

**Assessing Managerial Skills of Middle Level Managers in Public Sector Universities of Khyber Pakhtunkhwa**Aurang Zeb<sup>1</sup>, Dr. Iqbal Amin Khan<sup>\*2</sup>, Dr. Munir Khan<sup>3</sup>**Original Article**

1. PhD Scholar, Department of Education, University of Malakand  
Email: aurangzeb74@gmail.com
2. Lecturer, Department of Education, University of Malakand  
Email: iqbalphd.scholar@yahoo.com
3. Assistant Professor, Department of Education, University of Malakand  
Email: drmunirkhan71@gmail.com

**Abstract**

*This study investigates the perceptions of middle level managers about the managerial skills in public sector universities of Khyber Pakhtunkhwa. A stratified sample of 122 department heads/chairmen was selected from six public sector universities of Khyber Pakhtunkhwa. For data collection, a questionnaire was developed after the review of related literature and previous studies comprising seven categories of management skills (MS) i.e. technical skills, interpersonal skills, conceptual skills, diagnostic skills, communication skills, decision making skills and time management skills. Results of the study revealed that the technical, human, conceptual, diagnostic, communication and decision-making skills of middle level managers were found to be maximum above average level of observance. While time management skills of middle level managers was found to be above average level of observance. These managerial skills assist the middle level managers in the achievement of organizational goals in departments. The study results also revealed that the middle level managers faced problems regarding time management, communication issues among the staff, declaration of unjust decisions by the interruption of pressure groups, personal emotional instability, incompetency and do not having skill of saying "no" to subordinates. The introduction of refresher courses, arrangement of workshops, trainings and seminars may be worthwhile strategies to increase the managerial skills of middle level managers of public sector universities.*

**Keywords:** Heads of Teaching Departments, Management skills, Middle Level Managers, Public Sector Universities

**Introduction**

According to Griffin, (2021: 2) "Management, is a set of activities (including planning and decision making, organizing, directing and controlling) directed at an organization's resources, i.e. human, financial, physical and informational, with the aim of achieving organizational goals in an efficient and effective manners". Thus, educational management is properly arranging, organizing and implementing the teaching learning activities under the instructions, guidance and coordination with the authority. Wise management having strong background due to managerial skills face no hurdles in implementing plan, because in any organization head is the leader or administrator or manager who is responsible for the survival and promotion of the organization (Northhouse, 2018). A good manager is expected for transparency, strong team building, appreciation for recognition, accountability, fears as result of past experience, having solution for political pressure, mafia, pressure groups and nepotism in universities (Paturusi, 2017).

Head of teaching department is the manager who is responsible for the survival of the organization for managing operation and administration of the organization, guiding and educating the colleagues, maintaining facilities and infrastructure (Northhouse, 2018; Afshari *et al.*, 2012). In education departments at universities head/chairman is the most important factor in improving the quality of education (Bukhari *et al.*, 2021). Because the head is a leader who influences subordinates to work to achieve and set precedents (Yukl, 2012). The head must have good behavior and managerial styles, which is consistent, effective and visible when giving orders, assigning tasks, communicating, and encouraging subordinates (Williams, 2013). Middle level educational management is responsible, to properly arrange, organize and implement the teaching learning activities under the instructions, guidance and coordination with the top-level management, being working as administrator (Bukhari *et al.*, 2021). Educational managers are the professionals who have a set of code of ethics and are legally sanctioned by state boards of education, which behavior is according to the standard practices because their approach has been organized and their knowledge is tested (Peterson & Fleet, 2004).

The success or failure of an organization depends that how organization is being management (Rue *et al.*, 2012). The managerial skills of manager have great impact on organization's image building and its sustainability. Managerial skills are the expertise of the managers that ensure the achievement of organizational goals through the effective and efficient use of organizational resources (Quijada *et al.*, 2023). There are various managerial skills proposed by different researchers for effective and efficient management. These managerial skills may include technical, conceptual, interpersonal, decisional, problem solving, strategic planning, diagnostic, time management, communication and political skills (Birds, 2014; Griffin, 2021; Katz, 1955; Khalaf *et al.*, 2020; Mintzberg, 1973; Northhouse, 2018; Peterson & Fleet, 2004; Wepner *et al.*, 2014; Williams van Rooij, 2013; Yukl, 2012), however, it is not easy to grasp on all these skills.

A number of studies have been conducted on managerial skills most of which are in business firms or at schools or colleges level (Batra & Sharma, 2017; Fatima, Iftikhar & Ejaz, 2022; Griffin, 2021; Huda & Aslamiah, 2022; Katz, 1955; Mintzberg, 1973; Northhouse, 2018; Peterson & Dubrin, 2012; Williams van Rooij, 2013; Yukl, 2012). However, these findings cannot be generalized to the heads of teaching departments at university level as most of the studies have been conducted at business organization, health organization or industrial organization or at school level, where the cultural and working conditions are quite different. This study has been conducted on the managerial skills of middle level managers i.e. heads/chairmen in the public sector universities because at university level problems of the head are of different nature due to open and easy interruption of all through mafia and pressure groups both of students and community. To fill this gap, the current study aims to seek the perceptions of middle level managers about management skills in public sector universities of Khyber Pakhtunkhwa province.

### Research Methodology

The study used quantitative research approach. Descriptive (survey) design was used to collect and analyze the data. The population of the study consisted of 169 middle level managers working in six public sector universities of Khyber Pakhtunkhwa. By using multi stage cluster sampling technique 120 middle level managers of teaching departments were selected. In the first stage the researchers randomly selected six public sector universities from Khyber Pakhtunkhwa province. Then, from each university twenty teaching departments were randomly selected. In the last stage heads of teaching departments (middle level managers) were selected.

The researchers used a self-constructed questionnaire comprised of 67 based on Likert scale items ranging from "strongly agree" to "strongly disagree". The items were divided into seven constructs. The

first construct was about technical skills which consisted of eight items; followed by interpersonal skills which were consisted of eight items; followed by conceptual skills which were also consisted of eight items. The fourth construct diagnostic skills consisted of six items followed by communication skills consisted of seven items; followed by decision making skills consisted of nine items. The final construct time management skills which consisted of twenty items. The content and face validity was established through a panel of experts who had enough experience in teaching and research at university level in the field of educational administration, management and leadership which consisted of both inland and foreign experts. These experts were requested to check the relevancy, clarity and appropriateness of the items. Their valuable suggestions were incorporated in the questionnaire and final questionnaire was piloted to 30 heads of teaching departments who were not included in the sample of the study to check the reliability of the instrument. The reliability of the instrument was found through Cronbach's alpha (inter consistency method). The Chronbach's alpha values for technical, interpersonal, conceptual, diagnostic, communication, decision making and time management skills were found to be (.905, .891, .900, .884, .905, .907, .914) respectively.

### Results

Among 122 HoDs, 62.3 percent were male and 37.7 percent were female. The highest administrative experience (51.6%) of HoDs was 1-5 years while 33% had 6-15 years of administrative experience. However, 62.3% had more than 10 years of teaching experience. Sixty percent HoDs had not attended any type of training related to managerial skills.

**Table 1**

*Perceptions of HoDs about Technical Skills*

Items	SDA	DA	UD	A	SA	M	SD
Appreciate workable ideas for department	5	3	4	47	63	4.31	.963
Executing strategic plan for the achievement of departmental goals matters a lot for me.	5	3	3	71	40	4.13	.900
Execute those ideas which really work	5	2	7	68	40	4.11	.902
Understand what is being expected of me	2	1	8	51	60	4.26	.714
Following directions for the achievement of goals is important for me	1	2	7	66	46	4.52	.784
Application of emerging technologies are important for organization,	2	2	4	37	77	4.36	.783
Know my role and responsibilities very well	1	1	0	37	83	4.65	.588
Have command on using modern instructional technologies at workplace	0	7	7	63	45	4.20	.789
<b>Overall mean and standard deviation scores</b>						<b>4.32</b>	<b>.494</b>

The above table 2 shows the perceptions of departmental heads about technical skills. The mean scores of all the items in the construct "technical skills" have maximum above average level of observance. The maximum mean score among the eight items was found to be 4.65 for the item "Know my role and responsibilities very well" which shows the maximum above average level of observance. On the other hand, the minimum mean score among the eight items was found to be 4.11 for the item "Execute those ideas which really work" which also shows maximum above average level of observance among the eight items. The overall mean and standard deviation score for the construct technical skills was found to be (4.317 & .494) respectively, which shows maximum above average level of observance for the construct technical skills.

**Table 2***Perceptions of HoDs about Interpersonal Skills*

Items	SDA	DA	UD	A	SA	M	SD
Interact effectively with people both inside and outside the department.	0	1	1	66	54	4.42	.558
Adopt working style which fulfills people's needs at working place.	0	7	1	51	63	4.39	.777
Know how to motivate individuals and groups to perform activities.	0	2	12	49	59	4.35	.726
Provision of supportive communication climate to my staff is challenge for me.	1	1 9	3	42	57	4.11	1.09
Understanding social fabric of department is important for me.	0	1	7	62	52	4.35	.629
Getting support of all stakeholders really matters for me.	0	1	7	62	52	4.50	.579
Inculcating teamwork spirit at my department is my first priority.	0	1	5	54	65	4.49	.620
Concern with decisions making process which affect the lives of team members.	0	1	11	63	47	4.28	.659
<b>Overall mean and standard deviation scores</b>						<b>4.36</b>	<b>.473</b>

The above table 3 shows the perceptions of departmental heads about technical skills. The mean scores of all the items in the construct "interpersonal skills" have maximum above average level of observance. The maximum mean score among the eight items was found to be 4.50 for the item "Getting support of all stakeholders really matters for me" which shows the maximum above average level of observance. On the other hand, the minimum mean score among the eight items was found to be 4.11 for the item "Provision of supportive communication climate to my staff is challenge for me" which also shows maximum above average level of observance among the eight items. The overall mean and standard deviation score for the construct interpersonal skills was found to be (4.36 17 & .47369) respectively, which shows maximum above average level of observance for the construct interpersonal skills.

**Table 3***Perceptions of HoDs Conceptual Skills*

Items	SDA	DA	UD	A	SA	M	SD
View the department in holistic manner.	1	1	5	59	56	4.38	.684
Enjoy working with abstract ideas.	4	3	22	72	21	3.84	.853
I can keep focused on the big picture.	0	3	19	58	42	4.14	.764
Fascinated by complex problems of the department.	0	2	44	43	33	3.88	.829
Possessing mental capacity to understand the overall working of the organization.	0	0	9	64	49	4.33	.609
Making broad based decisions that serve the overall organization.	0	2	11	58	51	4.30	.701
Understanding how each individual's role is important for the achievement of mission.	0	1	3	55	63	4.48	.592
Thinking about organizational values and philosophy appeals to me.	0	2	11	58	51	4.30	.701
<b>Overall mean and standard deviation scores</b>						<b>4.20</b>	<b>.513</b>

The above table 4 shows the perceptions of departmental heads about technical skills. The mean scores of all the items in the construct “conceptual skills” have maximum above average level of observance. The maximum mean score among the eight items was found to be 4.48 for the item “Understanding how each individual’s role is important for the achievement of mission.” which shows the maximum above average level of observance. On the other hand, the minimum mean score among the eight items was found to be 3.84 for the item “Possessing mental capacity to understand the overall working of the organization.” which also shows above average level of observance among the eight items. The overall mean and standard deviation score for the construct conceptual skills was found to be (4.2039 & .51330) respectively, which shows maximum above average level of observance for the construct conceptual skills.

**Table 4***Perceptions of HoDs Diagnostic Skills*

Items	SDA	DA	UD	A	SA	M	SD
Try to dig out the possible reasons of the problems.	0	1	5	53	63	4.46	.619
Showing most appropriate response to a situation.	0	0	4	52	66	4.51	.564
Determining a probable cause of an issue.	0	1	16	45	60	4.34	.736
Analyzing carefully situation in which decision is made.	0	0	10	64	48	4.31	.618
Diagnose and analyze a problem at the department by studying its symptoms and then developing its solution.	0	1	14	64	43	4.22	.674
Before taking any action, analyze the situation carefully.	0	1	1	49	71	4.56	.561
<b>Overall mean and standard deviation scores</b>						<b>4.40</b>	<b>.469</b>

The above table 5 shows the perceptions of departmental heads about technical skills. The mean scores of all the items in the construct “diagnostic skills” have maximum above average level of observance. The maximum mean score among the eight items was found to be 4.56 for the item “Before taking any action, analyze the situation carefully.” which shows the maximum above average level of observance. On the other hand, the minimum mean score among the eight items was found to be 4.31 for the item “Analyzing carefully situation in which decision is made.” which also shows maximum above average level of observance among the eight items. The overall mean and standard deviation score for the construct diagnostic skills was found to be (4.40 & .469) respectively, which shows maximum above average level of observance for the construct diagnostic skills.

**Table 5***Perceptions of HoDs Communication Skills*

Items	SDA	DA	UD	A	SA	M	SD
Effectively communicate ideas and information with others.	0	1	5	70	46	4.32	.593
Efficiently receives ideas and information from others.	0	5	4	68	45	4.25	.711
Transmit ideas to subordinates so that they know what is expected of them.	0	3	4	46	69	4.48	.683
Inform high ups what is going on in the department.	0	2	5	49	66	4.47	.658
Coordinate work with peers and colleagues, so that they could work well together.	0	2	2	66	52	4.38	.607
Listen to what others say patiently.	0	2	11	32	77	4.51	.730
Understand the real meanings behind emails, letters, reports and other written communication.	0	1	2	67	52	4.39	.569
<b>Overall mean and standard deviation scores</b>						<b>4.40</b>	<b>.442</b>

The above table 6 shows the perceptions of departmental heads about technical skills. The mean scores of all the items in the construct “communication skills” have maximum above average level of observance. The maximum mean score among the eight items was found to be 4.51 for the item “Listen to what others say patiently” which shows the maximum above average level of observance. On the other hand, the minimum mean score among the eight items was found to be 4.25 for the item “Efficiently receives ideas and information from others.” which also shows maximum above average level of observance among the eight items. The overall mean and standard deviation score for the construct communication skills was found to be (4.40 & .442) respectively, which shows maximum above average level of observance for the construct communication skills.

**Table 6***Perceptions of HoDs Decision Making Skills*

Items	SDA	DA	UD	A	SA	M	SD
I am not get bogged down with individual complaints.	0	6	22	65	29	3.96	.786
Approach a task or problem from a scientific perspective.	0	0	12	74	36	4.20	.598
Analyze the situation carefully before making a decision.	0	0	5	72	45	4.33	.552
Select an appropriate course of action to solve problems.	0	0	11	58	53	4.34	.640
Believing that most of the time I make good decisions.	0	1	18	73	30	4.08	.650
Recognize quickly when I make a bad decision.	0	12	4	87	19	3.93	.762
Multitude roles affect my decision-making skill.	0	2	20	70	30	4.05	.691
Collect data about an issue and then make a decision.	0	1	5	69	47	4.33	.595
Collect objective data to arrive at correct decision.	0	5	16	54	46	4.15	.830
<b>Overall mean and standard deviation scores</b>						<b>4.15</b>	<b>.405</b>

The above table 7 shows the perceptions of departmental heads about technical skills. The mean scores of all the items in the construct “diagnostic skills” have maximum above average level of observance. The maximum mean score among the eight items was found to be 4.34 for the item “Select an appropriate course of action to solve problems.” which shows the maximum above average level of observance. On the other hand, the minimum mean score among the eight items was found to be 3.93 for the item “Recognize quickly when I make a bad decision.” which also shows above average level of observance among the eight items. The overall mean and standard deviation score for the construct diagnostic skills was found to be (4.15 & .405) respectively, which shows maximum above average level of observance for the construct diagnostic skills.

**Table 7***Perceptions of HoDs Time Management Skills*

Items	SDA	DA	UD	A	SA	M	SD
I schedule my activities in advance.	0	18	9	57	38	3.94	.990
Define goals at the start of the semester.	0	2	3	77	40	4.27	.590
I delegate easy tasks to my staff.	5	2	2	74	39	4.15	.869
My staff undertakes delegated tasks well.	4	12	3	66	37	3.98	1.01
I am not confident in the ability of my staff.	31	12	3	66	37	2.69	1.41
I always check on delegated tasks being completed.	0	3	11	83	25	4.07	.626
I develop my own priority lists each day.	0	14	9	67	32	3.96	.894
I check my priorities list at the end of each day to check if tasks have been undertaken.	0	13	9	69	31	3.97	.871
My priorities are determined by authorities outside the department.	22	24	20	36	20	3.07	1.37
Constant interruptions cause me to wander from my priorities.	17	9	45	38	13	3.17	1.16
Problems, as they arise, define my management priorities.	0	8	6	80	28	4.05	.737
I try not to allow colleagues to distract my attention with trivial issues.	11	4	25	77	5	3.50	.973
Meetings that I chair have agendas and minutes.	0	2	1	68	51	4.38	.594
The decisions taken at meetings are followed up by actions.	0	3	2	67	50	4.34	.640
My paperwork is filed regularly.	0	2	9	71	40	4.22	.649
I ignore paperwork which I consider less important.	19	21	6	70	6	3.19	1.24
My paperwork is filed regularly	0	2	9	71	40	3.97	1.01
I ignore paperwork which I consider less important	19	21	6	70	6	4.18	.704
I write notes to myself to remind me of future events and demands.	7	2	16	60	37	3.90	.999
I allocate enough time to ensure my paperwork is well organized.	2	0	9	74	37	3.98	.818
I know how to say 'no' to those employed at the department.	2	12	19	52	37	4.02	.813
<b>Overall mean and standard deviation scores</b>						<b>3.85</b>	<b>.459</b>

The above table 8 shows the perceptions of departmental heads about time management skills. The mean scores of all the items in the construct "time management skills" have maximum above average level of observance. The maximum mean score among the twenty items was found to be 4.38 for the item "Meetings that I chair have agendas and minutes." which shows the maximum above average

level of observance. On the other hand, the minimum mean score among the twenty items was found to be 2.69 for the item "I am not confident in the ability of my staff." which shows below average level of observance among the eight items. The overall mean and standard deviation score for the construct time management skills was found to be (3.85 & .459) respectively, which shows above average level of observance for the construct time management skills.

### Discussion

The results showed that HoDs had above average level of technical skills. The results of previous studies showed that middle level managers must possess technical skills because without these skills they may not be able to achieve the organizational goals (Ahmad & Ahmad, 2021; Hersey *et al.*, 2013, Northhouse, 2021). In the same way HoDs also perceived that without maintaining good interpersonal skills both inside and outside department, one cannot achieve the organizational goals (Wepner *et al.*, 2014). Similarly, conceptual skills also play significant role and HoDs must possess these skills. Middle level managers must play with abstract ideas so that they may be able to achieve the departmental goals (Abednego & Rahabav, 2023). The middle level managers must have diagnostic skills, so that they can diagnose the surroundings and situational analysis before making any decision. Diagnostic skills help middle level managers to achieve the departmental goals. Communication is a process through which the sender send message to the receiver. The manager must have the quality to effectively and efficiently communicate in written and oral form in inside and outside the organization (Hersey *et al.*, 2013, Northhouse, 2021). The HoDs have to make a dozen of decisions related to academic and non-academic matters in a day. Therefore, they must have decision making skills through which they can choose the most suitable alternatives. Right decision on right time is important for middle level managers for the achievement of departmental goals (Northhouse, 2021). To plan, organize, and prioritize effectively and efficiently, middle level managers need to manage the available time for the achievement of organizational goals. Managers have the potential to make a to-do list for each day. Organize papers, files and meetings effectively. Do planning for short, medium and long-term goals. Must have the ability to say 'no' to the colleagues and the outsiders and can control the interruptions. They should grasp on all activities and practices through which they can manage their personal and academic lives effectively (Khan *et al.*, 2015).

The study results show that managerial skills are obligatory for middle level managers at universities for achieving departmental and organizational goals. These help the HoDs in making good plans, diagnose actual problems and issues, communicate with stakeholders effectively, make right and on time decisions, and manage time effectively and efficiently. Through these skills they can build a best team which may help them in achieving organizational goals. The results of previous studies are consistent with the results of the present study (Hayati & Barahmand, 2013; Khan *et al.*, 2015; Khan, Shayan, & Zeb, 2023; Hoffman & Shipper, 2012; Zhu, 2014).

### Conclusions

The study concluded that middle level managers (Head/Chairman of the Teaching departments) possessed technical, human, conceptual, diagnostic, communication, decision making and time management skills up to the mark. Among the seven management skills, HoDs prioritized communication and diagnostic skills. On the other hand, they strive for managing time for academic and non-academic activities. These skills help HoDs to cope with the irritating, depressing and stressful situations at the department. Managerial skills also help the HoDs to obtain physical, human and financial resources for the effective achievement of departmental goals. These skills enable

managers to formulate short term and long-term goals for the department, achieve the vision, mission and objectives of the department in most effective and efficient manner.

### Recommendations

The study recommended that the university administration may arrange continuous professional development programmes for the development of core managerial skills. The Higher Education Commission (HEC) may arrange short and long course trainings for the top, middle and lower-level managers on regular intervals to enhance their management skills. It is also recommended that before appointing HoD of the department, the university administration must arrange short courses for the HoDs to enhance their technical, human, conceptual, diagnostic, decision making, communication and time management skills. For this purpose, a comprehensive plan may be introduced on regular interval basis.

### References

- Abednego, A., & Rahabav, P. (2023). Pedagogic and Managerial Competence for School Principals or Leaders in Early Childhood Education Management. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 7(5), 5196-5204.
- Afshari, M., Honari, H., Qafouri, F., & Jabari, N. (2012). Prioritizing managerial skills based on Katz's theory in physical education offices of universities in Iran. *World Applied Sciences Journal*, 20(3), 388-394.
- Ahmad, I., & Ahmad, S. B. (2021). Effect of managerial skills on the performance of small-and medium-sized enterprises: A case study in Pakistan. *The Journal of Asian Finance, Economics and Business*, 8(4), 161-170.
- Batra, M. R., & Sharma, B. P. (2017). A perception of managerial skill for leading educational institute. *International Journal for Innovative Research in Multidisciplinary Field*, 3(4), 98-103.
- Bialowolski, P., Weziak-Bialowolska, D., Lee, M. T., Chen, Y., VanderWeele, T. J., & McNeely, E. (2021). The role of financial conditions for physical and mental health. Evidence from a longitudinal survey and insurance claims data. *Social Science & Medicine*, 281, 114041.
- Birds, R. (2014). Middle managers in UK higher education conceptualizing experiences in support of reflective practice. *Perspectives: Policy and Practice in Higher Education*, 18(3), 90-98.
- Bukhari, S. K. U. S., Gul, R., Bashir, T., Zakir, S., & Javed, T. (2023). Exploring managerial skills of Pakistan Public Universities (PPUs)'middle managers for campus sustainability. *Journal of Sustainable Finance & Investment*, 13(1), 73-91.
- Creswell, J. W. & Creswell, J., D. (2018). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Los Angeles, CA: SAGE.
- Fatima, F., Iftikhar, M., & Ejaz, M. (2022). An Influence of Head Teachers' Managerial Skills on Teachers' Performance at Primary School Level. *Pakistan Journal of Educational Research*, 5(4), 112-133.
- Fauzi, M. (2018). *Principal's managerial skill in improving teachers' performance* (Doctoral dissertation, Universitas Mataram).
- Griffin, R. W. (2021). *Management*. Cengage Learning.
- Gul, R., Khan, S. S., Mazhar, S., & Tahir, T. (2020). Influence of logical and spatial intelligence on teaching pedagogies of secondary school teachers. *Humanities & Social Sciences Reviews*, 8(6), 1-9.
- Hayati, Z., & Barahmand, N. (2012). Managerial skills needed for academic library managers: The case of Iran. *The International Information & Library Review*, 44(2), 53-64.
- Hersey, P., Blanchard, K.H., & Johnson, D.E. (2013). *Management of organizational behavior, 10th Edition*. New Jersey: Pearson.

- Hoffman, R. C., & Shipper, F. M. (2012). The impact of managerial skills on employee outcomes: a cross cultural study. *The International Journal of Human Resource Management*, 23(7), 1414-1435.
- Huda, D., & Aslamiah, A. M. R. (2022). The Effect of Principal Managerial Skills, Work Commitment, and Motivation on Teacher Work Discipline in Balangan Regency. *International Journal of Social Science and Human Research*, 5(06), 2415-2421.
- Jandaghi, G., Martin, H. Z., Khanifar, H., & Kiaei, H. (2009). The Study on the Relationship between Management Skills of Managers and Organizational Learning in Rah-Shahr International Corporation. *International Business Management*, 3(4), 69-74.
- Katz, R. L. (1955). Skills of an effective administrator. *Harvard Business Review*, 33, 33-42.
- Khalaf, Osamh I., and Ghaida M. Abdulsahib (2020). Energy Efficient Routing and Reliable Data Transmission Protocol in WSN. *International Journal of Advances in Soft Computing and its Application*, 12, 345–353.
- Khan, I. A., Khan, U. A., ud Din, N., & Khan, A. N. (2015). Time Management Practices: Perceptions of Secondary Schools' Principals in Khyber Pakhtunkhwa. *Gomal University Journal of Research*, 31(1), 29-40.
- Khan, I. A., Shayan, M. H., & Zeb, M. A. (2023). Analyzing the Managerial Skills of Heads of Teaching Departments at Public Sector Universities of Malakand Division. *Sir Syed Journal of Education & Social Research*, 6(1), 24-30.
- Mintzberg, H. (1973). *The Nature of Managerial Work*. Prentice-Hall, Englewood Cliffs, NJ.
- Northouse, P. G. (2021). *Leadership: Theory and practice*. Sage publications.
- Paturusi, A. (2017). Contributions of leadership style, managerial skills of principals and compensation to the performance of teachers. *Journal of Education and Human Development*, 6(4), 105-114.
- Peterson, T. O., & Van Fleet, D. D. (2004). The ongoing legacy of RL Katz: An updated typology of management skills. *Management decision*, 42(10), 1297-1308.
- Pulmones, L. (2022). Management Skills and Learning Strategies among University of Southern Philippines Foundation Graduands. *Journal of Education, Teaching and Social Studies*, 4(1), 26-42.
- Quijada, M. A., Peterson, T. O., & Peterson, C. (2023). Leadership in the Eye of the Beholder. *Management Teaching Review*, 23792981231182326.
- Rue, L., L. Byars, and N. Ibrahim (2012). *Management: Skills & Application*. New York, NY: McGraw-Hill Higher Education.
- Sharifian, L. (2011). Collegial management to improve the effectiveness of managers, organizational behavior in educational institutions. *Procedia-Social and Behavioral Sciences*, 29, 1169-1178.
- Shinde, S. V. (2018). *Functions of Management*. Lulu Publication, United States.
- Weirich, H., Cannice, M. V., & Koontz, H. (2008). *Management: A global and entrepreneurial perspective*. New Delhi.
- Wepner, S. B., Henk, W. A., Clark Johnson, V., & Lovell, S. (2014). The importance of academic deans' interpersonal/negotiating skills as leaders. *Perspectives: Policy and Practice in Higher Education*, 18(4), 124-130.
- Williams van Rooij, S. (2013). The career path to instructional design project management: An expert perspective from the US professional services sector. *International Journal of Training and Development*, 17(1), 33-53.
- Yukl, G. (2012). Effective leadership behavior: What we know and what questions need more attention. *Academy of Management Perspectives*, 26(4), 66-85.
- Zhu, Y. (2014). The mediating effects of managerial skills on the relationship between managerial values, ethical leadership, and organizational reputation. *Journal of Asia-Pacific Business*, 15(4), 335-359.