



Aligning Capacity Building with RD&I: A Critical Qualitative Study of Non-Academic Staff Development in Pakistani HEIs

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ABSTRACT

This paper has focused on the disjuncture in the capacity-building strategies applicable to the non-academic staff and the research, development, and innovation (RD&I) agenda of Pakistan public higher education institutions (HEIs), a zone that has been conspicuously overlooked in the current body of literature on the topic of higher-education reform. This study has opted a qualitative approach, based on semi-structured interviews with the senior administrators, human-resources leaders, and non-academic employees at six state universities, to deconstruct the conception, implementation, and evaluation of staff-development frameworks. The findings of the empirical research reveal a highly disintegrated and poorly institutionalized capacity-building environment, which is highly disconnected with RD&I aims, with ineffective monitoring systems and strong inequities that exist on gender and geographical lines. One of the main contributions of the study is the fact that it proves that the marginalization of non-academic staff distorts the capacity to conduct research and innovations on an institutional level, and it provides a policy-based model that integrates the development of staff and national priorities on research and innovation. Lastly, the manuscript moves the academic discourse further by reassessing the non-academic staff as strategic figures of the higher-education systems instead of adjunct support staffing.

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1. Introduction:

In the past two decades, Pakistan's higher education system has mainly worked on training faculty better and adopting learning methods that support students (Murtaza & Hui, 2021). Such reforms, introduced and encouraged by the HEC and by various international development groups, have resulted in better teaching standards, improved curriculum, more research, and enhanced services for students (Khan, Bibi & Khan, 2018). Despite the major efforts on academic improvement, the significant role played by non-academic staff in building and progressing an institution is frequently ignored (Khan, Mustafa & Nawaz, 2021). For higher education institutions (HEIs) to function effectively, they need administrative officers, IT specialists, finance managers, human resource professionals, librarians, and research management staff as part of the vital support system.

They are key in making academic goals happen in practice. For example, administrative staff enforce rules and policies, whereas IT staff provide technology services important for current teaching and research (Kakkaew & Arpamo, 2024). Without engaging them, major academic and research efforts will most likely fall short (Fukushima & Couteret, 2025). Even though non-academic staff play a crucial role, their training systems in universities in Pakistan are not well-connected and do not support the main objectives (Zaidi et al., 2024). Many universities and businesses do not establish proper guidelines for staff training and often do not provide needed resources and money (Hidayah & Syahrani, 2022). Sometimes, regular performance evaluations fail to link with options for professional development, causing workers' careers and morale to remain unchanged.

As Pakistan seeks to better its knowledge economy and make progress in science and technology, non-academic employees should be fully involved in RD&I activities (Memon, Bhutto & Chowdhry, 2025). Therefore, this paper sets out to examine how capacity-building systems are applied for non-academic staff members in Pakistan's public sector HEIs. The process involves checking their design, implementation, and result, as well as their connection to global objectives in RD&I. Through highlighting strengths, weaknesses, and gaps, the paper gives evidence-based suggestions to help boost the strategic role of non-academic staff in higher education in Pakistan.

2. Literature:

The recent era is the era of fierce competition among organizations. However, the competition is especially dramatic and disastrous for Islamic Financial Institutions. Therefore, in this intensely competitive environment, Islamic Financial Institutions must try to understand & focus on the wants and desires of customers through efficient and quality services. The enhancement of focus on the wants and desires of customers will not only make Islamic banks focus more rigorously on the competition but also on sales, profitability, and market share (Rahmayati, 2020). These statements are especially important in light of Muhammad et al (2019) who highlighted that Islamic Banks are competing as a commodity that requires modern marketing tools and techniques.



Therefore, it is legitimate to use Michael Porter's generic model as a competitive strategy. The model has been under practice for several decades and declared one of the most dominant frameworks for gaining a competitive advantage. Three prime choices are reflected in the generic model of Michael Porter's i.e., cost-leadership strategy, differentiation strategy, and focus strategy. Porter himself nominated generic competitive strategies as one of the most notable models in strategic management. Companies pursuing this model have the option to optimize the level of customer satisfaction either by providing the lowest cost in the industry or by differentiating their offerings from their counterparts. Any organization that does not realize the role of the strategic model presented by Michael Porter may receive a severe hit from rivals (Auka, 2014). Hence, the use of CSR activities in comparison to the other marketing tools seems to be beneficial for the service industries & also for similar natures of businesses (AB Casado-Díaz et al., 2014).

3. Methodology

This was a qualitative research carried out using the framework of conducting a study of the capacity building models of non-academic staff in the public HEIs in Pakistan. The qualitative approach was chosen to ensure that as far as institutional practices, perceptions and contextual dynamics are concerned, this cannot be properly explored with the help of quantitative methods. The theme of the research was the conceptualization, application, and alignment of the capacity-building strategies with the objectives of RD&I.

3.1 Sampling Strategy:

Purposive sampling was used to select participants who have a direct or an oversight role in non-academic staff development in public sector HEIs. The inclusion criteria were to ensure that the participants were (i) assigned to either of the administrative, human resource, or staff development; or (ii) were part of non-academic staff that had experience with institutional training initiatives. They were recruited in respect to formal institutional contacts and professional networks.

Fifteen individuals were interviewed in six public universities that are located in a variety of geographical areas (urban and regional), the size of the institution, and the intensity of the research. Five human resource directors, five senior administrative leaders, three staff development officers or institutional trainers, and two mid-level non-academic staff members were used as the sample.

The sample size was calculated according to the principle of information power, but not according to the aspects of statistical representativeness. The interviews carried on until the thematic saturation occurred; in this, thematic saturation was determined as the level when no substantially new themes were generated within the context of new data. Though the sample is small, it is suitable to conduct an in-depth qualitative exploration based on the processes in an institution, but not generalization. The decision to use a small sample along with its effects on representativeness is recognized as a weakness of the investigation.



3.2 Data Collection:

The data collection happened via semi-structured interviews (face to face as well as via Zoom) depending on the availability and location of the participants. The interview protocol was designed on the basis of the research questions in the study and the review process of the literatures concerning the aspects of capacity building and RD&I alignment. One administrative professional was omitted in the final sample, which then biased the protocol through some question clarifications and ordering. The interviews took a duration of 45 to 60 minutes and followed a similar format which included: (i) current practices of staff development, (ii) correspondence to institutional RD&I priorities, (iii) access and equity concerns, (iv) monitoring and evaluation processes, and (v) recommendations to policy and practice.

Open-ended and neutral prompts have been used to reduce influence of the interviewer, and the participants were motivated to expound on any comments. The data collection handling was conducted by audio-recording and transcribing interviews. Coherence in interviews was maintained by the same interview guide, whereas flexibility was preserved to explore interviews-specific issues as they went by.

3.3 Data Analysis:

The thematic analysis was employed to analyze data based on the six-phase model used by Braun and Clarke (2006) in their familiarization, preliminary coding, theme development, theme review, definition, and reporting categories. It was both deductive as it was done through research questions and inductive as they allowed the themes to be discovered by the stories of the participants.

NVivo software was applied to systematize and handle the information. Preliminary line by line open coding aimed to find out repeat patterns as regards to institutional structures, RD&I alignment, equity and monitoring practices. Coded themes were placed into larger themes in turn and refined into more inter higher themes by the process of constant comparison between participants and institutions.

The development of themes was done through repetitions of review among the members of the research team to guarantee that the themes were coherent, unique, and in line with the data. The cases that were discrepant were actively analyzed to purify interpretations and prevent over-generalization. The theme building by the researchers was evidently recognized and the analytic decisions were recorded to improve the transparency and reliability.

4. Ethical Considerations

The study was pre-empted by obtaining ethical approval by the respective institutional review authority before the study was carried out. Information sheets were given to all the participants about the purpose, voluntary nature as well as intended use of the data of the study. Each interview was conducted with the informed consent being written. Participants were anonymized in terms of their identities and institutional affiliations to provide confidentiality and coded the transcripts of interview materials recoded with pseudonym. The transcripts and audio recordings were stored safely and were not accessible to other parties other than the research itself.



4.1. Reflexivity and Researcher Positioning:

The researchers also admit that they are part of the group of scholars, the researchers of higher education policy and organizations, which can shape the perceptions of institutional practices. Interpretational challenge was practiced in the research team, including regular peer debriefing that was used to enhance analytical reflexivity.

4.2. Methodological Rigor and Validation:

Triangulation of views between the various administrative roles was used to ensure methodological rigor and systematic steps of coding and transforming emerging themes. These advances in credibility were improved by achieving extensive interaction with the data and clarifying with the members in the interviews. Reliability and transparency were considered through the existence of an understandable audit trail of data collection, coding decisions, and theme development.

5. Findings

5.1. Theme 1: Institutional Fragmentation and Lack of Ownership:

Pakistani HEIs have a broad institutional fragmentation in the way they design and implement capacity-building programs for non-academic staff. According to the participants, staff development for non-academics is usually ad hoc, reactive, and ill-organized, whereas faculty development frequently benefits from specialized structures and ongoing budgets. The absence of yearly training calendars or strategic planning was a persistent issue among HR staff. "We don't have a proper annual training plan; we usually act when funding becomes available or when a donor approaches us," said one HR director. Because of this method, training is seen as an elective rather than a necessary component of institutional growth.

Additionally, a lot of HEIs lack staff development departments or personnel, which leads to a dispersed workload among administrative, financial, and human resources departments. It is difficult to maintain quality and consistency in training and to match it with strategic institutional goals when there is no clear "owner" of the capacity-building agenda. Senior leadership's lack of institutional commitment was another issue raised by participants. The requirements of non-academic staff for professional development are further marginalized by this lack of support from upper management.

As a result, growth possibilities are uneven and inconsistent, and they differ greatly between institutions. HEIs must set up official staff development units with leadership support, allocated funds, and explicit performance standards in order to close this gap. For staff development to be integrated into larger organizational frameworks and to be a valued and long-lasting part of university operations, institutional ownership is essential.

5.2. Theme 2: Misalignment with RD&I Objectives:

The poor fit between the present capacity-building programs and the larger research, RD&I objectives of Pakistani HEIs was a major theme that surfaced. Non-academic employees, who are frequently essential to operationalizing these goals, are left out of focused development programs despite the growing emphasis on institutional contributions to national innovation and knowledge economies.



The non-academic workers in charge of funds, budgets, and research data frequently lack the necessary abilities, despite the fact that faculty members gain from organized training in research proposal writing, project planning, and publishing ethics. "We are expected to support research, but we have never received training on grant compliance, data management, or intellectual property," a research administrator clarified. This imbalance lowers the effectiveness of research management systems and causes operational bottlenecks.

Training sessions usually concentrate on soft skills, basic computer literacy, or antiquated administrative procedures rather than being customized to RD&I responsibilities like technology transfer, grant administration, or policy compliance. Staff members are ill-equipped to handle the changing demands of contemporary research contexts as a result of this mismatch. Another issue raised by participants was the discrepancy between the actual content of staff development and institutional strategic plans. Institutions could thus find it difficult to fulfil the requirements needed for international academic collaborations or competitive grant acquisition.

HEIs must create competency frameworks for non-academic staff, carry out skills gap evaluations, and create training programs that are future-focused and context-specific in order to better match capacity-building initiatives with RD&I objectives. In order to ensure a more comprehensive and collaborative approach to innovation, institutional policies must specifically integrate non-academic development as a pillar of the RD&I strategy.

5.3. Theme 3: Equity and Access Gaps:

The unequal distribution of chances for capacity-building, especially between institutions in urban and rural areas and among various staff demographics, was another major subject. Participation was further limited by inadequate digital infrastructure, a lack of substitute staff, and limited travel allowances.

According to one employee, "Training workshops are typically held in Lahore or Islamabad". Finding money for travel and lodging is difficult, even if we are permitted to attend. This geographical difference maintains skill gaps between elite and under-resourced HEIs and strengthens institutional inequalities.

Gender was another important aspect of inequality. Systemic obstacles prevent female employees from advancing their careers, particularly in conservative provinces. "Many women in administrative roles want to attend training, but there is no childcare support or flexibility in timing", one administrator emphasized.

Barriers related to language and technology were also mentioned as constraints. Some staff members, especially those who were elderly or could not understand English, were unable to participate in training courses that were held solely in English or that used sophisticated digital platforms. This restricts the developmental reach of capacity-building initiatives and solidifies marginalization. Furthermore, institutional biases that favor permanent employees or financial limitations frequently



prevent non-teaching staff on contract or temporary employment from receiving training. As part of larger initiatives to guarantee justice and inclusion in the workforce development of higher education, national and institutional regulations should require equal access to capacity-building programs.

5.4. Theme 4: Absence of Monitoring and Performance Linkages

One significant weakness in the current frameworks for capacity-building in Pakistani HEIs is the lack of organized monitoring and performance linkage systems. Training programs, according to participants, are "tick-box exercises" or compliance measures that are largely in place to fulfil formalities rather than to promote substantive worker growth. "Even if someone attends training, there is no follow-up, no discussion on how it helped, or whether it improved their job performance", said one staff development officer. Motivation is lowered and learning outcomes are not incorporated into regular work procedures due to this lack of post-training involvement.

A related problem is the lack of institutional measurements or Key Performance Indicators (KPIs) that connect training to awards, role growth, or career promotion. Even excellent training is unlikely to result in long-term behavior change or increases in institutional efficiency without performance incentives. Additionally, the majority of HEIs lack a centralized database or monitoring system to record training records, evaluate skill gaps, or align training with job duties. Additionally, some institutions may not have standardized feedback systems in place to assess the quality of training or incorporate participant input into the design of future programs.

An important opportunity has been lost due to the absence of evidence-based monitoring and performance alignment. HEIs must establish evaluation procedures, such as pre- and post-training tests, performance reviews connected to training participation, and yearly audits of staff development initiatives, in order to improve results. To foster a culture of lifelong learning and professional development, training participation should be incorporated into performance management systems and connected to distinct career trajectories.

6. Discussion

The idea of capacity building in higher education covers the growth of people, institutions, and tools needed for the success and progress of academic organizations (Berchin, de Aguiar Dutra & Guerra, 2021). This includes training sessions as well as helping others grow in their careers, supporting their interests through policy changes, offering current tools, and developing leadership. Research administrators, IT employees, financial officers, and HR managers are the employees who make the HEIs function (Pandit & Paul, 2023). Although capacity building is very important in Pakistan's higher education, there is usually too much attention given to developing faculty and not enough to the development of other employees (Shah et al., 2024).

Significantly, since there is not a common agreement on what capacity building is, the country's approach to it is not the same everywhere. Usually, capacity development is interpreted as a one-time seminar rather than as a process that involves supportive mentoring, rewards, and helps employees move



up in their careers (Syailendra et al., 2023). As a consequence, such initiatives become standardized and do not lead to noticeable progress or advancements in a company's work. Good capacity building focuses on matching ambitions of institutions and development goals of a nation (Khan, Mfitumukiza & Huq, 2021). In order for Pakistan to do the same, HR policies, metrics for performance monitoring, and professional standards regarding non-academic staff should be considered together in a well-planned manner (Memon, Bhutto & Chowdhry, 2025). If Pakistani HEIs view capacity building as including all members and as a planned, strategic move, non-academic staff will be used more fully in boosting research and development activities (Babbar & Mehmood, 2024).

Non-academic staff at Pakistani higher education institutions lack tools for development because those programs are uncertain, rarely regarded as valuable, and owned by few institutions (Shahab et al., 2025). Even though HEC has done good work in strengthening education in colleges and universities by building NAHE, giving training workshops, and showing interest in digital initiatives, the focus is mostly on academic staff or management matters (Khan, Mustafa & Nawaz, 2021). In this regard, the particular and growing skills that non-academic staff use for research management, innovation, and technology systems are neglected.

Both LUMS and NUST have developed consistent skills programs and put focus on the strategic planning of their HR units (Khan, 2023). Still, it is very rare for such situations to happen. Professional development programs for staff in the public sector are often interrupted and occur very rarely (Otia & Bracci, 2022). When companies do not have regular performance appraisals, it discourages employees from focusing on their development (Bresciani et al., 2021). Despite the advantages of digital learning platforms, lack of digital knowledge and available technology in many parts of the world is a big issue (Fialho, Cid & Coppi, 2023).

Since there are no policies and enforcement mechanisms for non-academic staff training at the national level, education institutions are scattered. It becomes even worse because of limited funds, politicians choosing staff members, and inadequate support from leaders (Jacob, Ahaotu & Solomon, 2021). First, most initiatives are either not sustained or owned by the organizations they are meant for (Hassan et al., 2024). This kind of dependence stops companies from building human resources systems and hinders new ideas in HR development (Girei, 2023).

In addition, the frameworks do not blend well with the strategies designed by organizations for RD&I. Although building research and innovation capacity aims at goals such as writing grants, protecting intellectual property, or helping different areas of research join forces, most of the training is generic (O'Dwyer, Filieri & O'Malley, 2023). Unless results from training, learning outcomes, and organizational effects are given, it is hard to support further spending or guide improvements with facts (Nshimiyimana, 2023). Problems such as transportation, money, and access to resources make remote or peripheral HEIs look in on rather than engage in these events (Treve, 2021). Since not all institutions are working together, efforts are replicated, which also hinders the formation of a common professional development space among all the HEIs (Pham, 2021).



For a capacity-building framework to succeed, it should be all-inclusive, consider all necessary areas, and be integrated into an organization's planning (Gomes, 2025). The United Kingdom, Malaysia, and South Africa are among the countries that have developed solid and long-lasting systems for professional growth (Hart & Rodgers, 2024). It becomes clear from comparing models that successful ones depend on three basic aspects: national policies, commitment from institutions, and alignment with research and innovation priorities.

There are currently some challenges, but certain exciting developments indicate that more people are now acknowledging the need for capacity building for non-academic staff in Pakistani HEIs. Using these trends as opportunities can greatly help with reform, though this requires proper strategic planning and dedication from institutions. Professionals are utilizing digital tools more now for growth in their careers. Learners interested in digital transformation, project management, or innovation strategy can access many training opportunities on the platforms Coursera, edX, and HEC's LMS (Ivanova et al., 2024). Learning technology can solve the issues related to distance and inadequate resources that prevent staff in remote or underfunded universities from studying.

Importantly, HR teams in HEIs should help develop and oversee training programs that are in line with the institution's research and development goals. Creating centers inside universities for staff development, as there are for teaching excellence, could be a concentration for other valuable training.

7. Recommendations

The effective development of capacity-building programs for HEIs needs a united, large scale national strategy that includes everyone. The plan should pay attention to ensuring it remains effective for a long period and includes institutions in the process. One important suggestion is to build training modules that meet the set RD&I goals and are based on employee skills. Such modules ought to be concerned with research administration, handling grants, promoting innovation, and handling intellectual property rights.

In addition, every HEI ought to form a training unit within their department of Human Resources to manage training, identify needs, and check results. Incentives should be set so that gaining professional development means moving forward in one's career.

Using public-private partnerships, top knowledge from industry and development organizations can be applied to build specific modules for training. It is also necessary to include inclusivity in every aspect of the work. Therefore, training events become available either in their region or through the Internet to support those who cannot travel to bigger cities for training. It is important to focus on gender inclusivity by implementing special efforts that give all individuals the same opportunities and chances to participate. All these actions will ensure that the higher education sector in Pakistan becomes capable, equitable, and well-organized.

8. Conclusion:



The findings of this study show that capacity-building activities for non-academic staff in Pakistan's higher education institutions (HEIs) are fragmented, inconsistently implemented, and largely misaligned with the country's research, development, and innovation (RD&I) goals. Institutional fragmentation and a lack of ownership have resulted in ad hoc training projects that rely mainly on donor financing or irregular internal funds. These efforts, which are often motivated by compliance, lack strategic direction and do not meet long-term professional development goals. Furthermore, current programs do not effectively support the administrative abilities needed to manage research and innovation operations, restricting the non-academic workforce's commitment to institutional RD&I goals.

Equity and access disparities erode the effectiveness of existing systems. Training opportunities are still unevenly dispersed, concentrated in urban areas, and inaccessible to faculty in rural or under-resourced universities—particularly women and those facing digital or logistical hurdles. These issues are exacerbated by the lack of comprehensive monitoring, assessment, and performance-linking tools, which impede feedback, learning, and incentive.

To address these limitations, Pakistan must implement a coordinated, statewide capacity-building strategy geared towards non-academic roles. Taking lessons from overseas models like Malaysia, the United Kingdom, and South Africa, the country should invest in specialized staff development units, scalable and inclusive training programs, and infrastructure that promotes regional and gender equity. Aligning these activities with national RD&I priorities will not only empower non-academic workers, but also reveal their potential as key contributors to institutional innovation and change. A strong, strategically developed non-academic workforce is essential for Pakistan's higher education industry to reach its full potential.

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