

Academic Functioning of University Departments in Pakistan: An Analysis

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Abstract

The study analyzes the academic functioning of the university departments in Punjab, Pakistan. Academic functioning was taken as curriculum & instruction, assessment, academic facilities & resources, human resource practices, finance & management, research, and outreach programs. The use of quantitative and qualitative approaches made the study mixed method. The respondents were selected from six public universities of the Punjab through multistage sampling technique. They were 540 students, 162 teachers, 54 heads of the departments, and 24 senior officers. The analysis of the quantitative and qualitative data revealed that the academic functioning of the departments was at mediocre level. This was true for all seven indicators. The state of mediocrity may be improved by provision of proper standard operating procedures coupled with regular reviews of the functioning of departments. The standard operating procedures based trainings, on regular basis, are required to the staff of the departments and officers to support functioning of the departments at optimal level.

Key Words: Academic Functioning, Departments, Pakistan, Universities

Introduction

Socioeconomic status of a country rests with the quality of higher education which is provided to its youth. The core difference between economic conditions of the developing and advanced nations is mainly due to the facilities of higher education made available to their citizens (Ajila & Olutola, 2007). As far as universities are concerned, they are linked with a necessary requirement to maintain and uphold the excellence; thus, enabling the higher education institutions to compete at international level. Further, for capturing all of the outcomes of different activities performed within the institutions, a multidimensional performance measurement system needs to be developed (Broadbent, 2007; Kloot & Martin, 2000). Moreover, complete information should be provided to the policy makers and authorities to manage all the processes (particularly in government sector), beyond any financial aspect (Ceynowa, 2000).

Pakistan is an emerging country consisting of more than 200 million people. The higher education in Pakistan has been consistently facing numerous problems and issues which are affecting its quality. In this regard, it is admitted that declining trend of students' admission, low proficiency and aptitude level of teaching staff, and outdated curriculum are the reasons which are mostly quoted for this malaise (Kuh, 2018). Recent letters of the Punjab Public Service Commission and Higher Education Commission (HEC) about poor performance of graduates leave serious concerns to be pondered upon by the authorities for academic functioning of the departments of the universities. Academic quality of the universities directly impacts the reputation and employment of their graduates. However, this merely depends upon the strength of academic functioning and quality practices in the universities. Academic functioning

is always influenced by the individual culture of a university and higher education system of the country. Rao (2003) states that the academic functions range from prescribed courses of studies, appointments and training of the staff, organized instruction, conducting research, preparation of leadership for different strata, conducting examination and awarding degrees. These are the primary functions of the university done at the level of departments and they cover almost 65% of the university working (Hord & Sommers, 2008).

The universities attain rankings at national and international level, make sustainable academic growth and improve the jobs prospects of its graduates, depending upon efficient academic functioning of their teaching departments. The ranking agencies are heavily relying on the average of the academic functioning of university departments in isolation. Almost all the determinants of quality education are intrinsically related to that of the departments which are in fact the basic functional units of universities. Indeed, quality of a university depends upon the performance of its functional units. Therefore, universities should keep assessing the quality of academic functioning of the departments in order to adjudge their performance and to devise necessary measures to improve their functioning.

The academic functions primarily consist of curriculum, training and appointment of teachers, instructions, and research activities, assessment of the students, awarding degrees and outreach programs. They are considered as core functions of the departments (Lattuca & Stark, 2011). Another important role of the universities is to provide well trained and skilled professionals for the newly developed occupations like cyber /robotics engineering, and emergency medical service. The unanticipated and steady increase in the demand for university education due to industrialization compelled: firstly, additional extension in present institutions, secondly, supplementary promotion of the remaining current institutions and thirdly, a chain of new establishments (Salmi & Hauptman, 2006; Williams & Cochrane, 2010).

The students, teachers and administration are essential and important components of a university. So, voices of all of them carry inevitable value to properly measure the functioning of the departments of the universities. This study is opted to analyze academic functioning of the departments in the universities against their core functions: curriculum & instruction, assessment, academic facilities and resources, human resource practices, finance & management, research, and outreach programs, with a view to suggest possible measures to ameliorate the actual situation of the academic affairs in teaching departments of the universities. This study will contribute to determine the range of diversity in the academic functioning of the departments. It may help attaining the optimal output with respect to the quality education and productive research.

Material and Methods

Research Design

Plethora of literature shows that various research designs exist to accomplish the research work. However, the research designs are selected in accordance with the objectives of the study (Cohen, Manion, & Morrison, 2013). Usually, qualitative or quantitative or mixed method research designs are used in researches (Wallen &

Fraenkel, 2001).The study was descriptive in nature. According to nature of the present study, the researcher collected both qualitative data and quantitative data; therefore, the mixed-method research design was considered to be appropriate for this study.

A mixed methods research is explained as, “a study in which the researcher assembles and analyzes data, relates the findings, and draws conclusions using both qualitative and quantitative approaches” (Abbas Tashakkori & Creswell, 2007). In this design, quantitative data and the results obtained from the data provide common trends and associations. In contrary to that, the qualitative data and their results add a detailed view of the respondents (Kaiser, 2009). Further, triangulation enables the researchers to eradicate the inherent bias in case of usage of only one method in research work. Moreover, the mixed methods research design provides an opportunity to get the advantage of strengths of both the qualitative and the quantitative methods, and to overcome the weaknesses of these methods (Cresswell, Klassen, Plano Clark, & Smith, 2015; Creswell & Creswell, 2017; Leavy, 2011; Mathiyazhagan & Nandan, 2010; Simpson, 2011).

The qualitative data and their results add a detailed view of the respondents. Normally, the qualitative research method is considered suitable to achieve deeper understanding of the research problem (Corbin & Strauss, 2008; A Tashakkori & Teddlie, 2003). According to Creswell and Poth (2016), the qualitative method is very useful in comprehending the meanings to the events which respondents experienced.

The quantitative method covers large number of sample size, results generalization and to be benefitted from the larger sample in less time as compared to that of the qualitative study (Fidalgo, Alavi, & Amirian, 2014; Polit & Beck, 2010). Therefore, the mixed methods research was used in the study to get the advantage of both the qualitative and quantitative methods and to avoid their shortcomings.



Figure 3.1: Mixed Method Research Design

Population of Study

Population is defined as a group of people upon which the research is accomplished and the results are generalized(Gay & Airasian, 2000). The population of present study consists of the students, teachers, heads of the teaching departments, and the officers of the offices of the Directors QEC’s, and Directors of Academics, working in the public sector universities of Punjab.

There exist 73 universities in Punjab, including public and private sector universities. Among these, 65 universities are chartered by the Punjab Government, whereas 08 universities are chartered by the Federal Government of Pakistan. Out of 65 chartered universities of Punjab Government, 39 universities belong to the public sector universities. They can be further divided into General, Medical, Business Education, Technical, Agriculture universities etc. The researcher selected the general public sector universities as they run more disciplines and programs of studies as compared to other categories of the universities. Further, academic functioning of more departments could be measured in general public sector universities. Therefore, all the students, teachers and administration of public sector *general* universities in Punjab were taken as the population of this study.

Sample and Sampling Technique

Multistage sampling technique was used in this study. This technique is employed for the selection of respondents. Actually, this technique is sub component of mixed methods sampling approach, which is also known as “selection of sample from the samples” (Alvi, 2016; Onwuegbuzie & Collins, 2017). This technique is particularly being used in social sciences by the researchers. This multi-level sampling technique (Pullen & Bregler, 2000) is used for sample selection to obtain suitable representation of the sub-group in the main sampling framework (Dupa ová, Consigli, & Wallace, 2000). The detail of multistage sampling in this study is as under:

- At first stage, only Punjab province was selected from amongst the four provinces of Pakistan because it had more than 120 million of population which was more than that of many countries. Subsequently, six public sector general universities were randomly selected from Punjab (Pakistan): Pir Mehr Ali Shah Arid Agriculture University, Rawalpindi, University of Gujrat, Gujrat, University of Sargodha, Sargodha, University of the Punjab, Lahore, Bahauddin Zakariya University, Multan, and The Women University, Multan.
- At second stage, this study was confined to the nine departments of each university, selected randomly, i.e; Departments of Physics, Chemistry, Computer Science, Education, Psychology, Social Work, English, Urdu and Islamic Studies.
- At third stage, from each of the departments, the researcher selected one head of the department and three teachers conveniently. Moreover, five students (7th/8th semester) from BS (4 year) programs and five students from M. Phil /PhD programs were selected conveniently.
- At fourth stage, two senior officers from each of the directorates of university – Academics and Quality Enhancement Cell – were selected conveniently. Senior officers considered for this purpose were the Directors / Additional Directors / Deputy Directors of the aforesaid offices.

The total sample of the study was including 540 students, 162 teachers, 54 heads of departments, 12 senior officers from QECs, and 12 senior officers from the Directorates of Academics. (a total of 780 respondents).

The sample size should consist of more than 500 respondents for a survey study (Hill, 1998; Little & Rubin, 2019), and in this study, sample size was consisted of 780 respondents, which was significant for academic research

Instrumentation

Three instruments were developed for data soliciting. Firstly, a questionnaire as research instrument was used for seeking the perception of the teachers and students regarding the academic functioning of the university departments; secondly, one semi-structured interview schedule was developed to explore the perception of the Heads of university Departments and officers of the Directorates of QECs and Academics; thirdly, focus group discussion guidelines were developed to record the perception of the MPhil and PhD students.

Reliability of the Instrument

Reliability refers to the consistency of a research instrument (Pace et al., 2012). For the purpose of reliability of the research instrument, the researcher computed the coefficient of equivalence and internal consistency to ensure the accuracy of the research tool. Split half reliability was used to establish the coefficient of equivalence. "The split half estimate is considered the standardization parameters if corrected with Spearman Brown Prophecy Formula" (Gay & Airasian, 2000; Pallant & Tennant, 2007). Cronbach's Alpha Coefficient was used as the indicator for internal consistency; the Alpha value was found 0.91 which indicated a higher level of internal consistency of the research instruments. Reliability of the instrument was measured on the basis of data collected for the purpose of pilot testing.

Data Collection

The researcher involved a research assistant in data collection process due to some unavoidable circumstances and job obligations, who was selected from amongst the PhD scholars, after their extensive interviews. Subsequently, he was provided practical training for data collection in presence of the researcher. Thus, the researcher/research assistant collected the data by visiting each university. The students were approached in their classes with the permission of their teachers; whereas, the rest of the respondents were accessed in their offices.

Data Recording

Two data folders were created in Microsoft Excel. One folder was reserved for the data obtained from the teachers and the other folder was specified for the data collected from the students. The numeral values from 1 to 5 were allotted to the scale which was ranging from strongly disagree to strongly agree. The data obtained from the participants was entered in the respective data sheets. The proposals given in each questionnaire were also written in descriptive form. The data was also checked for its validation. The differences and abnormalities found in the data were instantly resolved.

The qualitative data were obtained from the respondents after getting their permission. The interviews were recorded keeping in view the permission granted by

the respondents. Key points of some of the interviews were jotted down as the permission was not granted by those respondents to record their interviews. Duration of the interviews was fixed as 45-90 minutes. It was ensured to maintain the confidentiality of the information provided by the respondents.

Results and Discussion

The purpose of this research was to analyze the academic functioning of the departments in public sector universities of the Punjab. The views of the respondents regarding the academic performance were obtained through two questionnaires. Similarly, the qualitative data were obtained through semi-structured interviews and focus group discussion guidelines. The quantitative data were analyzed by using SPSS version 22. The statistical procedure i.e. mean, frequencies, percentages, t-test and ANOVA were employed to analyze the said data; whereas, the qualitative data were analyzed by using thematic analysis technique on the indicators: curriculum & instruction, assessment, academic facilities & resources, human resource practices, finance & management, research, and outreach programs.

Analysis of Qualitative Part

The qualitative part of study was divided into two sections: Interviews – (Heads of the departments and administrative Officers) and Focus Group Discussions (FGDs) – (MPhil and PhD Students)

Section-I: Analysis of Interviews

The analysis of data retrieved from interviews of heads of the departments of Physics, Chemistry, Computer Sciences, Education, Psychology, Social Work, English, Urdu and Islamic Studies, and directors/additional directors/deputy directors of offices of the Directors Academics, and QEC's is given below against all the seven indicators of the study:

Curriculum and Instruction

Curriculum and instruction was found as per local and global standards, in accordance with the perception of the majority of respondents; however, a sizeable number raised their serious concerns about the existing curriculum and instruction. According to them, the curriculum content was not fulfilling the need of the job market. Regarding, 'instructional procedures and methods' they viewed that teaching methodology needs to be improved by using modern gadgets and up-to-date teaching techniques.

Assessment

The assessment system currently in vogue in the universities was working well. However, the respondents admitted many flaws existed in the prevailing assessment system which adversely affects the academics functioning of the university departments. Similarly, the evaluation of the teachers by the QEC's through Students' Assessment Reports (SARs) plays an effective role in improving of the universities by

overcoming the deficiencies highlighted by the students, but a fair mechanism of this evaluation process needs to be adopted to attain an unbiased view.

Academic Facilities and Resources

Majority of the respondents perceived that universities departments did not have adequate and necessary physical facilities, infrastructure and learning resources. This deficiency of resources creates major hindrances in appropriate academic functioning of the university departments. However, if such facilities are increased in the departments, their academic functioning can be accelerated positively. Contrarily, only few of the respondents viewed that the necessary academic facilities were available in the university departments to cater for their minimum basic requirements for provision of quality education.

Human Resource Practices

The respondents were satisfied with the existing faculty and support staff, including their competence and expertise in their relevant fields. Resultantly, according to them, the academic functioning of the departments related to the human resource practices should be considered as satisfactory; whereas, a considerable number of the participants were not contented with the available human resources to university departments. Their opinion was particularly based on recruitment of favourite but incompetent candidates without observing merit, deficiency of staff as per prescribed student teacher ratio (STR) and careless attitude of the administration to retain the experience and competent faculty by offering them senior posts and monetary incentives. They opined that proper standard operating procedures based trainings, on regular basis, are required to the staff of the departments and officers to support functioning of the departments at optimal level.

Finance and Management

Majority of the respondents was satisfied on provision of necessary funds to the departments through budget allocation as per resources available to universities through HEC funding or income from own sources. Further, appointments on managerial posts are also made as per provisions of the university acts and relevant statutes. Conversely, a sizeable number of the participants showed their reservations. According to them, neither appropriate funds are provided to the departments nor they are given autonomy to spend the allocated funds, which results poor academic functioning of the university departments in terms of financial matters. Further, the persons on the managerial positions, appointed without merit, run the departments dictatorially without observing proper rules, and ultimately they create unrest among the faculty and the departments, which lead towards adverse functioning of the departments.

Research

The respondents, in majority, perceived that the university departments provide adequate facilities to foster the research culture among the students and the faculty. For the said purpose, the administration allocates maximum budgetary resources within their financial limits to the departments for purchase of necessary

equipment and chemicals etc. On the other hand, a considerable number of the respondents opposed these arguments, and describes the research work produced by the faculty and students as unproductive as compared to that of the foreign researchers. They termed the research work as fruitless due to different reasons such as lack of sufficient funding to the departments, poor infrastructures of labs, dearth of equipment and chemicals, lack of competent human resources, less interest of the researcher due to their job obligations etc. They declared the research work just an addition in profiles of the researchers. To support their arguments, they mentioned the poor performance of the researchers regarding new inventions in the country.

Outreach Programs

The maximum number of the respondents was not satisfied with the appropriate community links and outreach programs because they had not produced the desired results as defined by the program objectives. According to their opinion, the departments took least interests to monitor the activities of the students among the community. Resultantly, the students did not perform the required functions in true spirit of the curriculum content. Owing to this, the intended learning outcomes of the programs could not be achieved. Contrarily, the other school of thought, although in minority, was entirely satisfied with the existing community links and outreach programs undertaken by the departments. They elaborated that both community and the students get the practical advantages of these programs. Further, the experience attained by the students helps them to find a job; whereas, the community succeed to resolve its issues/problems at the door step without spending a single penny.

Section II –Analysis of Focus Group Discussions (FGDs) .

The analysis of data retrieved from the respondents (M. Phil and PhD students) during the focus group discussions revealed that the academic functioning of the university departments in connection with curriculum and Instruction was satisfactory; however, they suggested for some improvement to fulfill needs of the current era to attain the desired learning outcomes. Further, the assessment system adopted by the Pakistani universities is satisfactory but even better results can be achieved by removing the grey areas like still relying on manual work in presence of latest technology and modern gadgets.

Regarding physical infrastructure, academic facilities and learning resources, the respondents viewed that university departments had been provided with enough infrastructural facilities and learning resources for quality education and research work. But they are not being used in an effective and efficient way, with a focus on the continued development of these resources. Moreover, the academic functioning of the universities was satisfactory in terms of human resources. However, they further suggested that more efforts should be made regarding transparent and merit-based appointments of teachers, provision of training to faculty and staff, recruitment of permanent staff instead of hiring of visiting faculty and provision of monetary incentives and promotion opportunities to achieve the performance at peak level. As for as the situation of finance and management is concerned, they viewed the functioning as satisfactory. However, in their opinion, more funding, and proficient and capable management can only bring the Pakistani universities at par with that of

the advanced countries. They further opined that although the research in term of quantity had increased, yet more efforts in terms of time and money are required to produce the productive research work, beneficial for mankind.

Community links and outreach programs came in discussion, upon which, the respondents showed their dissatisfaction on their effective conduct by the university departments. Further, they highlighted that faculty did not pay essential attention to these programs in accordance with objectives and learning outcomes mentioned in the curriculum. And, subsequently, their counterparts argued that these programs were minimally contributing in increasing confidence level and skill of the students through university and society conjunction. Therefore, neither the students nor the society was getting the true advantage of the outreach programs. They agreed that these programs should be really strengthened to improve the university - society interface in order to impart the necessary skills in students' as well as scientific and social development in wider society.

Analysis of Quantitative Data

Table 1
Level of academic functioning of the departments as perceived by teachers

Indicators	x	SD	Level
Academic Functioning	3.56	0.68	Mediocre
1. Curriculum & Instruction	3.58	0.64	Mediocre
2. Assessment	3.53	0.67	Mediocre
3. Academic Facilities & Resources	3.44	0.79	Mediocre
4. Human Resource Practices	3.61	0.65	Mediocre
5. Finance & Management	3.63	0.62	Mediocre
6. Research	3.57	0.67	Mediocre
7. Outreach Programs	3.57	0.75	Mediocre

N = 162

Table 1 reflected the level of academic functioning as perceived by teachers of different public sector universities. It is evident from the data that the level of academic functioning is at mediocre level. Further, the mean values attained against all indicators of study (curriculum & instruction, assessment, academic facilities & resources, human resource practices, finance & management, research, and outreach programs) are more than 3.50, which indicate towards run-of-the-mill functioning of the university departments. It means that the teachers perceived the academic functioning of the university departments at mediocre level.

Table 2
Level of academic functioning of the departments as perceived by students

Indicators	x	SD	Level
Academic Functioning	3.53	0.65	Mediocre
1. Curriculum & Instruction	3.44	0.47	Mediocre
2. Assessment	3.51	0.58	Mediocre
3. Academic Facilities & Resources	3.37	0.76	Mediocre
4. Human Resource Practices	3.55	0.61	Mediocre
5. Finance & Management	3.62	0.59	Mediocre

6. Research	3.58	0.67	Mediocre
7. Outreach Programs	3.59	0.72	Mediocre

N = 540

Table 2 reflected the level of academic functioning as perceived by students of different public sector universities. It is evident from the data that the level of academic functioning is at mediocre level. Further, the mean values attained against all indicators of study (curriculum & instruction, assessment, academic facilities & resources, human resource practices, finance & management, research, and outreach programs) are more than 3.50, which indicate towards run-of-the-mill functioning of the university departments. It means that students perceived the academic functioning of the university departments at mediocre level.

Moreover the researcher applied independent sample *t*-test to calculate the difference between perceptions of teachers and students of different public sector universities. The results indicate that there was no significant difference between the perception of students and teachers regarding academic functioning in university department. Similarly, one way ANOVA was applied to find out the department wise and university wise difference of academic functioning. The results of one way ANOVA also indicate that there is no significant difference between the perception of teachers and students of different departments and universities. It means that the perception of teachers and students of different universities and departments is same.

Conclusion

The academic functioning of the departments is at mediocre level. This is true for all seven indicators namely: curriculum & instruction, assessment, academic facilities & resources, human resource practices, finance & management, research, and outreach programs. Although a slight majority of respondents were satisfied regarding the academic functioning of the university departments in Pakistan regarding effectiveness of the aforementioned seven indicators, yet there is a huge gap between existing level of functioning and optimal level. Both qualitative and quantitative data lead towards the gap. Comparative ranking of functioning of the departments against different indicators has been found in descending order as: finance & management, research, human resource practices, academic facilities and resources, curriculum and instruction, assessment, and outreach programs

It is finally concluded that the academic functioning of the departments is much lower than the optimal level, and this is true for all seven indicators.

Recommendations

The state of mediocrity may be improved by addressing the issue of will and skills. Proper standard operating procedures coupled with regular reviews of the functioning of departments may contribute to high performance of the university departments. On skill side regular, pre-and on job training are required to the staff of the departments. The reason of non-existence of quality culture seems a vicious cycle of low-competence in the universities. Unfortunately, it seems that people in power in the universities instead of improving their own competence by hard work tend to undermine departments by hiding information and putting responsibility on them as

blaming the victim phenomenon works. Denying training opportunities just for keeping others below one's own level of competence seems present in university culture.

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