

Factors Affecting the Research Culture in Public Sector Universities of Afghanistan



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Abstract: *This study provides insights to those seeking to improve research culture in terms of research and its publication in public sector universities of Afghanistan. The study explored factors affecting the research culture of faculty members. A sample of 86 lecturers from six (6) universities was chosen and a questionnaire having 55 items exploring the three dimensions namely; environmental, institutional, and personal factors was used for data collection. Data were analyzed by calculating the mean value of each item and then further computing the overall mean scores for each dimension. The study found that out of all three dimensions, environmental and personal factors exert a significant perceived effect on the research culture. The study also asserts that strong leadership at both university and dean levels are critical components in the development of research culture in these public sector universities.*

Keywords: Research Culture, Universities, Environmental, Personal, Institutional Factors

Introduction

Research culture is “a hazy concept” (Casci & Adams, 2020). Robin Hill in the study “Revisiting the terms Research Culture” interrogated several questions to define Research Culture; “Do we mean an organizational culture in which research plays a significant role? Do we mean “the way we do research around here?” Or do we mean a culture of the type found in a petri dish, an environment where research grows and multiplies? (Hill, 1999). Research culture refers to all research community behaviors, values, and norms. It includes all facets of the scientific method from conducting research and communicating with people (The Royal Society, 2020).

Higher education plays an important role in the development of society by offering up-to-date knowledge and then transferring it to learners to

cultivate innovation. For successful learning outcomes, quality teaching is important. It should fulfill the students' and employers' present/future expectations. For quality teaching, the involvement of university lecturers in research activities is essential (Javed et al., 2020). Knowledge advancement, creativity, and societal progress are all fueled by the research culture of academic institutions. Faculty members play a crucial role in the academic community and have a significant effect on the research prevalence. Enhancing the research culture within institutions has become increasingly important in recent years (Hill, 2002; Altbach, 2011). A strong research culture benefits individual lecturers in terms of their professional growth, and career promotion and also enhances the institution's reputation (Hanover, 2014).

University lecturers are always considered

researchers because they are continuously busy with various research activities, such as research projects and publications. Hence, their involvement led them to be significantly productive in research fields and further assist universities in acquiring national and international rankings. Batool (2018) indicated that research aptitude is vital for effective teaching. Therefore, successful universities provide adequate assistance to lecturers for their research efforts.

In the last two decades, public universities in Afghanistan struggled to adapt and prevalence the research activities among faculty members. Several projects, seminars, and workshops have been conducted to enhance their research skills such as German-Afghan Research Forum (GARF) Training Programs. GARF was conceived in August 2006 as a major endeavor to introduce research methodology in the social sciences faculty of Kabul University. Earlier studies found that research productivity is associated with intellectual wealth (Jaffe et al., 2020; Heng et al., 2020), and strong research culture (Olvido, 2021). Now these universities also demand from their lecturers to conduct research in their field. Studies showed that a large number of scientific publications enable universities to achieve world ranking. Times Higher Education evaluates universities for ranking in five areas namely; “teaching, research, citations, international outlook, and industry income” (Times Higher Education, 2021).

Despite the growing emphasis on research and scholarly activities in higher education institutions in Afghanistan, there is a lack of research that specifically investigates the factors impacting the research culture of Afghan university lecturers. While there have been studies conducted in other contexts exploring the research culture among academics, such as in Western countries, it is important to recognize that Afghan universities operate within a unique socio-cultural and institutional environment.

The Afghan higher education system has encountered several problems due to political instability that has led to several major challenges including brain drain, and lack of

proper infrastructure and resources, which has negatively augmented the university lecturers’ motivation and research activities. As a result, there is a need for an in-depth investigation into the factors that influence the research culture among Afghan faculty members. This may inform the development of targeted strategies and interventions to improve research productivity and the overall academic environment in Afghanistan. By addressing this research gap, the study aims to contribute to the existing literature and provide valuable insights that might guide policy and practices in fostering a vibrant research culture among Afghan faculty members.

Research Question

1. What factors influence the research culture among Public University lecturers?

Research Methodology

This study used a descriptive survey design to identify key factors that influence the research culture of Afghan Public University lecturers. A questionnaire distribution method was used. Google form was created and then the link was shared with respondent through their WhatsApp groups. The study population was comprised of all public sector universities in Afghanistan. There are a total of 42 higher education institutes of which 26 are accredited universities. Six universities were selected randomly for data collection purposes. These selected universities were Nangarhar, Kunar, Laghman, Kabul Education University, Kandahar, and Paktia Universities. Eighty-six (86) faculty members have filled out the questionnaire and submitted the responses.

A questionnaire containing 55 statements on a five-point Likert scale ranging from strongly disagree to strongly agree which was developed by Iqbal et al. (2018) is used. The instrument is based on three dimensions namely; environmental, institutional, and personal factors. The mean responses were calculated for each statement to determine the perceived influence of the factors mentioned in the statements. The study further calculated the overall mean values for environmental, institutional, and personal factors to explore

what factors affect the research culture development at public universities in Afghanistan.

Results and Discussion

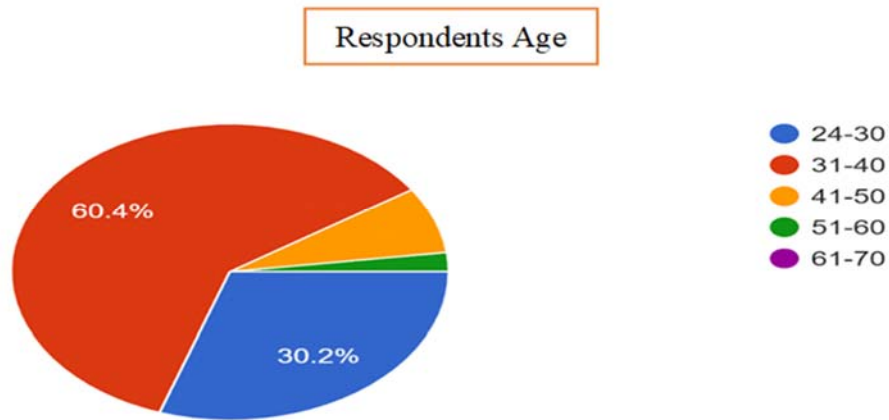
Demographic Characteristics of Respondents

Age

Figure 1 indicates that the majority of respondents fall within the 31-40 years age range, comprising 60.4% of the total respondents. The second largest age group is 24-

30 years, which comprises 30.2% of the respondents. Additionally, the 41-50 and 51-60 years' age groups respectively represent portions of the respondent population. Furthermore, the data does not show any faculty members in the 61-70 years age range. This suggests that there are currently no faculty members employed who fall within that specific age demographic, or who completed the questionnaire.

Figure 1 Respondents Age

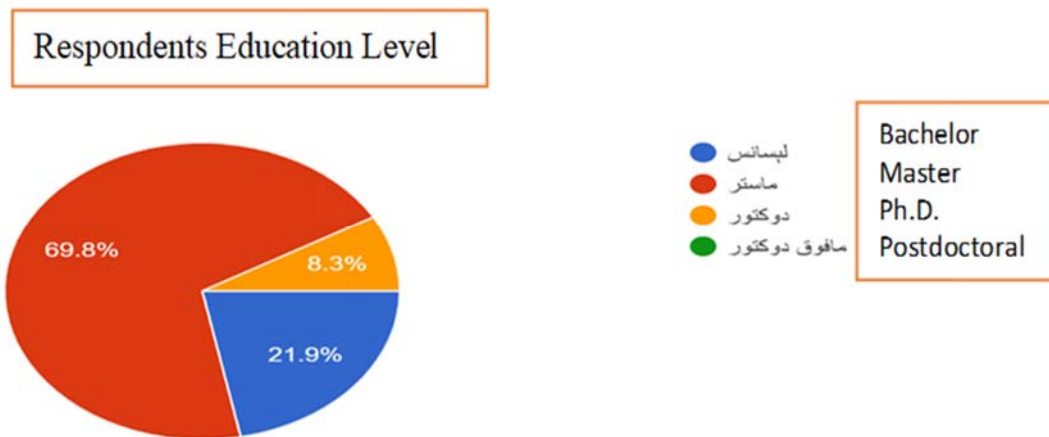


Education Level

Figure 2 illustrates the education level of the participants. The data clearly indicates that the majority of faculty members hold Master's

degrees, comprising 69.8% of the total sample. The second largest group has a Bachelor's degree, representing 21.9% of the respondents. Only 8.3% of the participants possess a Doctoral degree within selected universities.

Figure 2 Respondents Education Level



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Table 1 Environmental Factors for Research Culture

Statements	Mean
I have the facility to exchange information with my colleagues through informal meetings.	3.97
Faculty members exchange information with colleagues through formal meetings	3.52
Sharing ideas with other colleagues to succeed in the research projects is provided in our department.	3.54
Continued guidance is provided for research skills.	3.43
Opportunities to become involved in research activities are provided in our department	3.39
The department is very supportive of providing research opportunities. (Articles, Projects)	3.11
Research issues are communicated by the Dean/ Director/Head of Department.	3.31
Seminars are arranged in department to enhance the research skills of	3.23
Facilities to collaborate and access local and international researchers are available in the department.	2.70
Faculty members exchange information with colleagues through: 1. Cell phone 2. Letter	2.43
Overall Mean Scores	3.36

Descriptive Statistics

Environmental Factors

Table 1 illustrates that the mean scores of informal meetings (3.97) and formal meetings (3.52) suggest that faculty members tend to agree that both meetings facilitate information exchange among colleagues. This indicates a generally positive perception of the communication channels available among faculty members. There is also agreement that sharing ideas to succeed in research projects (3.54) and the department provides opportunities for involvement in research activities (3.39). However, the faculty members seem to have a more neutral perception of the department's support in providing research opportunities (3.11) and communicating

research issues (3.14) such as research paper writing and related projects. The relatively low mean score for the availability of facilities to collaborate with local and international researchers (2.70) suggests this may be an area of concern. In addition, the very low mean score for exchanging information via cell phone and letter (2.43) implies these are not commonly utilized communication channels among Afghan faculty members.

Table 2 Mean Scores of Institutional Factors of Research Culture

Statements	Mean
Institution demands to be productive in research	3.98
Library resources are provided adequately	2.48
Teaching and Research activities have equal importance.	2.29
Potential rewards such as promotion are awarded by universities for completing the research activities.	3.18
Research policies are communicated by Dean / Director / Head of Department / University authorities.	3.30
Computing resources and facilities are provided.	3.21
Potential reward such as recognition is awarded by universities for completing the research activities	3.13
Research activities are rewarded in accordance with defined benchmarks of achievement.	2.62
Measures are taken for the improvement of research skills.	3.41
Institution arranges the seminars with reputable competent researchers.	3.16
University provides administrative support for the presentation of research papers in academic conferences.	3.12
Successful research projects are presented to get new knowledge.	2.18
Financial support is provided by university for research activities.	2.53
Adequate time is provided for research activities. (Articles, Projects etc.)	2.61
A large portion of faculty is awarded by scholarships.	2.32
Overall Mean Scores	3.00

Institutional Factors

In table 2, the mean score (3.98) shows strong agreement among faculty members regarding the institution's demands for productivity in research, indicating a clear institutional priority.

of the equal importance placed on teaching and research activities, implying a potential imbalance or significant institutional priorities

However, the low mean scores for the adequacy of library resources (2.48) and financial support for research activities (2.53) suggest significant gaps in the provision of critical research infrastructure and funding. Moreover, faculty showed disagreement with the mean score (2.29)

to teaching activity. The moderately positive mean scores for potential rewards like promotion (3.18) and recognition (3.13) for

research suggest these incentives may be present but not strongly emphasized by the institution. The (3.30) mean scores for research policy communication from university authorities indicate a significant gap for improvement in the transparent dissemination of research guidelines and expectations. Besides, low mean scores for allocated time for research (2.61), research skills training funds (2.23), and teaching workload

adjustment (2.41) imply faculty members encounter significant constraints in dedicating adequate time and resources to research activities.

The low mean score (2.32) for faculty receiving research scholarships suggests limited institutional support for developing research capacity through advanced training.

Table 3 Personal Factors of Research Culture of Faculty Members

Statements	Mean
Senior Faculty members produce more research output due to control over their workload assignment.	2.50
Faculty members who are able to get more research grants produce more research output.	3.14
Faculty members with better facilities of professional growth do more research	3.88
I have been rewarded for any of my research studies.	2.96
Overall Mean Scores	3.12

Personal Factors

In table3, the mean score of 2.50 for the statement "Senior Faculty members produce more research output due to control over their workload assignment" suggests that faculty members do not strongly agree with this factor. This implies that senior faculty may not necessarily have more control over their workloads or leverage that to produce more research. The mean score of 3.14 for "Faculty members who can get more research grants produce more research output" indicates that access to research funding is seen as somewhat

beneficial for increasing research productivity. The mean score of 3.88 for "Faculty members with better facilities of professional growth do more research" suggests that faculty agree that better professional development resources and support can enhance their research output. The mean score of 2.96 for "I have been rewarded for any of my research studies" shows that faculty have a mixed perception of whether their research efforts are adequately recognized and rewarded by the institution. The value above indicates a neutral response meaning that faculty members have been rarely rewarded for their research studies.

Table 4 Personal Research Expertise of Research Culture among Pubic Faculty Members

Statements	Mean
I am competent enough to conduct:	
1. survey studies	4.08
2. Identifying the problem	4.10
3. design of the research	3.74
4. reviewing and writing relevant literature	3.92
5. Journal identification and publication	3.12
6. Experimental research	2.32
7. Action research	2.46
8. Analyzing quantitative data using SPSS software	2.90
9. Correlation studies	3.22
10. Case studies	2.54
11. Analyzing qualitative data	2.78
Overall Mean Scores	3.19

Personal Research Expertise

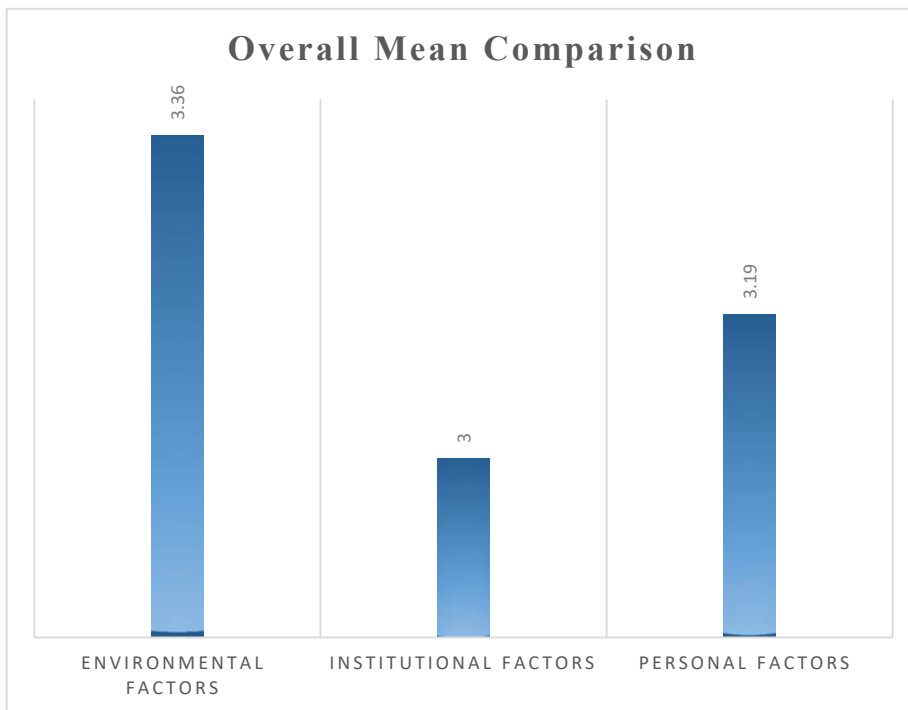
Looking to the above table 4, the highest mean score is 4.10, which suggests that "Identifying the problem" is one of the strongest factors contributing to the research culture. This indicates that faculty members are generally skillful at defining the research problems and formulating appropriate research questions. "Survey studies" and "Reviewing and writing relevant literature" also have relatively high mean scores of 4.08 and 3.92 respectively. This implies that faculty members are experienced in designing and conducting survey-based research, as well as engaging with the existing body of literature to conduct their studies. Moreover, "Designing the research" and "Correlation studies" have mean scores of 3.74 and 3.22, suggesting that faculty members possess reasonable competence in research design and conducting correlational analyses.

On the other hand, the lower mean scores for "Analyzing quantitative data using SPSS" (2.90), "Analyzing qualitative data" (2.78), and "Case studies" (2.54) indicate that faculty

members may have relatively weaker skills in these areas. This could be an opportunity for targeted training and capacity-building initiatives to enhance their proficiency in these research methodologies. The mean score of 3.12 for journal identification and publication reflects a moderately positive result, indicating that faculty members have a foundational understanding of the journal publication process. However, it also suggests the necessity for further skill development in selecting appropriate journals and effectively navigating submission and review procedures. Providing targeted training or resources in these areas could enhance their overall publication success.

The mean scores for "Experimental research" (2.32) and "Action research" (2.46) are the lowest, implying that faculty members may lack confidence or experience in conducting experimental studies or action research projects. This could be an area that requires more attention and support to develop these specialized research skills.

Figure 3 Comparison of all Factors Affecting Research Culture among Public Faculty Members



The above figure 1 indicates that the high mean score for Environmental Factors (3.36) suggests that this dimension, which likely includes elements like research infrastructure, funding, collaboration opportunities, and overall research-conducive environment, appears to be the strongest aspect and is perceived by the faculty to be relatively robust and supportive whereas the mean score of Personal Factors (3.16) highlights research competencies, motivation, and skills among these faculty members.

This suggests that the faculty generally have a moderately strong personal capacity and drive for conducting research, though there may be a gap for improvement in certain areas. Meanwhile, the mean score for Institutional Factors (3.00) has the lowest mean score among the three and encompasses institutional policies, resources, and support systems for research,

The lower mean score here implies that the faculty perceives the institutional support and infrastructure for research to be relatively weaker compared to the environmental and personal factors. The overall pattern highlights that the research culture seems to be strongest in

terms of environment, followed by personal research factors, while the institutional support mechanisms may need more attention and enhancement.

Discussion

A research culture is a set of common beliefs, actions, and frameworks that help educators and researchers carry out their research which is their fundamental responsibility. The findings regarding environmental factors suggest that opportunities for informal and formal ways of information exchange among faculty members generally support the research culture at these public universities. This aligns with the literature highlighting the importance of academic collaboration and networking for research productivity (Rossouw, 2020, p. 249; Olvido, 2021). However, the more neutral perceptions of departmental support and communication around research opportunities and issues indicate a significant gap for improvement in the institutional environment. Previous studies confirm the critical role of a positive research culture and support in creating a supportive environment (Abuso, 2021).

On the other hand, institutions often demand strong expectations of faculty to be highly productive in their research output. However,

these high expectations are not adequately supported by providing faculty with sufficient resources, funding, and professional development opportunities. The inconsistency between them appears to hinder the faculty's capacity to meet the expected research productivity standards set by their institutions. In other words, the institutions are imposing rigorous research output requirements on the faculty. Still, they are not providing them with the necessary tools, time, and resources to be able to fulfill those expectations genuinely. Earlier studies asserted that this inconsistency impedes the faculty's ability to reach the desired levels of research productivity (Abuso, 2021; Olvido, 2021; Madeed et al., 2021). The development of research culture needs training and other assistance. This can be achieved when adequate resources are allocated in the institutions or departments (Chung-nan, 2014). The findings further highlighted that there is a perceived imbalance between the institutional priority placed on teaching responsibilities rather than research productivity. Previous research asserts that academic jobs have different levels of demand namely teaching, research, and service demand which is in line with the Job Demand Model (Bakker and Demerouti, 2007; Demerouti et al., 2001). Jobs that require sustained physical or mental efforts are associated with negative psychological and physiological conditions (Demerouti, et al., (2001).

Comparatively, to enhance the research culture, university administrators should consider reviewing and strengthening the provision of critical research infrastructure, such as libraries, computing facilities, and financial support. Nasreen and Adeeb (2013) found that lack of physical resources such as library facilities, internet access, and proper working place significantly influenced the research culture of public sector universities. Faber et al. (2021) argued that modern and efficient research infrastructure may assist faculty members in increasing research productivity. Hence, better research infrastructure builds and develops research culture.

Moreover, the study also highlights that

improving transparency in research policy communication and aligning teaching and research workloads could also help create a more conducive institutional environment. The findings are also consistent with earlier study carried out by Bergeron et al. (2014) who found similar results. Investing in research skill development programs and research scholarship opportunities could help build faculty research capacity and demonstrate the institution's commitment to research productivity. A smooth and formative environment further improves the research culture in public sector universities (Iqbal, 2011).

The findings regarding personal factors suggest that access to research grants and professional growth resources play a more significant role in driving faculty research output compared to factors like seniority and workload control. Concerning seniority and age factors, the results are in line with the study conducted by Backes-Gellner & Schilnghoff (2004; Khahil & Khahil, 2019) in which they concluded that research productivity tends to increase due to seniority and promotion of full professorship. Other studies further assert a significant relationship between research output and age (Hedjazi & Behravan, 2011; Khahil & Khahil, 2019). Regarding the effect of time allocation, the researcher assumes that due to the weak research culture among these institutions, the departments allocate more teaching hours seen as a distraction from research. Jung (2011) indicated that the more time an academic dedicates to teaching responsibilities, the less time they will have available for research output and productivity. Similarly, Kwiek (2016) also asserts that high research performance is positively associated with adequate time dedication.

This study further found that lacking rewards and recognition for research activities in these institutions weakened faculty motivation and commitment to research activities. Faculty members who excel in research through conference presentations and publications in recognized journals should receive appropriate incentives and support. Quimbo and Sulabo (2014) revealed that "honorarium and credit

load” strongly predict research productivity.

Conclusion

The findings highlighted the multidimensional nature of cultivating an effective research culture within Afghan public universities. A key insight is the importance of creating an institutional environment synergistically supporting teaching and research responsibilities. The findings suggest that public universities generally facilitate adequate opportunities for academic collaboration and information exchange, which aligns with literature emphasizing the value of networking for research productivity. However, the more neutral perceptions around departmental support and their communication indicate a significant gap for improvement in these institutions. Moreover, another critical gap appears to be the inconsistency between the institutions' high research output expectations and the insufficient resources, funding, and professional development to the faculty. Addressing this variation by strengthening research infrastructure, allocating appropriate time, and investing in skill development could help foster a more conducive research culture.

Furthermore, the findings also underline the need to enhance transparency in research policy communication and align teaching-research workloads. This could encourage a supportive environment that recognizes and rewards research excellence through targeted incentives and professional growth opportunities. Ultimately, developing a strong research culture requires a multidimensional, evidence-based approach. This includes facilitating collaborative networks, providing necessary resources and support, aligning institutional priorities, and demonstrating a genuine commitment to faculty research productivity. By addressing these critical factors, public universities can nurture an environment that empowers and inspires their academic community to succeed in their research endeavors.

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