

Original Article

A Critical Study of the Importance of Academic Research in Higher Education in Reference to India

¹Mohammad Aslam Khan

¹Faculty of Management Studies, Jamia Millia Islamia, New Delhi, India

Received Date: 04 January 2023

Revised Date: 14 January 2023

Accepted Date: 24 January 2023

Abstract: Academic research is of great value and having acceptance in the field of higher education in India and it provides greater experience and learning curve to the academicians and researchers. It also provides valuable inputs into the methodologies & practices. This is ensuring the students and teachers to get more knowledge in all dimensions which assignments and exams cannot imbibe. The main objectives of this study are to obtain the recent challenges, scope and prospects in the filed academic research in reference of higher education in India. 250 standard questionnaires are distributed among the teachers to obtain their views and fulfillment of the objectives. Obtaining the worthy inferences from this study in reference to the learning capability, quality teaching and methods of teaching and designs of curriculum in the field of higher education. Results obtained from this study indicated that academic research helps in the growth & evolution of Indian higher education by increasing the job satisfaction levels of respected teachers with the adaption of advance teaching methodologies. It also excels the methods used in the respective institutions. It is also providing the assistance to the teachers to comprehend the competency of the students. It also provides better attentions to the students. These results are eminently used by the academicians by exploring the present domain of the research.

Keywords: Academic research, higher education, learning capabilities quality of teaching, teaching methodologies.

I. INTRODUCTION

The educational system of India is passing through exceptional transformation in the last decade. As one of the largest and is these changes are well governed by the changes of economic & demographic in nature. It is third largest economy due to growth of the middle class size. India may surpass China in the coming years as half of the population is under 25 years old. Higher education is based on three pillars on which government of India is also working i.e. equity, expansion and excellence. In the coming 5 years every feature of higher education is restructured & remodeled containing the major dimensions viz. “funding, leadership and management, quality assurance, accountability, relationships with industry, international collaboration and the way academic research in higher education is being conducted.”

The importance of academic research is of utmost value to the society and is benefitted from quality and ethical research and it should also support and defend it. Creation of new knowledge always helps the students and process of innovation gets strong and robust. Planning for the education requires basic research to excel in the concerned areas. Research should be embedded in the curriculum of the higher education in India. Knowledge becomes key factor in the economic excellence and societies using these may produce better growth and quality of the life aspects.

Economic growth has involved three things viz. division of labor, accumulation of capital and innovation based on technologies. This type of innovation is fundamental in nature which is self-perpetuating and regularly pushing the economic growth of the nation. Economic progress slows down due non availability of research in the concerned filed. Need of scientific research is very important for the support of R & D of nation. Academic researches done by the universities excel the base of the technology of the nation at a particular time.

Research may be defined as a process of systematic enquiries that includes collection of data along with documentation of important and critical information. After that we use scientific procedures and principles to analyze and understand the available data or information. With the passage of time we assess the validity of the concerned hypotheses and gather the quality of knowledge and findings and with due process it is shared among the stakeholders.

IMPORTANCE OF RESEARCH IN HIGHER EDUCATION

Three dimensions are required for the uprising in higher education viz. massification, diversification and research.

A. Massification:

It is defined as increased admission worldwide in the higher education for the masses. Divergence of higher education is

very much important and it is not needful to become universities. Massification must be of greater diversity of the admitted students. It is taking more time to finish the research work due to Massification. It led to very minimum level of education quality in the concerned country. Higher education institutions are facing challenges like financial, faculty and diversity of students.

B. Diversification:

In view of the future needs of the society and humanity all activities should be done and it should be taught in the higher education seeking the new knowledge.

C. Research:

Newer knowledge should be achieved to sustain all the development activities of the society.

Quality of teaching and research depends on the quality of students and respective teaching faculties. Faculties should impart broad knowledge of their subjects and inculcate thoughts to generate desire and enthusiasm about the course of their concern study. Faculties must have desire to learn from students to improve their teaching and research work. Only few universities have faculties of high standards and on estimate 40% of teaching staff is working on non-permanent basis. It is pressure on the faculties to publish research papers to get their respective promotions in the journals of low quality. Quality of education matters most by the intake of levels of students admitted in the graduate and higher secondary levels. Government must ensure the quality of schools present to cater the need of research and development. China has topped in article publication in the category of science and engineering category. USA got second and India achieved third position in the same category. In last ten years 31% publications have been increased in the all categories. The output of the global research based on publication of research paper and conference grew about 4% annually over the last decade.

II. REVIEW OF LITERATURE

Author Hebe Vessuri in his research paper **“The role of research in higher education: implications and challenges for an active future contribution to human and social development”** opined that human is facing three main challenges in the 21st century viz. freedom from fear, want and sustenance of life on the planet earth. The prospect of innovation, science and technology will decide the solution of these problems and solve them very successfully. Positive and negative forces are important for the development and making future trends in the positive direction. Science, Technology and innovation are associated in complex ways to the current development of resources. They are making remedies of environmental problems. Efforts are required to get the research benefit for the sustainability of R & D system. Research benefits may be used for the other purposes when required. Society may benefit of the scientific research for the attainment of their goals. Roles are same which are basic in nature but need & nature may complex and heterogeneous and keep on changing dramatically.

Author P. Agarwal in his research paper titled “Higher Education in India: The need for change” concluded that the pattern of changing funds and adaptability in the higher educational institution are the need of the hour as it provides more skills and trained workforce for the concerned economy and ultimately connects with economy of the words as well. He pointed out that policy procedures in higher education are essential to promote, sustain, & improve world-class research. For the proper reforms in the higher education section a good roadmap is necessary to put accountability and remove all the weaknesses in the phase manner in the prevailing system. As far as India is concerned many problems are interconnected in the higher education system. Due to deficiency in the system of higher education, graduates are still unemployable and there is shortage of skilled manpower and different sectors are made for the jobs. In India academic research is keep on declining and low and some of the problems faced are as “the unwieldy affiliating system, inflexible academic structure, uneven capacity across various subjects, eroding autonomy of academic institutions, and the low level of public funding are well known.” Higher education is influenced by the inclusion of academic research in India. 68% of respondents believed that due to quality of research work teachers may include new policies according to their students’ needs and requirements. 69% of respondents accepted that academic research helped the teachers to follow new lessons. 23% of respondents had expressed that academic research enabled students to think on with themselves. 66% of respondents felt that research could be helpful with the use of new way of teachings with the use of pedagogical methods. 53% of respondents agreed that researches could use teamwork to set the goals. 68% of respondents could gain more information with the use of these research based on academic. 67% of respondents believed that research work ensured the support of central universities to accelerate the educational system. All these results ensured that academic research can be beneficial for the higher education.

Author S. Batra in his research paper titled “The psychosocial development of children: implications for education and society—Erik Erikson in context” concluded that while carrying out research in academic in the higher studies it is fundamental need to have environment of research of prevalence in nature and close to the institution of higher studies. The management of these institutions must be efficient and effective. Performance of research has three dimensions viz. Research projects, Research publications and Research guidance. Research Publication is generated with the help of

research projects and guidance. Now a day's research is based on just to generate graduates rather than providing effective research. It is based on the short term benefits than generating research. This all have decreased the quality of the academic research in the area of higher education. Author focused on the vital need to work on the academic research to improve the quality of the teachers and professionals. Results of analysis found that 52% of respondents believed that academic research in the field of higher education will improve the techniques of innovation based on the modern demands. It will ultimately improve the teaching methods and quality of the professionals. 68% of respondents believed that output of the research work, the teachers could adjust to the well-defined policies as per the single needs of their students. About 69% of respondents believed that the research helped the teachers to study new lessons. 67% of the respondents had approved that the research may be beneficial to find out different ways through which the teachers may gain more information related to the concerned study. 53% of the respondents confirmed that the academic researchers introduced teamwork for the teachers for the goal setting to improve the quality of the teaching. It is, therefore, concluded that academic research in higher education aids in improving the teaching quality of the professionals.

Author V. Varghese in his research paper titled “Challenges of Massification of Higher Education in India” proposed that academic research have full ability to improve or accelerate the status of higher education in India by producing a huge number of educated & agile workforces for the adaption and use of their knowledge to meet the new challenges of the developing economy. 52% of respondents told that academic research favored the understanding of the subjects to teach the students by the teachers. 51% of the respondents believed that academic research had identified the students who are lacking and need special attention of the teachers. 54% of the respondents had believed that using the research new rules and policies are required to enact in the concerned colleges and schools for the betterment of the education standards. India is regularly and continuously producing knowledge workforce but this should be at par for more workers so that educational system will be more demand driven based on quality consciousness ad forward looking for the goals to be achieved like retaining the quality people and challenges of the emerging economies.

Author V. Arya in his research paper titled “Higher education, high-impact research, and world university rankings: A case of India and comparison with China” found that there is massive demand found in the higher education in India and attracted significant investments from the private players as philanthropy & individual fees. As per requirements, much more funds are required depending upon priorities. Seeing the unforeseen future, more and more funds are need of the time as expenditures are exceeding the limits. More planning is expected from all concerned.

Author N.K. Soni in his research paper “Quality Teaching & Higher Education in India” stated that the existing framework is providing the harsh constraints for the supply of goods of institutions, regulations of institutions and having barriers of innovations and creativity in the field of higher education especially in the case of India. 69% of respondents agreed that a teacher has unique responsibility to have good citizen who are active also. Their ideological route may have responsibility which will restrict their choices. 65% of respondents believed that using new theories there is risk of outdated and not looking forward for the growth. 60% of respondents believed that new theories are not to be prepared in isolation but have to be tested and adjusted as per existing environment. 54% of respondents are feeling difficulties in learning due to not having abundant research in the concerned fields.

III. RESEARCH OBJECTIVES

The basic aim of this research paper is to extract & investigate the idea of potential involvement of academic research in the field of higher education. This is highlighting the prospects & challenges that are going to inform the academic research in higher education in the Indian reference.

- To examine the effects of academic research in the field of higher education.
- To discover the recent scope & potential of academic research in the field of higher education in India.
- To study the limitations & challenges that pervades the field of academic research in higher education in India.
- To appraise the step of evolution & growth in higher education causing from academic research.

IV. MATERIALS AND METHODS

A. Research methodology:

This research study has followed positive philosophy which had incorporated quantitative based approach. This approach is to identify the impact of research on the quality of teaching & student learning. A questionnaire is distributed through email and face to face to 250 teachers in the Delhi covering various colleges and universities. 100 were selected after scrutiny and found fit for the application of using 5 point Likert Scale survey method. SPSS software was used for the descriptive statistics & one sample test.

B. Hypotheses:

Hypothesis 1:

H10: Academic research in higher education does not advance teaching quality of the professionals.

H1A: Academic research in higher education advances teaching quality of the professionals.

Table 1. One-sample test for hypothesis # 1

Opinions/Views on using Academic research to improve the teaching quality in higher education	Test Value 3					
					Confidence Interval(95%) of the Difference	
	T value	D.F.	Sig.(2-tailed)	Mean Difference	Lower	Upper
	19.001	101	.000	.81124	.7121	.8123

The T value is 19.001 & resultant value of p is 0.000 which is than 0.05, so it can be concluded that Academic research in higher education increases teaching quality of the professionals. Henceforth accepted the alternate hypothesis & rejected the null hypothesis.

Hypothesis 2:

H20: Academic research does not ease advanced teaching methods in higher education.

H2A: Academic research eases advanced teaching methods in higher education.

Table 2. One-sample test for hypothesis #2

Preeminent practices of confirming quality teaching in higher educational institutes	Test Value 3					
					Confidence Interval(95%) of the Difference	
	T	D.F.	Sig. (2-tailed)	Mean Difference	Lower	Upper
	21.010	101	.000	.85231	.7420	.9123

The T value is 21.010 & resultant value of p is 0.000 which is than 0.05, so it can be concluded that Academic research is facilitating advanced teaching methods in higher education. So accepted the alternate hypothesis & reject the null hypothesis.

Hypothesis 3:

H30: Academic research does not help in choosing the professional teachers for higher education.

H3A: Academic research helps in choosing the professional teachers for higher education.

Table 3. One-sample test for hypothesis #3

Experience on the benefits of performing research in education education	Test Value 3					
					Confidence Interval(95%) of the Difference	
	T	D.F.	Sig. (2-tailed)	Mean Difference	Lower	Upper
	19.312	101	.000	.71528	.6678	.8348

The T value is 19.312 & resultant value of p is 0.000 which is than 0.05, it can be concluded that Academic research benefits in choosing the professional teachers for higher education. So accepted the alternate hypothesis & reject the null hypothesis.

Hypothesis 4:

H40: Academic research does not create an influence on the course designs of the higher education. H4A: Academic research creates an influence on the course designs of the higher education.

Table 4. One-sample test for hypothesis #4

Different types of educational researches that are required in higher education of India	Test Value 3					
					Confidence Interval(95%) of the Difference	
	T	D.F.	Sig. (2-tailed)	Mean Difference	Lower	Upper
	20.752	101	.000	.78631	.7543	.8630

The T value is 20.752 & resultant value of p is 0.000 which is than 0.05, it can be concluded that Academic research makes an impact on the course designs of the higher education. So accepted the alternate hypothesis & reject the null hypothesis.

Hypothesis 5

H50: Academic research does not impact the students to learn better by intending deep into the specific subject.

H5A: Academic research impacts the students to learn better by intending deep into the specific subject.

Table 5. One-sample test for hypothesis 5

The challenges encountered in research education	Test Value 3					
					Confidence Interval(95%) of the Difference	
	T	D.F.	Sig. (2-tailed)	Mean Difference	Lower	Upper
	23.656	101	.000	.89873	.8529	.9146

The T value is 23.656 & resultant value of p is 0.000 which is than 0.05, it can be concluded that Academic research influenced the students to learn better by concentrating profound into the particular subject. So accepted the alternate hypothesis & reject the null hypothesis.

V. CONCLUSION

This section entirely and elaborately shows the result of the study to focus the impact of academic research on the higher education. This study also explores the recent potential and scope of academic research in the existing domain. Further, this study had used 05 hypotheses to conduct the quantitative analysis using the SPSS software on 100 questionnaire found fitted on the 5 point Likert scale. After going through this study on the concerned topic, it was found that India is lacking in academic research due to following reasons:

- Poor or Insufficient Infrastructure.
- Inadequate collaboration between Academic and Industrial for society need-based research
- Less than adequate funding for research; necessary for innovation-driven society
- Intake of poor quality students in higher education
- Lack of quality faculties
- Insufficient support of government to education up to higher secondary level

Steps taken:

1. "The government may do the job of catalysis of education up to higher secondary level using various means by creating new schools and increasing competition among the private schools."
2. "The examinations should be more on knowledge-driven and should be based on continuous evaluation with a focus to impart learning of fundamentals and increasing analytical abilities of a child."
3. "At the higher education level, the improvement of infrastructure, quality faculty members, improved quality student's intake, and connecting the society and its need for higher education. This will not only provide sustained development but also increase the sensitivity of the students towards society."
4. "The subjects such as industrial mathematics, machine learning, and computing-based learning at early stages may help the child to develop their reasoning ability essentially required to pursue higher education."
5. The government may do the job of catalysis of education up to higher secondary level using various means by creating new schools and increasing competition among the private schools."
6. "The examinations should be more on knowledge-driven and should be based on continuous evaluation with a focus to impart learning of fundamentals and increasing analytical abilities of a child."

7. "At the higher education level, the improvement of infrastructure, quality faculty members, improved quality student's intake, and connecting the society and its need for higher education. This will not only provide sustained development but also increase the sensitivity of the students towards society."
8. "The subjects such as industrial mathematics, machine learning, and computing-based learning at early stages may help the child to develop their reasoning ability essentially required to pursue higher education."

VI. LIMITATION AND FUTURE RESEARCH

Time and money was main constraint in following the research work in this concerned field since the scope is very wide and far reaching in the Indian education system. More areas may be taken into this study for the generalization the study.

VII. REFERENCES

A. Journal Article

- [1] V. Prakash, "Trends in Growth and Financing of Higher Education in India," Economic and Political Weekly, vol. 42, no. 31, 2007.
- [2] D. C. Levy, "Access through Private Higher Education: Global Patterns and Indian Illustrations," The Program for Research on Private Higher Education, no.11, 2008.
- [3] G. Prathap, "The performance of research-intensive higher educational institutions in India," Current science, vol. 107, no. 3, pp. [389-396], 2014.
- [4] P. Agarwal, "Higher Education in India: The need for change," Indian Council for Research on International Economic Relations, no. 180, 2006.
- [5] M. Minch, "Higher Education and Research in India," International Journal of Social Science & Interdisciplinary Research, vol. 2, no. 3, 2013.
- [6] N. Weiler, "International research on higher education: Of scope, focus, and boundaries", Zeitschrift für Erziehungswissenschaft, Vol. 11, no. 4, 2008, pp. [516-541].
- [7] Agarwal, P., "Indian higher education: Envisioning the future", Sage Publications India, 2009.
- [8] Batra, S. "The psychosocial development of children: implications for education and society—Erik Erikson in context". Contemporary education dialogue, vol. 10, no. 2, pp. [249-278], 2013.
- [9] C. Deka, "Predictive analytics in a higher education context," IT Professional, Vol. 17, no.4, pp. [24-33], 2010.
- [10] Varghese, V, "Challenges of Massification of Higher Education in India", Centre for Policy Research in Higher Education, vol. 40, no. 2, 2015.
- [11] V. Arya, "Higher education, high-impact research, and world university rankings: A case of India and comparison with China" Elsevier Ltd. Vol. 2. No. 1, pp. 1-21, 2016.
- [12] Soni, N.K. "Quality Teaching & Higher Education in India". International Journal of Scientific and Research Publications, Vol. 4, no. 1, 2014.

B. Books

- [13] R. Craig, Author, College Disrupted: The Great Unbundling of Higher Education, St. Martin's Press, New York, 2015.
- [14] A. Gupta, K. B. Powar and D. Levy, Private Higher Education-Global Trends and Indian Perspectives, Shipra Publication, Delhi, 2008.
- [15] M. W. Krist and M. L. Stevens, Remaking College: The Changing Ecology of Higher Education, Stanford University Press, California, 2015.

C. Report

- [16] Yashpal, "A Report of the Committee to Advice on Renovation and Rejuvenation of Higher Education in India", 2009.

D. Online News and Articles

- [17] National Knowledge Commission, "The Third Umpire by A Gnanam- University News", Dec.2, 2007.
- [18] P. G. Altbach, "Higher Education in India," The Hindu, April 12, 2005.
- [19] NEA's Code of Ethics for the Education Profession, NEA Handbook [2010 issue, p. 435]. Zemsky, Robert. Checklist for Change: Making American Higher Education a Sustainable Enterprise. Rutgers University Press, August 20, 2013.
- [20] S. Jaschik, "Commodification of Academic Research," University of Pittsburgh Press, 2010.