

# **FACTORS AFFECTING HIGHER EDUCATION DEMAND IN INDIA**

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# **FACTORS AFFECTING HIGHER EDUCATION DEMAND IN INDIA**

by

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## **CERTIFICATE**

This is to certify that the thesis entitled “**Factors affecting higher education demand in India**” being submitted by Shri **Jan e Alam**, to the Indian Institute of Technology Delhi for the award of the degree of **Doctor of Philosophy**, is a record of bona fide original research work carried out by him. Shri Alam worked under my guidance and supervision. He has fulfilled the requirements for the submission of the thesis, which has attained standard requirement for a PhD degree of the Institute. The results presented in this thesis have not been submitted elsewhere for the award of any degree or diploma.

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## **Abstract**

Indian higher education system is one of the largest and most complex systems in the world. The growth in HE demand has constantly outstripped population growth at the national level. This growth in demand is influenced by multifarious factors. Rapid expansion of the HE system has brought into salience many issues that have a bearing on HE demand in the country. Literature indicates that several studies have been conducted on specific areas related to HE demand and management, but least explored from the national education management perspective in the context of India. This study attempts to discuss various factors and their interrelationships impacting demand for HE in India. The present study also explores the impact of privatization as a moderating factor affecting HE demand, between these factors and HE demand. To explore their significant causal linkages and interrelationships of the factors with higher education demand and privatization as the moderating factor, the analytical presentation of modified Total Interpretive Structural Modelling (TISM) has been deployed. Based on the TISM study, a survey of 232 respondents consisting of students, academicians, education experts and administrators has been conducted and analysed. The results have been further validated by the Structural Equation Modelling (SEM). A comparative study of two HEIs i.e., one public and one private university has also been conducted based on NIRF data for further insights into HE managements in Public and Private sectors.

## सार

भारतीय उच्च शिक्षा प्रणाली विश्व में सबसे बड़ी और सबसे जटिल प्रणालियों में से एक है। राष्ट्रीय स्तर पर उच्च शिक्षा की मांग जनसंख्या वृद्धि से भी तेजी से बढ़ रही है। इस मांग की वृद्धि को कई प्रकार के कारकों से प्रभावित किया जा रहा है। उच्च शिक्षा प्रणाली के तेजी से विस्तार ने उन कई महत्वपूर्ण मुद्दों को सामने लाया है जो देश में उच्च शिक्षा की मांग पर प्रभाव डालते हैं। साहित्य इसका सुझाव देता है कि उच्च शिक्षा की मांग और प्रबंधन से संबंधित कई क्षेत्रों पर कई अध्ययन किए गए हैं, लेकिन भारत के संदर्भ में राष्ट्रीय शिक्षा प्रबंधन की दृष्टि से इस पर कम ध्यान दिया गया है। यह अध्ययन भारत में उच्च शिक्षा की मांग पर प्रभाव डालने वाले विभिन्न कारकों और उनके आपसी संबंधों पर चर्चा करने का प्रयास करता है। वर्तमान अध्ययन यह भी जांचता है कि उच्च शिक्षा की मांग पर प्रभाव डालने वाले इन कारकों और उच्च शिक्षा की मांग के बीच एक मध्यस्थ कारक के रूप में निजीकरण का प्रभाव क्या है। इन कारकों और उच्च शिक्षा की मांग के साथ उनके महत्वपूर्ण कारणीय संबंधों और इनके आपसी संबंधों की जाँच के लिए संशोधित कुल व्याख्यात्मक संरचना मॉडलिंग (TISM) का विश्लेषण किया गया है। TISM अध्ययन के आधार पर, छात्र, शिक्षाविद, शिक्षा विशेषज्ञ, और प्रशासकों से मिलकर बनी 232 उत्तरदाताओं का सर्वेक्षण किया गया है और विश्लेषण किया गया है। परिणामों को संरचनात्मक समीकरण मॉडलिंग (SEM) द्वारा भी पुनः पुष्टि किया गया है। NIRF डेटा के आधार पर दो उच्च शिक्षा संस्थानों, एक सार्वजनिक और एक निजी विश्वविद्यालय का तुलनात्मक अध्ययन भी किया गया है, जिससे सार्वजनिक और निजी क्षेत्रों में उच्च शिक्षा प्रबंधन में और अधिक ज्ञान मिला है।

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## **List of Abbreviations**

ABC	Academic Bank of Credit.
AICTE	All India Council for Technical Education.
AISHE	All India Survey of Higher Education.
AMOS	Analysis of Moment Structures.
ANOVA	Analysis of Variance.
ARIIA	Atal Ranking of Institutions and Innovation Achievements.
ARWU	Academic Ranking of World Universities.
CBI	Confederation of British Industry.
CFA	Confirmatory Factor Analysis.
CFI	Comparative Fit Index.
CGPA	Cumulative Grade Point Average.
DCI	Dental Council of India.
ECCE	Early Childhood Care and Education.
EFA	Exploratory Factor Analysis.
FLN	Foundational Literacy and Numeracy.
GDP	Gross Domestic Product.
GER	Gross Enrolment Ratio.
GO	Graduation Outcome.
GoI	Government of India.
GOF	Goodness-of-fit.
HCT	Human Capital Theory.
HE	Higher Education.
HECI	Higher Education Commission of India.
HEIs	Higher Education Institutions.
IBM	International Business Machine.
IHEJ	International Higher Education Journal.
IIT	Indian Institute of Technology.
IMF	International Monetary Fund.
IRT	Item Response Theory.
JSTOR	Journal Storage.
MCI	Medical Council of India.
MHRD	Ministry of Human Resources Development.

MICMAC	Cross-Impact Matrix Multiplication Applied to Classification.
MoE	Ministry of Education.
Modified TISM	Modified Total Interpretive Structural Modelling.
NAAC	National Assessment and Accreditation Council.
NCF	National Curriculum Framework.
NCI	Nursing Council of India.
NCTE	National Council for Teacher Education.
NEP	New Education Policy.
NET	National Eligibility Test.
NIRF	National Institutional Ranking Framework.
OI	Outreach and Inclusivity.
OVR	Orthogonal Varimax Rotation.
PCA	Principal Component Analysis.
PCI	Pharmacy Council of India.
PG	Post Graduate.
PhD	Doctor of Philosophy.
PP	Peer Perception.
QS	Quacquarelli Symonds ranking.
RMSA	Rastriya Madhyamic Shiksha Abhiyan.
RMSEA	Root Mean Square Error Assessment.
PR	Research and Professional practice.
RTE	Right to Education Act.
SEM	Structural Equation Modelling.
SERVQUAL	Service Quality.
SMA	Science Mapping Analysis.
SPSS	Statistical Package for Social Sciences.
SSA	Sarva Shiksha Abhiyan.
SRMR	Standardized Root Mean Square Residual.
STEM	Science Technology Engineering and Mathematics.
THE	UK based Times Higher Education.
TISM	Total Interpretative Structural Modelling.
TLI	Tucker-Lewis Index.
TLR	Teaching, Learning, and Resources.
UDISE	Unified District Information System of Education.

UGC	University Grants Commission.
UN	United Nations.
UNESCO	United Nations Educational, Scientific and Cultural Organizations.
UK	United Kingdom.
US	United States.
USA	United States of America.
VIF	Variance Inflation Factor.
VoS	Visualization of Similarities.
WAS	World Academic System.
WB	World Bank.
WoS	Web of Science.