

**PRIVATE TUTORING PARTICIPATION AND IMPLICATIONS IN INDIA: AN
ECONOMIC ANALYSIS**

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**DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES
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ECONOMIC ANALYSIS**

By

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DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES

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THESIS CERTIFICATE

This is to certify that the thesis titled **Private Tutoring Participation and Implications in India: An Economic Analysis**, submitted by **Parul Gupta**, to the Indian Institute of Technology, Delhi, for the award of the degree of **PhD**, is a bona fide record of the research work done by her under our supervision. The contents of this thesis, in full or in parts, have not been submitted to any other Institute or University for the award of any degree or diploma.



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A handwritten signature in black ink, appearing to read 'upte', written over a horizontal line.

ABSTRACT

KEYWORDS: private tutoring ; learning outcomes; gender bias; education; hurdle model; instrumental variable estimation.

Private tutoring is prevalent across the globe, and widely used especially in South Asia as a tool to enhance academic performance and gain a competitive edge. We explore the phenomenon of private tutoring using theoretical and empirical techniques. Our theoretical model suggests the presence of gender gaps in tutoring participation at the household level. The theoretical predictions are tested empirically using a recent, large-scale nationally representative dataset from rural India. Using a hurdle model specification, we find that several socio-economic predictors at the household, child, community and school level are correlated with tuition demand. Notably, we find that, one, gender gaps and income disparities exist in tutoring participation, and, two, school quality and tutoring demand have a negative association. We further investigate whether tutoring improves fundamental skills in reading and arithmetic in school-going students. We use instrumental variables estimation to remedy the potential endogeneity problem, and report a positive association between tuition spending and learning outcomes. Our research contributes to the literature by using richer data (school characteristics) and improved methodology (instrumental variable approach) to arrive at the results. The findings have several policy implications: first, tutoring can be leveraged as a useful tool to improve learning outcomes; second, improvement in school quality with a focus of pedagogy and curriculum could reduce the dependence on tutoring; and third, unencumbered growth of tutoring can have equity implications for educational access and quality for the disadvantaged groups, including girls and financially challenged students.

सार

निजी शिक्षण दुनिया भर में प्रचलित है, और विशेष रूप से दक्षिण एशिया में अकादमिक प्रदर्शन को बढ़ाने और प्रतिस्पर्धा में बढ़त हासिल करने के लिए व्यापक रूप से उपयोग किया जाता है। हम सैद्धांतिक और प्रयोगसिद्ध तकनीकों का उपयोग करके निजी शिक्षण की जांच करते हैं। हमारा सैद्धांतिक मॉडल घर में शिक्षण भागीदारी में लिंग अंतर की उपस्थिति का सुझाव देता है। हमारे सैद्धांतिक मॉडल के निष्कर्ष को सत्यापित करने के लिए हम असर डेटासेट का प्रयोग करते हैं। हर्डल् (hurdle) मॉडल की मदद से, हम पाते हैं कि परिवार, छात्र, समुदाय और स्कूल स्तर पर कई सामाजिक-आर्थिक कारक ट्यूशन मांग को निर्धारित करते हैं। विशेष रूप से, हम पाते हैं कि, एक, निजी शिक्षण मांग में लिंग और आय आधारित असमानताएं मौजूद हैं, और, दो, स्कूल की गुणवत्ता और निजी शिक्षण की मांग में है एक नकारात्मक सह – संबंध है। थीसिस में हम आगे जांच करते हैं कि क्या ट्यूटरिंग से स्कूल जाने वाले छात्रों में पढ़ने की दक्षता और अंकगणित प्रवीणता में सुधार होता है। हम इन्स्ट्रुमेन्टल् वरिअबल् (instrumental variable) विधि का उपयोग करते हैं। हमारे निष्कर्षों के अनुसार निजी शिक्षण और पढ़ने/अंकगणित की दक्षता में सकारात्मक संबंध है। इन निष्कर्षों के कई नीतिगत निहितार्थ हैं: पहला, शैक्षिक उपलब्धि में सुधार के लिए ट्यूटरिंग एक उपयोगी उपकरण के रूप में उपयोग किया जा सकता है; दूसरा, स्कूल गुणवत्ता में सुधार निजी शिक्षण पर निर्भरता को कम कर सकता है; और तीसरा, ट्यूटरिंग की तीव्र वृद्धि का सामाजिक समता पर प्रभाव पड़ सकता है, विशेष रूप से लड़कियों और आर्थिक रूप से जरूरतमंद लोगों के लिए।

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