that the principals can use their potential to generate maximum funds and resources to improve the quality of teaching, learning and management. These findings are related to the study conducted by Sincar (2013) who discussed the challenges that principals face in managing technology. While, the present study reveals specific challenges that principals face in terms of school leaders.

Considering the relationship of professional development with challenges and the role, this study has revealed that professional development was statistically significant for dealing with challenges and playing their roles. Pointing out specifically the relationship of professional development with the role in school organizing and maintaining the relations, the study showed that professional development is less significant in these dimensions. While, professional development plays a very significant role in planning, teaching, supervision, and guidance (Piaw et al., 2014; Pina et al., 2015). Thus, this study confirms and contributes significantly in advancing the argument that school leadership can be strengthened and principals can be capable if professional development is monitored and maintained regularly to deal with the challenges and playing their roles.

## 5. Conclusions

This study aimed to find the answer of the question, "How do the professional development and role of school leaders work to combat with the challenges for school success"? Findings have shown that improvement of schools requires untiring efforts from their principals. Professional development works as a key ingredient to lead a school effectively. It can also enable them to perform in competing, complex, and unprecedented challenging environment. Principals are simultaneously expected to perform new and complex tasks employing less resources but with extra-ordinary outcomes. Apart from professional development, school leaders perform a number of roles in mitigating the complex situations and leading their schools in unprecedented challenges. As the study was conducted in one of the metropolitan cities of Pakistan, Lahore, employing quantitative approach, the findings can be generalized to the public schools in Lahore. Precisely, it was revealed that professional development is statistically significant in determining the success of schools and improving its efficiency. Professional development plays a significant role in order to improve teaching, learning, school supervision, and guidance of various stakeholders. Maintaining relations and

school organization were found less important in comparison of teaching, learning, school supervision, and guidance. Additionally, the challenges of finance and challenges related to teachers were found the major challenges to the schools' principals. The study was conducted in higher secondary schools using three key ingredients of leadership. Thus, the future study can be conducted to further explore the relationship of other factors with professional development. Moreover, the future study can also be enhanced including the teachers and students in terms of taking their opinion for school improvement. Comparison of public and private school leaders can also be done in further study.

### References

- Ali, R., Bukhari, S. K. U. S., & Muhammad, S. (2021). The Importance of IPIP Five Factor Personality Traits in Prediction of University Students' Emotional Intelligence. *Pakistan Social Sciences Review*, 5(2), 556-569.
   Baker, B. D., Punswick, E., & Belt, C. (2010). School Leadership Stability, Principal Moves, and
- Baker, B. D., Punswick, E., & Belt, C. (2010). School Leadership Stability, Principal Moves, and Departures: Evidence From Missouri. *Educational Administration Quarterly*, 46(4), 523-557. doi: 10.1177/0013161x10383832
- Balyer, A., Karatas, H., & Alci, B. (2015). School Principals' Roles in Establishing Collaborative Professional Learning Communities at Schools. *Procedia - Social and Behavioral Sciences, 197*, 1340-1347. doi: https://doi.org/10.1016/j.sbspro.2015.07.387
- Bates, T., Swennen, A., & Jones, K. (2014). *The Professional Development of Teacher Educators*: Taylor & Francis.
- Berson, Y., Shamir, B., Avolio, B. J., & Popper, M. (2001). The relationship between vision strength, leadership style, and context. *The Leadership Quarterly*, *12*(1), 53-73. doi: https://doi.org/10.1016/S1048-9843(01)00064-9
- Bukhari, S. K. U. S., Gilani, N., & Waheed, S. A. (2020). Approaches to Attain Campus Sustainability: A Case of Pakistan Public Universities. *Paradigms*, 14(2), 42-49.
- Coelli, M., & Green, D. A. (2012). Leadership effects: school principals and student outcomes. *Economics of Education Review, 31*(1), 92-109. doi: https://doi.org/10.1016/j.econedurev.2011.09.001
- Corcoran, R. P. (2016). Principals on the path to excellence: Longitudinal, multisite clusterrandomized controlled trials of the National Institute for School Leadership's Executive Development Program. *International Journal of Educational Research*, *79*, 64-75. doi: https://doi.org/10.1016/j.ijer.2016.05.001
- Daniëls, E., Hondeghem, A., & Dochy, F. (2019). A review on leadership and leadership development in educational settings. *Educational Research Review, 27*, 110-125. doi: https://doi.org/10.1016/j.edurev.2019.02.003
- Dimmock, C. (2013). School-based management and school effectiveness: Routledge.
- Eacott, S. (2015). The principalship, autonomy, and after. *Journal of Educational Administration and History*, *47*(4), 414-431. doi: 10.1080/00220620.2015.996866
- Ferdig, M. A. (2007). Sustainability Leadership: Co-creating a Sustainable Future. *Journal of Change Management*, 7(1), 25-35. doi: 10.1080/14697010701233809
- Hancock, D. R., Müller, U., Wang, C., & Hachen, J. (2019). Factors influencing school principals' motivation to become principals in the U.S.A. and Germany. *International Journal of Educational Research, 95*, 90-96. doi: https://doi.org/10.1016/j.ijer.2019.04.004
- Huang, L., Zhang, T., & Huang, Y. (2020). Effects of school organizational conditions on teacher professional learning in China: The mediating role of teacher self-efficacy. *Studies in Educational Evaluation, 66*, 100893. doi: https://doi.org/10.1016/j.stueduc.2020.100893
- Ibrahim, M. S., Razak, A. Z. A., & Kenayathulla, H. B. (2013). Smart Principals and Smart Schools. *Procedia - Social and Behavioral Sciences, 103*, 826-836. doi: https://doi.org/10.1016/j.sbspro.2013.10.404
- Kanat-Maymon, Y., Elimelech, M., & Roth, G. (2020). Work motivations as antecedents and outcomes of leadership: Integrating self-determination theory and the full range leadership theory. *European Management Journal, 38*(4), 555-564. doi: https://doi.org/10.1016/j.emj.2020.01.003
- Kanokorn, S., Wallapha, A., & Ngang, T. K. (2013). Indicators of Ethical Leadership for School Principals in Thailand. *Procedia - Social and Behavioral Sciences*, 93, 2085-2089. doi: https://doi.org/10.1016/j.sbspro.2013.10.170

- Khan, A. (2012). Instructional management of a private and a government secondary school principal in Northern Pakistan. *International Journal of Educational Development*, *32*(1), 120-131. doi: https://doi.org/10.1016/j.ijedudev.2010.12.003
- Lee, A. N., Nie, Y., & Bai, B. (2020). Perceived principal's learning support and its relationships with psychological needs satisfaction, organisational commitment and change-oriented work behaviour: A Self-Determination Theory's perspective. *Teaching and Teacher Education, 93*, 103076. doi: https://doi.org/10.1016/j.tate.2020.103076
- Navaridas-Nalda, F., Clavel-San Emeterio, M., Fernández-Ortiz, R., & Arias-Oliva, M. (2020). The strategic influence of school principal leadership in the digital transformation of schools. *Computers in Human Behavior, 112*, 106481. doi: https://doi.org/10.1016/j.chb.2020.106481
- Ng, S.-w., & Pun, S.-h. (2013). How school principals position themselves in times of education reform in China. *Procedia-Social and Behavioral Sciences, 89*, 54-58.
- OECD. (2018). *Teaching for the Future*: OECD Publishing.
- Ong, C. H. (2015). Challenges and Processes in School Turnaround A Singapore Secondary School Principal's Perspective. *Procedia - Social and Behavioral Sciences, 186*, 169-173. doi: https://doi.org/10.1016/j.sbspro.2015.04.173
- Paulsson, A. (2019). Professionalism between profession and governance: how university teachers' professionalism shapes coordination AU - Macheridis, Nikos. *Studies in Higher Education*, 44(3), 470-485. doi: 10.1080/03075079.2017.1378633
- Piaw, C. Y., Hee, T. F., Ismail, N. R., & Ying, L. H. (2014). Factors of Leadership Skills of Secondary School Principals. *Proceedia - Social and Behavioral Sciences*, 116, 5125-5129. doi: https://doi.org/10.1016/j.sbspro.2014.01.1085
- Pina, R., Cabral, I., & Alves, J. M. (2015). Principal's Leadership on Students' outcomes. *Procedia - Social and Behavioral Sciences, 197*, 949-954. doi: https://doi.org/10.1016/j.sbspro.2015.07.279
- Pont, B., Nusche, D., & Moorman, H. (2008). Improving school leadership, Volume 1: Policy and practice. *Australia: OECD Publications. Available online also at: https://www. oecd. org/edu/school/44374889. pdf [accessed in Makassar, Indonesia: October 9, 2016].*
- Rice, J. K. (2015). Investing in Equal Opportunity: What Would It Take to Build the Balance Wheel? *National Education Policy Center*.
- Rice, J. K., Monk, D., & Zhang, J. (2020). Chapter 24 School finance: an overview. In S. Bradley & C. Green (Eds.), *The Economics of Education (Second Edition)* (pp. 333-344): Academic Press.
- Simola, S. K., Barling, J., & Turner, N. (2010). Transformational leadership and leader moral orientation: Contrasting an ethic of justice and an ethic of care. *The Leadership Quarterly*, 21(1), 179-188. doi: http://dx.doi.org/10.1016/j.leaqua.2009.10.013
- Sincar, M. (2013). Challenges school principals facing in the context of technology leadership. *Educational Sciences: Theory and Practice, 13*(2), 1273-1284.
- U-Sayee, C. R., & Adomako, E. B. (2021). Supervisory practices and challenges faced by senior high school principals in Greater Monrovia, Liberia: implications for quality education. *Heliyon*, *7*(4), e06895. doi: https://doi.org/10.1016/j.heliyon.2021.e06895
- Valli, L., Stefanski, A., & Jacobson, R. (2014). Leadership in School-community Partnerships. Procedia - Social and Behavioral Sciences, 141, 110-114. doi: https://doi.org/10.1016/j.sbspro.2014.05.020
- Van Vugt, M., & von Rueden, C. R. (2020). From genes to minds to cultures: Evolutionary approaches to leadership. *The Leadership Quarterly, 31*(2), 101404. doi: https://doi.org/10.1016/j.leaqua.2020.101404
- Vélez, S. C., Lorenzo, M. C. A., & Garrido, J. M. M. (2017). Leadership: Its Importance in the Management of School Coexistence. *Procedia - Social and Behavioral Sciences*, 237, 169-174. doi: https://doi.org/10.1016/j.sbspro.2017.02.059
- Wenger, E. (1998). *Communities of Practice: Learning, meaning and identity*. Cambridge, U. K.: Cambridge Univesity Press.
- Wise, D. (2015). Emerging Challenges Facing School Principals. *Education Leadership Review*, *16*(2), 103-115.