



Development of Capacity Building Mechanism for Non-Academic Staff in Public Sector Higher Education Institutions of Pakistan

Saifullah Memon

Institute of Science, Technology & Development,
Mehran University of Engineering & Technology
Saifullah.memon@admin.muet.edu.pk

Arabella Bhutto

Shaheed Allah Buksh Soomro University of Art,
Design and Heritages, Jamshoro
arabella.bhutto@faculty.muet.edu.pk

Bhawani Shankar Chowdhry

Mehran University of Engineering & Technology
bhawani.chowdhry@faculty.muet.edu.pk

Abstract

Non-academic staff play a critical role in the administration, governance, and operational efficiency of public sector higher education institutions (HEIs) in Pakistan. However, limited capacity-building initiatives hinder their professional development, affecting institutional performance. This study explores the training needs, challenges, and skill gaps among non-academic personnel and proposes a structured capacity-building mechanism. A pilot study with 50 participants was conducted using a quantitative survey approach, followed by statistical validation, reliability analysis, and exploratory factor analysis (EFA). The findings indicate insufficient training opportunities, resistance to digital transformation, and a lack of standardized professional development policies. The study emphasizes the need for HEC-led national training frameworks, dedicated funding, and competency-based learning models to enhance staff efficiency and institutional governance. The research provides evidence-based recommendations to improve non-academic staff development in Pakistan's HEIs, ensuring long-term sustainability and operational effectiveness in higher education administration.

Keywords: Capacity Building Mechanism, Non-Academic Staff, Higher Education Institutions, Pakistan



Introduction

Higher Education Institutions (HEIs) are profoundly effective in shaping a country's intellectual and economic development (Oppong, 2013). Academic staff undertake research and teaching directly, while non-academic staff support the effectiveness of institutional administration and governance. In public sector HEIs, the non-academic staff undertakes key functions in the areas of administration, finance, student affairs, human resource management, and institutional support services (Nakimuli, 2023). The capacity building programs for non-academic personnel have been given less attention, which, in turn, accounts for the inefficiencies in service delivery, resource management, and the performance of the institution (Mafindi, 2024).

The term capacity development refers to the process by which knowledge, skills, and competencies are developed in order to enable individuals or groups of individuals to perform effectively (Ziervogel et al., 2022). In public sector higher education institutions in Pakistan, developing systematic capacity building frameworks for non-academic personnel is necessary to provide solutions to institutional challenges, enhance administrative efficiency, and ensure quality service delivery. The situation of professional training programs being unavailable, minimal exposure to up-to-date administrative practices, and obsolete curriculum in the skills diminish these categories' potential for effectively contributing to the institution's goals (Nyakito, Amimo & Allida, 2021).

In Pakistan, a changing higher education environment characterized by increased enrolments, advances in technology, and changes in regulations, non-academic staff require continued professional development (Riaz, Jabeen & Irfan, 2023). However, most of the training programs conducted in the HEIs of Pakistan are mainly concerned with specific training for academic faculty, completely ignoring formal learning possibilities for the non-academic staff (Saleem, Afzal & Amin, 2022). This study explores the need, constraints, and viable solutions for an efficient capacity building strategy for non-academic staff in public sector higher educational institutions.

The absence of any systematic capacity building framework for non-academic personnel at HEIs in Pakistan has brought about inefficiencies, skill shortages, and performance impacts (Bukhari et al., 2023). Even in developed countries, professional training programs are part of the more accepted institutional policy, while non-academic staff in



Pakistan are seldom trained formally in core administrative and managerial skills (Iqbal et al., 2024). This hinders good decision-making, creates bureaucratic delays, breeds poor administration, and leads to inefficiencies in the system.

The training programs in place for non-academic personnel are erratic and sporadic, lacking any consistent long-term strategy (Mafindi, 2024). In fact, there is no standardized approach whatsoever to professional development, career path advancement, or skill enhancement. Another thing that limits training and capacity building opportunities are financial constraints, lack of institutional interest, and poor policy framework. Due to numerous circumstances, a robust capacity building framework will render the non-academic personnel incapable of adjusting to the changes in institutional needs, technological advancements, and global best practices (Moser, 2024).

This study aims to identify the gaps in existing capacity building programs and suggest a systematic, policy-oriented framework for improving public-sector higher education skills, efficiency, and productivity on the part of non-academic staff in Pakistan.

Research Objectives

This study seeks to develop a comprehensive capacity building mechanism for non-academic staff in public sector HEIs of Pakistan. The specific objectives include:

1. To empirically assess the involvement of the non-academic staff in public sector HEI functions in Pakistan for the Promotion of RD&I
2. To explore the modes of capacity building for non-academic staff in public sector HEIs of Pakistan
3. To explore the modes of capacity building for non-academic staff in public sector HEIs of advanced countries
4. To evaluate the gaps in the modes of capacity building for non-academic staff in public sector HEIs of Pakistan in relation to the advanced countries
5. To measure the relationship between the level of capacity building of non-academic staff with overall HEC & QS-World / Times Higher Education Rankings & promotion of RD&I
6. To develop a capacity building mechanism for non-academic staff in public sector HEIs of Pakistan



Significance of the Study

This study is important for several different levels. Firstly, it adds to the debate on higher education policies by stressing the role non-academic staff play in institutional performance. Secondly, it offers an empirical analysis of the demands for capacity building among non-academic staff members. Thirdly, the study provides useful suggestions for government agencies, legislators, and HEI managers to provide organized training courses in line with the world's best standards.

Effective non-academic staff generally support institutional efficiency, student satisfaction, and a higher quality of education. A capacity building process will strengthen Pakistan's higher education sector through greater governance, expanded service delivery, and improved institutional performance.

Literature Review

Improving institutional efficiency and employee performance in higher education institutions (HEIs) has been shown to depend critically on capacity building (Nwuke & Nwanguma, 2024). Although faculty development programs receive much attention, there is still a dearth of organized capacity building projects for non-academic staff members, who are indispensable for operational, financial, and administrative purposes inside HEIs (Tamrat & Teferra, 2018). Non-academic staff members in Pakistan's public sector HEIs sometimes lack official training, organized career paths, and professional development initiatives (Saleem, Afzal & Amin, 2022). Existing capacity building methods, issues, best practices, and the requirement of a methodical training program for non-academic staff in HEIs are investigated in this literature review.

Concept of Capacity Building in Higher Education

Improving the skills, capabilities, and efficiency of staff members to raise institutional performance depends on capacity building within the framework of HEIs (Samsurijan & Rohayati, 2024). These attributes improve institutional governance, service delivery, training programs, skill development seminars, leadership development courses, and policy reforms—(UNESCO, 2017). Good capacity building guarantees that HEIs can adapt to changing administrative and educational needs, therefore producing a skilled and effective workforce able to handle institutional problems (Mian et al., 2020).



Through professional development programs, human capacity building seeks to raise employees' knowledge, skills, and competence (Taguma & Barrera, 2019). This covers administrative skills, leadership development, and training in new technologies that improve personal performance. Building institutional capacity stresses administrative policies, governance structures, and resource management systems (El-Taliawi & Van Der Wal, 2019). Good administrative systems and institutional policies guarantee seamless operations and improved decision-making procedures. Systematic capacity building is enhancing national-level projects and policy systems meant to support ongoing education and development inside HEIs (Marginson, 2022). This dimension emphasizes how cooperative projects, laws, and government regulations help to promote sustainable institutional development.

Although much study has been done on faculty capacity building including programs for faculty development, grants for research, and pedagogical training; the growth of non-academic staff is still an understudied field. Administrative operations, financial administration, and student support services all depend on non-academic staff; nonetheless, organized training courses for professional development are sometimes missing (Adejare et al., 2020). Ensuring institutional efficiency depends on closing this discrepancy since well-trained non-academic staff greatly influences the general performance and efficacy of HEIs. Strengthening the higher education sector depends thus on creating a methodical and sustained capacity building framework for non-academic professionals (Mensah & Gordon, 2020).

Importance of Non-Academic Staff in HEIs

The foundation of HEIs non-academic and staff members are crucial in guaranteeing the seamless running of administrative operations, financial management, student relations, human resource management, institutional governance, and financial control (Pandit & Paul, 2023). Their duties cover several spheres, including managing financial resources, procurement of institutional supplies, administration of admissions, maintenance of IT infrastructure, and guarantees of legal and regulatory compliance. Since non-academic staff members are so essential to HEIs, their efficiency and effectiveness directly affect institutional performance and service delivery (Baltaru, 2019).

Veles, Graham & Ovaska (2023) emphasizes that non-academic staff members are often the first point of contact for faculty members and students. Thus, their jobs are essential to the whole student and faculty experience. Their fast and efficient administrative support



helps to create conditions fit for academic performance. However, non-academic staff members' professional growth stays mostly underfunded in Pakistan. Lower levels of productivity, less responsibility, and diminishing service quality follow from a lack of organized training programs, career progression possibilities, and skills development projects (Ahmad, Gul & Kashif, 2024). Many of the non-academic staff rely primarily on on-the-job learning, which sometimes is advantageous but has no proper systemic way of honing the skills. Some constraints put the productivity of non-academic staff at HEIs in Pakistan.

Some of the major obstacles to better institutional productivity, according to Shah Bukhari et al (2022), include old administrative procedures, resistance to digital transformation, and, finally, poor leadership development. A large number of such non-academic staff are unwilling to adopt and adapt new technology that could make administrative procedures simple, as they are not well acquainted with modern digital applications. Moreover, deficiencies in leadership mean a lack of proactive decision-making and innovation inside HEIs. These problems emphasize the most urgent need for an organized capacity building system meant to meet the specific needs of non-academic employees for their professional development and institutional effectiveness (Ajail, 2024).

Existing Capacity Building Mechanisms in HEIs

Advanced countries are aware that the organization of capacity building systems for the non-academic staff of HEIs is a necessity for institutions to develop performance and for continuing professional advancement (Suwannatarn & Asavisanu, 2022). These systems provide an organized syllabus of training courses to equip administrative staff with the right tools for administering contemporary educational environments effectively.

In the UK Higher Education system, CPD for non-academic staff is given priority so that continuous training is available throughout employment (Nga, Shamim & Salleh, 2025). The Leadership Foundation for Higher Education (LFHE), one of the flagship programs, trains non-academic staff in areas such as strategic leadership, financial management, and governance (Bolden & Tymms, 2020). The intent here is, therefore, that the administrative staff is prepared to face institutional challenges, make prudent decisions, and thereby contribute toward the success of HEIs as a whole.

HEIs in the US develop the capabilities of non-academic staff and offer workshops, certifications, and short courses (Kezar, 2018). This model is vital for institutional governance



for the very reason of preparing the staff to undertake legal compliance issues, financial aid systems, and handling of student data. Across Australia, Colleges have adopted a blended approach toward professional development, integrating employment rotations, mentoring activities, and online courses (Croucher et al., 2020). This model attempts to use flexible online learning opportunities, allowing non-academic workers to gain experience. Mentoring programs connect experienced professionals with junior staff members for knowledge transfer and skill development.

These are capacity building schemes that are organized, and they show the extent to which systematic training programs can be key in raising the performance of non-academic staff members within HEIs. These models further assist developing countries in increasing the efficiency of their higher education administrative systems, outputs, and effectiveness.

Pakistan's HEI Capacity Building Initiatives

Limited training opportunities, uneven schemes, and the absence of structured policies in Pakistan are great barriers to growing the capacities of non-academic staff in HEIs (Shahab et al., 2025). Unlike rich countries with organized continuous programs for professional development, HEIs in Pakistan do not focus on skill-upgrading programs for their non-academic staff. According to Mustafa, Alzubi & Bashayreh (2021), there are just about 15% of non-academic staff members in public HEIs have undergone official training courses organized. Such a disparity greatly affects administrative efficiency, institutional governance, and service delivery in higher education.

Although HEC's Staff Development Programs seek to improve administrative abilities, these projects are sometimes erratic, underfunded, and lacking a defined execution (Malik & Nawaz, 2022). Many HEIs lack specific funding for non-academic staff development, which results in uneven and scattered development initiatives. One of the main gaps in Pakistan's efforts at capacity building for HEIs is the lack of a national policy framework especially for non-academic staff development. Institutions lack the drive and means to fund long-term professional development initiatives without a uniform approach. Moreover, the fast digital revolution in education makes modern administrative skills and IT competency indispensable (Dwivedi & Joshi, 2021). Nevertheless, non-academic staff members get either minimal or no organized training in these domains. Dealing with these problems calls for institutional dedication, legislative changes, and more financing to make sure non-academic employees of



Pakistani HEIs are ready for the challenges of a changing educational scene (Shahijan, Rezaei & Preece, 2016).

Challenges in Capacity Building for Non-Academic Staff

Some of the barriers that need to be overcome for successful capacity enhancement in public HEIs include budgetary limitations, administrative neglect, resistance to change, and lack of institutional policies (Singun, 2025). These barriers inhibit professional development opportunities for non-academic personnel and, therefore, lead to ineffective governance and service delivery.

Limited budgetary allocation is one such considerable challenge. According to Yusuf & Ibrahim (2024), they stated that insufficient funding has hindered HEIs in arranging formal training programs for non-academic staff. Training for administrative personnel has become sorely low on funding and uncoordinated, compared to that for faculty members, which sometimes gets large funding. Most HEIs resort to informal models of professional development in the absence of specific budget lines for training non-academic staff.

Yousafzai, Khan & Shah (2021) stated that HEIs in Pakistan have primarily been geared toward faculty development, neglecting the need for developing training programs for administrative staff. This differential treatment literally deprives the non-academic personnel of development opportunities; thus, skill sets fall into a constant state of stagnation, incapable of catching up with the evolving trends in higher education management.

Opposition against change is yet another strong impediment to success. Long-service non-academic staff mostly resist any new training, especially in areas of digital transformation and technology-based administrative systems (Shah Bukhari et al., 2022). Many are reluctant to adopt newer digital technologies and are holding on to outdated administrative methods, thereby compromising the institution's efficiency. This inertia will continue to slow down HEIs that do not take targeted interventions.

The absence of institutional policies guiding structured capacity building activities limits sustained staff development (Domorenok, Graziano & Polverari, 2021). They also highlight that without formal policies and long-term strategic plans in place, it becomes virtually impossible for HEIs to integrate continuous professional development for non-academic personnel. Tackling these challenges calls for reforming policies, investing financial



resources, and making it clear that leadership is committed to ensuring that non-academic staff get the training they require to drive institutional viability (Maama, 2024).

Methodology

This research employs a quantitative technique to assess the capacity building needs of non-academic personnel in public sector HEIs in Pakistan. The study design is meant to test the effectiveness of the survey instrument prior to full-fledged research, refine ambiguous questions, and point out critical problems. Participants were drawn from a stratified simple random sampling method to ensure adequate representation across the different functions and departments, including administration, finance, student relations, HR, IT services, and institutional governance; these totaled 50 participants in the pilot study. The inclusion of members from different organizational levels of management, middle management, and operating staff enables the study to provide varying perspectives on institutional support for professional growth and training needs.

Divided into four sections—demography, awareness of higher education roles, capacity building experiences, and recommendations for improvement—a standardized survey questionnaire was the main data collecting technique. Over two weeks, the questionnaire was sent both online and personally. Assured of confidentiality, participants were told about the goal of the study and given the opportunity to comment on the relevance and clarity of the survey questions. The pilot phase revealed several important issues, including reluctance to train, inadequate programs for developing leaders, and antiquated administrative procedures. To further clarification, the comments also helped improve some technical terms, Likert scale response categories, and open-ended question structure.

Descriptive statistics, response rate, mean scores, standard deviations, and frequency distributions were computed in data analysis using the SPSS program. Internal consistency of the survey items was evaluated using reliability analysis (Cronbach's Alpha); therefore, guaranteeing that every construct tested was dependable for further research. Furthermore, exploratory factor analysis (EFA) is to find underlying latent constructions pertaining to training needs and capacity building issues. EFA determined if items loaded suitably onto predicted factors, therefore helping to investigate the structural validity of the questionnaire. Principal Component Analysis (PCA) with Varimax Rotation was used for factor extraction,



therefore enabling improved interpretability of factor groups. Low factor loadings or cross-loadings on items were reviewed for revision or deletion in the final questionnaire.

Informed consent was obtained before data collection, and all responses were anonymized to maintain confidentiality. The pilot study's results revealed that some of the survey items were either too complicated or duplicated and needed restructuring and simplification. Participants also discovered some terminologies they were not familiar with. To address these issues, question phrasing was revised, redundant questions were merged, and Likert scale options were refined to provide more distinct response categories.

Findings

Pre-Testing of the Instrument

Pre-testing (pilot study) for data collection was conducted at 50 HEIs to assess the study's feasibility and validity. Based on the pilot study's findings, the questionnaire was changed to achieve better results. The methodology was similar to that outlined by Wood & Brink (1998) and Polit and Beck (2004).

Exploratory Factor Analysis

Exploratory factor analysis (EFA) is a marvelous technique in statistics for identifying the underlying structure of a dataset by grouping variables into associated factors based on their correlation (Widaman & Helm, 2023). EFA in a pilot study is useful particularly to assess the suitability of survey items, identify redundant or poorly contributing variables, and ensure each construct is operationally well-defined. The results of EFA determine how well survey items can cluster into distinct constructs; thus, guiding researchers toward improving their measurement model.

Table 1: KMO Bartlett Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.877
Bartlett's Test of Sphericity	Approx. Chi-Square	3767.486
	Df	25
	Sig.	.000

Test pilot produced an initial KMO score for Kaiser-Meyer-Olkin Amount of Sampling Adequacy (KMO) of 0.877 (Table 1). This score is considerably above the accepted benchmark

of 0.60, thus feeling to be an excellent score. The table indicates that the value of Bartlett's Test of Sphericity is 0.00, satisfying the condition of significance less than .005 (Bahkia et al., 2019). The value shows that these items are profitably intercorrelated because data and sample size are enough and fit to proceed to the reduction step.

Table 2: Reliability Analysis

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Familiarity and awareness	0.950	0.955	0.955	0.620
Challenges and Opportunities	0.920	0.930	0.940	0.750
Personal Growth and Development	0.860	0.865	0.900	0.630
Promotion of RD&I	0.930	0.935	0.945	0.725

Cronbach's Alpha, which refers to the extent to which a measure is internally consistent and reliable, shows strong reliability for all constructs, being above the benchmark of 0.7 (Table 2). Rho-A, which is an alternative reliability measure, meets this criterion again, emphasizing the internal consistency of the constructs. Composite Reliability, which incorporates factor loadings, is very high, above 0.9 for all constructs, ensuring evidence of their robustness. In terms of convergent validity, the Average Variance Extracted (AVE) is above the acceptable threshold of 0.5 for all constructs, showing that constructs capture a significant amount of variance when compared with measurement error. Of all the constructs, the "Challenges and Opportunities" construct has the highest AVE (0.750), which denotes high explanatory power. At the same time, the lowest AVE (0.620) is attributed to the construct of "Familiarity and Awareness" but still holds a legitimate level.

Involvement of the Non-Academic Staff in Public Sector HEIs Functions in Pakistan for Promotion Of RD&I

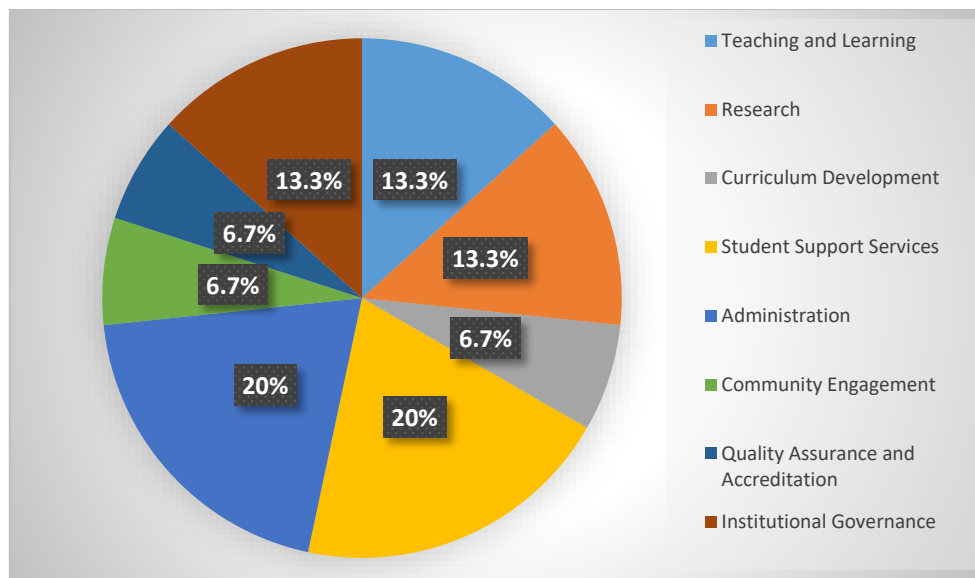


Figure 1: Involvement in assisting the core functions

Based on the observation, most of the participants were actively involved in student support services, administration, teaching and learning, research, and institutional governance (Figure 1). However, involvement in curriculum development, community engagement, quality assurance, and accreditation was observed to be the least.

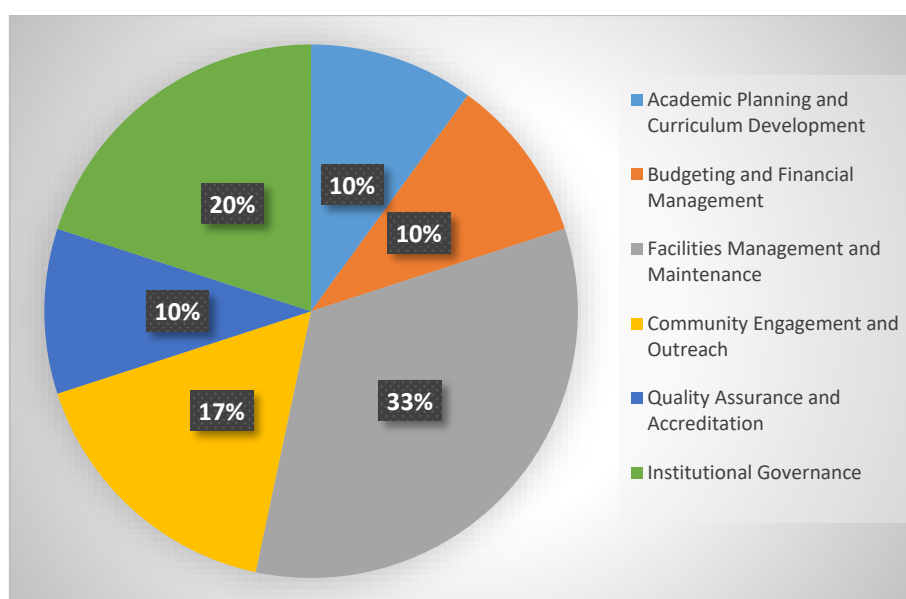


Figure 2: Involvement in Decision-Making Processes related to Core Functions

Research has shown that the greatest level of involvement occurs in making decisions related to the core functions of facilities management and maintenance, followed by institutional governance and then community engagement and outreach (Figure 2). Lastly, academic planning and curriculum development, budgeting and financial management, as well as quality assurance and accreditation, are the core functions that have the lowest score regarding their decision-making processes.

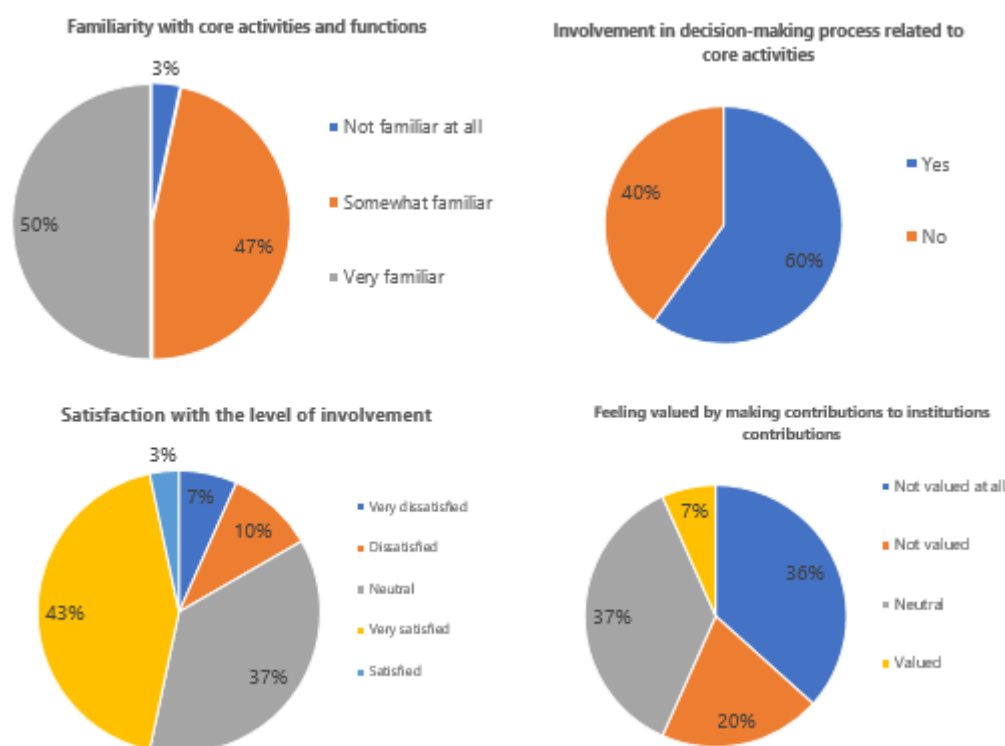


Figure 3: Involvement in Core Functions and Activities (a) familiarity with core activities and functions; (b) Involvement in decision-making process related to core activities; (c) satisfaction with the level of involvement; and (d) Feeling valued by making contribution to institutional contributions

Most study participants were reported to be very familiar with core activities and functions (Figure 3); 60% were involved in the decision-making process concerning core activities; 43% were very satisfied with their level of involvement; and 37% of the participants were neutral about feeling valued for their contributions to the institutions. On the contrary, 47% of the participants were somewhat familiar with core activities and functions; 40% were not involved in any decision-making processes related to core activities; 37% were neutral

regarding their level of satisfaction; while 36% of the participants were unvalued in their contributions to the institutions.

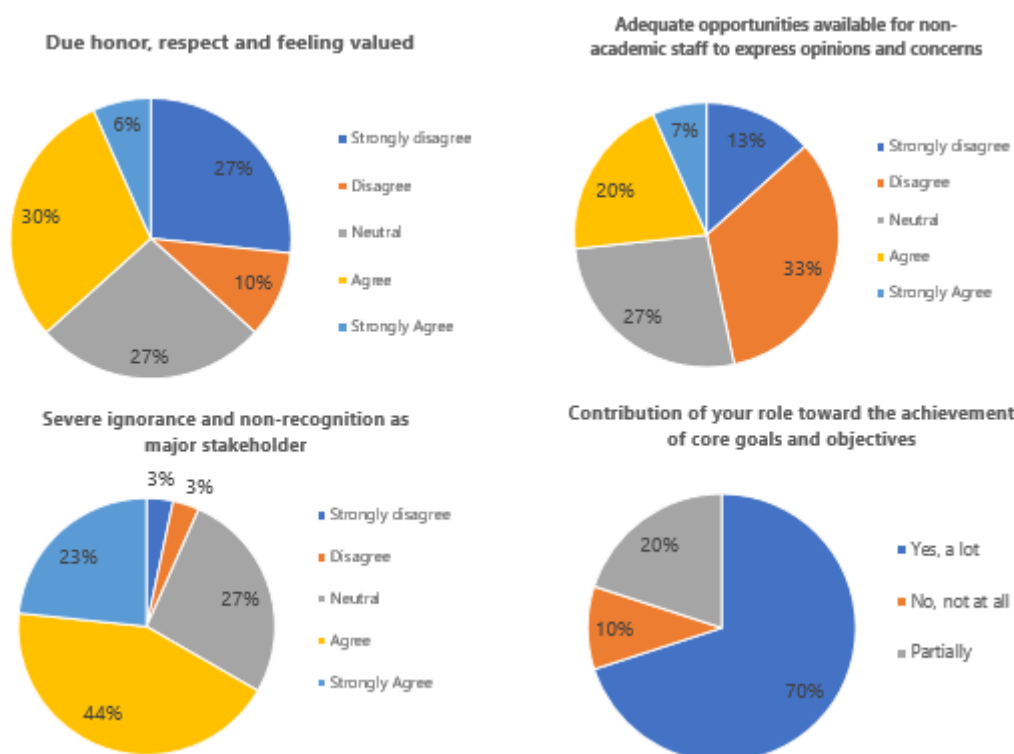


Figure 4: Involvement in Core Functions and Activities (a) due honor, respect and feeling valued; (b) adequate opportunities available for non-academic staff to express opinions and concerns; (c) severe ignorance and non-recognition as major stakeholder; and (d) contribution of your role toward the achievement of core goals and objectives

The majority of the respondents (Figure 4) felt that they have received due honor, respect and have been felt to be genuinely valued (36%); adequate opportunities were available to non-academic staff for expressing opinions and concerns (47%); severe ignorance and non-recognition were actually observed against them as among major stakeholders (67%); and having made most of the contributions towards achieving core goals and objectives (70%). In contrast, however, 37% disagreed that they had been shown honor and respect or even felt valued at all; 6% had not even felt the absence of high respect and recognition; 46% disagreed that adequate opportunities existed for the non-academic staff to have their say on matters, while 30% would feel that these non-academic staff have contributed very little to aiding the main goals and objectives.

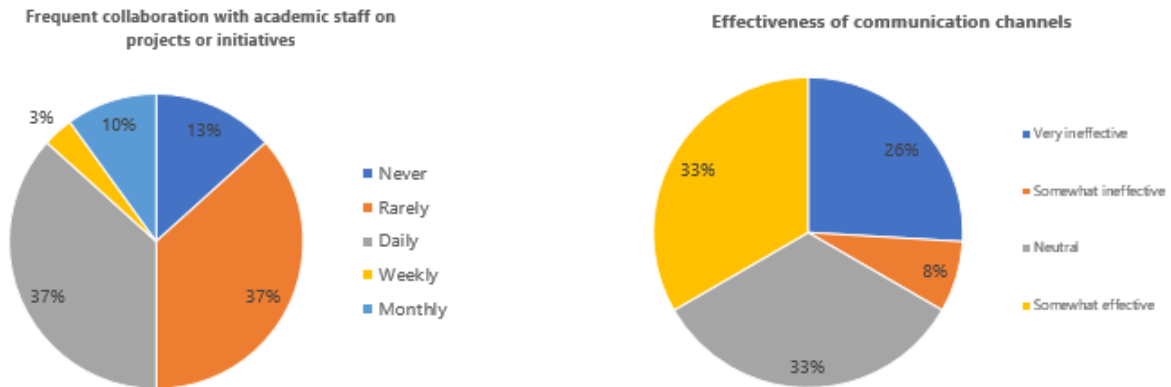


Figure 5: Involvement in Core Functions and Activities (a) Frequent collaboration with academic staff on projects or initiatives; (b) Effectiveness of communication channels

When it comes to the issue of frequent collaboration, 37% of the participants said that they collaborate for projects or initiatives on a daily basis (Figure 5). In contrast, 50% of the participants said that the academic staff almost never or rarely collaborates. Regarding communication channels, 33% of participants felt that the communication channels were somewhat effective, while 34% believed that the channels were very or somewhat ineffective.

Modes of capacity building for non-academic staff in public sector HEIs of Pakistan

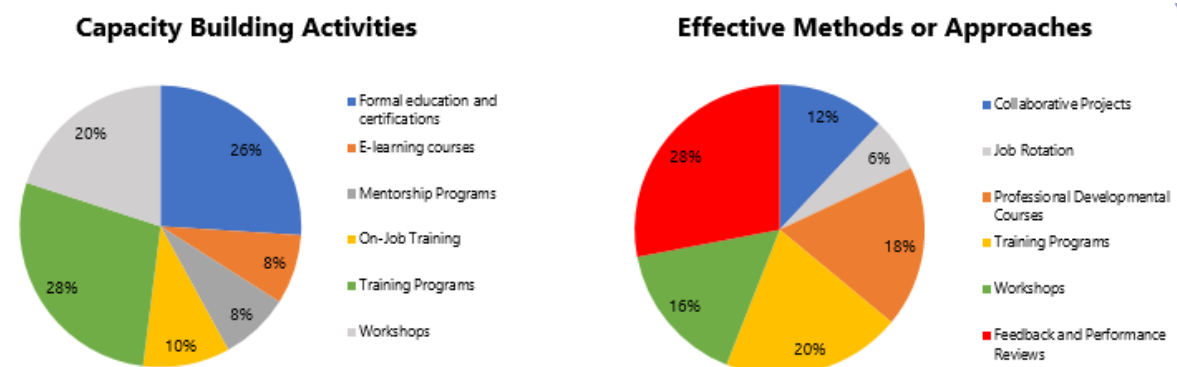


Figure 6: Modes of Capacity Building (a) Capacity Building Activities; (b) Effective Methods or Approaches in Pakistan HEIs

The above findings delved into the means and modes of capacity building for the non-academic staff of public sector higher educational institutions in Pakistan (Figure 6). Evidence

shows that formal education and certification programs, workshops, and training were some of the salient capacity building activities. Further considerations among non-academic staff were that feedback, performance reviews, training programs, and professional development courses were the most effective methods or approaches.

Modes of capacity building for non-academic staff in public sector HEIs of advanced countries

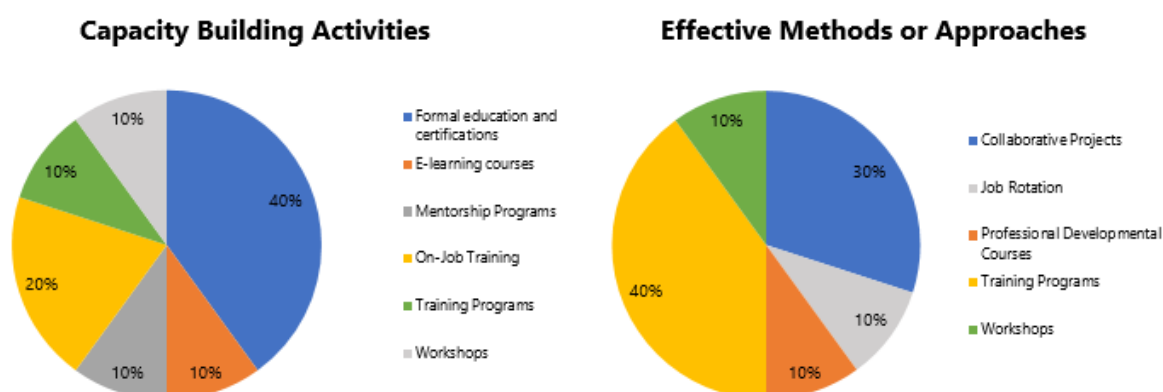


Figure 7: Modes of Capacity Building (a) Capacity Building Activities; (b) Effective Methods or Approaches in Advanced HEIs

The modes on which capacity building programs for non-academic staff in advanced public sector HEIs are dependent have now been evaluated (Figure 7). The critical capacity building activity training referred to formal education and certification and on-job training. In addition, training programs and collaborative projects were considered the most effective methods or approaches among the non-academic staff of the developed countries.

Conclusion

In conclusion, non-academic staff members have an important role in public-sector higher education institutions (HEIs) in Pakistan. Their role is not as structured when capacity development programs are concerned, but that does not mean their contribution to institutional governance, academic practices, student support services, finance, and administration is less important. Employees of non-academic standings are usually more undervalued, far less involved in decision-making, and have a very weak level of interaction with their academic counterparts, according to the findings.



The study also underlines how often training courses and seminars are used for capacity building, although they are not methodically included in institutional strategies. Developed nations, on the other hand, guarantee competency-based learning and career progress for non-academic employees by using organized, well-funded, and continuous professional development frameworks. Dealing with these problems calls for institutional dedication, legislative changes, and more financing to create a disciplined capacity building framework catered to the particular requirements of non-academic staff in Pakistani HEIs.

Implications

Theoretical Implications

This paper highlights the underappreciated contribution of non-academic staff to institutional success, therefore augmenting the body of knowledge already in publication on capacity building in HEIs. It expands Human Capital Theory by proving that funding administrative staff improves general institutional performance. Emphasizing the need for organized policies and governance structures in staff development, it also offers empirical evidence for Institutional Theory.

Practical Implications

The study emphasizes higher education managers' requirement for organized professional development initiatives that match institutional objectives. HEIs should include mandatory training, leadership development, and digital literacy campaigns in institutional policies. The Higher Education Commission (HEC) and government agencies must set aside specific money to assist programs of ongoing education.

The study emphasizes for non-academic staff the advantages of professional development and skill enhancement, therefore motivating involvement in programs for capacity building. Increasing cooperation between academic and non-academic staff will help to enhance general HEI performance, institutional governance, and service quality. The study offers evidence-based suggestions for legislators on creating a national policy framework for non-academic staff development, therefore guaranteeing consistency among public sector HEIs.

Limitations

While this study provides valuable insights, several limitations must be acknowledged.



Limited Sample Size: The pilot study included 50 participants, which may not fully represent the diverse workforce in all public sector HEIs in Pakistan. A larger sample in future research will provide more generalizable results.

Focus on Public Sector HEIs: The study does not include private sector HEIs, where capacity building mechanisms may differ significantly. Future research should explore comparative analyses across different institutional settings.

Self-Reported Data: The study relies on survey responses, which may be subject to response bias. While statistical measures (e.g., Exploratory Factor Analysis, Reliability Tests) ensure data validity, further qualitative research (e.g., interviews, focus groups) can provide richer insights.

Short-Term Perspective: The study captures current perceptions and training needs but does not track the long-term impact of capacity building initiatives. A longitudinal study would offer deeper insights into the effectiveness of capacity building programs over time.

Recommendations

For Higher Education Institutions (HEIs)

Emphasizing leadership development, digital literacy, financial management, and student services, higher education institutions (HEIs) should create organized capacity building programs, including mandatory training courses for non-academic staff. These initiatives ought to be meant to improve institutional governance and administrative effectiveness. Encouragement of cross-departmental cooperation will also help to improve communication and teamwork between academic and non-academic employees, so supporting an inclusive institutional environment. HEIs have to apply competency-based training approaches, stressing practical learning and real-world applications over theoretical debates, if they are to guarantee effectiveness. This strategy will help employees to manage demanding tasks in the field of higher education administration.

For the Higher Education Commission (HEC) and Policymakers

Establishing a nationwide capacity building system by the Higher Education Commission (HEC) will help to guarantee uniform policies for training non-academic staff members throughout all public sector universities. To preserve consistency in skill improvement, this framework ought to specify competency criteria, training courses, and professional development benchmarks. Furthermore, special funds should be set aside to



support ongoing learning opportunities, therefore enabling non-academic staff members to engage in organized training courses free from financial limitations. Policymakers should also include IT skills training to equip personnel with digital proficiency, therefore ensuring effective operations in modern HEIs, given the growing dependence on e-governance and digital administration.

References

- Adejare, B. O., Olaore, G. O., Udofia, E. E., & Emola, T. B. (2020). Inefficiency among Non-Academic Staffs in Nigerian Tertiary Institutions: The Role of Training and Development. *Journal on Efficiency and Responsibility in Education and Science*, 13(2), 56-66.
- Ahmad, I., Gul, R., & Kashif, M. (2024). A qualitative study of workplace factors causing stress among university teachers and coping strategies a qualitative study of workplace factors. *Human Arenas*, 7(4), 812-834.
- Ajail, S. Z. (2024). *Academic staff experiences of providing programme leadership to support students* (Doctoral dissertation, Auckland University of Technology).
- Bahkia, A. S., Awang, Z., Afthanorhan, A., Ghazali, P. L., & Foziah, H. (2019, August). Exploratory factor analysis on occupational stress in context of Malaysian sewerage operations. In *AIP Conference Proceedings* (Vol. 2138, No. 1). AIP Publishing.
- Baird, J. A., Grotorex, J., & Bell, J. F. (2004). What makes marking reliable? Experiments with UK examinations. *Assessment in education: Principles, policy & practice*, 11(3), 331-348.
- Baltaru, R. D. (2019). Do non-academic professionals enhance universities' performance? Reputation vs. organisation. *Studies in Higher Education*, 44(7), 1183-1196.
- Bolden, D., & Tymms, P. (2020). Standards in education: Reforms, stagnation and the need to rethink. *Oxford Review of Education*, 46(6), 717-733.
- 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.
- Croucher, G., Wen, W., Coates, H., & Goedegebuure, L. (2020). Framing research into university governance and leadership: Formative insights from a case study of Australian higher education. *Educational Management Administration & Leadership*, 48(2), 248-269.
- Domorenok, E., Graziano, P., & Polverari, L. (2021). Introduction: Policy integration and institutional capacity: Theoretical, conceptual and empirical challenges. *Policy and Society*, 40(1), 1-18.
- Dwivedi, V. J., & Joshi, Y. C. (2021). ICT Perspectives of Productive and Sustainable Development for 21st Century Higher Education Institutions. *International Journal of Education and Development using Information and Communication Technology*, 17(3), 81-96.
- El-Taliawi, O. G., & Van Der Wal, Z. (2019). Developing administrative capacity: An agenda for research and practice. *Policy Design and Practice*, 2(3), 243-257.
- Hox, J. J., & Boeijs, H. R. (2005). Data collection, primary vs. secondary. *Encyclopedia of social measurement*, 1(1), 593-599.



- Iqbal, J., Jamal, W. N., Akhtar, K., & Shaikh, A. A. (2024). Employability of Graduates from Top-Tier University Brands in Business and Management: An Exploratory Study of Institutional Strategies and Effective Practices. *Pakistan Journal of Humanities and Social Sciences*, 12(2), 2084-2098.
- Kezar, A. (2018). *How colleges change: Understanding, leading, and enacting change*. Routledge.
- Maama, H. (2024). A critical review of leadership styles in higher education institutions: Implications for employee commitment in South Africa. *Economics, Management and Sustainability*, 9(2), 84-93.
- Mafindi, K. A. (2024). Evolution and Impact of Personnel Management Practices in Higher Education Institutions. *Solo Universal Journal of Islamic Education and Multiculturalism*, 2(03), 279-292.
- Mafindi, K. A. (2024). Training and Staff Development a Vital Means for Academic Productivity in Nigerian Colleges of Education. *Maktabah Reviews*, 1(02), 119-132.
- Malik, M. S., & Nawaz, M. K. (2022). Fostering employability through mediation of protégé career self-efficacy of Pakistani bankers. *Cogent Business & Management*, 9(1), 2141672.
- Marginson, S. (2022). Space and scale in higher education: The glonacal agency heuristic revisited. *Higher Education*, 84(6), 1365-1395.
- Mensah, A. M., & Gordon, C. (2020). Strategic partnerships between universities and non-academic institutions for sustainability and innovation: Insights from the University of Ghana. *Sustainability Challenges in Sub-Saharan Africa I: Continental Perspectives and Insights from Western and Central Africa*, 245-278.
- Mian, S. H., Salah, B., Ameen, W., Moiduddin, K., & Alkhalefah, H. (2020). Adapting universities for sustainability education in industry 4.0: Channel of challenges and opportunities. *Sustainability*, 12(15), 6100.
- Moser, S. C. (2024, April). Social Transformations to Sustainability through a Critical Lens: Integrative insights from twelve research projects funded under the Transformations to Sustainability research programme (2018–2022). In *International Science Council, Belmont Forum, NORFACE*, doi (Vol. 10, No. 2024.03).
- Mustafa, M., Alzubi, F. K., & Bashayreh, A. (2021). Factors Affecting Job Performance of Teaching and Non-Teaching Staff in Higher Education Levels in Oman. *Ilkogretim online*, 20(5).
- Nakimuli, A. (2023). Delivery of Non-Academic Student Support Services by Staff at Kyambogo University. *East African Journal of Education Studies*, 6(2), 302-314.
- Nga, P. T., Shamim, A., & Salleh, R. (2025). Developing and validating a scale for non-academic staff's service competencies in higher education. *Cogent Education*, 12(1), 2450127.
- Nwuke, T. J., & Nwanguma, T. K. (2024). Capacity Building as a Tool for Administrative Staff Improved Job Performance in Public Universities in Rivers State. *Journal of Social and Management Sciences*, 3(2), 211-225.
- Nyakito, C., Amimo, C., & Allida, V. B. (2021). Challenges of integrating information and communication technology in teaching among National Teachers' Colleges in Uganda. *East African Journal of Education and Social Sciences*, 2(3), 157-171.
- Oppong, S. (2013). Should higher education institutions (HEIs) serve national economic needs? Why and why not?. *Education Sciences & Psychology*, 25(3).



- Pandit, J. M., & Paul, B. (2023). Strategic Human Resource Management in Higher Education. *India Studies in Business and Economics*. <https://doi.org/10.1007/978-981-99-4067-7>.
- Polit, D. F., & Beck, C. T. (2004). *Nursing research: Principles and methods*. Lippincott Williams & Wilkins.
- Riaz, H., Jabeen, N., & Irfan, S. (2023). Analysis of Higher Education Reforms in Pakistan: A Public Management Perspective. *Journal of Management and Research*, 10(2), 118-144.
- Saleem, H., Afzal, S., & Amin, M. (2022). Challenges Faced by Head of Departments (HoDs) and Strategies used to Improve Faculty Performance in Public Sector Universities of Punjab, Pakistan. *Journal of Educational Research and Social Sciences Review (JERSSR)*, 2(2), 99-108.
- Samsurijan, M. S., & Rohayati, M. I. (2024). Improving Facility Management Performance in Public Higher Education. *Facility Management Practices: Empirical Cases in Developing Countries*, 61.
- Shah Bukhari, S. K. U., Said, H., Gul, R., & Ibna Seraj, P. M. (2022). Barriers to sustainability at Pakistan public universities and the way forward. *International Journal of Sustainability in Higher Education*, 23(4), 865-886.
- Shahab, S., Ayub, A., Shabir, M., & Aziz, Z. (2025). The Impact of New Managerialism on Academic Identity and Governance: A Comparative Study of University Cultures in the UK and Pakistan. *Journal for Social Science Archives*, 3(1), 452-467.
- Shahijan, M. K., Rezaei, S., & Preece, C. N. (2016). Developing a framework of internationalisation for higher education institutions in Malaysia: A SWOT analysis. *International Journal of Management in Education*, 10(2), 145-173.
- Singun, A. J. (2025). Unveiling the barriers to digital transformation in higher education institutions: a systematic literature review. *Discover Education*, 4(1), 37.
- Suwannatarn, Y., & Asavisanu, P. (2022). The development of a model for enhancing leadership capabilities of non-academic staff in a Thai private higher education institution. *Scholar: Human Sciences*, 14(2), 59-59.
- Taguma, M., & Barrera, M. (2019). OECD future of education and skills 2030: Curriculum analysis. Disponible su: https://www.oecd.org/education/2030-project/teaching-and-learning/learning/skills/Skills_for_2030.pdf.
- Tamrat, W., & Teferra, D. (2018). Internationalization of Ethiopian higher education institutions: Manifestations of a nascent system. *Journal of Studies in International Education*, 22(5), 434-453.
- UNESCO (2017). *Global Education Monitoring Report, 2017/2018*.
- Veles, N., Graham, C., & Ovaska, C. (2023). University professional staff roles, identities, and spaces of interaction: Systematic review of literature published in 2000–2020. *Policy Reviews in Higher Education*, 7(2), 127-168.
- Widaman, K. F., & Helm, J. L. (2023). Exploratory factor analysis and confirmatory factor analysis.
- Wood, M. J., & Brink, P. J. (1998). Comparative designs. *Advanced design in nursing research*, 143-159.
- Yousafzai, M. T., Khan, I., & Shah, T. (2021). Assessing the implications of university model act reforms on governance: A case of public universities in Pakistan. *The Dialogue*, 16(2), 28-41.



- Yusuf, S., & Ibrahim, M. A. (2024). Educational Services in Nigerian Universities: Prospect, Challenges and Way Forward. *Fuoye Journal of Educational Management*, 1(1).
- Ziervogel, G., Enqvist, J., Metelerkamp, L., & van Breda, J. (2022). Supporting transformative climate adaptation: community-level capacity building and knowledge co-creation in South Africa. *Climate Policy*, 22(5), 607-622.