

FACTOR CONTRIBUTING OF QUALITY EDUCATION IN PUBLIC SECTOR UNIVERSITIES LEARNERS' PERSPECTIVE

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Abstract

Quality education is a constitutionally declared a big issue in public sectors of Pakistan yet one can see a little progress in establishing factors that permote the quality education in public sectors of Pakistan. Poor quality of education in many public sectors has a negative impact on a country's growth. As a developing country, Pakistan struggles with factors that affect the quality education in public sectors. We need to establish strong educational laws in our country to permote quality education in public sectors. This study highlights the factors that effects on quality education in public sectors of Punjab, Pakistan. To determine the effect of these factors, 394 samples are taken from two public sectors of Okara, Punjab as research samples. We determined that assessment method and learning environment with facilities like mess, internet, group projects, and relation with students and responsibility of teachers with their courses make a good impact on quality of education in public sectors (University of Okara, University of Agriculture). We determined that these factors in good manners permote the innovation of new learning outcomes for better quality education using statistical techniques like descriptive statistics (mean, standard deviation, skewness, kurtosis and coefficient of variation), bivariate analysis (Pearson's correlation analysis) and testing of hypothesis (F-test and analysis of variance).

Key Words:Area of study, Gender, Education, Marital Status, Learning Environment, Responsibility, Student Feedback, Relation with students, Attitude of teacher, Modern Technology and assessment Method.

Introduction

Concept of quality education

The conception of quality education encompasses various dimensions, including effective teaching methodologies, well-designed curricula, modern infrastructure, adequate resources, and a supportive learning environment (OECD, 2019). While these factors are crucial, it is essential to understand the learners' perspective in evaluating the overall quality of education provided by public sector universities. Their insights, experiences, and perceptions provide valuable insights into the effectiveness and impact of educational practices Aslam, A., Sultana, N., & Yasin, I. (2017). Understanding the learners' perspective is of utmost importance as they are the primary stakeholders in the education process. Their voices can shed light on the strengths and weaknesses of the existing educational systems, thereby helping educators, policymakers, and

institutions make informed decisions to improve the quality of education Ritchie, J. (2023). Furthermore, by considering learners' perspectives, universities can develop student-centered approaches and tailor their strategies to meet the diverse needs of their student population Altbach, P. G. (2019).

Determinants of Education Quality

The complexity of the teaching and learning process and the size of Pakistan's public sector are the key reasons why evaluating education quality is challenging. Research in the field of education is interested in evaluating the effectiveness of instructional activities in universities to increase academic brilliance since improving universities has a substantial impact on the advancement of society Lopez, T., & Alvarez, C. (2019). Given that this is a complicated and contentious activity, it's crucial to analyze strengths and weaknesses, determine where training is needed, and determine if the training itself results in improvements to training procedures. It's crucial to have accurate and trustworthy performance evaluation tools if you want to keep up González, E. S. M., & Soler-Vaya, F. (2024). The three components of the educational process—teaching, assessment, and learning—should be used to evaluate a teacher's performance. The theoretical underpinning of this work is therefore the investigation of these three characteristics of teaching in higher education. The construction of questions that include factors related to teaching quality (FRTQ) will be made possible by theoretical analysis, and these items' content validity, internal structure, and internal consistency will be evaluated. According to Ferguson, who was referenced by Kreuz, T. K. (2005). the best teachers are the most crucial component of education since they have a direct impact on students' learning. According to the literature, the caliber of pre-service and in-service teacher education as well as teacher education as a whole affects the quality of teaching. This study's theoretical underpinnings are characteristics of teaching in higher education.

Indicators of Quality in Teacher Education programmers

There is currently discussion on the effectiveness of current teacher preparation programs across various nations and levels Hobin, E. P. (2012). Similar to the quality of education, it is difficult to describe the quality of teacher preparation since different people have different ideas about what makes a successful program. Reform initiatives taking place around the nation represent various opinions on the caliber of teacher preparation Owusu, C. A. (2015). There are a number of widespread issues with the poor caliber of teacher education programs all throughout the world. Thomas, M. O. (2024). listed eleven issues that affect many conventional teacher preparation programs, including: Inexplicable reasons, a fragmented curriculum lacking coordination and coherence, inconsistencies in the curricula of various faculties, discrepancies between university curricula and school practice, low standing of teacher educators even in education faculties, and low status of teacher educators in general are some of the issues that need to be addressed. Lack of collaboration is caused by the autonomous cathedral structure in the Faculty of Education, which also contributes to the following issues: vii. Uncertainty regarding teachers' careers and their role in practical supervision; viii. The involvement of numerous stakeholders in teacher education; ix. The absence of a change management strategy; and X. The risk associated with unilateral reforms in teacher education.

Quality of Teacher Education in Pakistan

There are 270 educational/teacher training institutions in Pakistan, including Azad Kashmir and Uttar Pradesh, of which 227 are public and 53 are privately run. State College of Primary Educators (GCET), College of Education (GCE) and Department of University Education/IER are the main government institutions offering BA, BA, MA, MA, MA, MA of Education, MA of Philosophy. Presentation and Doctoral Programs The New Education Policy of 2009 argues that the quality of instructors in public institutions has been subpar and states that "declining quality of teachers in a large number of systems is attributable to changes in management, outmoded pre-service from. Lack of proper training in government and educational institutions Khalid, S., & Tadesse, E. (2024). Its overall efficiency and efficacy are hampered by significant issues. Common issues include: a lack of funding and resources, a dearth of training facilities, a brief training period, an overemphasis on quantitative expansion, a focus on a limited range of subjects in the curriculum, an imbalance between general education and professional courses, and an overemphasis on theory and practicality. Insufficient training and excessive stress. Teacher instructors, inadequate standard texts, a subpar assessment system, a lack of follow-up and accountability, and a failure to enact improvements that might be advantageous. Programs for preparing teachers need assessment and research. Ali, M., Niu, X., & Rubel, M. R. B. (2024). To advance the teacher training industry in Pakistan, it is urgently necessary to assess the efficacy of the current teacher training programs.

Objectives

- Identify the key factors that learners perceive as essential for quality education in public sector universities.
- Investigate the role of qualified and experienced faculty in enhancing the quality of education from the learners' viewpoint.
- Examine the impact of infrastructure and learning resources on learners' perception of the quality of learning in public area universities.
- Assess the significance of learner-centered approaches, such as interactive teaching methods and student engagement, in promoting quality education as perceived by learners.

Hypothesis

- H_0 = The assessment process has an effect on the caliber of education
- H_1 = Assessment procedures have no bearing on educational quality.
- H_0 = The quality of education is impacted by the learning environment.
- H_1 = Education quality is unaffected by the learning environment.
- H_0 = The quality of education is improved by the instructors' focus.
- H_1 = A higher quality of education is a result of instructors' focus.
- H_0 = The impact of academic teacher competence on educational quality
- H_1 = The efficiency of instructors in the classroom has little bearing on the standard of education

Literature Review

The geographical location of private higher education institutions can also affect affordability. Ahmed, S., & Uddin, S. (2024, January). explored the variations in tuition fees and affordability across different regions of Bangladesh. Their research provided insights into

regional disparities and called for strategies to address the affordability gap between urban and rural areas.

Rehman, A., & Ahmad, A. (2024). Moreover, the availability of affordable loan programs can impact the accessibility of private higher education explored the role of government-sponsored loan schemes in facilitating access to expensive private institutions. Their findings emphasized the need for flexible repayment options and interest rates to ensure affordability for students from diverse socioeconomic backgrounds. Private higher education institutions in Bangladesh have experienced a significant increase in tuition fees, raising concerns about accessibility and affordability.

Rahman, M. M., & Halim, M. A. (2024) explored the role of government-sponsored loan schemes in facilitating access to expensive private institutions. Moreover, the availability of affordable loan programs can impact the accessibility of private higher education. Their findings emphasized the need for flexible repayment options and interest rates to ensure affordability for students from diverse socioeconomic backgrounds.

Ahmed, A., Khan, Z., & Rahman, A. (2024). Highlighted the importance of scholarships in enabling students from lower-income backgrounds to access private higher education. In addition to socioeconomic background, scholarship and financial aid programs play a crucial role in determining affordability. Their study emphasized the need for expanded financial support mechanisms to bridge the affordability gap.

Additionally, the quality of education provided by private institutions is often associated with their affordability. Ahmed et al. (2016) examined the relationship between quality and affordability, emphasizing the need to balance cost and educational standards. Their findings highlighted the importance of ensuring affordability without compromising on the quality of education.

Bromley, P., & Smith, D. S. (2024) the socioeconomic background of students was shown to be a significant factor impacting the affordability of private higher education. Students from better-income households were found to be more likely to enroll in private universities owing to their financial capability. This shows that income levels and regional economic differences are strongly correlated with affordability.

Research Methodology

In this chapter, the methodology of selection of sample data from population and collection of data is being discussed and studied. All the steps for selecting and collecting of sample data to carry out a statistical survey is mentioned in this chapter of research methodology. Thus, we discussed our research methodology as:

Population or Universe

The population is defined as the number of individuals of characteristics which lie in our interest of study area. The area of importance in this study is the number of students of University of Okara & Agriculture University.

Target Population

The target population is said to be the number of individuals in which we have to draw inferences about whole population on the basis of sample data. In this study, the area of interest (target population) is the total number of students of University of Okara & Agriculture University.

Sample

The sample is defined as the representative part of the population. The basic requirement during the selection of sample is that it must be representative to whole population under observation. It helps to draw inferences about population. In this study, we collect sample from University of Okara & Agriculture University.

Sample size

Our sample size $n=394$ is collected through survey questionnaire using simple random sampling. The questionnaire is filled from the students of University of Okara & Agriculture University.

$$n = \frac{N}{1 + N(e)^2}$$

$$n = \frac{23800}{1 + 23800(0.05)^2}$$

$$n = \frac{23800}{60.5}$$

$$n = 394$$

Data type

The Primary data collected from survey questionnaire is used for this research study.

Sampling Area

The sampling area is the University of Okara & Agriculture University.

Data Management

IBM SPSS Statistics 21 is used to analysis of data in this research thesis.

Data Analysis techniques

Following statistical data analysis techniques will be used in this study:

1. Descriptive Statistics
 - Mean, Standard deviation,
 - Coefficient of variance
2. Bivariate Analysis
 - Correlation
3. Testing of hypothesis
 - F-Test, Chi-squared method

Bivariate Analysis

Bivariate analysis is a statistical method used to study and analyze the relationship between two variables. It focuses on understanding how changes in one variable are related to changes in other variables. Bivariate analysis allows researchers to examine correlations, dependencies, or correlations between two variables, providing valuable insight into their relationships and possible patterns. By analyzing the relationship between two variables, researchers can gain a deeper understanding of the underlying dynamics and uncover meaningful trends or dependencies. Bivariate analysis serves as a foundation for more advanced statistical methods and plays a crucial role in various fields such as social sciences, economics, and healthcare Vicini, A. (2024).

Correlation:

The degree to which two variables move to a specific degree is referred to as correlation. Positive correlation is the state of two variables moving in the same direction. There is a negative connection when they travel in the opposing directions. A connection between two variables is said to have a positive correlation when both variables move in the same direction. When one variable rises while the other falls, or vice versa, this occurs. The range of correlation values is -1 to 1. The two variables of interest are more tightly associated when the value is -1 or near to 1. They are ostensibly independent if they are near to 0. When analyzing the influence of various conditions on data gathering, correlations are crucial. The correlation matrix is crucial to the investigation because confirmatory factor analysis needs correlation coefficients for variables linked to job satisfaction.

$$r = \frac{\sum(x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum((x_i - \bar{x}))^2((y_i - \bar{y}))^2}}$$

Testing of Hypothesis

The statistical inference process must include the testing of hypotheses. a method that enables us to make judgments about whether or not to believe a claim or hypothesis on the value of a population parameter based on details from the sample data. If a hypothesis is confirmed by the sample data, it is accepted as true. If the sample data does not support a hypothesis, we reject it. This part examines the data gathered and evaluates the connections between different variables and qualities. Various qualities and variables are associated with, and conclusions are drawn from them.

F-test:

The ratio of the group mean squared to the within-group mean, or F-statistic, is determined by the F-test. If the estimated F statistic is big enough, it will reveal that there are substantial differences between the groups being compared and that the variance across groups is considerably larger than the variation within the group. The null hypothesis of equality of variances or means is rejected if the estimated F-value exceeds the critical value at a specific level of significance (usually = 0.05), at which point it may be said that there are significant differences between groups. A statistical test called an F-test is essentially used to compare the variances or means of several groups.

Chi-square method:-

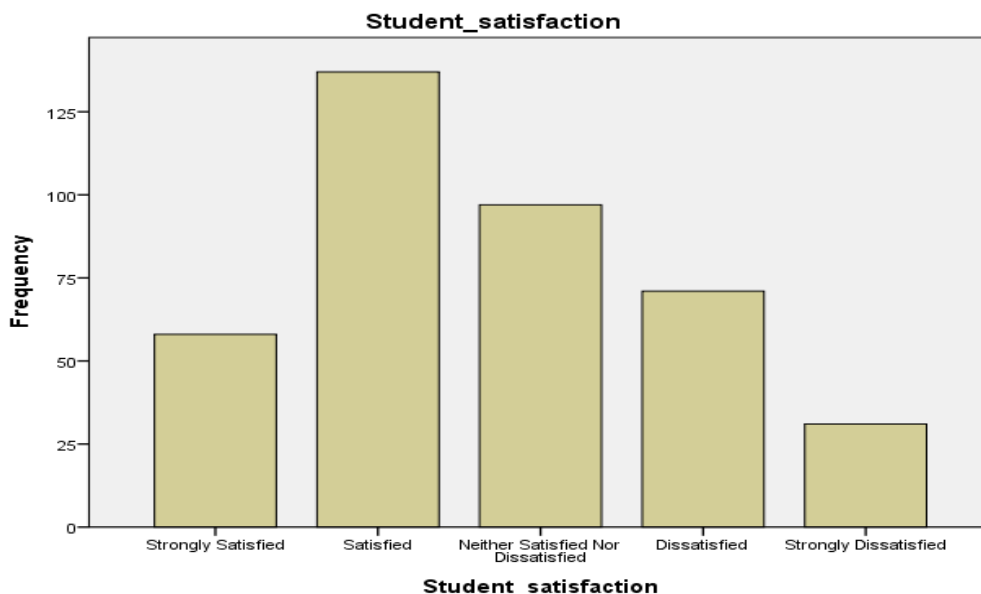
The chi-square method is a statistical method used to determine the correlation or degrees of freedom between dependent variables. It is often used in fields as diverse as social sciences, biology, and market research. The method calculates a chi-squared statistic by comparing the observed frequencies of a categorical variable with the frequencies that would be expected if the variables were independent. In this research thesis, we use chi-squared method to compare the observed frequencies of independent variables.

Result and Discussion

Results and discussions are integral components of a research study or academic paper. The results section presents the findings obtained through data analysis and provides a clear and concise summary of the study's outcomes. It typically includes tables, figures, or statistical analyses that effectively present the collected data and highlight key findings. The results section

aims to provide readers with a comprehensive understanding of the research outcomes, allowing them to assess the validity and significance of the study's objectives and hypotheses. It is important to present the results objectively, using appropriate statistical measures or descriptive statistics, and organizing the information in a logical and coherent manner. The results section serves as a foundation for the subsequent discussion, enabling researchers to delve deeper into the implications, interpretations, and limitations of the findings.

Figure# 01 Bar Chart



The Bar chart shows the frequencies of student satisfaction that 58 students marks with Strongly satisfied, 137 students marks with satisfied, 97 students marks with neither satisfied nor dissatisfied, 71 students marks with dissatisfied and 31 students marks with strongly dissatisfied as learner's perspectives on quality of education in public sectors.

Table# 01

| Descriptive Statistics | | | | | | |
|-------------------------------|----------|-------------|-------------|-------------|---------------------------|--------------------------------|
| Variable | N | Min. | Max. | Mean | Standard deviation | Coefficient of variance |
| Relationship with Student | 394 | 1 | 3 | 1.73 | .800 | 46.24 |
| Area | 394 | 1.00 | 2.00 | 1.2386 | .42676 | 34.46 |
| Attitude of teacher | 394 | 1.00 | 3.00 | 1.8452 | .83125 | 45.05 |
| Responsibility | 394 | 1.00 | 3.00 | 2.0863 | .89253 | 42.78 |
| Student Satisfaction | 394 | 1.00 | 5.00 | 2.6954 | 1.15850 | 42.98 |

| | | | | | | |
|----------------------|-----|------|------|--------|--------|-------|
| Student Feedback | 394 | 1.00 | 2.00 | 1.1726 | .37837 | 32.27 |
| Learning Environment | 394 | 1.00 | 2.00 | 1.4112 | .49267 | 34.91 |
| Assesment Method | 394 | 1.00 | 2.00 | 1.5178 | .50032 | 32.96 |
| Group Project | 394 | 1.00 | 2.00 | 1.3858 | .48740 | 35.17 |

Shows the descriptive statistics (minimum values, maximum values, mean, standard deviation and Coefficient of variation (CV)) of different variables. The results conclude that variable that has less coefficient of variance is more efficient variable with respect to other variables. It means the lower value of coefficient of variation (CV) is more efficient variable. In table 4.2, the lower value of CV is 32.27 related to Student feedback which is the most efficient variable among all studied variables.

Table # 02

| Correlations | | | | | | |
|------------------------|-------------------------------|-------------------------|--------------------|--------------------------|--------------------|--|
| | Relationship_w ith_Student | Attitude_of_ teacher | Responsibi lity | Student_satis faction | Marital_stat us | |
| Pearson Correlation | 1 | | | | | |
| Sig. (2- tailed) | | | | | | |
| N | 394 | | | | | |
| Pearson Correlation | .626** | 1 | | | | |
| Sig. (2- tailed) | .000 | | | | | |
| N | 394 | 394 | | | | |
| Pearson Correlation | -.274** | -.284** | 1 | | | |
| Sig. (2- tailed) | .000 | .000 | | | | |
| N | 394 | 394 | 394 | | | |
| Pearson Correlation | .249** | .310** | -.075 | 1 | | |
| Sig. (2- tailed) | .000 | .000 | .135 | | | |
| N | 394 | 394 | 394 | 394 | | |
| Pearson Correlation | .040 | .083 | -.018 | -.095 | 1 | |
| Sig. (2- tailed) | .430 | .098 | .728 | .059 | | |
| N | 394 | 394 | 394 | 394 | 394 | |

ificant at the 0.01 level (2-tailed).

Shows the correlation analysis of different variables. Pearson correlation applied on variables (Marital status, responsibility, attitude of teacher, relation with student and student satisfaction). The value of Pearson's correlation values shows the strength between two variables.

Pearson's correlation coefficient is a statistical measure that quantifies the strength and direction of the linear relationship between two continuous variables. It ranges from -1 to 1, where a value of -1 indicates a perfect negative linear relationship, 1 indicates a perfect positive linear relationship, and 0 indicates no linear relationship.

Table # 03 Chi-squared method

Test Statistics

| | Attitude of teacher | Student satisfaction | Relationship with Student | Assessment Method |
|-------------|---------------------|----------------------|---------------------------|-------------------|
| Chi-Square | 18.005 ^a | 82.447 ^b | 46.208 ^a | .497 ^c |
| df | 2 | 4 | 2 | 1 |
| Asymp. Sig. | .000 | .000 | .000 | .481 |

Attitude of teacher: The Chi-Square test statistic for the Attitude of teacher variable is 18.005, with 2 degrees of freedom (df). The associated p-value (Asymp. Sig.) is 0.000, which is less than the typical significance level of 0.05. This indicates that there is a significant relationship between the Attitude of teacher and the other variable(s) being examined. Student satisfaction: The Chi-Square test statistic for the Student satisfaction variable is 82.447, with 4 degrees of freedom (df). The p-value is 0.000, indicating a significant relationship between Student satisfaction and the other variable(s) being examined. Relationship with Student: The Chi-Square test statistic for the Relationship with Student variable is 46.208, with 2 degrees of freedom (df). The p-value is 0.000, suggesting a significant relationship between Relationship with Student and the other variable(s) being examined. However, there is no significant relationship found between Assessment Method and the other variable(s).

Conclusion

This thesis highlights the multifaceted factors that contribute to quality education in public sector universities from the learners' perspectives. Key elements such as student-teacher relationships, teacher attitudes, responsibility, work satisfaction, student feedback, learning environments, assessment methods, and group projects were thoroughly analyzed. The findings underscore the importance of innovative, interactive, and practical learning approaches that enhance critical thinking and skill development. A well-designed curriculum that aligns with industry needs and promotes holistic growth is also essential.

Descriptive statistics provided insights into the frequency and significance of these factors, while Pearson correlation analysis revealed the strength of relationships among variables, with notable values indicating connections between marital status, responsibility, teacher attitude, and student satisfaction. Chi-squared tests further supported the hypothesis that these educational factors significantly enhance quality education at the University of Okara and the University of Agriculture. Ultimately, the research concludes that while certain factors may be more pronounced in specific sectors, all contribute to improving educational quality in Pakistan's public universities.

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