

GENDER DISPARITY IN ACCESS TO PRIVATE TUITION: A CASE OF HAILAKANDI DISTRICT OF SOUTHERN ASSAM

Abdul Basith Laskar

Abstract

Private tuition is considered a necessary evil in today's world, irrespective of developed and developing countries. It has increased to a large extent over the last two decades and now pervades all the socioeconomic strata of both developing and developed nations of the world, and India is not an exception. It is reported that more than 24 percent students receive paid tuition classes for the age group of 6-14 in rural India. The figure is much higher in urban areas. But the increasing trend of private tuition may not be impartially enjoyed by boys and girls. There are evidences which show that most household level utility is partially concentrated towards boys. Thus, it is necessary to examine if girls share the same fate as of boys in respect of access to private tuition. However, very limited research work has been conducted to address this issue in India in general and Hailakandi district in particular. Given this backdrop, the present paper makes an attempt to understand the gender disparity in access to private tuition in Hailakandi district of southern Assam. The study is based on primary data collected from field survey during January, 2016. The study reveals that gender disparity in private tuition prevails at higher secondary level only other than secondary and undergraduate level.

Keywords: Educational Economics, Private Tutoring, Sampling Interval & Standard

I. INTRODUCTION

PRIVATE tuition is considered as a necessary evil in today's world, irrespective of developed and developing countries. It has increased to a large extent over the last two decades and now pervades all the socioeconomic strata of both developing and developed nations of the world. It is reported that the prevalence of shadow education¹ is higher than 50 percent in a large number of countries from different sub-continent of the

world [1]. With the prevalence of large extent of shadow education all over the world, it may be surprising to students, families and policy makers when the cost of shadow education is associated with it. It is estimated that for all levels of schooling the world will spend over 100 billion² US dollars (USD) each year on shadow education by 2018. The spread of private tuition is also very much visualized in India. According to the survey of Annual Status of Education Report (ASER) 2014, it has been reported that 24.1 percent students receive paid tuition classes for the age group of 6-14 children in rural India with highest being found in West Bengal (73.9 percent) followed by Tripura (65.8 percent) and lowest is found in Chhattisgarh (2.8 percent) followed by Mizoram (3.7 percent). Speaking in terms of expenditure, the report demonstrates that the average tuition expenditure per month is Rs. 169/- in rural India. More specifically, it is found that states like Jammu and Kashmir (Rs.367) followed by Sikkim (Rs.360), Manipur (Rs.345) and Assam (Rs.315) incurred higher amount of expenditure and states like Tamil Nadu (Rs.82) followed by Karnataka (Rs.121) and Jharkhand (Rs.131) incurred lower amount expenditures for the age group of 6-14 children in rural areas in terms of private tuition. However, scholars have shown divergent opinion regarding the impact of private tuition on academic performance. One school of thought believes that if additional specialized coaching is given, students are expected to perform better than their counterparts who do not receive private tutoring [2], [3]. Reference [3] in his study, for instance, found that private tutoring improved students' academic performance. The result demonstrates that higher spending on private tutoring increases the probability that the student accomplishes the good and excellent

Abdul Basith Laskar, Research Scholar, Department of Economics, Assam University, Silchar, India (Corresponding author, phone: +919706638385; e-mail: abdulbasith510@gmail.com).

¹ Shadow education here refers to the fee based tutoring that is provided outside mainstream schooling (Bray, 1999).

² Retrieved from <http://www.forbes.com/sites/jamesmarshallcrotty> accessed on 10/30/10/2012.

academic ranking. It increases the probability of achieving a good and excellent academic ranking by 0.04 and 0.06 respectively at the primary and lower secondary school level.

On the other hand, there are scholars who believe that a mere increase in private tutors may not necessarily improve the academic performance rather it may hamper performance. They are of the opinion that increase in the number of private tutors may lead to increase extra pressure on students' tiredness, unnecessary wastage of time and loss of innovative skills [4], [5]. More specifically, reference [4] in his study demonstrates that children who attend both mainstream and supplementary classes are placed under considerable pressure. It is argued that students sometimes rush to tuition classes without sufficient meal or recreation, and after these tutoring classes they return home so late and tired that they are denied the free time needed to explore their own personal interests. While private tutors are important for improving academic performance of the students due to poor quality of education in mainstream schooling, lack of proper monitoring, parents' attitudes towards the flexibility of private tutors etc., but too much of this brings boredom to students and thus contrary to people's general perception, having private tutors may lead to an overall decline in their academic performance.

II. PREVIOUS STUDIES ON PRIVATE TUITION: AN OVERVIEW

The growing importance of the private tutoring industry is being noticed in many countries of the world [6]. Students in East Asia, especially Japan, Taiwan, and South Korea, are heavily involved in various kinds of private tutoring. However, the phenomenon is not limited to Asia. For example, the private tutoring sector in France is estimated to be growing annually at about 10 percent [7]. In the U.S., spending on tutoring is growing at more than 5 percent, and tutoring rates have surged among the parents who want their children to qualify for gifted programs or be admitted to top public schools. South Korea has the largest system of private tutoring in the world [7]. In 2011, approximately 72 percent of Korean students received tutoring for an average of 7 hours per week. In Indian context, a study examines the nature, extent and trends of private tutoring particularly in secondary school education [8]. The data with regard to private tuition was collected from a random sample of 4,031 students studying in Grade IX–X in 49 schools from Thiruvananthapuram, Pune, Nalgonda and Varanasi districts in four states:

Kerala, Maharashtra, Andhra Pradesh, and Uttar Pradesh respectively. Out of the total number of students covered in the study (4,031), around 45 percent students were seeking private tutoring for one or more subjects at secondary level (Grade IX–X). The extent of private tuition varies among four sampled states, ranging from 55 percent to 32.26 percent. Out of four sampled states, Kerala, an educationally progressive state, has the highest percentage of students going for private tuition at secondary level (55 percent), followed by Maharashtra (49.35 percent), which is both industrially and educationally developed. In Andhra Pradesh, the percentage of students taking private tuition is the lowest (32.26 percent), while Uttar Pradesh (46.67 percent) has been just behind Maharashtra.

The extent of private tutoring is significantly higher in Grade X compared to Grade IX. The average percentage of students seeking private tuition is 58.8 percent as against 32 percent in Grade IX. Since the results of public examination in Grade X determine admission into higher secondary as well as choice of subjects and streams, a higher percentage of students in Grade X obviously prefer to go for private tutoring compared to Grade IX. However, this limits the analysis on secondary analysis only without identifying any causal relationship. Keeping this in mind, another study in regional context has been conducted to identify the relationship between private tuition and academic performance [9]. But the study also suffers from the following limitations: *firstly*, it is based on the students of competitive examination who sit in that examination barring different socio-economic characteristics of the household for a student which may not be representative and may produce biased result. *Secondly*, it considers only secondary and higher secondary students and does not include under graduate level students. Thus, it is evident that the prevalence of private tuition is more in India and the figure is much higher in urban areas. But increasing trend of private tuition may not be impartially enjoyed by boys and girls. Historically it has been observed that most household level utility is partially concentrated towards boys. Thus, it is necessary to examine if girls share the same fate as of boys in respect of access to private tuition. Therefore, present study is a household level study that covers the students of secondary, higher secondary and undergraduate level students. Moreover, the study is also representative based on sound method of data collection. Given this backdrop, the present paper makes an attempt to understand the gender wise

variation in access to private tuition in Hailakandi district of southern Assam. Given this introductory note, section II deals with review of literature that covering existing work on private tuition among different countries of the world. Section III deals with the data source and methodology; section IV summarises the results and findings and the last section concludes the results with some future research work.

III. METHODOLOGY

A. Data Source

The study is conducted in Hailakandi district by collecting primary data through field work. As per 2011 India census, Hailakandi had a population of 659,296 of which male and female were 337,890 and 321,406 respectively. Males constitute 51.25 percent of the district's population and females 48.75 percent. Average literacy rate of Hailakandi in 2011 were 74.33 percent compared to 59.64 percent of 2001. If things are looked out at gender wise, male and female literacy were 80.74 and 67.60 respectively. As per 2011 India census density of Hailakandi district for 2011 is 497 people per sq. km compared to 427 in 2001. Hailakandi district administers 1,327 square kilometers of areas. According to 2011 census, 92.70 percent people lives rural areas and only 7.30 percent people lived in urban areas. Average literacy rate in Hailakandi district (urban) as per census 2011 is 92.93 percent of which males and females are 95.31 percent and 90.54 percent literates respectively. Literacy rate in rural areas of Hailakandi district (rural) is 72.73 percent as per census data 2011. Gender wise, male and female literacy stood at 79.51 and 65.57 percent respectively.

The study uses multi-stage stratified random sampling to collect data from households. The sample size covers 347 households from the study unit. It is to be noted that in a particular household more than one students may be there at secondary, higher secondary and under graduate level. But for our purpose randomly I have chosen one student from each household to keep the study unit similar. Hailakandi district has five development blocks viz. Algapur, Hailakandi, Lala, Katlicherra & South Hailakandi development Block. At the first stage, two development blocks viz; Hailakandi and Lala shall be purposively selected. It is to be noted that Hailakandi block consists of 64 villages and 16 municipality wards, while Lala block covers 87 villages and 10 wards as per the Census report 2011. It is customary to select at least 50 (fifty) Primary Sampling Units (PSUs) from a particular district for investigation related to field work survey. Now, Hailakandi

subdivision (block) under Hailakandi district has eighty (64+16 = 80) PSUs, whereas Lala subdivision constitutes ninety seven (87+10 = 97) PSUs. Further, in the whole Hailakandi district there are three hundred fifty nine (359) PSUs. A simple calculation will indicate that Hailakandi block consists of 23 percent (80/359*100) while Lala shares 27 percent (97/359*100) of PSUs in the district. A similar calculation will tell us that 23 percent of 80 is 19 (23/100*80) and 27 percent of 97 is 26 (27/100*97). Therefore, PSUs from Lala and Hailakandi is 19 and 26 respectively. Once we selected the number of PSUs from each subdivision the next question is to select PSUs from rural as well as from urban areas.

Repeating the same calculation it indicates that there are there are 4 and 15 PSUs from urban and rural areas respectively at Hailakandi block. Similarly, there are 3 and 23 PSUs from urban and rural areas respectively at Lala block under Hailakandi district respectively. To have identified the final number of PSUs our next task is to select the specific village and ward from the selected primary sampling units. This is done by using the following formula:

$$SI = \frac{TNH}{NVS}$$

Where SI stands for Sampling interval, TNH refers to total number of households and NVS represents number of villages or wards to be selected.

With the help of this formula random number (RN) has been generated between 1 and SI which will be the 1st survey village. Having selected the 1st village, the subsequent village has been selected by using following technique.

$$1st \text{ village} = \text{Random Number (RN)}$$

$$2nd \text{ village} = SI + RN, 3rd \text{ village} = 2SI + RN$$

$$4th \text{ village} = 3SI + RN, 5th \text{ Village} = 4SI + RN$$

$$N^{th} \text{ Village} = (N-1) SI + RN$$

B. Methods

In order to measure the access to private tuition, we calculate the ratio of students attending private tuition to total number of students. The formula can be stated as follows:

$$EPT = \frac{NSPT}{TNS}$$

Where EPT stands for extent of private tutoring, NPST represents number of students attending tutoring classes and TNS stands for total number of students. Moreover, to analyse the gender wise variation in access to private tuition t-test (Two-Sample Assuming Unequal Variances) has been used.

Moreover, in order to measure financial burden of private tutoring expenditure on a household, we can calculate the ratio of private tuition expenditure to total expenditure of each household.

$$FBT=PTE/TE$$

Where FBT stands for financial burden of private tutoring expenditure, PTE represents private tuition expenditure and TE stands for total expenditure of each household.'

IV. RESULT AND ANALYSIS

A. Gender Wise Disparity in Access to Private Tuition across Different Grades

We begin our data analysis with gender wise variation in access to private tuition. The analysis is sub divided in to two broad parts. In the first part, we shall focus on the variation in access to private tuition across three broad categories of grade. In the second part, we shall investigate the variation at aggregate level disregarding the grades. In order to put scientific touch in to the analysis, we shall conduct t-test to see if the observed variation at any level is statistically meaningful. The result of the analysis is reported in table I.

TABLE I
ACCESS TO PRIVATE TUITION (IN PERCENTAGE)

Grade	Male	Female	t-value
Secondary	73.77	67.00	0.92
Higher Secondary	78.05	55.74	2.43**
Under Graduate	52.94	58.70	0.51
All	69.85	61.84	1.54

Source: Collected from field survey during January, 2016.
Note: ** represents significant at 5 percent level

Table I depicts the proportion of students who receive private tuition across different grades. It reveals that around 70 percent students receive private tuition at secondary level in which male and female constitute almost 74 percent and 67 percent respectively but it is not statistically significant. At higher secondary level in total more than 64 percent students receive private tuition among them male students receive greater proportion of private tuition than female students by 23 percentage points which is statistically significant at 5 percent level. This implies that there is significant variation in access to private tuition between male and female students at higher secondary level. Similarly, more than 56 percent students do private tuition at the undergraduate level in which male and female students

receive around 53 percent and 59 percent respectively that is also not statistically significant. In total more than 65 percent students receive paid tuition classes among them male and female students constitute 70 percent and 62 percent respectively. It is reported that the proportion of tuition is more at both secondary and higher secondary level. It is because there is the prevalence of board and final examination where students need to secure more marks for entering into the degree and university courses [10].

B. Gender Wise Variation in Access to Private Tuition across Different Streams

In this section we have made an attempt to examine gender wise disparity in access to private tuition across different streams of study. In the study area, we have found that students study mainly in three different streams viz.: Arts, Science and Commerce. However, students are not uniformly distributed across these streams. It is found that majority of the students study in the branch of arts (78 percent) followed by science (18 percent) and commerce (4 percent). The result of this section is reported in table II.

TABLE II
ACCESS TO PRIVATE TUITION ACROSS STREAMS

Grade	Stream	Male	Female	t-value	Total
Secondary	Arts	65.38	44.68	1.72	52.05
	Science	100.00	91.67	1.00	95.45
Higher Secondary	Com.	100.00	100.00	-	100.00
	Arts	48.15	61.90	1.11	56.52
Under Graduate	Science	66.67	25.00	1.27	50.00
	Com.	100.00	100.00	-	100.00

Source: Collected from field survey during January, 2016
Note: Here Com. Refers to commerce stream.

Table II summarises the access to private tuition across different streams. It is reported that at both higher secondary and under graduate level all students i.e. 100 percent students belonging to commerce stream received paid tuition classes irrespective of male and female. At higher secondary level more than 52 percent students received private tuition under arts stream among them male and female constitute 65 percent and 45 percent respectively. And under science stream more than 95 students receive tuition in which male and female students have 100 percent and 92 percent respectively. Although it is seen that there is variation in access to private tuition between male and female students across different streams but this is not

statistically significant. However, the pattern of access to private tuition has changed at under graduate level between arts and science streams. It is reported that students belonging to science stream receive lesser private tuition (50 percent) than arts students (57 percent).

C. Disparity in Access to Private Tuition between Government and Private Schools

This section is devoted to understand variation in access to private tuition across school type. It may be mentioned here that students in the study area are enrolled in two types of schools viz. govt. schools and private schools. Out of 343 students, 233 study in the govt. schools signifying the dominance of govt. schools. It should be mentioned here that we limit our analysis to secondary and higher secondary levels because students at graduate level all study in govt. institutions.

TABLE III
GENDER WISE DISPARITY IN ACCESS TO PRIVATE TUITION ACROSS SCHOOL TYPE

School Type	Grade			
	Secondary	Higher Secondary	All	
Government	Male	78.86	76.00	75.93
	Female	63.16	57.14	60.61
	All	67.44	64.14	62.66
	t-value	1.23	1.61	2.00**
Private	Male	71.86	81.13	75.00
	Female	72.09	52.63	66.13
	All	72.00	65.71	70.00
	t-value	0.02	1.85	1.03
Aggregate	69.57	64.71	65.01	

Source: Collected from field survey during January, 2016
Note: ** represents significant at 5 percent level.

Table III depicts the access to private tuition across school type i.e. private and government schools. The table clearly indicates that students studying at private schools receive more paid tuition than government schools irrespective of the different grades or levels of education. It reveals that more than 65 percent students in aggregate receives private tuition in all types of school in which private school students receive larger proportion of private tuition than government schools students by more than 7 percentage points. However, if we disaggregate the proportion of private tuition between government and private schools at secondary and higher secondary levels, the table III demonstrates that secondary students receive more private tuition than higher secondary students in both government and

private schools. Moreover, when we segregate this proportion between males and females across school type, then it is found that male students receive more private tuition than female students except private school at secondary level where females hire marginally approximately 1 percent higher than male students, although this difference is not statistically significant. Significant difference is found on receiving private tuition specifically at higher secondary level in private schools between male and female by around 27 percentage points.

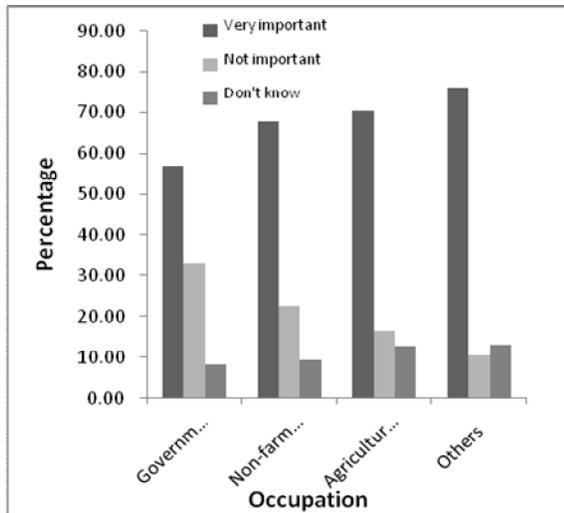
D. Parents' Attitudes towards Private Tuition

As perceived by the parents it is felt that private tuition has become a necessity to succeed in entrance test and board examination and that majority of the children attended private tuition voluntarily. The reasons for which the parents send their children to private tuition are for securing high marks in the examination, helping in studies as parents are unable to help the students at all the stages and in all the subjects and the practice has become so widespread that not going to private tuition is seen as something abnormal. Parents support paid tuition by arguing that private tuition enables learners to access additional attention, ensures improved learning styles, improved performance, personalized relationship, and involvement of parents as they keep track of the performance of their children [11]. They felt that remedial teaching is necessary to complete the syllabus due to the overloaded curriculum and also to bring on board slow learners in order to help them compete with fast learners for the limited school/college slots. The finding [12] seems to suggest that parents were concerned mostly about the academic performance of their children as the single most factors that influenced their support for private tuition. This is also consistent with our evidence that reflect that more than 65 percent parents considered private tuition is very important for improving academic performance. While 25 percent parents opined that private tuition is not important to score good marks and only 10 percent parents maintain that they don't know whether private tuition can improve academic performance or not.

TABLE IV
PARENTAL ATTITUDES TOWARDS PRIVATE TUITION

Category	Attitude (percent)
Very important	65.60
Not important	24.80
Don't know	9.60
Total	100.00

Source: Collected from field survey during January, 2016



Source: Compiled from field survey during January, 2016

Fig 1 Attitude towards private tuition based on private tuition

It is to be noted from fig 1 that parental attitude “very important” regarding private tuition is lowest among the parents who are working in government sector (57 percent) followed by non-farming (68 percent), farming (72 percent) and others (76 percent) respectively. On the contrary, parental attitude “not important” regarding private tuition is highest among the government sector (33 percent) followed by non-farming (23 percent), farming (17 percent) and others (11 percent) respectively.

E. Monetary Burden of Tuition Fee at Household Level

Every household in the society has to incur certain proportion of their income on the basic consumption bundles including education expenditure too. However, private tuition fee is another important constituent in relation to education expenditure. Families who spend money on their children’s education as tuition fee face heavier financial burden particularly for lower income group which in turn creates social inequalities. Table 5 demonstrates the average monthly expenditure on receiving private tuition by the students at different levels of education.

It is reported that average monthly expenditure on receiving private tuition is higher at higher secondary level (Rs. 655) followed by secondary (Rs. 392) and undergraduate level (Rs. 344). In total, it is seen that average monthly expenditure on hiring private tuition at all levels of education is around Rs. 464.

TABLE V
AVERAGE MONTHLY EXPENDITURE ON HIRING PRIVATE TUITION ACROSS DIFFERENT GRADES BY GENDER

Grades	Monthly expenditure (Rs.)		
	Male	Female	All
Secondary	445.59	337.43	391.51
Higher secondary	776.06	534.47	655.27
Under Graduate	368.68	318.82	343.75
All	530.11	396.91	463.51

Source: Collected from field survey during January, 2016

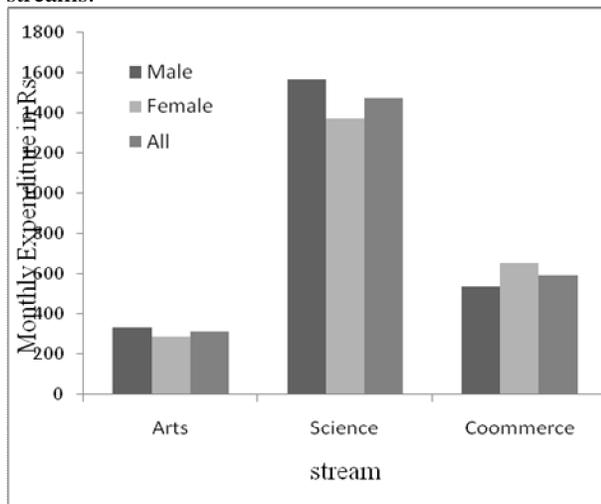
When we separate out this proportion across gender then it has been observed that at all levels of education average monthly expenditure on hiring private tuition is higher among the male students than female student. Fig 2 provides the average monthly expenditure on hiring private tuition across the major streams i.e. arts, science and commerce. It is revealed that expenditure on receiving private tuition is higher for science students (Rs. 1467) followed by commerce (Rs. 631) and arts students (Rs. 298). In total, the average monthly expenditure on hiring private tuition is around Rs. 799. This is because average number of private tutor or science students is more than three (3.13) and for commerce it is more than two (2.25) and the number of private tutors on an average for arts students is near about one i.e. only 1.11. Moreover, as we differentiate between male and female regarding spending on tuition it is demonstrated that monthly expenditure on receiving private tuition is slightly more in case male students than female students at both arts and science stream except commerce stream. It is seen that in total every household spends more than 4 percent of its total expenditure for receiving private tuition. This proportion is higher at higher secondary level (5.5 percent) followed by secondary (4.1 percent) and under graduate level (3.1 percent).

When we separate out it across gender it is observed that burden of private tuition is relatively less towards female students than male students for every household.

V. CONCLUSION

The present paper makes an attempt to understand the gender wide disparity in access to private tuition. The analysis reveals that there exists gender wise disparity in access to private tuition at secondary, higher

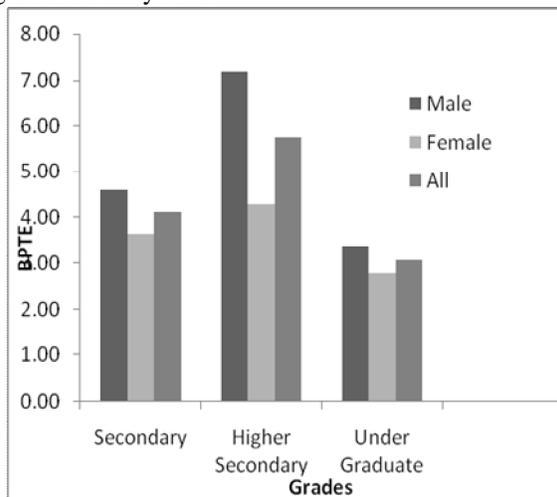
secondary and higher secondary level across different streams.



Source: Collected from field survey during January, 2016

Fig 2 Average monthly expenditure on hiring private tuition across stream by gender

But these variations are not statistically significant at all level except higher secondary level. Gender wise disparity is found to be statistically significant at higher secondary level only. Moreover, the study also demonstrates that on an average monthly expenditure on private tuition at different level of education is around Rs. 464 which is highest at higher secondary level followed by secondary, undergraduate level. Similarly, the burden of private tuition is also more at higher secondary level.



Source: Collected from field survey during January, 2016

Fig. 3 Burden of tuition expenditure across grades

Moreover, average monthly expenditure and burden of private tuition is relatively more for male than female students. Since the present study is an explorative study

aimed at exploring and understanding different aspects of private tuition. Therefore, it will be too early to provide any constructive policy suggestions. We believe one should conduct further research on the subject to come up with any constructive policy suggestions. Future research in this area shall focus on the major factors that determine gender wise disparity in access to private tuition at higher secondary level.

REFERENCES

- [1] C. Buchmann, D. J. Condrón, and V. J. Roscigno, "Shadow education, American style: Test preparation, the SAT and college enrollment." *Social Forces*, vol. 89, No. 2, pp 435–461, 2010.
- [2] D. L. Stevenson and D. P. Baker, "Shadow education and allocation in formal schooling: Transition to university in Japan." *American Journal of Sociology*, vol. 97 no. 6, pp. 1639–1657, 1992.
- [3] H. A. Dang, "The determinants and impact of private tutoring classes in Vietnam." *Economics of Education Review*, vol. 26 no. 6, pp. 683–698, 2007.
- [4] A. R. Foondun. "The issue of private tuition: An analysis of the practice in Mauritius and selected South-East Asian Countries." *International Review of Education*, vol. 48 no. 6, pp. 485–515, 2002.
- [5] A. Cheo and E. Quah, "Mothers, Maids and Tutors: An Empirical Evaluation of Their Effect on Children's Academic Grades in Singapore." *Education Economics*, vol. 13 no. 3, pp. 269-285, 2005.
- [6] M. Bray, "The private costs of public schooling: household and community financing of primary education in Cambodia." Working paper in 1999 by International Institute for Educational Planning/UNESCO, Paris.
- [7] M. Bray, "The Challenge of Shadow Education: Private tutoring and its implications for policy makers in the European Union." European Commission, 2011.
- [8] A. M. Phillips, "Tutoring Surges with Fight for Middle School Spots." *New York Times*. 16 April, 2012.
- [9] A. B. Laskar, "Private tutors and academic performance: Does number matter?" *Assam Economic Review*, vol. 9 no. 1, 232-245, 2016.
- [10] I. Wanyama and E. Njeru, "The Sociology of Private Tuition." In Institute for Policy Research and analysis (IPAR) Policy brief, vol. 10, no.7 pp 1-4, Nairobi: IPAR, 2004.
- [11] G. W. Makworo, "How can teachers teach effectively without extra tuition?" An unpublished term paper, Kenyatta University, 2012
- [12] R. B. Mwebi and R. Maithya, "Perceptions of Parents on the Practice of Private Tuition in Public Learning Institutions in Kenya." *Journal of Education and Practice*, vol. 7, no. 4, pp. 122-128, 2016.

About the Authors



Abdul Basith Laskar was born in 1989 at Hailakandi in Assam, India. He is a PhD research scholar in the Department of Economics, Assam University, Silchar. His area of research is in educational economics and health economics. He has also published research articles in different journals and edited books.