

A Critical Analysis of Problems of Higher Education in Pakistan: An Analysis of Possible Solutions

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It is the basic criteria to address the importance of skill development & training in higher education, partly due to the increased focus on outcome assessment in academic programs for undergraduate programs at university of Sindh as data analyzed for 2021,2022 and 2023. Final Assessments When creating curriculum and evaluating their effectiveness promotes the focus of "ideal" or better values and skills of the higher education graduates. To put it over simplicity, the knowledge and skills that students are often expected to possess upon finishing their education are the main emphasis of outcome assessment. The state can fulfil its targets, when it has a functioning educational system. Being a developing nation, Pakistan has struggled with education from its founding, which has prevented the educational system from meeting the needs of the people. This scenario can be attributed to multiple sources. This research examines a few of the major issues that Pakistan's educational system has been beset with thus far. Based on a critical analysis of existing literature, the analysis may provide the insights of problems of Pakistan in education. The higher education graduates have traditionally been characterized as a terminal degree for professionals in the public and nonprofit sectors, with an emphasis on the professional values, practical knowledge, and skills requirement to thrive in public and nonprofit organizations and address the needs and interests of democratic societies.



1. Introduction

It is widely anticipated that higher education programs will give the students necessary skills in quantitative analysis so they can succeed as desire able human capital. The nature and sophistication of the particular quantitative analysis abilities that are typically taught in higher education courses are the main topics of discussion here (Muhammad & Kamran, 2023). Although many of the principles, skills, and values that students should learn in a university degree programs are outlined in the curriculum guidelines of national development policy of states, there is still much room for disagreement (Malhi et al., 2022).

The path to national growth is education. People develop a sense of responsibility as a result. People who have an education not only understand their responsibilities, but also know how to exercise their rights as citizens, citizens of the country, and individuals (Falak, 2021). This insight fosters a culture of trust and collaboration within society. People become prosperous and contribute in their own ways to the overall development of the country (Abdul,2020).

The topic of what kinds of quantitative analysis abilities should be taught in higher degree programs is the subject of much the same kind of discussion. To some extent, the main concerns have been: what are the typical expectations for graduates and what skills are really needed for employment in the public and nonprofit sectors? The skill requirements for administrators in the public and nonprofit sectors are yet unknown and undoubtedly vary greatly depending on their job duties (Ning et., 2020).

The aforementioned issues could be resolved by creating logical plans and policies, then making sure those plans are carried out correctly. One nurturing factor is education. It is a necessary component of any society. People can work for their own development and growth when they have an education that develops people and helps them realize their latent potential (Ratheeswari, 2018).

They have listed the statistical and methodological strategies that have been taught and questioned the degree of proficiency in quantitative analysis that is anticipated of the students. None of the studies have provided much direction regarding the necessary coursework in analysis-related subjects, research techniques, and mathematics (Rab et al., 2019). Few of the researchers' analysis have made comments regarding the challenges associated with assessing students' abilities to proceed to more advanced coursework based solely on previous coursework, the ambiguous importance of having strong mathematically-based statistical skills in comparison to more surface-level "cookbook" type skills, and the hazy boundary between research and decision-making skills (Nabi et al., 2017). The important part of nations development is basic need in shape of education. Everything that happens in the world is built on education. It is a well-established truth that only countries with strong educational systems have advanced and developed globally for the solution of challenges of education (Ferri et al., 2020).

People grow through education. It raises people's awareness of life and the difficulties it presents. It sparks creativity and ideas into vacant minds. As a result, countries with strong educational systems lead the world (Warginata et al., 2020). Pakistan's poor education system has

caused the country to fall behind in terms of national development and advancement since its independence. Many problems, including localized feudal and state politicians, dishonest bureaucracy, authoritarian regimes, brittle civil society, and feeble democracy, prevented the higher education system from progressing. The nation purposefully disregarded its higher education system. Rather than building the country around free, high-quality education, so-called "monsters of democracy and development" took control of the system. Rather than establishing a solid framework for a high-quality higher education system that may serve as a solid foundation for the nation's future educational structure (Engel et al., 2023).

Research has indicated that the elementary education system in Pakistan suffers from several poor management and structural issues. Compared to metropolitan areas, higher education conditions are worse in rural areas. Not even teachers are present in the higher education sides to carry out the teaching and learning activities. Gypsies and migrants are using several classrooms as makeshift shelters. This circumstance leads to the production of unskilled, poorly skilled, and ignorant pupils for the nation's higher education. While pupils attending the nation's finest schools have access to all facilities, there are other run-down institutions where impoverished students attend classes without teachers (Imran et al., 2020).

1.1 Objectives of the Study

- i) To analyze the problems of education quantitatively in higher education of graduates.
- ii) To make the solution plans of higher education in universities.

1.2 Research Questions

- i) What types of quantitative analysis skills, both basic and advanced, are students in higher education programs learning for research and public decision-making.
- ii) What does that suggest about the definition of "outcomes" in higher education?

1.3 Statement of the Problem

Pakistan's higher education issues date back to the country's founding, when they become newly independent state took over an established educational framework. This was a weak, mismanaged, and classified system. According to (Sheikh & Rasool, 1998), the system could not be changed to accommodate the requirements and social classes of the populace. Because of this, even after 77 years of independence, Pakistan continues to struggle with having the lowest literacy percentage in the world. This study makes an effort to examine the root reasons of the different issues that Pakistan's higher education with thus far.

2. Literature Review

In a certain way, those studies acknowledge the variations in programs' goals and methodologies while also defending the substance and logic of quantitative techniques courses. As higher education lists to investigate the caliber of academic research in the area, the usefulness of research for public sector practices, and the efficacy of public sector decision-making itself, the significance of the problem may become increasingly clear. This analysis was motivated by numerous expectations, in addition to offering an inventory of the quantitative approaches taught



in higher education programs and the abilities that students bring to the programs (Ratheewari, 2018).

It was certainly the underlying expectation that more quantitative techniques would be taught in the higher education programs than in previous years. This anticipation was based on the more noticeable developments in the field of higher education over the previous few years, such as the rise in the quantity of higher education programs in the different graduate program departments and institutes or the provision of specialties in certain areas. To put it briefly, it was thought to be helpful to comprehend potential program decisions regarding which mathematical skills to teach. It is commonly anticipated that faculty and degree programs focused on research will focus on social statistics, whereas more applied programs and faculty will focus on management sciences (Abdul, 2020).

The details of which areas of quantitative analysis—specifically, data literacy and assessment literacy—might be most beneficial for practitioners to be proficient in have been extensively covered by modern writers. The word "fluent" is used here on purpose because "literacy" is a term that is frequently used in this literature to refer to the capacity to read, analyze, and summarize research and to apply critical thinking and questioning of that study to practice. According to (Boudett et al., 2013), evaluation literacy comprises the ability to perform assessment and evaluation tasks. Research on assessment literacy has demonstrated that, in light of the use of standardized examinations and the growing expectations for accountability in schools, one of the most important aspects of preparation programs should be to give graduates the capacity to analyze critically.

The findings of this study can serve as a starting point for discussions about the data and analytical requirements of graduate students in higher education programs in education leadership, as well as their present and potential employers. (Brocato, Willis, & Dechert, 2014), for instance, asked superintendents, principals, and teachers in a large sample of districts in a state to answer the following question: "What components of a statewide longitudinal data system are needed for that system to best meet the respective needs of superintendent, principal, and teacher leaders?" It's interesting to note that their findings demonstrated that the needs of each organizational level were very different. Teachers concentrated on the performance and growth needs of individual students, principals on the hiring and evaluation of teachers, and superintendents (Imran et al., 2020)

As a result, proposals for promoting the use of data must take these varied viewpoints into account. Second, all of the respondents stated that comparisons were crucial, even while they all desired data that would help with judgments regarding particular individuals, such pupils or teachers. This emphasizes the necessity of analysis, particularly the use of scatterplots, cross-tabs, and correlations as simple ways to compare data. Third, the findings speak to the wide range of data and analysis requirements that exist at every stage of the educational system. This emphasizes the necessity of graduate-level instruction in the process of choosing the "data story" from the

many options available in order to concentrate the development of assessment and data literacy skills inside an institute or district (Falak, 2021).

Using my own courses as an example, the question from Brocato et al. (2014) can be a great way to start a conversation in a quantitative methods course or to get school leaders talking about their data. It can also be a great way to organize talks about assessment literacy, data literacy, and data-driven decision making. This is on top of the intriguing results of their investigation. School administrators are more open to discuss the main issues when I follow this procedure.

The context and interoperability of the analytic samples can be discussed in districts and academic institutions in a variety of ways. Students can avoid misinterpreting their results by having a solid understanding of the distributional assumptions of statistics. For example, they can learn to accurately evaluate p-values vs effect sizes. Additionally, it can assist in keeping pupils away from activities that have been called "p-hacking," "statistical fishing," and the "garden of forking paths." The quantitative techniques course should go into great detail on these subjects (Gelman & Loken, 2013).

Not that these problems are unrelated to those mentioned above; rather, it is the basic point that, these problems are addressed by the domains of data literacy and assessment literacy. Additionally, this kind of training helps practitioners and scholars respond to the criticism made by Bruno & Fox (1973) regarding the need to teach school administrators about what ideas and resources are available, when and where to use them, and any potential drawbacks.

Therefore, the argument made throughout this essay is in favor of giving the quantitative research methods course a more practical focus. However, it is essential to include the fundamentals of statistical methods and research into these kinds of courses when it comes to interpretation and application. The data literacy and assessment literacy domains, for example, include teaching students about sampling distributions (Mandinach & Gummer, 2016; Popham, 2010). This is especially crucial for understanding correlations, ANOVAs, and t-tests (Cohen et al., 2003).

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3. Research Methodology

A survey was carried out in 2023, using many of the same questions as those employed by Hy, Nelson, and Waugh in their studies on research methods in higher degree programs in 1978 and 1984 (Hy et al., 1981; Waugh & Hy, 1985; Hy et al., 1987). All University of Sindh (Social sciences and Management sciences) that are listed as offering graduation degrees' relevant programs were sent questionnaires. Only undergraduate programs, as well as master's programs

explicitly focused on social issues or general public affairs, were offered by the institutions that were examined.

We requested that the questionnaire be forwarded to the undergraduate program's quantitative techniques and computer instructors by the key representatives who were contacted. It is crucial to remember that the expectation was and still is that the information gathered will reflect the respondents' impressions or best guesses rather than in-depth examinations of curriculum, syllabi, and student records. Programs that did not respond were mailed second and third waves of questionnaires. During the survey itself, all programs that identified as something other than graduate programs were removed from the study. Ultimately, 179 out of the 189 persons from graduate programs that are part of social sciences or management sciences, or 73.5 percent, replied.

4. Analysis and Problems

Table No 1: Analytical Skills of Graduate Student

Prior Coursework	2021	2022	2023
Research Methods	03	03	04
Business	10	09	20
Economics	36	45	51
Sociology	5	6	3
Political Science	4	9	14
Pakistan studies	12	11	13
International Relations	12	11	13

Students enrolling in graduate programs increasingly have prior training in computer-related business, research methods, advanced economics, and the philosophy of science, as above data illustrates. It is evident that students are receiving at least some foundation in economics and research methods as part of their undergraduate programs and/or are required to take such coursework as prerequisites for the public administration studies, even though the percentages are still relatively low for the majority of those skills.

Table No 2: Response of Understanding

Question	Response 2021	Response 2022	Response 2023
Research Methods	Yes	Yes	No
Business	Yes	No	Yes
Economics	Yes	Yes	Yes
Sociology	No	No	No
Political Science	Yes	Yes	Yes
Pakistan studies	Yes	Yes	Yes
International Relations	No	No	No

As the aforementioned data shows, students who enroll in graduate programs increasingly have prior expertise in advanced economics by replying with yes or no, research methodologies,

computer-related business, and the philosophy of science. Even though the percentages are still relatively low for the majority of those skills, it is clear that students are receiving at least some foundation by replying in positive way.

5. Conclusion and Policy Recommendations

Broadly speaking, the data align with the conventional understanding and bolster the expectations. Although the majority of undergraduate programs teach quantitative approaches nearly exclusively, most of them don't have very high levels of sophistication. With certain caveats that will be discussed below, the general answer to the question of whether more practitioner-oriented programs will prioritize management science over complex research approaches was also in the yes. Important questions about the content of undergraduate courses are also brought up by the statistics.

First off, the information presented here does offer some basis for institutes assessing their course requirements in light of quantitative analysis and looking for standards for the skill set that graduate students should be expected to possess. The information also begs the question of what kinds of methods undergraduate students ought to be taught.

More interestingly, Table 2's findings are based on the finding that more than half of incoming students have some foundation in basic subjects by replying yes. Economics and sociology departments may be justified in placing less of a focus on fundamental skills given that an increasing proportion of their students already possess them when they enroll in their programs.

This study indicates that, for researchers or graduates who comprehend things rationally, education helps people progress in all realms of life, including political, social, moral, spiritual, and economic domains. It is a dynamic force that enables all nations to achieve their main objectives. Strong social and political institutions are a hallmark of countries with robust educational systems, as is commonly acknowledged. Strong educational systems are propelling several countries to the forefront of international affairs. They are enjoying their liberties in addition to being politically and economically free and advanced. Despite offering great prospects, Pakistan's educational system has not been able to adequately contribute to the nation's progress. This element has aided in the emergence of resentment within Pakistani society. There should be proper understanding of courses for undergraduate programs.

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