Exploring Supervisory Practices in Higher Education Institutions in Khyber Pakhtunkhwa, Pakistan

Faheem Khan, *Regional Professional Development Center (Male), D.I.Khan, Khyber Pakhtunkhwa, Pakistan*
Muhammad Shakeel, *Government Higher Secondary School Muryali, D.I.Khan, Khyber Pakhtunkhwa, Pakistan*
Zia-Ur-Rehaman, *Working Folks Grammar Higher Secondary School, D.I.Khan, Khyber Pakhtunkhwa, Pakistan*

Keywords	Abstract
Supervisory Practices, Higher Education Institutions (HEIs), Research Culture	*The current study aimed to explore the supervisory practices in HEIs in Khyber Pakhtunkhwa, Pakistan. Therefore, seven well-reputed universities were selected for the study. Pragmatic research philosophy was applied, and therefore mixed-method research (MMR) was used. A sample of 616 (58 HODs, 239 teachers, and 319 students of MPhil and PhD) were taken by applying the stratified sampling technique for quantitative data, whereas 12 individuals were taken through the purposive sampling technique for qualitative data. While semi-structured interviews were designed for gathering qualitative data, an adapted questionnaire was used to collect quantitative data. Thematic analysis was used for qualitative data analysis, while analysis of variance (ANOVA) was performed for quantitative data analysis. The results concluded that supervisors were constantly available for students to assist in their research. Enough time was allocated by the supervisors to evaluate the research work of the students. Moreover, they provide guidance in the publication of research articles in renowned journals.*

1. INTRODUCTION

Higher education institutions (HEIs) play a crucial part in developing knowledge based on research because knowledge spurs from research. Thus, universities are considered as the centers of research and knowledge (Abdelkreem et al., 2024). Research is the main activity of higher education institutions (HEIs), and the quality of this activity is defined by its standard. The HEIs' primary objectives are information generation (research), knowledge management, and knowledge transformation (Ali et al., 2018).

Doctorate experts from all around the world acknowledge the importance of doctorate-level supervision. Key markers of empowerment, training, and facilitation of PhD scholars for independent researchers shifting careers are supervisory practices. The use of research methodologies for the specialized training of teachers is hardly discussed in academia. In teacher training institutions, research practice is a key component of professional development for teachers. In terms of researchers' professional development, the research mindset condition is similar (Matheka et al., 2024). Teachers' research practices lead to innovative instructional

environment. The dedication of the work of the teachers improves the quality of research work. Teachers must engage in substantial research practices as part of their professional growth after receiving their doctorate degree (Donnelly & Fitzmaurice, 2013).

For research skills to advance practice and knowledge, many methods are needed in collaboration. For professional objectives and a desire to study, a stable correlation must be created. Professional goals are essential to ensuring that research advances with the cooperation of academic institutions. The focus on research has increased recently in universities, but newly published studies show that institutions have a poor research culture, and supervisors rarely use the research results to improve their practices or attitudes regarding research. Many studies highlighted how crucial it is for researchers to have a positive outlook on their profession (Heyns et al., 2019).

The advancement of research scholars is influenced by supervisors' professional research attitudes and research skills. Both the supervisors and the researchers must cultivate adequate research abilities and a favourable outlook on the field. The definition of mentoring and supervision varies slightly. The first word discusses task-orientated relationships, and the second word is about the long-term development of scholars. The relationship between an experienced specialist and a less experienced person known as a "mentee" or "supervisor" is unique. The supervisor-supervisee relationship and communication are essential. The protection and encouragement provided by supervisors to their scholars increase their competence and talents (McCulloch & Loeser, 2016; Yende, 2021). The current study was aimed at investigating and exploring the issues related to supervisory practices in the higher education institutions (HEIs) in KP.

1.1. Objectives

The main objectives of the study were:

1. To explore the existing supervisory practices in HEIs in KP.
2. To compare the attitude of supervisors towards research practices in HEIs in KP.

1.2. Hypotheses

H_{01}: There is no significant difference in respondents' views regarding the attitude of respondents towards supervisory practices.

H_{02}: There is no significant difference in respondents' views regarding the attitude of respondents towards supervisory practices (SP) with respect to sample universities.

2. LITERATURE REVIEW

i. Research supervision

Academic, interpersonal, and instructional abilities required for fruitful relationships have been acquired under doctoral supervision. Degree completion and contentment with supervision

have a good association. Regular meetings and feedback play a crucial part in a scholar's degree completion and academic achievement. Many researchers have also supported these conclusions. Academic achievement and satisfaction increased when the supervisor and supervisee have a good working relation (McCormack et al., 2019; Tikkanen et al., 2024).

A PhD research degree is a dive into the knowledge sea. After earning such a degree, a research scholar is eligible for a variety of awards. The institution, family, and community have great expectations that their goals will be realised through cutting-edge information and methods, boosting the nation's revenue. The doctorate requires rigorous requirements. However, PhDs with these abilities are hard to come by. The difference between having a doctorate and non-doctorate, is huge. The research supervisors accuse research students of being irresponsible, uninteresting, incompetent, and non-serious about earning a degree (Javed, 2019). Both sides keep placing blame on one another, although nations have been fighting a cold war for millennia with no appreciable economic benefits. The number of PhDs is rising even as their quality of research work is declining over time. The world faces this problem (Zhang et al, J., 2024). For such undeveloped academicians, Pakistan is the sufferer in particular. Higher education institutions in Pakistan require greater in-class instruction, but research findings are not sufficiently disseminated in social, economic, and scientific policy. Regrettably, the difficult process of earning a doctorate is global. The scholars attribute the problem to the supervisors' incapacity and inadequate supervisory techniques, as well as the government's and the university's insufficient resources. This inconsistency will continue until the end (Buttery et al., 2005).

The notion of research supervision used by the research supervisors is influenced by their own experiences while supervising a PhD student. Their personal research experiences serve as a source for academic growth. On the other hand, their conception of monitoring is something that can be improved. The institution's training program might lead to the development of a chaotic and complex pedagogy. With time passing and adequate learning opportunities, different experiences may arise in supervisors who engage in significant self-reflection. The research supervisors frequently go through similar doctoral experiences as their supervisees. As a result, the majority of PhD candidates discontinued their studies. The second reason is that when they initially started the research process, they gave an incorrect definition of their degree (Javed, 2019).

ii. Global view of supervisory practices in HEIs

Universities were required by the knowledge economy's growing importance and challenges to prepare graduates in ways that would increase their likelihood of finding employment and help them finish their research degrees. To make a significant contribution to various economic sectors outside of academia, PhD holders need to develop a wide range of abilities, knowledge, and attitudes. The doctoral program is accused of being overly concerned with producing academic doctoral scholars' expertise. To encourage doctorate candidates to consider alternate destinations in the academic world, universities have devised numerous researcher development strategies. A decrease in postdoctoral graduates is evident from the evolving PhD degree requirements. The majority of PhD holders from UK universities found

employment outside of academia after earning their degrees, according to the Royal Society of the UK in 2010 (Javed, 2019).

3. METHODS AND MATERIALS

Researchers followed a pragmatic research philosophy where both quantitative and qualitative research methods are paralleled. The notion is only considered relevant in the study of pragmatism if it makes action easier. Pragmatics, which recognize that there are various ways of studying the world and conducting research, states that a single point of view can never give the whole picture and that there may be more than one reality. Therefore, mixed-methods research was applied. For this purpose, converging parallel design (CPD) was used. Seven (07) public sector universities of KP were randomly selected. A sample of 616 people (58 HODs, 239 teachers, 319 MPhil students, and PhD scholars) was selected using the stratified sampling method to collect quantitative data, while 12 people were selected using the purposive sampling technique to collect qualitative data. An adapted questionnaire was used, which was developed by Javed (2019). The questionnaire contained 28 items related to the supervisory practices. A semi-structured interview was also developed based on five (05) leading questions related to supervisory practices in HEIs. Cronbach's alpha was used to measure internal consistency, or reliability, while the Item Objective of Congruence (IOC) was used for validating the questionnaire. Analysis of variance (ANOVA) was used for quantitative data, whereas thematic analysis was used for qualitative data.

Table 1: IOC and Cronbach's Alpha Score

Research Tool	No. of Items	IOC	Cronbach's Alpha
Supervisory Practices Questionnaire	28	.07-0.9	.783

The results of IOC and Cronbach's Alpha show that the scale used in Supervisory Practices Questionnaire has a satisfactory level of validity and reliability.

4. RESULTS

Table 2: Showing Mean difference regarding the attitude of respondents towards Supervisory Practices (SP)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.2179	3	.864	14.231	.000
Within Groups	34.451	613	.137		
Total	37.821	616			

Table 2 indicates the difference in the respondents' views regarding supervisory practices. The table depicts that the value of F=14.31 with $p=<.05$ reveals that there is significant difference among the respondents' views regarding supervisory practices. These results reject the null hypothesis (H$_o$1).

Table 3: Showing Mean difference regarding the attitude of respondents towards Supervisory Practices (SP) with respect to selected Universities

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.9823	3	.743	17.093	.000
Within Groups	35.238	613	.069		
Total	38.998	616			

Table 3 indicates the difference in the respondents' views regarding supervisory practices from the perspective of universities. The table depicts that the value of F = 17.093 with $p=<.05$ reveals that there is a significant difference among the respondents' views regarding supervisory practices from the perspective of universities. The results rejected the second null hypothesis (Ho 2).

4.1. Qualitative Data Analysis

The skills of the supervisor and attitudes play a vital role in research development. During the interview, the following words regarding supervisory practices were stated by one of the interviewees:

"Report writing is one of the key problems in research today. Additionally, it was observed that students are in the application of appropriate statistical tools. Indeed, I agree that students lack experience with SPSS. With the financial support of HEC, I also held a session in 2022 about the use of SPSS and creating synopses. I should also mention that few students are interested in doing research and that most students are dependent on their supervisors. In my opinion, the university should host workshops to increase students' enthusiasm for research (ST #4)".

The following were the same words used by another participant to describe the supervisory practices:

"In terms of supervisor competency, faculty members at our university are HEC-approved supervisors and qualified in the research area. Within the allotted time, they check our research work. He provides me with the right amount of time if I have a problem with the study. My supervisor gave me advice on the topic choice. He nearly checked every chapter of my thesis (RSPND#20) as I approached the thesis submission stage (HD#3)".

Another participant explored the supervisory practices in the given words:

"One of the busiest sites where teaching and research are combined is a university. As a result, time frame is a significant barrier to undertaking research. The university does not allot specific time for undertaking research. Instructors are expected to attend classes, cover the required material in the allotted time, and undertake research in addition to their other academic responsibilities. Teachers teach classes for BS (Hons) and MPhil/PhD degrees while also fulfilling their academic responsibilities, so they are unable to devote enough time to research activities. Hence, in my opinion, the institution must give teachers a specific amount of time so that they can finish the students' research projects on time (Respnd#10)."

In the following terms, one respondent expresses his opinions about supervisory practices.

"Universities have collaborative research environments." Teamwork has shown in the institution because every supervisor provides his or her expertise to student's research work. Official meetings are conducted to resolve issues of MPhil and PhD students by the head of the institution (FM#4)."

Another participant discussed supervisory practices in the given words:

"There is no such financial assistance provided by the university, but I am admitting that university administration provides support in the documentation process (FM #7)."

5. DISCUSSIONS

The current study explored how supervisors now practice at KP's HEIs. The study's findings show that most respondents are satisfied with the existing supervisory practices and that there is a collaborative environment. Resultantly, students and scholars are getting degrees in MPhil and PhD in the stipulated time, and the number of PhDs in Pakistan is increasing by leaps and bounds. The results of the current study are in line with those of Nguyen et al. (2016) and Batool (2018). They found that supervisors help students with their research activities. They support them in getting the study article published. Departments use appropriate communication channels for letters and alerts regarding various research initiatives. Universities have HEC-approved supervisors in almost all departments.

6. CONCLUSIONS

The study's key objective was to explore the supervisory practices in HEIs of Khyber Pakhtunkhwa, Pakistan. According to the study's findings, scholars believed their supervisors were always willing to help in their research work, and encouraged them to publish what they had learned. They fulfilled the expectations for supervision and were familiar with the thesis evaluation process, and had a well-defined schedule to help in the progress of their studies. On the other side, most researchers reported that they frequently encountered a lack of input from their supervisors to advance their study work. The majority of students—about one-third—agreed that their research abilities were wasted under the supervision of incompetent supervisors and held the research supervisor solely accountable for their subpar doctoral research abilities. There were a few concerns about the time for research activities by the supervisor due to the workload.

6.1. Recommendations

The study recommended that an incentive may be taken by the supervisors to assist scholars and provide research-related facilities to uplift the standard of research culture in HEIs in KP. Furthermore, it is recommended, that the future researchers may be given equal chances to initiate further research work on the same research study for boosting and enhancing the quality of education at higher education level.

REFERENCES

Abdelkreem, E., Ibrahim, M. E., Elateek, S., Abdelgawad, F., & Silverman, H. J. (2024). Perceptions of the Research Integrity Climate in Egyptian Universities: A Survey Among Academic Researchers. Journal of Empirical Research on Human Research Ethics, 15562646241273097.

Ali, A., Saeed, A., & Munir, A. (2018). An Instrumental Perspective of Higher Education in Pakistan: From Public Good to Commercial Commodity. Bulletin of Education and Research, 40(3), 95-114.

Batool, A. (2018). Relationship of Personal and Institutional Factors with Research Productivity among Faculty Members of Public and Private Sector Universities of the Punjab. (Doctoral Dissertation, University of the Punjab, Lahore)

Buttery, E. A., Richter, E. M., & Leal Filho, W. (2005). An Overview of the Elements that Influence Efficiency in Postgraduate Supervisory Practice Arrangements. International journal of educational management, 19(1), 7-26.

Donnelly, R., & Fitzmaurice, M. (2013). Development of a Model for Blended Postgraduate Research Supervision in Irish Higher Education. Emerging Issues in Higher Education III, From Capacity Building to Sustainability, Dublin, Educational Developers in Ireland Network (EDIN).

Heyns, T., Bresser, P., Buys, T., Coetzee, I., Korkie, E., White, Z., & Mc Cormack, B. (2019). Twelve Tips for Supervisors to Move Towards Person-Centered Research Supervision in Health Care Sciences. Medical Teacher, 41(12), 1353-1358.

Javed, Z. (2019). Effect of Supervisory Practices on Attitude, Academic Satisfaction and Research Skills of the Students. (PhD Dissertation). Government College University, Faisalabad, Pakistan.

Matheka, H. M., Jansen, E. P., Suhre, C. J., & Hofman, A. W. (2024). The Influence of Supervisors and Peers on PhD Students' Sense of Belonging and their Success at Kenyan Universities. Studies in Graduate and Postdoctoral Education.

McCormack, B., Baecher, L. H., & Cuenca, A. (2019). University-Based Teacher Supervisors: Their Voices, their Dilemmas. Journal of Educational Supervision, 2(1), 22-37.

McCulloch, A., & Loeser, C. (2016). Does Research Degree Supervisor Training Work? The Impact of a Professional Development Induction Workshop on Supervision Practice. Higher Education Research & Development, 35(5), 968-982.

Nguyen, Q., Klopper, C., & Smith, C. (2016). Affordances, Barriers, and Motivations: Engagement in Research Activity by Academics at the Research-Oriented University in Vietnam. Open Review of Educational Research, 3(1), 68-84.

Tikkanen, L., Anttila, H., & Pyhältö, K. (2024). How does Supervision Influence a Doctoral Supervisor's Occupational Wellbeing? European Journal of Higher Education, 1-19.

Yende, S. J. (2021). Factors of Effective Postgraduate Student-Supervisor Relationships at Selected Universities in South Africa. Journal of African Education, 2(2), 135.

Zhang, J., Wu, M., & Zhang, G. (2024). The Influence of Supervisor–Postgraduate Relationship on Master's Students' Research Learning Engagement—The Mediating Effect of Academic Aspiration. Behavioral Sciences, 14(4), 334.