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Research Article

Ranking and Accreditation Systems: Challenges before Indian Higher Education

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Abstract:

The ranking and accreditation systems have become popular method and being used as an acceptable tool for quality assessment of a Higher Education Institution(HEI). This paper attempts to study and examine the issues pertaining to Higher Education in India and whether Ranking and Accreditation systems have created qualitative environment in Indian HEIs or not. For this purpose, the response of academicians, academic administrators and senior managers of Indian HEIs have been sought through a Questionnaire method. Their responses have been examined with the help of various statistical tools and analysis of the same has been presented in this paper. This study highlights some important issues/challenges before Indian Higher Education which needs immediate attention. This study also reveals that the ranking and accreditation systems are having significant impact on the performance outcomes of Indian Higher Education Institutions. The outcome of the study has a relevance to stakeholders be it students, parents, educational administrators, academic fraternity, government, investors in higher education and society at large.

Keywords: Challenges; Ranking; Accreditation; Higher Education

Introduction

The quality of education plays a significant role in fostering the country's economic growth. Post-independence, the Higher Education took a drastic turn in India, as the national leaders were determined in their aim of making India more strong and stable by enriching its human resource. Post-independence, higher education became the top priority of the government as it was considered as the most important factor that could determine the nation's future.

After independence, a comprehensive review of Higher Education was felt necessary of its all areas to revamp the whole system. The goal was to make the higher education system more relevant to the needs of an emerging nation. The Radhakrishnan Commission (also known as the University Education Commission) was the first commission (in 1948-49) in India after independence to study the condition of the universities. The Radhakrishnan Commission had recommended to set up the University Grants Commission (UGC) as a link between the central government and the universities.

The evaluation of quality of higher education in India has been emphasized by the National Policy of Education 1986 and the Programme of Action (POA) 1992. Subsequently, recognizing the importance of Institutional assessment, the National Assessment and Accreditation Council (NAAC) had been established in 1994 by the University Grants Commission (UGC).

Ranking procedure has been in practise for the past decade marking its first appearance in 2003. Ranking and accreditation systems ensures Higher Education Institutions meet the expected standards and promote a healthy competition among the institutions to sustain and enhance their quality. Each Ranking Agency has its own criteria and methodology based upon the country's culture, skills in demand, etc. The criteria considered for raking is evaluated using certain indicators like student strength, median salary, etc.

To further strengthen the evaluation process, the Ministry of Education (Earlier known as Ministry of Human Resource and Development), Govt. of India had launched, the National Institutional Ranking Framework (NIRF) on 29th September 2015 to rank the Higher Education Institutions (HEIs). The NIRF provides a process to rank the institutions across the country. The criteria include, Teaching Learning & Resources with a ranking weight of 30%, Research and Professional Practice with a ranking weight of 30%, Graduation Outcomes with a ranking weight of 20%, Outreach and Inclusivity (OI) with a ranking weight of 10% and Perception (PR) with a ranking weight of 10%.

These steps of Govt. of India have created a competitive environment in Higher Education Institutions. It is believed that rankings create motivations for the institutions to improve their positions and create conditions for assuring world class quality in higher education. The National Institutional Ranking Framework (NIRF) has infused competitiveness in Indian

Higher Education Institutions. It is forecasted that the ranking and accreditation are to further improve the quality of higher education through competitiveness.

An overview of Ranking and Accreditation Systems has been highlighted in Table 1 to understand their certain important aspects.

Table - 1

An Overview of Ranking and Accreditation Systems

Accreditation	**Ranking**
NAAC - A five-year comprehensive assessment of the institution as a whole.	NIRF - A yearly affair.
NAAC - Absolute grade is given	NIRF - Relatively graded with other institutions
It is a one-time (five-year) event in NAAC. Accredited institutions can report their yearly performance.	It is an Annual Report Card to the Nation and to the stakeholders on what has been done by the Institution in the last one year, on the given performance parameters.

The Status of Indian Universities under various International Ranking Systems is given below in Table-2, which shows that no Indian University could get rank among top 100 Universities in the world.

Table - 2

Ranks of Indian Universities under various International Ranking Systems

Ranking Agency	**Status of Indian Universities**
Times Higher Education (THE), UK	World University Rank 2020: Total 36 Universities in top 1000 out of which no university in top 200, 6 Universities in top 500; and rest 30 Universities in 501 to 1000 range. • Indian Institute of Science, Bangalore and IIT Ropar be in "301-350" in World • IIT Indore be in "351-400" in World • IIT Bombay, IIT Delhi and IIT Kharagpur, be in "401-500" in World (THE, 2020[a])
Quacquarelli Symonds World University Ranking, UK	World University Rank 2020: Total 24 Universities in top 1000 out of which 3 universities in top 200, 6 Universities in top 500; and rest 15 Universities in 501 to 1000 range. • IIT Bombay at 152 rank in world • IIT Delhi at 182 rank in world • IISc Bangalore at 184 in world (QS WUR) (2020[a])
Shanghai Ranking by Shanghai Jiaotong University, China	World University Rank 2019: Total 16 Universities in top 1000 out of which no university in top 200, 1 University in top 500; and rest 15 Universities in 501 to 1000 range. • Indian Institute of Science (IISc) Bangalore "401-500" in World • IIT Madras "501-600" in World • IIT Kanpur and University of Calcutta be in "601-700" in World (ARWU)(2020[a])

This paper attempts to understand the challenges / issues before Indian Higher Education and the mind-sets/opinion

of Academicians and Managers of Higher Education Institutions (HEIs) with respect to various Ranking and Accreditation Systems especially National Institutional Ranking Framework (NIRF) and National Assessment and Accreditation Council (NAAC).

Literature Review

A review of studies undertaken in past 20 years reveals that there are a handful of studies undertaken in Indian context on ranking and accreditation. Based on the detailed literature review, some studies are highlighted hereunder which gives us a fair picture of Indian Higher Education and Ranking & Accreditation Systems. This literature review is structured into five sections, as follows:

a) Indian Higher Education and Global Ranking
b) Importance of Ranking
c) Ranking Methodologies
d) Accreditation as a Tool
e) Challenges and Suggestions

a) Indian Higher Education and Global Ranking:

Indian has been a place of learned saints and pundits. In the ancient time, the people of India used to impart the learning through hymns and chants. According to Choudhary, Sujit Kumar (1998), the Higher education in ancient India had a glorious form of education based on Buddhist social virtues and Brahminical Hindu social order. There had prevailed various regional identities, historical legacies, dominant values as cherished by Lord Buddha, Lord Mahavira, the great-emperor Asoka and the great poet Kalidas in ancient India. In Mediaeval India, one may find the existence of Madrasahs evolved and developed by Muslims scholars under the guidance and supervision of Islamic rulers, particularly under the Mughal Empire. British administration in India, beginning from Macaulay's policies of education, introduced a Western model of education with an aim of creating a professional class which could fulfil their needs. In the post-independent India, the new leadership sponsored the modernization of India's education system based on modern, western social ethos and legacies. (p.69-70)

According to G Srinivas (2019), a critical examination reveals that Indian HEIs under the control of Central Government are relatively well placed in terms of funding and quality of resources. In contrast, the state level institutions (mainly state universities and colleges) are grappling with administrative challenges like vacant positions, lack of policy stability in the state, litigation and other regional issues. As a result, the bottom of the pyramid, where the quality culture and quality enhancement is most required is getting further marginalised (p 40)

b) Importance of Ranking:

The research paper of Imanol Ordorika & Marion Lloyd, (2014) discusses about the various aspects of rankings systems such as its impact, logic, reliability, ideological debate, contest, dispute in the media, the policy debate in Europe etc. "The rankings also fuel the privatizing trend in higher education worldwide, by rewarding attributes that, at least in the US context, are characteristic of the top private institutions: high tuition and large endowments; highly competitive selection processes, both for students and faculty; and heavy emphasis on research, ideally leading to industrial patents and other profit-making ventures" (P 390).

As per Arora Namrata (2015), University rankings widely affect the behaviours of prospective students and their families, university executive leaders, academic faculty, governments and investors in Higher Education. Ranking that simply recycle reputation without any necessary connection to real outputs are of no common value. It is necessary that ranking be soundly based in scientific terms if a virtuous relationship between performance and ranking is to be established, the worst potentials of rankings are to be constrained, and rankings are optimized as a source of comparative information (P 18–20).

Despite the many criticisms, university rankings are influential. Hazelkorn (2007) provided evidence that rankings have a strong impact on academic decision-making and behaviour, and on the structure of the institutions. Future strategic targets and advertising on the international education market is shown to depend on the ranking (P 87 – 110).

According to Singh, S. P. (2019), the 3 R's i.e., ranking, rating and research are inter-linked and interdependent on each other. The allocation of funds for research also depends on the rank and rating of a HEIs/ University and good research and publications are of prime importance for ranking / rating of Institutions. The funding agencies such as Department of Science and Technology (DST), Department of Biotechnology (DBT), UGC etc. are not very liberal in providing funding to young Institutions, which have no or poor ranking/rating. For HEIs/Universities in private Sector, the funding of research projects is very difficult if they are not well established with ranking /rating.

c) Ranking Methodologies:

According to Kristof De Witte, Lenka Hudrlikova, (2013), Existing university rankings apply fixed and exogenous weights based on a theoretical framework, stakeholder or expert opinions. Fixed weights cannot embrace all requirements of a 'good ranking' according to the Berlin Principles. As the strengths of universities differ, the weights on the ranking should differ as well. Author proposes a fully nonparametric methodology to rank universities. The methodology is in line with the Berlin Principles. It assigns to each university the weights that maximize (minimize) the impact of the criteria where university performs relatively well (poor). The method accounts for background characteristics among universities and evaluates which characteristics have an impact on the ranking. In particular, it accounts for the level of tuition fees, an English speaking environment, size, research or teaching orientation. In general, medium sized universities in English speaking countries benefit from the benevolent ranking. On the contrary, author observes that rankings with fixed weighting schemes reward large and research oriented universities. Especially Swiss and German universities significantly improve their position in a more benevolent ranking (P 337).

d) Accreditation as a Tool

According to Benoit Cret, (2010), By focusing on the implementation of the three main accreditation processes of Business schools and programmes (AACSB, EQUIS and AMBA) within three French ''Grandes Ecoles'' and three English Business Schools, I show that accreditations are first and foremost used by the local Deans of the Business Schools where accreditation processes are implemented. They are used as management tools of a special kind; their implementation results in the progressive consolidation of the institutional position of the Deans within their universities (p 415).

e) Challenges and Suggestions:

According to E. C. Subbarao (2013), India's higher technical education is good in small pockets, but far from world class. The bulk of it is of poor quality, producing graduates many of whom are unemployable. The main reason for this pathetic situation is rapid expansion of the education system without adequate number of qualified teachers, shortage or absence of infrastructure and lack of autonomy in all aspects of the technical education system. Other contributing factors are: poor linkage with industry, poor visibility in terms of publications, patents, new products and low or no international collaboration in teaching and research.

According to Mittal Prabhat, (2018) to make the Indian higher education a world class, India needs to increase public financing for research and innovations, enhance the infrastructure in terms of physical settings and equipments and above all needs a greater attention to its existing talented teachers and researchers to save them from hopeless future in Indian Universities (p 68).

According to Bhushan and Verma (2015), presently, less than one third of all universities and about one-fifth of the colleges are accredited in India but many of the famous and renowned universities and institution are not going for accreditation.

The research paper of Vidya Rajiv Yeravdekar, Gauri Tiwari, (2014) explain reasons of India's non-appearance in global rankings of higher education institutions. It has been pointed out that the phenomenon of global rankings is situated in a centre-periphery paradigm. It is very likely that global rankings will continue to be dominated by trans-Atlantic universities (p74).

However, the researcher could not find any study which comprehensively explore, study and examine the issues pertaining to Indian Higher Education with reference to NIRF Ranking and NAAC Accreditation Systems. Therefore, it is a high time to explore this area to know the opinion of academicians, academic administrators/ Senior Managers of Indian Higher Education towards ranking (NIRF Ranking) and accreditation (NAAC) systems and the challenges / issues faced by them so that new ways may be explored to improvise the status of Indian Higher Education.

Statement of the Problem and Need of Study

The popularity of Ranking and Accreditation agencies is growing day by day, and their results are being discussed at different forums nationally and internationally and also the league table has been a parameter of making choice whether it is admission for higher education or employment. India's nonappearance in the top 100 Universities in the Global Ranking has been one of the discussion among academicians and administrators. This issue has been raised in media too. The politicians and policy makers expressed their concern about the poor quality of higher education and non-employability of students in multinational companies.

In order to accelerate the process of quality education, Indian Government has come up with various important measure including policy on declaring certain 'Institutions of Eminence' who have potential to be in the top 100 Institutions in the World. Therefore, to understand the current Indian Higher Education scenario, the present study has focused to study and examine the challenges/issues faced by the academicians, academic administrators and senior managers of Indian HEIs.

Objective of the Study

To study and examine the challenges / issues pertaining to Higher Education in India and Ranking and Accreditation Systems.

Research Methodology

To fulfil the aim and objectives of any study and answer the research questions, a proper research framework needs to be adopted for carrying out the study successfully. The following research framework has been used in this study, which gives an overview of the present study. More than 300 participants from 172 HEIs have submitted their responses. It comprises the procedure for conducting the study, techniques and instruments used for research methodology.

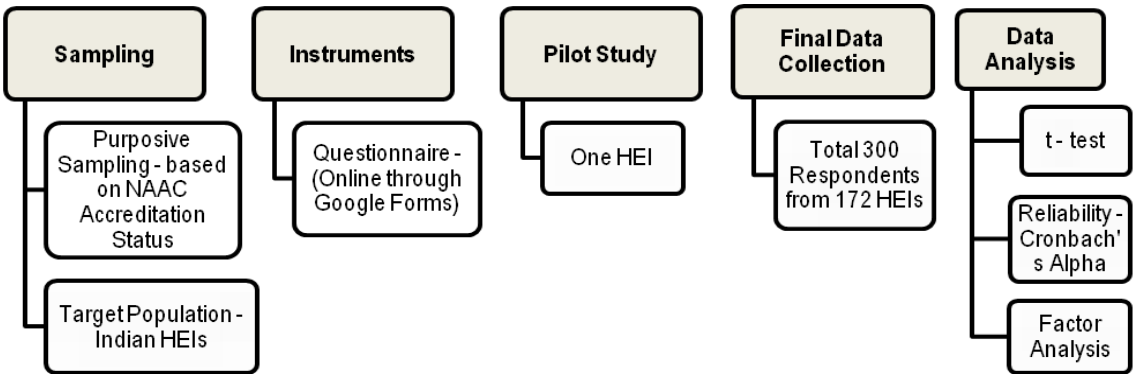


Figure 1: Research Framework

- Method of Data Collection: In the present study data has been collected through primary method. For primary data, a questionnaire was prepared, keeping in view of the objective of the study. The same was pre-tested and in the light of the findings of pre-test, the same was revised.
- Research Design: Single Cross-Sectional Descriptive Research Design was applied in the study. In such research designs, the sample is drawn only once and data are also collected only once. The findings of the study are described and discussed in detail.
- Population: Population consists of the academicians, academic administrators and senior managers of Indian Higher Education Institutions across 29 States and Union territories of India.
- Sample unit: The sample unit consists of the respondents who are in Teaching / Non-Teaching field and working in universities and colleges of Indian Higher Education and having the awareness regarding Ranking and Accreditation Systems.
- Sample size: In the present study, the size of sample is 300 academicians, academic administrators/ Senior Managers working in universities and colleges of Indian Higher Education.
- Sampling Technique: Samples have been taken based on Judgement / Purposive Sampling of Nonprobability Sampling Method.

- Tools of presentation and analysis: The data collected for the study was given statistical treatment. Different tools have been used for presentation of data. Mainly t-test of two independent samples was applied in order to assess the significant difference in the opinion of respondents of two categories, namely, male and female; teaching and non-teaching; and two categories of respondents based on the type of HEIs. SPSS software is used for analysis of data.

The study has been undertaken during Jan to March 2020 to get the opinion of the academic administrators working in the HEIs on Ranking and Accreditation Systems. A Questionnaire was prepared for getting the opinion on 5 point Lickert Scale. The Questionnaire was prepared after doing the extensive review of literature in the study area. The pretesting of the questionnaire was done on 35 respondents and in the light of the findings of the pre-test, the same was revised. The validity of the questionnaire was also ascertained, by sending the copy of the questionnaire to 5 experts. The opinion on the items of the questionnaire were almost the same of all experts. The minor change in the language of the items were suggested and the same were incorporated. The final Questionnaire was sent to academicians, academic administrators and senior managers of Indian Higher Education Institutions through email. With great efforts and three times reminders to academicians / administrators, only 314 respondents sent the filled in questionnaire. The 14 Questionnaires were found incomplete and these were discarded and finally the sample size remain 300.

- **Background Information of Respondents:**

The background information of the respondents was also gathered and presented in Table 3 and Table 4. There are only three background variables which are as follows:

1) Gender (i.e., Male and Female Respondents)
2) Profession (i.e., Teaching and Non-Teaching Respondents)
3) Type of University (i.e., Various University Respondents)

Table - 3
Background Information of Respondents (N=300)

Background Information	**Number**	**Percentage**
Gender:		
— Male (1)	222	74%
— Female (2)	78	26%
Profession:		
— Teaching (1)	223	74.3%
— Non-Teaching (2)	77	25.6%
Type of University:		
— Central University & Institution of National Importance (1)	79	26.3%
— Others (2)	221	73.7%

Source: Author's calculations based on primary data

Table - 4
HEI wise Summary of Responses Received

Type of HEIs	**No. of HEIs**	**No. of Responses received**
Central University	29	52
Institute of National Importance	18	27

Type of HEIs	**No. of HEIs**	**No. of Responses received**
Deemed University	28	51
Private University	28	39
State University	57	97
Other Institution	11	16
Anonymous	-	18
Grand Total	**172**	**300**

Source: Author's calculations based on primary data

Comparison of Statements/Items of Major Issues/Challenges Before Indian HEIs Between Teaching and Non-Teaching Respondents

Based on extensive literature review and after discussion with Supervisor/ Co-Supervisor and also with some reputed academicians,11 issues / challenges before Indian Higher Education have been identified for the existing study.

An attempt has been made to compare these 11 statements/items/variables of major issues/challenges between Teaching and Non-Teaching Respondents. The value of each dimensions varies from 1 to 5, 1 being 'Highly Challenging', 5 being 'Not at All Challenging'. The t-test of two independent samples has been applied to access the difference between Teaching and Non-Teaching Respondents. The results of the analysis are presented in Table 5, and the description and discussion of the analysis of each statement is given below:

i. Paucity of World Class Research and Innovations:

The t-value in the table indicates that there is no significant difference in the opinion of Teaching and Non-Teaching Respondents (t=1.883, not significant). It implies that the opinion of Teaching and Non-Teaching respondents is almost the same, as is also evident from the mean values of Teaching respondents (Mean = 4.04) and Non-Teaching respondents (Mean = 3.78). It is further noted from the table that the mean value in case of Teaching respondents is just equal to option 4 (agree), and in case of Non-Teaching respondents it is approaching option 4 (Agree). It implies that on an average all the respondents have the same opinion that 'Paucity of World Class Research and Innovation' is one of the serious concerns/issues/challenges for Indian Higher Education, and Indian HEIs need to accelerate their participation in the area of research and innovation to achieve good ranking / high accreditation.

ii. Poor quality of teaching and learning due to unqualified or untrained faculty:

The average opinion of Teaching and Non-Teaching respondents about 'Poor quality of teaching and learning due to unqualified or untrained faculty' variable comes to 3.84 and 3.65 respectively. The difference in mean values is not significant as is evident from the t-value in the Table (t = 1.317, not significant). It is also observed from the table that both the mean values (i.e., Teaching and Non-Teaching respondents') are moving towards option 4 (Agree). Therefore, it may be inferred that almost all the respondents agree with the statement that unqualified or untrained faculty is one of the serious concerns before Indian Higher Education and it is also observed from the literature reviewed that majority of Indian HEIs are not able to provide quality education to its students.

iii. Negligible interest in international competition and projection:

The t value in the table indicates that there is no significant difference in the opinion of Teaching and Non-Teaching respondents about this variable (t = 1.735, not significant). The mean values of both the categories, that is, teaching respondents (Mean = 3.82) and Non-Teaching respondents (Mean = 3.58) are approaching to option 4 (agree). Therefore, it may be concluded that all the respondents agree in their opinion that there is a lack of commitment and ambition in the

Indian HEIs, and it is a big concern for Indian Higher Education that Indian HEIs are not participating in international competition and projection and with the result Indian Institutions are far behind in International league tables.

iv. Inadequate faculty:

The t-value in the table indicates that there is significant difference in the opinion of Teaching and Non-Teaching respondents (t= 3.253, significant at .01 level) so far as the variable 'Inadequate faculty' is concerned. It implies that opinion of Teaching and Non-Teaching respondents about 'Inadequate faculty' variable is not the same, as is evident from the mean values of Teaching respondents (Mean = 4.07) and Non-Teaching respondents (Mean = 3.61) too. However, it is further observed that both the mean values are around the option 4 (Agree), and therefore it may be inferred that on an average all the respondents agree in the opinion that the HEIs are facing the problem of inadequacy of faculty and the Indian Institutions are required to make great efforts to improve number of faculty members in the Institutions as per students' enrolments to improve the faculty-student ratio and its ranking and accreditation status.

v. Inappropriate/ obsolete /outdated curriculum:

It is found from the table that there is no significant difference in the opinion of Teaching and Non-Teaching respondents as the t value is 1.702 which is not significant, and the average of the opinion of Teaching and Non-Teaching respondents about 'Inappropriate/ obsolete /outdated curriculum' variable comes to 3.83 and 3.57 respectively, i.e., both the mean values are moving toward option 4 (Agree). Hence, it may be concluded that on an average all the respondents agree that Inappropriate/ obsolete /outdated curriculum' is a concern for Indian Higher Education and in view of literature review, it is understood that the same needs to be updated time to time and be linked with the Industry requirements so that it can fulfil the present/future requirements of skilled manpower as per industry demands/requirements.

vi. Affordability for students:

Based on the t-value (t= 2.910, significant at .01 level) in the table, it may be inferred that there is a significant difference in the opinion of Teaching and Non-Teaching respondents on this variable, i.e., the opinion of both respondents is significantly different. The mean values in the case of Teaching and Non-Teaching respondents are 3.76 and 3.36 respectively. It indicates that opinion of the teaching respondents is more favourable to this variable as compared to Non-Teaching respondents.

vii. Ineffective monitoring:

The average opinion of Teaching and Non-Teaching respondents about 'Ineffective monitoring' variable comes to 3.80 and 3.48 respectively. The difference in mean values is significant as is evident from the t value in the Table (t = 2.294, significant at .05 level). Therefore, statistically, on an average the opinion of respondents of both the categories is not the same, the respondents belonging to teaching profession are more in agreement in their opinion towards ineffective monitoring in the higher education institutions as compared to the opinion of non-teaching respondents. As a matter of fact, ineffective monitoring is a major problem for achieving good ranking and high accreditation by the HEIs.

viii. Inequity issue:

The t value in the table indicates that there is a significant difference in the opinion of Teaching and Non-Teaching respondents (t=2.775, significant at .01 level). The mean value of this variable in the case of Teaching respondents is 3.69, whereas the mean value is 3.34 of Non-Teaching respondents. Therefore, the opinion of the teaching respondents is more in agreement towards this variable as compared to non-teaching respondents, however both type of respondents, on an average, agree that Inequity issue is one of the major hurdles before Indian HEIs to achieve good Ranking / high Accreditation, because opinion of both the respondents on an average are approaching the option 4 (Agree).

ix. Poor Government Funding:

The t value in the table indicates that there is a significant difference in the opinion of Teaching and Non-Teaching respondents (t=3.886, significant at .01 level) so far as this variable is concerned. The mean value in the case of Teaching respondents is 4.13, is more than the option 4 (Agree), whereas the mean value of this variable in the case of Non-Teaching respondents is 3.61, which is little less than the option 4 (Agree). It implies that Teaching respondents are more affirm that the Poor government funding is one of the major problems before HEIs, on the other hand Non-Teaching respondents also

confirms but not that strongly as Teaching respondents. It is pertinent to mention here that the funding agencies such as Department of Science and Technology (DST), Department of Biotechnology (DBT), University Grants Commission (UGC) etc. are not very liberal in providing funding to young Institutions, which have no or poor ranking/rating.

x. Lacking of Interdisciplinary Approach:

The mean value of 'Lacking of interdisciplinary approach' variable in the case of Teaching respondents is 4.00, and for Non-Teachings it is 3.69; also moving towards the option 4 (i.e., Agree). The t-value in the table indicates that there is a significant difference in the opinion of Teaching and Non-Teaching respondents (t=3.280, significant at .05 level). However, both respondents agree that the Lacking of interdisciplinary approach is one of the issues before HEIs.

xi. Inadequate and Poor Infrastructure:

The t-value in the table indicates that there is a significant difference in the opinion of Teaching and Non-Teaching respondents on this variable (t=2.177, significant at .01 level). The mean values show that the mean in case of Teaching respondents is 4.01, whereas in the case of Non-Teaching respondents it is 3.57, which is also approaching option 4 (Agree). It implies that the opinion of Teaching respondents is more in agreement that the Inadequate and poor infrastructure is one of the major problems/hurdles before HEIs to achieve good NIRF Ranking / high NAAC Accreditation. On the other hand, the mean value of Non-Teaching respondents is little less than the option 4 (Agree), therefore, their opinion is a little less in agreement. On an average, it may be concluded that both respondents agree that shortage or absence of infrastructure is one of the major problems in Indian HEIs.

The results of the analysis are presented in Table 5, given below:

Table – 5

Teaching and Non-Teaching Respondents' Opinion on Major Issues Before Indian HEIs

Dimension	**Teaching (N = 223)**		**Non-Teaching (N = 77)**		**t value**
	Mean	**SD**	**Mean**	**SD**	
Paucity of world class research and innovations	4.04	1.048	3.78	.982	1.883NS
Poor quality of teaching and learning due to unqualified or untrained faculty	3.84	1.110	3.65	1.121	1.317NS
Negligible interest in international competition and projection	3.82	1.008	3.58	1.018	1.735NS
Inadequate faculty	4.07	1.063	3.61	1.102	3.253**
Inappropriate/ obsolete /outdated curriculum	3.83	1.147	3.57	1.069	1.702NS
Affordability for students	3.76	1.049	3.36	0.999	2.910**
Ineffective monitoring	3.80	1.060	3.48	1.071	2.294*
Inequity issue	3.69	1.005	3.31	1.067	2.775**
Poor government funding	4.13	1.009	3.61	1.053	3.886**
Lacking of interdisciplinary approach	4.00	1.063	3.69	1.079	3.280**
Inadequate and poor infrastructure	4.01	1.002	3.57	1.069	2.177*

** Significant at .01 level * Significant at .05 level NS Not Significant
Source: Author's calculations based on primary data

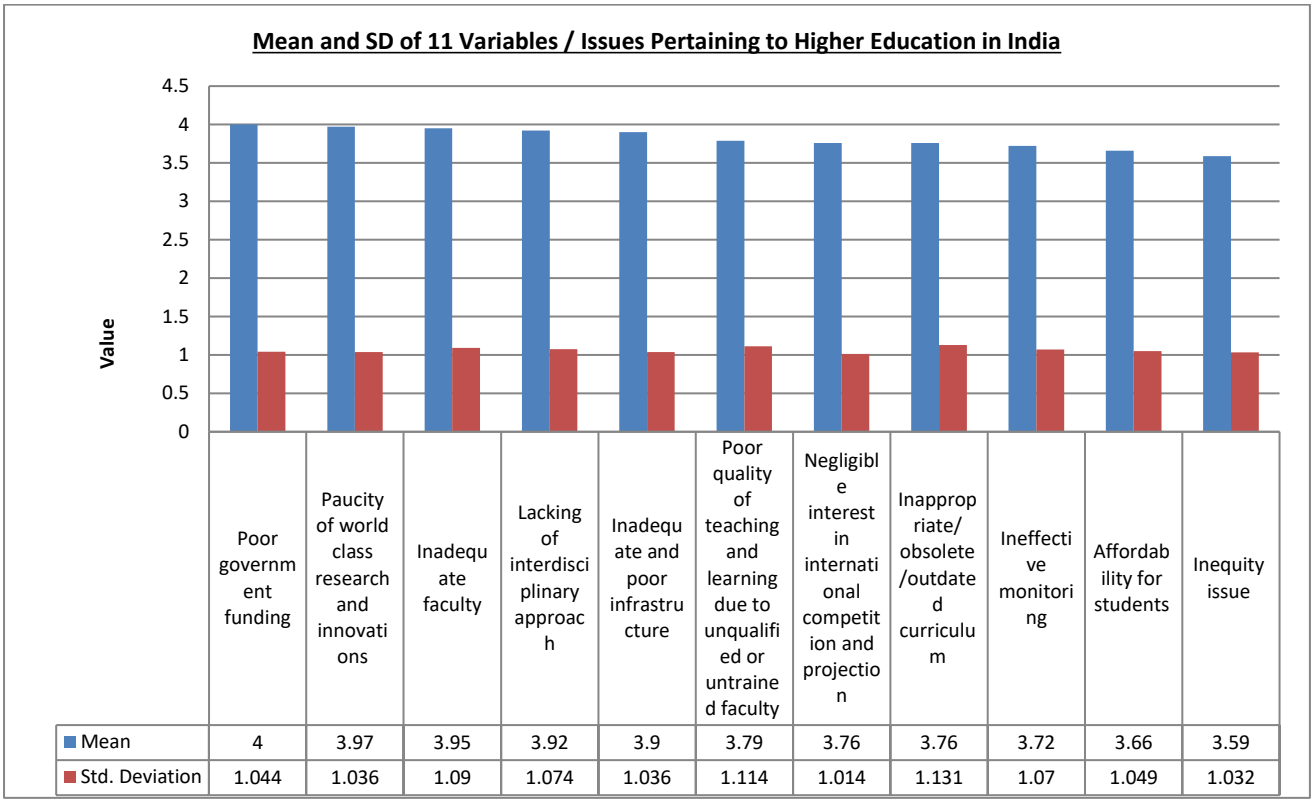
Mean and Standard Deviation of 11 Variables (Total Sample)

It is observed from the Table No. 6 that the mean value is the maximum in the case of Poor government funding (Mean = 4.00), followed by Paucity of world class research and innovations (Mean = 3.97) and Inadequate faculty. The mean value (Mean = 3.59) is lowest in the case of Inequity issue. The mean value is 3.66 in the case of Affordability for students.

Table – 6 Mean and Standard Deviation of 11 Variables (N = 300)

Variables	**Mean**	**Std. Deviation**
Paucity of world class research and innovations	3.97	1.036
Poor quality of teaching and learning due to unqualified or untrained faculty	3.79	1.114
Inadequate faculty	3.95	1.090
Inappropriate/ obsolete /outdated curriculum	3.76	1.131
Affordability for students	3.66	1.049
Ineffective monitoring	3.72	1.070
Inequity issue	3.59	1.032
Poor government funding	4.00	1.044
Lacking of interdisciplinary approach	3.92	1.074
Inadequate and poor infrastructure	3.90	1.036

The following bar chart showing the Mean and SD of 11 variables/ Issues Pertaining to Higher Education in India in descending order.



	Poor government funding	Paucity of world class research and innovations	Inadequate faculty	Lacking of interdisciplinary approach	Inadequate and poor infrastructure	Poor quality of teaching and learning due to unqualified or untrained faculty	Negligible interest in international competition and projection	Inappropriate/ obsolete /outdated curriculum	Ineffective monitoring	Affordability for students	Inequity issue
Mean	4	3.97	3.95	3.92	3.9	3.79	3.76	3.76	3.72	3.66	3.59
Std. Deviation	1.044	1.036	1.09	1.074	1.036	1.114	1.014	1.131	1.07	1.049	1.032

Figure 2: Mean and SD of 11 Variables/ Issues Pertaining to Higher Education in India

Limitations of the Study

The primary limitation was the small sample size. 2000 senior Academic Administrators / Sr. Managers / Faculty members / Scientists across India were requested to answer the questionnaire. This request was followed by four reminders in a gap of 15 days of each reminder. The researcher also made request to the concerned persons on the available telephone numbers for doing the needful. After awaiting three months, responses were received about 300 from renowned Academic Administrators /Sr. Managers/Faculty/ Scientists, representing a 15% response rate, from more than 172 Higher Education Institutions.

Testing of Hypothesis

The following hypothesis was prepared to assess the difference of Variables of major issues / challenges pertaining to higher education in India:

H1: There is no significant difference of major issues / variables pertaining to higher education in India between Teaching and Non-Teaching respondents.

The results of t-test in Table 5 of 11 major issues / variables pertaining to higher education in India indicate that there is a significant difference in the opinion of Teaching and Non-Teaching respondents on following 7 variables. Therefore, the above stated hypothesis is **not** accepted in the case of following 7 variables:

1) Inadequate faculty
2) Affordability for students
3) Ineffective monitoring
4) Inequity issue
5) Poor government funding
6) Lacking of interdisciplinary approach
7) Inadequate and poor infrastructure

The mean values of these 7 variables is more favourable towards teaching respondents. It means such respondents show more concern towards these 7 variables as compared to Non-Teaching respondents.

In case of the following 4 variables, no significant difference is found in the opinion of Teaching and Non-Teaching respondents as is evident from the t value in the table 5 i.e., t is not significant in the case of all these four variables.

1) Paucity of world class research and innovations
2) Poor quality of teaching and learning due to unqualified or untrained faculty
3) Negligible interest in international competition and projection
4) Inappropriate/ obsolete /outdated curriculum

Therefore, the above stated hypothesis is accepted for these 4 variables.

It may further be indicated that the mean values of these 4 variables are little more in the case of Teaching respondents, as compared to Non-Teaching respondents. Though there is a slight difference in the mean values of these 4 variables but the difference is not significant in any of these 4 variables between Teaching and Non-teaching respondent. This is evident from t values, in the Table 5, which are not significant.

General Findings

This study reveals that the ranking and accreditation systems are having significant impact on the performance outcomes of Indian Higher Education Institutions. The results of this study also indicates that there is a broad positive consensus towards all 11 issues/ challenges before Higher Education in India. However, the Teaching respondents have strong inclination towards following 5 issues/challenges while for other aspects they are mildly inclined towards agreement:

1) Poor government funding
2) Paucity of world class research and innovations
3) Inadequate faculty
4) Lacking of interdisciplinary approach
5) Inadequate and poor infrastructure

Research / Policy Implications

The present study has studied respondents from recognized HEIs who have been involved in academic administration. A similar study of other stake holders / respondents of HEIs such as students and parents, can be conducted to understand and compare their perspective with academic administrators about issues/challenges and ranking and accreditation systems. The outcome of study could also be compared to that in other countries to check the presence of ranking and Accreditation factors in other countries internationally, especially in the developing countries to find out the geographical influences. A similar study for respondents of recognized schools affiliated to different boards can also be conducted.

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