QUALITY INDICATORS FOR PERFORMANCE OF HIGHER EDUCATIONAL INSTITUTIONS: AN EXPLORATORY FACTOR ANALYSIS IN THE LIGHT OF STUDENT'S PERCEPTION.

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1.0 INTRODUCTION:

A Nation is built by its citizens, citizens are moulded by teachers and teachers are made by teachers-educators. The National Policy on Education, 1986 has rightly stated, "No people can rise above the level of its teachers". So for the development of the country, it is very important to have good teachers and good teachers can be produced only if we have a good system of education.

As higher education systems grow and diversify, society is increasingly concerned about the quality of programmes, public assessments and international rankings of higher education institutions. However these comparisons tend to overemphasize research, using research performance as a yardstick of institutional value. If these processes fail to address the quality of teaching, it is in part because measuring teaching quality is challenging (Hernard, 2008) India has been always been a land of scholars and learners. In ancient times also, India was regarded all over the world for its universities like Taxila, Nalanda, Vikramshila and its scholars. By independence India had 20 universities, 500 colleges enrolling about 2, 30,000 students. Since independence India has progressed significantly in terms of higher education statistics.

There is no doubt to the fact that much of the progress achieved by India in education has come from private sector. In fact the public sector and private sector is not in opposition to each other but they are working simultaneously in Indian education sphere. UGC is the main governing body that enforces the standards, advises the government and helps coordinate between center and states. During the last few years, universities have increased manifold and colleges have mushroomed all over our country to impart higher education. Opening of a large number of private medical colleges, engineering colleges and poly-techniques has become an attractive financial proposition but on the other hand, it also affect on the quality of education. Almost two third of our universities and 90% of colleges are rated below average in quality parameters..." and Enrollment rates in our higher education institutions have gone up to around 17% but are still well below the world average of 26 per cent

2.0 AIM OF THE STUDY:

To encapsulate the quality aspects into certain indicators for performance of higher educational institutions though factor analysis and ascertain the ranking of explored quality indicators for performance of higher educational institute as perceived by students.

3.0 RESEARCH METHODOLOGY:

The aim of the present paper is to determine the quality indicators for performance of higher educational institutions in the light of perception of students and assigned quality ranks to determined indicators.

3.1 Research method: In the light of aim of the present paper, the investigation was followed descriptive survey method to determine the quality indicators for performance of higher educational institutions through perception of students.

3.2 Sample design: In relation to evaluation of determined quality indicators for performance of higher educational institutions in the light of perception of students, 200 students as sample units were selected from various higher educational institutions affiliated to Dr B. R. A. University, Agra through stratified random method.

3.3 Tools and techniques : the investigator constructed a rating type scale (Quality Indicator Scale) to develop quality indicator for performance of higher educational institutions. In the preliminary phase of the scale investigator observed and piling a large numbers of items which expressed and ensured comprehensive coverage of the most relevant domains of the quality of the higher educational institutions. A list of 40 items was administered on the 50 responders for refinement of the scale. Item – total item correlation and internal consistency (Cronbach's alpha

reliability) protocol were followed for item analysis and refinement of the scale. Those items placed in the final form of the scale having more than 0.3 value of item-total item correlation. Finally a set of 35 items placed in the final form of the scale. The internal consistency and test retest reliability were estimated for the final form of the scale and index of Cronbach's alpha reliability and test retest reliability were found satisfactory. The content and face validity were established for this scale (QIS).

4.0 FINDINGS OF THE STUDY:

4.1 To encapsulate the quality aspects into certain indicators for performance of higher educational institutions though factor analysis.

The investigator found in pre-requisite phase of factor analysis that the sample and data is appropriate and adequate (KMO and Bartlett's test) and also the items have large proportion of its variance accounted by the factors which are suitable pre-requisites for factor analysis.

All necessary steps are followed and finally summary of the finding (percentage of variance accounted by determined endogenous indicators and their items with factor loading) of this objective is shown in the table-1 as below.

Table 1: Percentage of variance accounted by determined endogenous indicators and their quality items with factor loading.

Factors	Percentage of variance	Items with factor loading	Endogenous indicators
А	17.925	Mixed policy of centralized	Governance
		and decentralized	
		management (.924),	
		Recruitment and salary as	
		per norms (.900),	
		Accountability of staff	
		(.814), Curriculum updated	
		frequently (.828), Students	
		involvement in the	

B	15.636	administration (.826), Transparent admission policy and fee structure (.812) Periodic investigation and supervision by administrative authority (.780), Academic calendar (.792), Comprehensive and continuous assessment (.738) Placement cell (.927), Student motivation for self learning (.901) Guidance and counseling facility (.939), Physical activity programme (.909), Attendance involvement in scholastic achievement (.902), High-tech teaching and learning environment (.841), Clear vision and mission in	Student Support and Progression
С	12.390	the mind of students (.705) Balanced work load among staff (.915), Staff student ratio (.909), Healthy staff student_interaction_(.024)	Team effort and Healthy Coordination
		student interaction (.924), Subject-wise teaching staff (.930), Internal coordination and management (.906)	
D	11.131	Guest lecture by educational expert. (.858), Organizing seminar, conferences and workshops. (.823), Remedial	Knowledge Assimilation

		coaching. (.617), Focus on teaching practice (.837), Enriching social, cultural and leisure activities (.732), Enforcement on research development. (.810)	
E	9.913	Highly motivated faculty with high job satisfaction (.924), Reward and recognition for outstanding progress (.889),Staff setting goal for teaching Development (.899), Well qualified and experienced teaching faculty (.907)	Faculty quality and Development
F	8.133	Library with innovative resources (.855), Financial assets as per norms (.896), Electronic multimedia and laboratories (.843), Students support facilities e.g canteen, toilet, water etc. (.727)	Infrastructure With Innovative Resources

It is revealed from the table-1 that there are found six indicators which have labeled with their common features. These indicators are known as governance, student support and progression, team effort and healthy coordination, knowledge assimilation, faculty quality and development and infrastructure with innovative resources.

4.2. To ascertain the ranking of explored quality indicators for performance of higher educational institute as perceived by students

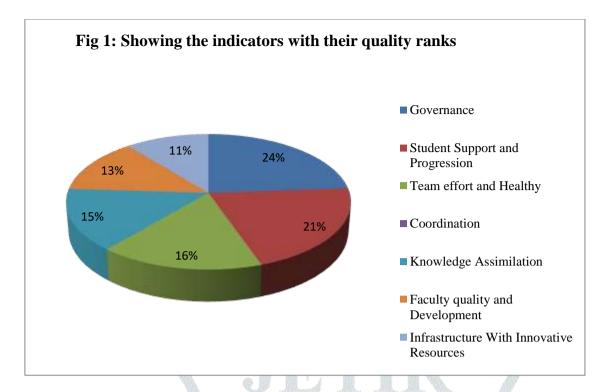
It is clearly seen from the table 1 that there are six quality factors explored on the basis of perception of students which reflected that what is need and attitude of students towards quality factors in the higher education. The investigator ascertained the ranks of determined quality factors through their achieved percentage of variance. The table 2 showing the quality factors and their respective percentage of variance and ranks as under-

Table 2: Showing the quality factors with	h their percentage of variance and ranks
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Quality indicators	Percentage of variance	Ranks
Governance	17.925	1
Student Support and Progression	15.636	2
Team effort and Healthy	12.390	3
Coordination		
Knowledge Assimilation	11.131	4
Faculty quality and Development	9.913	5
Infrastructure With Innovative Resources	8.133	6

Table 2 indicated that governance which accounted 17.925 percentage of variance obtained the first rank as perceived by students, it can say that students thought that governance is the first ranked key factors which is important for quality of higher education whereas, students support and progression which encapsulated sub key issues such as placement cell, student motivation for self learning, Guidance and counseling facility, Physical activity programme, attendance involvement in scholastic achievement, high-tech teaching and learning environment, clear vision and mission in the mind of students obtained 15.636 percentage of variance and secured second rank as important for quality of higher education.

In the same manner, other factors such as Team effort and Healthy Coordination having value of percentage of variance i.e. 12.390 achieved third quality rank as perceived by students, Knowledge Assimilation having value of percentage of variance i.e. 11.131 achieved fourth quality rank as perceived by students, Faculty quality and Development having value of percentage of variance i.e. 9.913 achieved fifth quality rank as perceived by students and Infrastructure with Innovative Resources having value of percentage of variance i.e. 8.133achieved last quality rank. the data as seemed in the table 2 also presented through fig 1 as under-



5.0 CONCLUSION:

It is concluded from the above discussion that governance, student support and progression, team effort and healthy coordination, knowledge assimilation, faculty quality and development and infrastructure with innovative resources were found significant factor/indicators which represents the quality domain of higher education and perceived by students in the present scenario. Governance and students support and progression were perceived as most important key domain in higher education by students whereas Team effort and Healthy Coordination and Knowledge Assimilation were perceived as second important key factors for quality of higher education. Infrastructure With Innovative Resources perceived by students as comparative lesser important than the governance, student support and progression, team effort and healthy coordination, knowledge assimilation, faculty quality and development.

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