

Occasional Papers

Dropout in Secondary Education

A Study of Children Living in Slums of Delhi

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Dropout in Secondary Education: A Study of Children Living in Slums of Delhi

Sunita Chugh*

Abstract

Dropout is a universal phenomenon of education system in India, spread over all levels of education, in all parts of the country and across all the socio-economic groups of population. The dropout rates are much higher for educationally backward states and districts. Girls in India tend to have higher dropout rates than boys. Similarly, children belonging to the socially disadvantaged groups like Scheduled Castes and Scheduled Tribes have the higher dropout rates in comparison to general population. There are also regional and location wise differences and the children living in remote areas/urban slums are more likely to drop out of school. Failure to complete high school not only produces negative outcome for the individuals, but also widens the existing social and economic inequalities. In order to reduce wastage and improve the efficiency of education system, the educational planners need to understand and identify the social groups that are more susceptible to dropout and the reasons for their dropping out.

Keeping the above context in perspective, the present paper tries to examine the factors that contribute to dropping out by children at the secondary level. The analysis is based on the empirical study undertaken on the marginalized group of children living in slum areas of Delhi, which was conducted during the period from August 2006- July 2007.

The findings reveal that both the family and school related factors were responsible and appeared to be highly correlated with each other. It was also found that adolescents dropout not merely due to poverty and financial constraints but also because the schools did not respond appropriately to their special educational needs forcing them to dropout. The paper proposes that the State needs to adopt a holistic approach to dropout issue and not treat it as merely a discrete problem that can be tackled without reference to the broader socio economic setting and poor delivery of education in which it is rooted. Preventive and restorative approaches, briefly discussed in the paper, are needed to tackle the issue of dropout for children living in slum areas. Though the study is conducted at micro level, the analysis provides useful policy insights in terms of broader educational policies aimed at improving educational equity and quality with the adoption of appropriate intervention for focused groups at the local level.

The paper is structured as follows: After the introduction, Section II describes the existing scenario of secondary education in Delhi and presents a synoptic review of literature on the issue of dropout. Section III focuses on the findings from the field giving details about the sample schools; Section IV gives detail on household profile of dropout children. Section V describes the phenomenon of dropping out, looking at the year and grade of the dropout; the decision to leave school; Section VI concentrates on the reasons for leaving the school; also discusses the current activities of the students, who have dropped out and discloses as to how many of them would like to rejoin if given an opportunity. The paper also considers ways to keep potential dropouts in school and looks at dropouts' own suggestions for changing the system and concludes by suggesting certain preventive measures to reduce drop-out at the secondary levels of education.

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Introduction

The dropout problem is pervasive in the Indian education system. Many children, who enter school, are unable to complete secondary education and multiple factors are responsible for children dropping out of school. Risk factors begin to add up even before students enroll in school that includes: poverty, low educational level of parents, the weak family structure, pattern of schooling of sibling, and lack of pre-school experiences. Family background and domestic problems create an environment which negatively affects the value of education. Further, students could drop out as a result of a multitude of school factors such as uncongenial atmosphere, poor comprehension, absenteeism, attitude and behavior of the teachers, and failure or repetition in the same grade, etc. When students experience school failure, they become frustrated with lack of achievement and end up alienated and experience exclusion leading to eventual dropout. It is important to carefully design preventive measures and intervention strategies that could be adopted in order to help all adolescent dropouts. Certain preventive measures can be implemented throughout the target population, while others must take into account the diversity of dropout profiles.

With this backdrop, the present paper tries to identify the major pull and push factors that lead to dropping out of school at secondary level for the children living in slum settings in Delhi. An attempt is made to uncover various factors associated with dropout. For this purpose, it draws on the recently concluded research study on “School Dropouts in Secondary Education: A Case Study of Children living in Slum Areas”. In addition, the paper also considers ways to keep potential dropouts in school looking at the dropouts' own suggestions for changing the system.

The paper is based on the data collected from 33 schools of Delhi which the children living in slum areas were attending. A purposive sampling technique was used for the selection of sample. Through the discussion with the administrators of Directorate of Education of Delhi, four secondary and 29 senior secondary schools catering to the children living in slum areas were identified. A checklist of dropout children numbering 526 was prepared on the basis of the school records and information on the particulars of these children like name and address were collected from the schools. The sample

consisted of children who had dropped out in IX, X, XI or XII standard from these 33 schools of Delhi (12 boys, 12 girls and 9 coeducational) during 2006-07. (*List of Selected School is given in Annexure I*). Out of a total of 526 dropouts, 432 could be contacted as remaining had either shifted or were not available so could not be traced. The dropout rate was found to be higher at Grade IX while it was the lowest at Grade XII. To get information from households a questionnaire was used. A comprehensive profile of each dropout child was prepared, giving details about the family income, age and grade at which they dropped out, the major reason for leaving the school and current activities after dropping out.

For the purpose of this study, dropouts are defined as young children, who enroll in secondary education and for some reason other than death leaves school before completing the grade without transferring to another school. It may be termed as “an event dropout”. Dropout rate is the percentage of dropouts in a given year out of the total number of those enrolled in a programme in the same year. These are, therefore, annual dropout rates and lower than the dropout rates from a programme, which counts the total number of children who start a programme and do not finish it.

Secondary Education in Delhi

The school education in Delhi consists of eight years of compulsory elementary education (Standard I – VIII), two years of high/secondary education (IX and X) and two years of senior secondary education (XI and XII).

Quantitative Expansion of Institutions, Students and Teachers

Delhi has made considerable educational progress with high literacy rate, improved access to educational facilities, high enrolment and retention rate. Secondary education has also seen enormous quantitative expansion in Delhi with increase in secondary and senior secondary schools, an increase of more than three times, i.e., from 514 in 1971-72 to 1,758 in 2007-08. The enrolment in secondary and senior secondary has increased from 1.59 lakhs in 1971-72 to 7.74 lakhs in 2007-08 recording an increase of around five times. The number of teachers in the secondary and senior secondary schools has increased from 21,182 in 1971-72 to 69,121 in 2007-08 showing an increase of more than three times (Table 1).

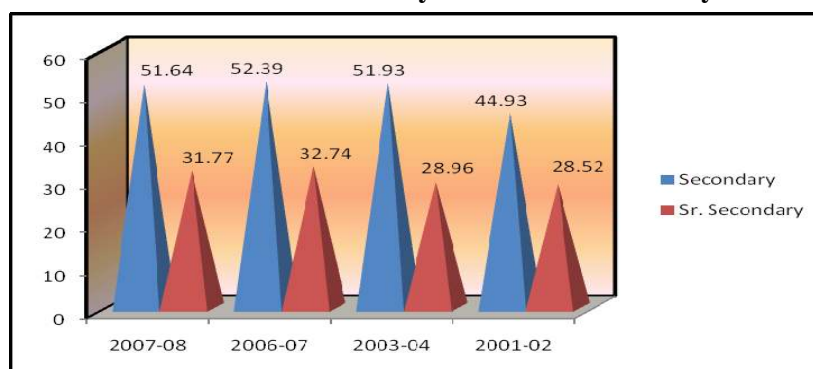
Table 1
Growth of Secondary and Senior Secondary Education in Delhi

Years	Number of School	Enrolment (in Lakh)	Number of Teachers
1971-72	514	1.59	21182
1976-77	604	2.04	26432
1980-81	704	2.54	34239
1986-87	921	3.30	41983
1990-91	814	4.16	42095
1998-99	1412	5.19	39321
2001-02	1578	5.74	54891
2002-03	1619	5.82	58015
2003-04	1678	6.27	59123
2004-05	1712	6.69	59146
2005-06	1750	6.91	61149
2006-07	1697	7.57	65580
2007-08	1758	7.74	69121

Source: Selected Educational Statistics for various years, MHRD

Private institutions contribute significantly to secondary schooling facilities in Delhi. In 2007-08, about 32 percent of schools at senior secondary level and about 52 percent at the secondary level are managed by private bodies (Figure 1). The share of private institutions at secondary level is higher in Delhi as compared to all India level which is around 34.63 percent in 2007-08, but at the senior secondary level it is little lower in comparison to all India level which was 34.40 percent. Predominance of private schools in providing secondary education in Delhi may further disadvantage the marginal groups like children living in slums and those belonging to low income groups as they have to pay fees to gain entry in private schools.

Fig. 1
Proportion of Private Unaided Secondary and Senior Secondary Schools in Delhi



Source: Selected Educational Statistics for various years, MHRD

Gross Enrolment Ratio

Though a large number of educational institutions, both private and government, exist in the city of Delhi, the participation level at secondary and senior secondary levels, still remains low which is reflected through the gross enrolment ratios presented in Table 2.

Table 2
Gross Enrolment ratio at Secondary and Senior Secondary Levels in Delhi

	All Categories of Students					
Year	Classes IX-X			Classes XI-XII		
	Boys	Girls	Total	Boys	Girls	Total
2007-08	66.22	68.68	67.34	46.67	47.64	47.12
2006-07	65.20	67.24	66.14	46.03	47.09	46.52
2005-06	59.43	67.23	62.99	39.73	45.34	42.29
2004-05	61.35	68.32	64.51	37.56	43.34	40.17
	Scheduled Caste					
2007-08	33.10	37.28	35.05	24.15	20.69	22.15
2006-07	29.67	35.61	32.45	19.23	22.15	20.60
2005-06	27.83	34.51	30.94	17.90	19.22	18.53
2004-05	28.38	34.15	31.03	13.25	15.24	14.20

Source: Selected Educational Statistics for various years, MHRD

The available time series data on GER though limited to four years is inconsistent. This implies the GER is either stagnant or increasing very slowly. The GER of SCs is very low in comparison to general population both at secondary and senior secondary level which implies even after higher proportion of over aged children the participation rates remain low. Scheduled Caste population largely concentrates in slums and in absence of data on slums the participation rate of Scheduled Caste can be seen as proxy to the participation rates of children living in slums.

Dropout Rate

Very few children complete elementary education and even fewer transits to secondary education. Despite a small proportion of children actually reach secondary education the dropout rates at secondary level are found to be very high. Though, the available data does not give precise figures on how many enroll and how many actually

dropout at secondary stage but the difference between children who dropout at upper primary and secondary stage may hint at the volume of dropouts. The dropout rate for Delhi stands at 36.04 percent compared to 56.71 percent at the all-India levels between classes I-X in 2007-08. It may further be noted that the dropout rate fell drastically by 10 percentage points in one single year i.e. 2005-06 and 2006-07 whereas between 2007-08 and 2006-07 it remained constant. Surprisingly in case of SCs, the dropout rates are lower than the general population in 2005-06 and 2006-07 whereas in 2004-05 and 2007-08 the dropout rates of SCs are higher than general population. This implies that the data on dropouts is very inconsistent and more so in case of Scheduled Castes. This raises questions about the quality of official data on enrolment and dropouts. But this does not hide the fact that the dropout rate is still very high.

Table 3
Dropout Rate in Delhi

Year	All Categories of Students					
	Classes I-VIII			Classes I-X		
	Boys	Girls	Total	Boys	Girls	Total
2007-08	0.00	0.00	0.00	33.84	38.38	36.04
2006-07	22.67	26.39	23.49	31.39	39.30	35.31
2005-06	12.54	20.22	16.34	46.37	46.15	46.26
2004-05	27.71	28.53	28.12	45.04	48.84	46.92
	Scheduled Caste					
2007-08	37.64	32.57	35.16	56.98	65.05	61.40
2006-07	40.78	33.64	37.29	31.55	21.52	26.71
2005-06	41.98	48.91	45.77	27.51	20.22	23.90
2004-05	0.00	0.00	0.00	70.36	67.72	69.15

Though, the dropout rates at secondary level are lower than elementary education but soon it may increase consequent upon persistent efforts to reduce dropout at elementary education. This necessitates studying the dropout phenomenon at micro level on who drops out and what factors contribute for dropout at secondary level. This paper presents results from a micro study of dropout from secondary schools that serve children of slums in Delhi. Before discussing the results of study, an overview of a few studies on dropout is given in the next section.

A Review of Related Studies

Over the years, an appreciation for the intricacy of the dropout phenomenon has emerged in the relevant literature. Considerable research has been undertaken to reduce the wastage in education caused by dropout and the studies conducted on dropout can be classified into four categories: (i) Longitudinal and Cross sectional examinations of dropping out using data from nationally representative data sources like Census of India and the NSSO. These studies have been particularly useful in identifying ‘at-risk students’ and developing estimates of the extent of the dropout problem; (ii) Studies using multi-level statistical models that differentiate between individual effects and school effects. These studies help in identification of factors related to the child and household and those related to the institutions which they attend; (iii) “Experimental” studies examining particular aspects of dropout. These are basically micro level studies and, therefore, are not nationally representative; (iv) Qualitative studies that employ interviews and focus group discussions to probe into youth’s attitudes. Most of the qualitative studies assume that the behavior and attitude of at-risk students start showing the symptoms of dropping out much before they actually dropout.

A review of these studies indicate that the final decision of the child to dropout of school comes from a variety of sources such as within students’ families, schools and communities (and peers) or the child’s behavior. Meanwhile, research has consistently found that socio-economic status, most commonly measured by parental education and income, is a powerful predictor of school achievement and dropout behavior (Bryk and Thum, 1989; Ekstrom et al., 1986; McNeal, 1999; Rumberger, 1995; Rumberger & Larson, 1998; Pong & Ju, 2000). High parental income makes it convenient to provide more resources to support children’s education, including access to better quality schools, private tuitions and more support for learning within home. Poverty still remains as one of the significant causes of children dropping out of school (Birdsall et al, 2005; Boyle et al, 2002; Brown & Park, 2002; Bruneforth, 2006; Cardoso & Verner, 2007; Dachi & Garrett, 2003; Hunter & May, 2003). In addition, empirical studies have found that students, whose parents monitor and regulate their activities, provide emotional support, encourage independent decision-making and are generally more involved in their

schooling, are less likely to drop out of school. (Astone & McLanahan, 1991; Rumberger et al., 1990; Rumberger 1995, Liu 2004, Ainsworth et al, 2005).

It is commonly known that schools exert considerable influence on the attendance, continuation and performance of the children. Some of the studies have tried to estimate the school influence after controlling the estimate of individual characteristics of students (Rauderbush & Willams, 1995). Several studies indicate that resources influence school dropout rates with pupil-teacher ratio having a positive and significant effect on high school and middle school dropout rates (McNeal 1997; Rumberger, 1995; Rumberger & Thomas, 2000). Various aspects of teaching-learning are also linked to dropping out—the case of poor teaching-learning transaction leading to low motivation, low comprehension and finally dropping out is one instance (Chaudhury et al, 2005; Davis & Dupper 2004). Thus, when the teachers do not prepare lessons, do not have designed scheme of work, do not check the notebooks properly and is not regular, the learning does not take place (Ghuman & Lloyd 2007; Smith cited in Hunt). These classroom practices have an adverse impact on the retention of children.

Further, research has shown that early school leaving at the secondary level is the outcome of a long process of disengagement of children with measurable indicators that exist in the early grades (Alexander et al., 1997; Barclay & Doll, 2001; Barrington & Hendricks, 1989; Ensminger & Slusacick, 1992, Garnier, Stein & Jacobs, 1997). These studies found that early academic achievement and engagement like regular attendance, misbehaviour in elementary and middle school, predicted withdrawal from high school. Therefore, the key ingredients of student engagement include student participation, identification with school or social bonding, academic performance etc. (Finn, 1993; Maehr & Midgely, 1996; Wehlage, Rutter, Smith, Lesko, & Fernandez, 1989). Boyle et al (2002) suggest that beatings and intimidation ‘affect children’s motivation to attend school’.

Some studies indicate that poor academic achievement leads to dropping out (Ekstrom et al., 1986; Goldschmidt & Wang, 1999; Rumberger, 1995; Rumberger & Larson, 1998; Swanson & Scheider, 1999; Colclough et al 2000; Boyle et al, 2002; Hunter and May, 2003; Liu 2004). Absenteeism from school and student discipline

problems are also strong predictors of dropping out, especially at the secondary level of education. (Bachman et al., 1971; Carbonaro, 1998; Ekstrom et al., 1986; Goldschmidt & Wang 1999, Rumberger, 1995, Rumberger & Larson, 1998; Swanson & Schneider, 1999; Wehlage & Rutter, 1986 Grant & Hallman, 2006; the PROBE Team, 1999). These studies support the idea that dropping out is influenced by both the social and academic experiences of students.

The literature review suggests that child related factors such as disinterest in studies and poor comprehension are one of the significant causes for dropping out which is very closely related to school quality measured in terms of infrastructural facilities, teacher preparedness and curriculum relevance. The reasons identified by the research studies were found to be holding true in the case of drop out children living in *jhuggi jhoparies* and in resettlement colonies of Delhi. However, not much research has been conducted in the Indian context and the studies mentioned above did not capture the specific conditions of the children living in slum areas of cities. The present paper is a modest attempt towards this direction. The main purpose of this paper is to derive detailed information about the specific reasons behind high dropout rates at secondary level, of youngster living in slums of Delhi. It tries to analyze the role of school as well as of contextual variables in order to bring into fore the debate between supply and demand interventions aimed at reducing dropout rates and to suggest appropriate important policy implications. However, the study does not elaborate on the various determinants of school quality and of the differences in education opportunities available to the children living in slum areas vs. rest of the city dwellers. This is a significant area for further research and merits the attention of educational planners and administrators.

Characteristics of the Sample Schools

The dropout is one of the perennial problems inflicting Indian education system across all levels and this condition is more acute at the elementary stage. However, with the recent initiatives to reduce dropout rates and some amount of success at elementary stage, it is feared that dropout may simply shift to secondary education in a big way (Reddy, 2007). Much of the research till now is confined to elementary stage of education and the factors responsible for dropout at elementary and secondary stage are most likely

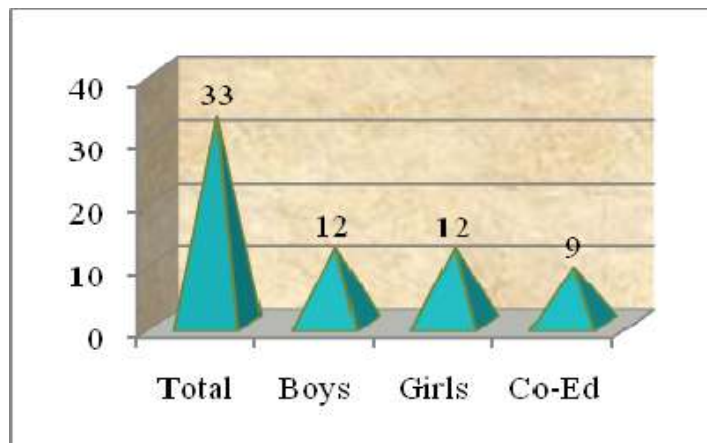
to be different. Considering the significance of secondary education for all the adolescents, especially for the disadvantaged, in breaking the vicious cycle of economic and educational backwardness, it is imperative that the research should be directed to estimate the level of dropout at secondary stage and reasons for the same, in order to evolve policies and strategies to reduce the levels of dropout. In this context the present paper tries to examine the factors that contribute to dropping out by children at the secondary level in the slum setting of a metropolitan city of Delhi. The paper tries to identify the ‘at risk’ environment and ‘at risk’ students associated with dropout at secondary level.

The sample consisted of those children living in slum areas who had dropped out from the Government schools. Details on the particulars of schools and drop out children are presented in the following section.

Type of Sample Schools

Out of 33 sample schools, 12 were exclusively for girls, 12 for boys only and nine were co-educational schools. In Delhi, a large number of schools operate in double shift. While the morning shift is for girls, the afternoon shift is for boys or vice versa, but each shift is counted as a separate school as the teachers and other staff is different for each shift.

Fig. 2
Type of Sample Schools



How many Drop out?

The sample schools had 4,440 children in Grade IX (349 dropped out, 7.7%), 3,421 children in Grade X (66 dropped out, 1.9 %), 3,450 children in Grade XI (99 dropped out, 2.9 %,) and 2,535 children in Grade XII (16 dropped out, 0.6%). A total of 13,846 children were enrolled from Grade IX to XII in these schools out of which 526 children dropped out. The dropout children were identified on the basis of information given by teachers and principal of school. About eight percent of the children dropped out in Grade IX, about two percent in Grade X, three percent in Grade XI and less than one percent in Grade XII. The data collected from the schools reveal that the dropout rate is comparatively high in Grade IX in all the schools with two schools having high dropout rate in the range of 25 to 30 percent. The dropout rates mentioned here are the children who dropped out of school during same academic year as reported by teachers and therefore not comparable with cohort dropout rates given in official data sources.

Further the data makes it clear that the once the children cross initial hurdles and moves beyond IX grade they are likely to remain in the system till the XII grade as dropout rate progressively declines by grade. It is worth mentioning that teachers have reported all dropout children in their schools belong to slums only. In this background the study assumes added significance. This needs to be further probed and an in-depth study may be undertaken on the socio-economic background of the students at secondary level in government schools of Delhi to get a clearer picture.

Size of Schools

Enrolment in sample secondary and senior secondary schools varies significantly. While around 27 percent schools had less than 300 children at secondary and senior secondary levels, around 42 percent of schools had an enrolment in the range of 300 to 500 and around 27 percent schools had an enrolment in the range of 500 to 1000. Table below presents figures on enrolment in the selected schools. Out of the sample schools four schools were having classes upto Grade X while 29 schools were having classes upto Grade XII.

Table 3
Size of Sample Schools

Enrolment	Schools (%)
<300	9 (27.5)
300-500	14 (41.9)
500-1000	9 (27.5)
> 1000	1 (3.1)

Size of Class

Overcrowded or large class size in Indian context could be specified as those classes where the pupil-teacher ratio exceeds 40:1 and teachers often face many obstacles, when attempting to teach in such classes. Large class size can negatively affect two significant and interrelated aspects of teaching practice, i.e., instructional time and classroom management. Large class size takes a toll on the teachers' ability to manage time, requiring more time to be devoted to task and behavioral management thus leaving less time for actual instructions. Wilson reports (2006) classes of large size tend to be noisier with pushing, crowding and hitting occurring more often compared to smaller class rooms. Class size in different grades in the sample schools is given in the Table 4.

Table 4
Class size in Sample Schools

Class size	IX	X	XI	XII
<30	2	6	6	9
30-40	14	9	9	10
40-55	12	15	10	7
>55	5	3	4	3
All	33	33	29	29

Figures in the Table indicate that around 50 percent of schools had large class size in IX, X and XI grades. However, in Grade XII ten out of 29 (around 34%) schools had large class size which is probably because few children reach up to Grade XII in government schools.

Socio-Economic Background of Dropouts

Considering the importance of the households' decision to send the children to school or to discontinue their studies, information was collected from the families of the drop out children to look at their environmental, social and economic compulsions which may act against their continuation in school.

Physical Facilities in the Household

The children living in the slums are devoid of basic infrastructural facilities like toilet and drinking water. Inadequate and poor quality of infrastructural and physical facilities negatively influences education of the children. Due to non-availability of water in the individual household, the children are many a time given the responsibility of collecting water from the tanker or the municipal tap that consumes around two to three hours per day. In addition, absence of toilet facility poses a great problem especially for girls who have to answer to their biological needs at the early hours of the day. Poor housing facilities do not provide the space for children to study in peace. Either the electricity connection is not available or it has been taken illegally resulting in irregular supply. In the absence of electricity, it is not possible for the child to study at home in the evening or late night. The sample children living in the slums were also faced with the similar kind of environmental and physical hazard (Table 5).

Table 5
Availability of Basic facilities in Sample Households

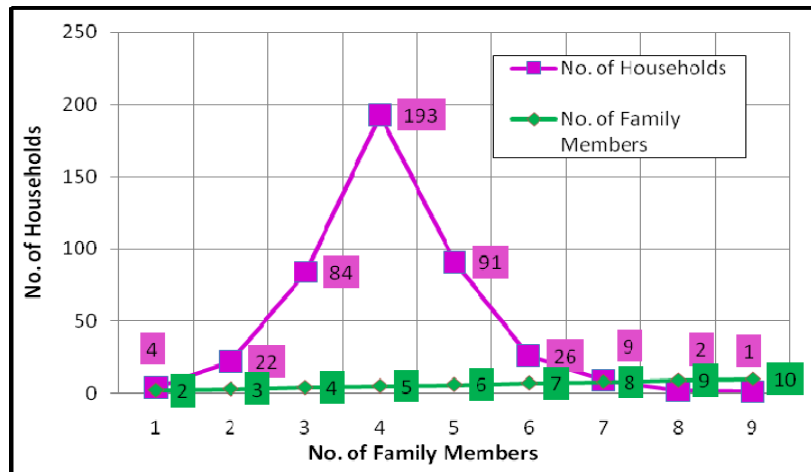
Facility	Available	Not available
Toilet	26 (within house)	406 (open space)
Drinking Water	17 (individual tap)	415 (community tap)
Electricity	34 (legal) 380 (not legal)	18 (No electricity)

Family Size

Family size influences children's schooling cycle greatly. In comparison to children with fewer siblings, children with more siblings tend to enroll later, repeat grades more often and drop out of school earlier. Consequently, with larger family size, the financial burden/potential workload is greater; children are less likely to attend school

and often dropout. Similarly, a study found that having a large number of siblings (6+) children were associated with a 36 percent increase in the odds of dropping out of primary school, in comparison to the odds for smaller families (Enyegue 2000). The corresponding increases at the junior and senior secondary levels were 41 percent and 68 percent, respectively. It becomes all the more difficult for those households that are having more than one school going child in the family. Further, if we look at the family size of the sample households we find that around 45 percent of households (193 households) have five members and around 21 percent of households (91 households) have six family members. Figure 3 depicts the family size of the sample households.

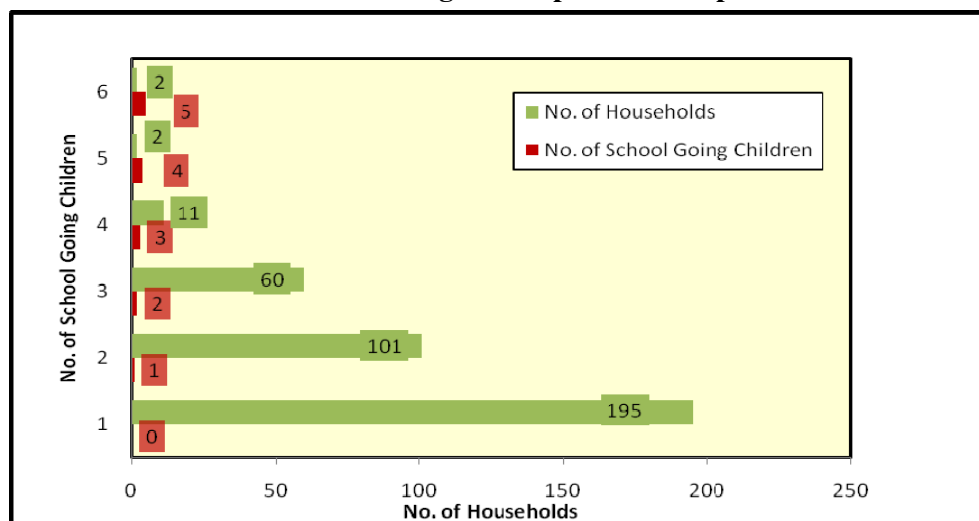
Fig 3
Family size of the Sample Households



Attendance Status of Siblings

What other children are doing in a household of a child who dropped out from secondary schools would be quite interesting. School going age siblings were reported in 371 households out of 432. Out of these 371 households children from only 176 households were attending school. In case of 195 households no child is attending the school.

Fig 4
Attendance Status of Siblings of Dropouts in Sample Households

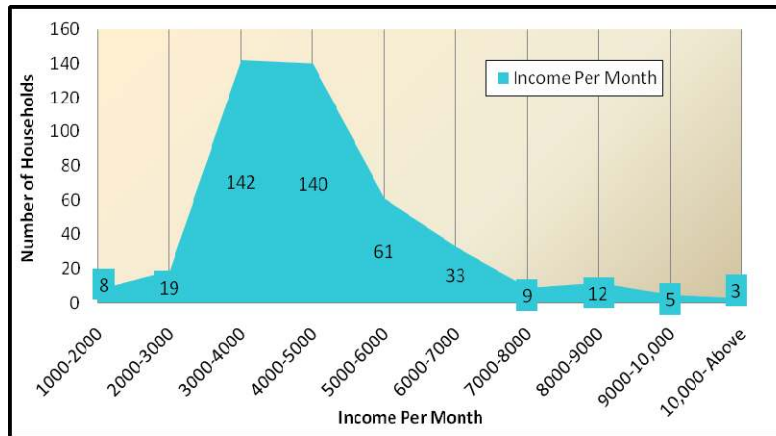


Monthly Income of Households

Research has consistently found that socio-economic status, most commonly measured by parental education and income is a powerful predictor of school achievement and dropout behavior (Bryk and Thum, 1989; Ekstrom et al., 1986; McNeal, 1999; Rumberger & Larson, 1998; Pong & Ju, 2000). High parental income allows them to provide more resources to support their children's education, including access to better quality schools, private tuitions and more support for learning within home. During the financial crisis, schooling of the children becomes the first casualty in poor households.

Most of the sample households had an income within the range of Rs 3000-5000 which amounts to Rs 36,000 to 60,000 per year and annual expenditure of the household on secondary education for each child is approximately Rs 5,000, which is 12 to 14 percent of their income. The UNESCO Institute for Statistics (Global Education Digest, 2007) observes that Households in India pay for more than one quarter (28 percent) of the costs to send their children to primary and secondary schools. This expenditure poses a very real barrier for children of poor families. Considering the inflation and standard of living in cities it is difficult for the families to incur expenditure on education especially if the number of school going children is more than two. Figure 5 presents the monthly income of the sample households.

Fig.5
Monthly Income of the Sample Households

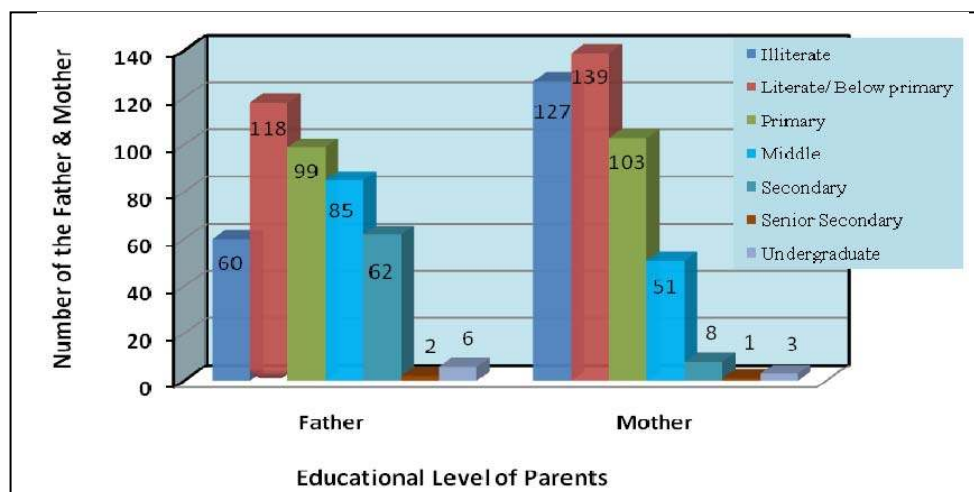


Educational Attainment of Parents

Besides household income, the education level of the parents is also expected to influence the continuation of children in school. Ersado (2005) observes that parental education is the most consistent determinant of child education. Higher parental education is associated with increased access to education, higher attendance rates and lower dropout rates (Al Samarai & Peasgood, 1998; Ainsworth et al, 2005; Grant and Hallman 2006). Parents, who have attained a certain educational level, might want their children to achieve at least the same level.

Fathers of about 14 percent of children (60) were illiterate and about 27 percent (118) had studied below primary level. About 59 (99 primary, 85 upper primary, 62 secondary, two senior secondary and six college level) percent of father of the sampled children had primary or more than primary level of education. However, the figures loudly speak of the low educational status of the mothers of children. About 30 percent (127) were illiterate and about 32 percent (159) had education below primary level. About 24 percent (103) were primary graduates and 12 percent (51) were middle pass. Only 8 women were having secondary level of education and 3 were undergraduates. Low education status of mothers is one of the contributing factors of the low completion rate of children. Figure 6 depicts the educational attainment levels of parents of the sample children.

Fig. 6
Educational Attainment of the Parents in Sample Household



The socio-economic composition of the foregoing discussion establishes that the children were living in adverse environmental surroundings with poor infrastructural and physical facilities. The next section discusses the profile of the sample children and the reasons for dropping out as perceived by parents/children.

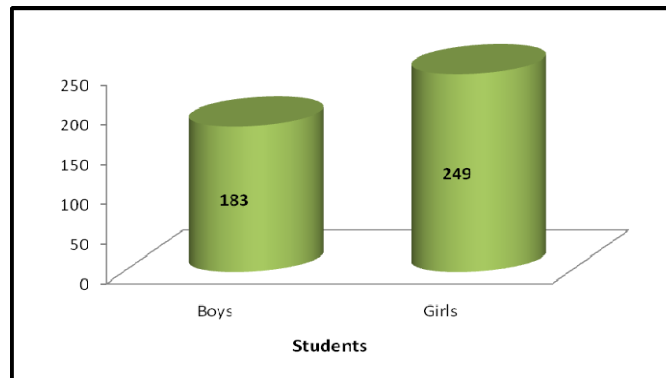
Profile of Drop out Children

Drop out children varies widely. They belong to different regions, castes, culture and languages. About 30 percent of them were migrants from Uttar Pradesh and another thirty percent were from Bihar. About 20 percent belonged to West Bengal and the remaining were from Rajasthan, Madhya Pradesh, etc. About one third of them were born in Delhi while about half of them have been living in Delhi for the last 15 to 20 years. Only about 15 percent of the families had come to Delhi five to six years back. Though the sample children constituted diverse groups, the common factor among them was that all of them were living in adverse environmental conditions with low household income and had been attending government schools. The particulars of drop out children are presented in detail in the following section.

Dropout by Gender

As mentioned above, the sample comprised of 432 dropped out children from 33 schools of Delhi. The number of girl students (57.6%) was more than that of boys.

Fig.7
Gender-wise dropouts



India's patriarchal society gives less importance to girls' education due to the socio-cultural and economic barriers prevailing in the society. If poor households can not send all the children to school, then they will most likely give boys precedence over girls. Girls are especially discouraged to attend schools from the onset of puberty and early marriage. Added to this are factors like the presence of exclusively male teachers, distance and not-so-safe road to school, and separate toilet for girls, etc. These are considered as potential factors for high dropout rate for girls. The field observation discloses that the factors listed above were found to be true in case of a number of girls.

Grade wise Dropout

Of the sample dropout children 345 dropped out at Grade IX, 56 children at Grade X, 26 children at Grade XI and five children at Grade XII. This implies nearly 80 per cent of dropout is actually taking place at Grade IX, the first of secondary education itself. The reason for the high dropout at Grade IX is probably they had learning difficulty before coming to the secondary level. The quality of primary education and learning levels of pupils which is abysmally low ill-prepares them for the academic rigor of secondary education. Another reason could be teachers may be weeding out the children who in their opinion are unlikely to clear the board examination. Teachers were closely monitoring the progress of children of Grade IX as the children were to appear for the board examination in the following year. For some children the secondary school was at a great distance and they found it difficult to reach school on time, therefore, they were forced to dropout at Grade IX (Table 5).

Table 5
Grade-wise Dropout

Total Students	IX	X	XI	XII
Boys	129	31	20	3
Girls	216	25	6	2
Total	345	56	26	5
Dropouts by grade (%)	79.9	13.0	6.0	1.2

Age at which Children Dropped out

Census 2001 data reveal that the workforce participation rate of children of 10-14 years is higher than those of 6-10 years. The NSSO data estimates of 61st round (2004-05) disclose that workforce participation rates of children in the age group of 10-14 is around 6.6 percent. Though the Child Labour Prohibition Act stipulates that the children below 14 years of age should not be employed and Right to Compulsory and Free Education Act, 2009 ensures free and compulsory education to all children of 6-14 years of age group.. Still a large proportion of children are engaged in work and around 18 percent of children are out of school (NSSO, 2004-05). After the age of 14 the vulnerability of children entering workforce increases significantly as there is no legal compulsion. Moreover, the out-of-pocket expenditure on secondary education is substantial as the education is not free and parents are supposed to bear the educational expenditure. Poor households find it difficult to bear the cost and, therefore, children either do not enroll or dropout before completing the secondary education cycle.

If we look at the figures we find that the age significantly influences the drop out rate. Largest number of children dropped out at the age of 16 years and followed by 15 years and so on (Table 6).

Table 6
Age at which sample children dropped out

Age (in years)	No. of Children	% of total
15	171	39.6
16	197	45.6
17	37	8.6
18	21	4.8
19	6	1.4

Age Grade Matrix

If we observe the age and grade matrix of dropout children we find that a disproportionate children dropout at Grade IX at ages 15 and 16 (Table 7). About 76.8 per cent of children of age 15 and 16 together drop out in Grade IX. Most of the children who drop out at Grade X are of age 16 and 17. Together these two age groups account for 11.8 per cent of all dropouts. It is interesting to note that most of children who dropout in different grades happen to belong to younger age group. For example more than half of children who drops out at Grade IX are of age 15. In case of Grade X, nearly one third of children who are dropping out are of age 16. This further confirms that the children who are pushed from one grade to next grade till they complete elementary cycle of education without bothering about their learning levels are at the potential risk of dropping out at the beginning of secondary education even if they somehow get into it.

Table 7
Age-Grade Matrix of Dropouts

Age	Grade				Total
	IX	X	XI	XII	
15	171				171
16	161	36			197
17	13	15	9		37
18		5	16		21
19			1	5	6
Total	345	56	26	5	432

Birth order

There is evidence that in developing countries the cost of high fertility is borne by older siblings, rather than by parents (Emerson & Portela Souza, 2002). The first casualty to dropout is the eldest child for looking after the younger siblings or contributing to the household income by earning some extra money. In the present study, 31.7 per cent of drop out children happen to be first in the birth order, 43.8 per cent are second in the birth order and 18 per cent are third in the birth order (Table 8).

Table 8
Birth order of Sample children

Birth Order	Dropouts	% of the Total
1	137	31.7
2	189	43.8
3	79	18.3
4	22	5.1
5	5	1.1

From the profile of drop out children it can be concluded that older children, first and second birth order are more likely to dropout. Further much of dropout is taking place in the ninth grade itself.

What Causes Dropout at Secondary Level?

Considerable research has been undertaken to define the characteristics of dropouts and to develop tools to identify children “at risk” of dropping out of school. It has been repeatedly observed that low-achievers and students from low socio-economic backgrounds are at much higher risk of dropping out which could be due to several reasons such as inadequate parenting, inability to afford the educational expenditure, poor schooling infrastructure, de-motivated teachers, pressures to augment family income, accompanied by a view that schooling has limited economic returns; peers with low aspirations; poor nutrition and health; and too few role models in the community.

For policy makers to develop effective interventions, it is essential to ascertain which factors are most important for identifying school leavers as dropouts are not a homogenous group but early warning signs can help identify those most at risk and suitable strategies could be evolved for them. However, one of the key problems is that students don't usually dropout for a single reason. Multiple factors are at play and no single risk factor can accurately predict who will dropout. The paper categorizes three sets of factors vis-à-vis household, school and child related that primarily contribute to the phenomenon of drop out. At the same time it may be remembered that these reasons do not influence dropout independently but intertwined with each other producing a net effect of dropout. As an illustration one can argue that academic inability to cope with academic rigor and inability to bear the expenditure on private tuition interact and lead to

dropout. Even children have given more than one reason for dropout. The same is given by the number of respondents and presented in Table 9.

Household Factors

Socio-economic and cultural background of the families is the most significant contributor to the continuation or discontinuation of the child in school. Poverty of the parents still remains one of the significant causes for the low participation of children in schooling.

Financial Constraint

Educational expenditure has two sources namely, public and private. The expenditure incurred by the state in providing infrastructural arrangements for education, like creating facilities in the form of building and maintenance of schools, provision of teachers, payment of teacher salary, and other planned and non-planned grants are a part of the public expenditure. Private expenditure on education refers to the expenditure incurred by the parents and households. This is mainly contributed to the payment of fees, private tuition, stationery, uniform, transport, etc. A number of studies highlight the linkage between poverty and dropping out from the school (Birdsall et al, 2005; Boyle et al 2002; Dachi & Garrett, 2003). A few research studies indicate that the cost of schooling, including fees, is one of the main reasons for dropping out (Brown & Park, 2002, Colclough et al, 2000; Mukudi, 2004, Chugh 2004).

About 18 percent of the respondents reported that the most significant factor of dropout is their inability to meet the cost of schooling. At the secondary level annual expenditure towards school fee is around Rs 400, stationery items is around Rs.1,200, cost of books is around Rs 800 and the same amount is needed for school uniform. During the survey the children and their parents talked about difficulties in paying for school fees and other school related items, especially when the father was without a job or somebody fell sick in the family.

Table 9
Reasons for Dropping Out of School #

Reason	RI*	%	RII	%	RIII	%
<i>Household</i>						
To look after the younger siblings	2	0.5	19	4.4		
Not able to pay school fees, uniform, instructional material and books	78	18.1	78	18.1	21	5.9
Not able to bear cost private tuition and miscellaneous charges from school such as contribution to annual day, etc.	112	25.9	46	10.7	12	3.4
Disputes within the family	5	1.2	11	2.6		
Lack of time for studies at home	3	0.7				
No need of education for employment	1	0.1				
Insecurity of the child	5	1.2	8	1.9		
Fear of rape of girl child	15	3.5	7	1.6	11	3.1
No need of education for girls	9	2.1	16	3.7	9	2.5
Frequent break in studies	0					
No one at home to help in studies	5	1.2	12	2.8	8	2.2
<i>Individual Child</i>						
Insufficient place to study at home			23	5.3	55	15.4
Sickness of the child			11	2.6	9	2.5
Sickness in the family	6	0.9			4	1.1
Lack of interest in studies					23	6.4
Gained Employment			46	10.7	10	2.8
Poor Comprehension	75	17.4	84	19.4	47	13.1
Poor Academic performance	84	19.5	48	11.1	9	2.5
<i>School</i>						
Discriminatory attitude of teachers	12	2.8	8	1.9	13	3.6
Medium of instruction	7	1.6				
No effective teaching		0.0	12	2.8	98	27.4
Schools appears to be far off	13	3.0			11	3.1
Lack of female teachers			3	0.7	18	5.0
Total	432		432		358	

*R- response; # Not mutually exclusive

About 26 percent of the respondents expressed their inability to bear the private tuition expenditure. In the opinion of many parents as well as students, attending school without simultaneously availing private tuition does not yield any positive results. It is widely shared among parents as well students without private tuition it is difficult to cope the severity of secondary education. Thus when students felt that their family could not afford private tuition, they simply withdrew from the school. Many studies have also documented the emergence of private tuition across the country (Mark Bray 2007, Sujatha 2006). Sujatha K (2006) observes that there exists a system of ‘private tuition’

parallel to the formal system of education to supplement the academic support and to overcome the school inadequacies. Children from the middle and higher income families spend Rs 5,000 to 10,000 per month towards private tuitions but children from the poor households also often spend Rs 300 to 800 per month towards group tuitions to improve their understanding of a subject. It becomes difficult for parents to bear their tuition expenses. Moreover, the private tutors are also not of high quality and even after attending the tuition, children are not able to cope with the syllabus leading to failure. Failure in a particular grade lowers their morale and self-esteem resulting in disinterest in studies and finally dropping out of the system.

Case Study I: Inability to Bear Educational Expenses

Kusum dropped out of government co-ed school, Karampura, in the middle of Grade IX when she was 16 years old. She decided to drop out because she was not able to pay her school fees. She neither had the uniform nor the schools shoes. She was not able to purchase all the text books. She needed private tuition for science and maths. After dropping out from the school, she started working as a housemaid in three households

Rajesh also shared a similar kind of experience. He mentioned that he tried to go to school and also worked as a part time hand in a shop as his parents could not afford his school expenses. He wanted to join private tuition as well but it was not possible to pay the tuition fee. Moreover, it was tiring for him to work and study at the same time. He did not get time to study at home; therefore, he decided to leave school. But he plans to continue the studies through the open school.

Safety of Child

The secondary schools are not available to these children in the neighborhood and as such they need to travel by bicycle/bus or walk for about 25 minutes to reach the school. Insecurity, especially of the girls, becomes a major impediment for the children to continue in school. Data analysis from the sample households makes it clear that around three percent of the families felt that it was not safe to send the children to a far off school, especially the girls. About seven percent of girls reported that they discontinued studies for fear of sexual assault as the school was far away from their residence and about 40 percent of girls did mention that they were scared of going alone though it was not cited as the main reason. Annu Jha, field worker with the NGO Nav Srishti, which brings non-formal education to girls in some Delhi slum areas, notes that one of the main reasons parents take girls out of school is the rampant sexual harassment in, and on the

way to, school. Therefore, a large number of girls in India drop out of the education system around puberty. If this is the situation prevailing in the country's capital city, one can only imagine the situation in small towns and rural areas with girls facing serious danger in their attempt to avail educational facilities.

Insecurity in reaching school is not only a deterrent factor but the insecurity within the school is a matter of concern for girls. A study of Mumbai Municipal Schools (2002) conducted by Vacha Kishori Project Team notes: "We tried to raise the issue of unnecessary touching and attention by male teachers. The girls resented the behavior of male teachers and expressed their discomfiture to us. The principal of the school did not believe the girls, despite the fact that two municipal school teachers had been arrested for confinement and molestation of girl students while school was on. In one school, a teacher wrote graffiti on the walls of the girls' toilet; the girls did not want the research team to intervene as the teacher might penalize them. (Times of India, 30 April 2005, Deepti Priya Malhotra)

The case studies of Renu and Meena also corroborates this finding. Renu, a good looking girl, dropped out in Grade X, and Meena left in Grade IX as they were teased by the boys on their way to school.

Case Study II: Insecurity to Travel

Renu who lives in Baljeet Nagar walks about 25 minutes to reach school. Two boys were following and teasing her every day. She told her mother about it, her brother started dropping her on the bicycle. This happened for fifteen days after which she tried to go alone, but the same boys started following her. On hearing this, her mother did not allow her to continue in school, even though she was good in studies. She may continue through the open school as her father wants her to study at least up to the graduation level.

Similarly Meena was harassed by the boys while she traveled to school. She got frightened and stopped going to school.

Peer Group

Social composition of students in a school is a strong predictor of dropout rates. Students living in slum areas are more likely to have friends as dropouts which may also influence the decision of others to discontinue school. Around 15 percent of children cited this as one of the significant causes for dropping out as they did not like to attend school without their friends.

Case Study III: Peer Group Influence

Sheela, staying at Naraina, dropped out after going for two weeks. She said that her parents did not want her to take admission as her friends in the neighborhood had already discontinued. Her brother got her admitted and it took her around 20 minutes to walk to school. She did not like to go to school alone, thus stopped going. Her friends are either learning stitching or working with the beautician. She plans to join a typing college and beauty course as she wants to work and earn. (Sheela's case makes it clear that education related expenditure is not the only issue but peer group could also be a major reason for dropping out.)

Disputes within Family

Quite often family environment of households living in slums turns violent for a variety of reasons. Financial constraints, job loss and chronic unemployment, addiction to alcohol and other substances can lead to frequent disruptions in the family. This can be unbearable for several children, they loose interest and attend school mechanically leading to low academic performance that may ultimately result in dropout. As discussed earlier, the monthly income in most of the households is either equivalent or less than the monthly expenditure on the essential items. In addition, as most of the parents of the dropped out children were working in private and unorganized sector, their incomes are irregular and insufficient. Moreover, in many of the households one third to one fourth of income is spent on liquor. Some of the children reported that the habit of consuming liquor most often results in fights and quarrel that not only deprives the family of its pecuniary benefits but also leaves a deep psychological scar on children, making it difficult for them to concentrate on studies. One important area that requires further investigation is the interaction between family environment and the performance of children of vulnerable groups.

School factors

It is widely acknowledged that infrastructural facilities, school environment and teachers' attitude exert powerful influences on student's interest or disinterest in studies including dropout rates. In this context, the PROBE team (1999) and Balgopalan and Subramanian (2003) describe discrimination against socially disadvantaged groups as terrible and exclusionary. They reveal that children from the upper classes are joining private schools and the poor are basically attending government schools with some belonging to the Scheduled Caste and Scheduled Tribe groups and teachers belong to the so-called upper caste. Consequently, the attitude of the teachers, disinterest in teaching to these disadvantaged children and poor infrastructural facilities like unavailability of functional toilets, improper seating arrangements etc. are found to be some of the significant reasons for pushing out the children from school. Findings from the field also confirm some of these observations.

Infrastructural Facilities in the School

Overall the infrastructural facilities of sample schools appear to be not too bad. Though, improvement here and there is very much necessary. The schools are having pucca/semi pucca buildings. Drinking water facility is available in all the sample schools but in four schools the supply is not regular. Except for two schools the toilet facility is available but in 10 schools toilets were not in functional condition. The children did not cite this as a main reason for dropping out of school although they did mention that it created discomfort. Many schools in fact run in shift system with the each shift reserved for single gender.

Attitude of the Teachers

Studies demonstrate that when teachers hold low academic expectations of particular students, they tend to treat those students (consciously or unconsciously) in a negative way. Some of the sample children reported discriminatory practices of the teachers such as verbal abuse; children given cleaning tasks in school; corporal punishment meted out to them. With less than two percent of children citing 'Discriminatory Attitude of Teachers' the most significant reason for them to dropout;

majority of them, however, complained of the rude behavior of teachers towards them. They reported that teachers would “pick on” or “single out” them and take disciplinary action against them often with no fault of their own.

As far as qualification of the teachers is concerned all the teachers were professionally qualified which implies that the teachers were having requisite qualification but the competence and commitment of teachers was lacking. Children, who had dropped out, perceived teachers to be less interested in teaching in the classroom, preferring instead, taking private tuitions. Apathy of the teachers made these children disengaged from school activities and finally pushing them out of school.

Case Study IV: Attitude of the Teacher

Ramesh stopped going to school as the teacher used to scold him almost every other day. Since he belonged to a very poor family, he used to mostly wear dirty and torn clothes and did not have the finances to purchase the books required. As it takes him about half an hour to reach school, he often reached late by ten minutes and was punished for that. One of the teachers specially used abusive language. Moreover, not being a bright student (hoshiar nahin hoon), he was getting scolding very often. Due to which he felt, frustrated, humiliated and agitated, therefore, decided to leave the school.

Distance of the School

Distance also proved to be a barrier for some children continuing in school. Research studies (Glick & Sahn 2006 found for Madagascar and Colclough et al, 2000, Ainsworth et al 2005) have already established that long distance has a strong negative impact on attending school. It has been observed that a large number of children, especially girls, terminate their schooling after Grade VIII as the secondary school may not be available in their village. Even in cities like Delhi there are instances of secondary school being not available in the close vicinity to quite a few children. As a result about three percent of the children had to leave school as their squatter settlement had been relocated in the outskirts of the city, making it difficult for them to travel about 25 to 30 kilometers everyday to attend school. In addition, they were not sure if they would get admission in the nearby school as their quarterly results were not satisfactory. Some of them mentioned that they would try to continue their studies through the distance mode.

Individual Child Factors

The child related factors are closely associated with the family and school related factors. Financial constraints and inappropriate school environment tend to de-motivate the children, making them loose interest in their studies and thus leading to their eventual dropout. Further household circumstances and academic failure increased students' alienation from school, leading to absenteeism, which also influenced their dropping out of school.

Poor academic performance

As the children living in slum areas do not have favorable academic environment at home, and even in school the teachers lack motivation to teach, as a result of which the incidence of failure is very high among them. It was observed that about 20 percent of children cited failure as the most significant reason for dropping out as detention in the same grade caused embarrassment to them. Further, it was reported that even after repeating the same grade they could not understand the subject matter and as such started loosing interest in studies. Thus, most of the students who failed had difficulty in understanding all the subjects but they found Maths, Science and English very difficult.

Case Study V: Failure in Examination

Mohan and Rajesh, stopped going to school after they were retained in the same Grade IX, for two years. Even though they were taking private tuitions, they were still not able to understand Maths and English. Since they could not understand these books, they instead planned to take up some apprentice work in a motor garage or electricity shop.

Poor Comprehension

It has often been observed that poor understanding at the elementary level is the main factor contributing to low comprehension at the secondary level. Researchers have also reported connection between measures of academic performance in early elementary school and dropout behavior before high school graduation (Boyle et al, 2002; Hunter & May, 2003). They also emphasize the need for examining the causes of dropout before high school, as many students were observed to be dropping out before Grade X. Those who reach secondary level with weak academic understanding find it difficult to sustain.

It was noted that around 17 percent of the children stopped going to school after losing interest in their studies due to poor comprehension. Even the remedial classes, though not held regularly, proved futile.

The students, who had dropped out, indicated that their reasons for dropping out include -not being able to identify with what is going on in the classroom; teachers not really explaining what needed to be done; teachers going too fast; and insufficient time to complete class assignments. Further, the children felt that they had been put on a schedule with no flexibility and a sense of defeat seemed to have prevailed due to the insensitive attitude of the teachers and other staff members, leaving them with no other alternative but to go away from the school.

From the above description one can say that around one fifth of the children discontinued studies due to poor comprehension resulting in their failure in a particular grade. Teachers need to be oriented in order to improve the teaching methodologies in a way that they can relate the curriculum to the life experience of these children and at the same time make an effort to bring the academically weak children under their centre of focus.

Early Marriage

Marriage at an early age is alarming, especially among the girls. Even though statistics are elusive, estimates show that 40 to 50 percent of marriages in India involve a girl under 18 or a boy under 21, the legal ages for marriage. In fact, as per NFHS Survey-3 (2005-06), 45 percent of women of 20-24 years were married before the legal age of marriage of 18 years, compared with 50 percent, as reported in NFHS 2 (1998-99). Further, in urban slums 40.5 percent of males get married before the age of 21 and 55.5 percent of girls before the age of 18 years (Aggrawal Sraddha, 2006). Thus, early marriage is one of the important reasons for children dropping out from the school, especially in the states of Bihar, Rajasthan, Madhya Pradesh, etc. Slums represent the culture and customs of different states as the residents are migrants from different parts of India. These migrants follow their state specific rituals in marrying off girls at an early age. After marriage these students do not return to school and school policy also does not encourage their return to school either. Most of the time, these students also do not

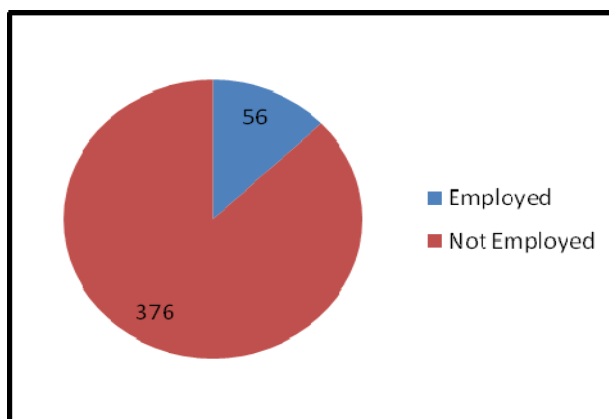
possess any information regarding future educational possibilities due to which most of the girls do not attend school or any other course or training after marriage. It was found that 17 children had got married and dropped out, of which 15 were girls of less than 17 years of age. Around 20 percent of girls reported that they would get married in the next year.

What Children are doing after Dropping Out?

Employment

Employment of children and education has inextricable linkages. The children, who are not enrolled or dropped out, usually try to get jobs in the unorganized sector like small factories, garages, in dhabas or stay back to help in household activities. Moreover, children studying at the secondary level can be easily absorbed in the unorganized job market as legally they can be employed. Even then out of the total 432 children who dropped out, only 56 children (i.e. 13 per cent) are working. This implies that children working follow dropping out. Not the reverse i.e. children dropout because they are required to work. Out of 56 children who are working, 48 boys were employed either in a dhaba or in the motor parts shop while only eight girls were employed with all of them working as house maids.

Fig 8
Working after dropping out



Children who were not currently working, about 50 percent (150 children) have reported that they were learning skills such as carpentry, work related to electrician, while the girls were learning stitching, embroidery work and the beautician course.

Earnings of the Employed Children

Children were either unskilled or semi-skilled, with the average earning of about Rs 2,500 per month. Monthly earning of the children who were employed is presented in Figure 9. A disproportionately large number of children (34) earning fall between Rs. 2000-3000. The families of most of the employed children (42 out of 56) reported that the children spent most of the amount on themselves rather than contributing to the household income.

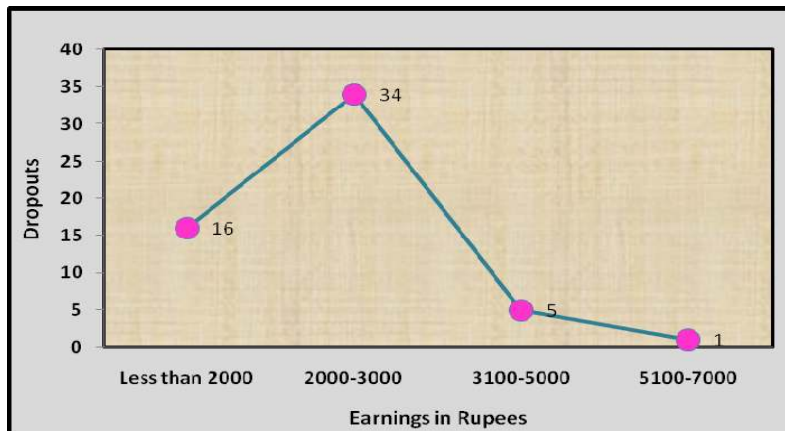
Case Study VI: Reactions of Employed Children

Rajesh dropped out while he was studying in Grade XI. It used to take him half an hour to reach the school. As he had secured only 42 percent marks in Grade X, he was offered the humanities stream with History and Political Science, even though he was keen on the Commerce stream. In addition, since his father met with an accident, he could not go for work for three months due to which Rajesh did not have money to purchase books. He also missed school quite often and consequently could not understand what was taught in the class. He stopped going to school and started working in a garment export factory. His friend helped him to get a job. For the first three months he would get Rs 1,200 a month and the salary would be raised afterwards. He likes to learn while he earns.

A dropout from Grade IX, Sangeeta started working as a maid in a household and was earning Rs 3,000 per month besides getting food and clothes.

Fig 9

Earnings of Working Children (in rupees)



Continuation of Studies

As mentioned above various reasons such as financial constraints and poor comprehension, were given by the respondents for dropping out of school. When asked if given an opportunity to continue the studies, only about 33 percent of children (142

children) were interested to study further provided they are given additional coaching by the teachers and the books are provided by the school. Few were keen to complete secondary education; while some of them wanted to pursue some vocational course so as to enhance their employment prospects. However, large proportion of children (about 64 percent i.e. 278 out of 432) were somewhat reluctant to resume studies as they felt that understanding subjects like mathematics and science was beyond their capacity and felt that even after the completing the secondary level of education they would get the same kind of job. This indicates both an internalization of the expectations of teachers of these students and also shrinking job prospects even after completing very basic levels of education.

Preventive Measures to Reduce Dropout

The preceding analyses suggest a variety of reasons for the dropout phenomenon. Based on findings and the National Scheme for Universal Access and Quality at the Secondary Stage (SUCCESS) following interventions could be made to combat and reduce dropouts, especially for children living in Jhuggi Jhoparies and other resettlement colonies.

Comprehensive approach could help ‘at-risk students’ to address their social and academic problems as well as improve their ‘at-risk settings’ which contribute to these problems.

- Socio-economic status variables like socio economic background, family structure, etc., are unlikely to change but alterable variables such as access to schooling facilities, attendance, improvement in infrastructure, flexible curriculum and teacher motivation could be modified to improve the retention rate of these children.
- Access to schooling facilities may be improved. Efforts can be made to locate schools at those places where they are needed the most. To make a provision of secondary school within five kilometers of any habitation and higher secondary school within 7-10 kilometers of any habitation.
- In cases where the land is not available for new schools to be opened, the transport facility may be arranged for safe and convenient access to schooling facility. It should also be strictly made mandatory for all the private schools to reserve twenty five percent of seats for the poor.
- As dropout is influenced by financial constraints; children may be given stipends, scholarships, free uniform, free text books, free stationery items up to secondary level of education. For children of poor socio-economic background, these incentives will be useful in improving the retention rate.

- Since the symptoms of dropping out such as absenteeism, poor performance in the school examination, etc., begin to show at the elementary school level, prevention strategies need to be initiated at this stage itself. Meanwhile, to reduce dropout rate at secondary levels, the education system needs to ensure that the students do not have academic deficiencies at the elementary levels of education. For this purpose, a bridge course or special classes during the summer break may be arranged.
- Schools may provide after school and summer enhancement programmes at secondary level that eliminate information loss and invokes creativity. Such experiences are especially important for students at risk of school failure.
- For improving the performance of children at secondary level of education, issues like curriculum, instructional materials, teacher preparedness and their ability to handle the teaching of modern science and mathematics need to be reviewed.
- Differentiated curriculum may be followed in the schools and the students should be allowed to opt for the basic or advanced level of the curriculum. More skill oriented courses like carpentry, electric, motor mechanic, computer related course need to be introduced, with the students being given the option to choose a course of their choice, as for a large proportion of children, secondary school is a terminal stage of education.
- An inter-sectoral approach aiming at holistic development, at both central and state levels, is necessary keeping in view the complexity of the problem. Thus, considering the original causes of dropout, an integral policy adopting *preventive and restorative* approach needs to be formulated.
- For adopting the preventive measure, the teachers need to be acquainted with and oriented to the specific problems and issues of the children living in these areas. For this purpose, a detailed profile of each child may be prepared from the primary stage and the tracking may be done up to the completion of school education. The advice of counselors may be taken to identify their psychological, emotional and behavioral problems.
- Teachers also have to make an extra effort to counteract dropout by understanding, stimulating, supporting, and guiding the students in their studies.
- Besides the preventive dropout policy, a restorative policy is also necessary, which will ensure that dropouts are offered a second opportunity to acquire the necessary knowledge and skills, in order to increase their chances in the labor market. For this the students may be given readmission without creating any difficulty and they may be oriented in open school option.

Summary and Conclusion

The dropout phenomenon has been observed to be very intricate with multiple interwoven factors responsible for leading to this complex situation. This paper is a modest attempt to explore this complex phenomenon with reference to children living in slums. The study was carried out in Delhi. It attempts to juxtapose the additional academic support required to continue in school and overcome issues arising from household characteristics of children living in slums and if school is expected to meet them.

A sample of 432 children, who had dropped out from 33 schools (12 exclusively for girls, 12 for boys only, and nine co-educational schools) of Delhi, was identified. The dropout was highest at Grade IX while it was low at Grade XII which imply that children usually dropout at the beginning of secondary education. And once the children get accustomed to the rigors of school they may likely to continue till the end of secondary cycle.

It was found that family background such as low socio-economic and educational status of the parents is significantly correlated with the phenomenon of dropping out with about one fifth of the sample children dropping out due to financial constraints. At secondary level, taking private tuition is a common practice to obtain higher marks, but it was observed that as many as 26 percent households reported that they could not bear this expenditure because of which their children dropped out of school. In addition, a few children dropped out (about 18 percent) as they found the curriculum too heavy and difficult to comprehend the content, especially mathematics and science leading to failure and repetition. Around 20 percent of children left due to failure in a particular grade.

Data from household survey on the reasons for dropping out of school at the secondary level reveal that economic reasons and school related reasons are both equally important. The main finding of the study is that youngsters do not drop out merely because they are poor but also because by the time they reach secondary level of education, they have accumulated a strong history of school failure which puts them at higher risk of dropping out. School failure due to poor comprehension, discrimination in the class, poor teaching-learning process is a cumulative process which needs to be tackled early, right from primary or elementary education to secondary education.

From the analysis in this study a few policy implications can be drawn both in terms of broader education policies aimed at improving educational equity and for the design and implementation of targeted economic incentives aimed at reducing the dropout rates of marginalized children living in slum areas. It is important that the private costs of education need to be moderated by providing scholarships and also incentives like uniform, text books and stationary, etc. In particular, by providing additional teaching one can ward off the need for private tuitions. Teachers also need to be

sensitized with the difficult conditions in which the children in slums live and how they need to respond more sympathetically. Mere sensitization of teachers without providing corresponding infrastructure that enables the students residing in slums to overcome circumstantial disadvantages would not be of much use.

The consequences for youngsters who drop-out before finishing secondary education is dramatic, in terms of high unemployment and low lifelong earnings. Completing secondary education does not guarantee access to high paying job; it represents a promise of greater access to further opportunities and is fast becoming a prerequisite to remain employable and re-trainable, the highly valued qualities in today's labour market. This makes a strong case in favour of investing more resources to tackle this issue of dropouts. These investments must be part of an integral approach to education policies, combining supply and demand measures, while maintaining a clear mandate that it is the role and responsibilities of schools and teachers to make sure that all students regardless of their socio-economic background complete the secondary level of education.

References

- Ainsworth, M, Beegle, K and Koda, G. (2005): The Impact of Adult Mortality and Parental Deaths on Primary Schooling in North-Western Tanzania, *The Journal of Developmental Studies*, 41 (3); 412-439
- Aggarwal Y.P. & Chugh Sunita (2003): Learning Achievement of Slum Children in Delhi, *NIEPA Occasional Paper 34*, NIEPA.
- Al Samarrai, S. and Peasgood, T. (1998): Educational Attainments and Household Characteristics in Tanzania. *Economics of Education Review*, 17(4): 395-417.
- Alexander et al., (1997) From First Grade forward: Early Foundations of High School Dropout. *Sociology of Education* 70, 87-107
- Astone, N.M & McLanahan, S.S (1991): Family Structure, Parental Practices and High School Completion, *American Sociological Review*, 56, 309-320.
- Balgoplan, S. (2003): 'Neither suited for the Home Nor for the fields' *IDS Bulletin*, 34 (1). 55-62.
- Banerji Rukmani. (2000): Poverty and Primary Schooling, Field Studies from Mumbai and Delhi, *Economic and Political Weekly*, March 4, 2000, pp 795-802.
- Banerji Rukmani & Surianarain Sharmi, (2005): *City Children, City Schools* Pratham/UNESCO, New Delhi.
- Barrington, B.L. & Hendricks, B. (1989): Differentiating Characteristics of High School Graduates, Dropouts, and Non-Graduates. *Journal of Educational Research*, 82,309-319.
- Bachman, J. G., Green, S., & Wirtanen, I. D. (1971): *Youth in Transition, Dropping out: Problem or symptom?* Ann Arbor, MI: Institute for Social Research, University of Michigan.
- Bhatty Kiran (1998): Educational Deprivation in India - A Survey of Field Investigations, *Economic and Political Weekly*, July 4, 1998 & July 11, 1998.
- Birdsall, N et. al. (2005): Towards Universal Primary Education: investments, incentives, and institutions. *European Journal of Education. Vol 40 (3), 337 -349.*
- Boyle, S., Brock, A., Mace, J. and Sibbons, M. (2002): Reaching the Poor: The 'Costs' of Sending Children to School. *Synthesis Report*. London: DFID.
- Bray, Mark (2007): *The Shadow education system: Private tutoring and its implications for planners*, UNESCO, IIEP, Paris.
- Brown, P. H., & Park, A. (2002): Education and Poverty in Rural China. *Economics of Education Review*, Vol. 21. pp. 523-541.
- Bruneforth, M. (2007) Characteristics of Children who Drop-out of School, Background paper for the *EFA Global Monitoring Report*.
- Bryk and Thum, (1989): The Effects of High School Organization on Dropping out: An Exploratory Investigation, *American Educational Research Journal* 26(3) 353-383.
- Cardoso, A.R. and Verner, D. (2007): School drop-out and push-out factors in Brazil: The role of early parenthood, child labor, and poverty. *IZA Discussion Paper No 2515*. Bonn: Institute for the Study of Labour (IZA).
- Carbonaro, W.J. (1998): A little help from my friend's parents: Intergenerational Closure and Educational Outcomes. *Sociology of Education*, 71, 295-313.
- Census of India*, 1991- 2001: Final Population Totals, Series-1.

- Chaudhury, N., Hammer, J., Kremer, M., Muralidharan, K. and Halsey Rogers, F. (2005): Missing in Action: Teacher and Health Worker Absence in Developing Countries Available from <http://www.economics.harvard.edu/faculty/kremer/files/MissinginAction.pdf>
- Chugh Sunita (2004): *Why Children dropout? Case study of a Metropolitan Slum in Delhi*, Book well Publication, New Delhi.
- _____ (2005): Schooling for the Urban Poor, *Social Change*, Vol. 35 Number 1, March 2005
- _____ (2008): Achieving Universalisation of Elementary Education in Slum areas: Problems and Issues, *Journal of Indian Education*, Number 4, February 2008.
- _____ (2009): Social Justice and Urban Educational Planning: An Examination of Free Seats in Private Schools, *Perspectives in Education*, Vol 25, No 1, 2009.
- Chatterjee, B. (1975): *School Dropout among Harijan Children: Causes and Cure* Central Institute of Research and Training in Public Cooperation, New Delhi, 1975.
- Chatterjee, Madhusudan (1998): The Primary Education among the Poor in the City of Calcutta Paper presented at NUEPA at the workshop on “Indian Mega Cities and Primary Education of the Poor”, September 1998.
- Chitnis Suma (1982): *Dropouts and low pupil achievement among the urban poor in Bombay*, Tata Institute of Social Science, Bombay, Mimeo.
- Coleman James S (1966): *Equality of Educational Opportunity*, USA Arna Press.
- Colclough, Christopher. Rose, Pauline. & Tembon, Mercy. (2000): Gender inequalities in Primary Schooling: The Roles of Poverty and adverse Cultural Practice. *International Journal of Educational Development*. Vol. 20(1): 5-27.
- Connelly, R. and Zheng, Z. (2003): Determinants of school enrollment and completion of 10 to 18 year-olds in China. *Economics of Education Review*, 22(4): 379-388.
- Dachi, H.A. & Garrett, R.M. (2003): *Child labour and its impact on children’s access to and its participation in primary education: A case study from Tanzania*, London, DFID
- Ekstrom, R.B., Goertz, M.E, et.al (1986): Who drops out of high school and why? *Teachers College Record*, 87, 356-373.
- Emerson, Patrick M. and Andr´e Portela Souza (2002): Bargaining over Sons and Daughters: Child labor, School Attendance and Intra-Household Gender Bias in Brazil. Department of Economics, *Working Paper* 02-W13.Nashville, TN: Vanderbilt University.
- Ensminger, M.E. & Slusacick, A.L. (1992): Paths to high school graduation or dropout: A longitudinal study of a first-grade cohort. *Sociology of Education*, 65, 95-113.
- Enyegue Parfait Eloundou (2000): Tradeoff between Family Size and Education, Africa Notes, December 2000.
- Ersado, L. (2005): Child labour and schooling decision in urban and rural areas: comparative evidence from Nepal, Peru and Zimbabwe. *World Development*, 33(3), 455-480.
- Finn, J.D. (1993): *School Engagement & Students at Risk*. Washington, DC: National Center for Education Statistics.
- Fuller, B. and Liang, X. (1999): Which Girls Stay in School? The Influence of Family Economy, Social Demands, and Ethnicity in South Africa. in *Critical Perspectives on Schooling and Fertility in the Developing World*, Bledsoe, C.H., Casterline, J. B., Johnson-Kuhn, J. A. and Haaga, J. G. (eds.). Washington, DC: National Academy Press.
- Garnier, H. Stein, J., & Jacobs, J. (1997): The Process of Dropping out of High School: A 19-year perspective. *American Educational Research Journal*, 34, 395-419.

- Ghuman, S. and Lloyd, C.B. (2007): Teacher Absence as a Factor in Gender Inequalities in Access to Primary Schooling in Rural Pakistan. Working Paper No 1, New York: Population Council.
- Glick, P. and Sahn, D. E. (2000): Schooling of Girls and Boys in a West African Country: The Effects of Parental Education, Income, and Household Structure. *Economics of Education Review*, 19: 63–87.
- Goldschmidt, P. & Wang, J. (1999): When can School Affect Dropout Behavior? *American Educational Research Journal*, 36, 715-738.
- Government of India (1986): National Policy on Education, Ministry of Education, New Delhi.
- _____. 1992: Programme of Action on the National Education Policy, Ministry of Human Resource Development, New Delhi.
- Grant, M. and Hallman, K. (2006): Pregnancy Related School Dropout and Prior School Performance in South Africa. Policy Research Division *Working Paper No 212*. New York: Population Council.
- Gubert, F. and Robilliard, A. (2006): Do Household Income Shocks Affect School Attendance in Rural Areas: A case study of Madagascar. Working Paper, Paris
- Hunt Francis (2008): Dropping out from School: A Cross Country Review of Literature, CREATE Pathways to Access, Research Monograph No 16.
- Hunter, N. and May, J. (2003): Poverty, Shocks and School Disruption Episodes among Adolescents in South Africa. CSDS Working Paper, No. 35.
- Jayachandran, Usha (2007) How High is Dropout rates in India, *Economic and Political Weekly*, March 17, 2007
- Juneja Nalini (2001): *Primary Education for All in the City of Mumbai: The challenge set by local actors*, IIEP, Paris.
- Lew, W.O. (2003): Equity Access to Education: Themes, Tensions, and Policies, Asian Development Bank, Comparative Education Research Centre, The University of Hong Kong.
- Leach, F., Fiscian, V., Kadzamira, E., Lemani, E. and Machakanja, P. (2003): An Investigative Study of the Abuse of Girls in African Schools. London: DFID.
- Lewin, K. M. (2007): *Improving Access, Equity and Transitions in Education: Creating a Research Agenda*. CREATE Pathways to Access Series, No 1. Brighton: University of Sussex.
- Maehr, M.L., & Midgley, C. (1996): *Transforming School Cultures*. Boulder, CO: Westview Press.
- Maithly, B, Vartika Saxena: Adolescent's Educational Status and Reasons for Dropout from the School, Vol 33, Issue c 2, PG 127-128.
- McNeal, Jr. Ralph B (1997): High School Dropouts: A Close Examination of School Effects. *Social Science Quarterly*.
- McNeal, R. B. (1999) Parent Involvement as Social Capital: Differential Effectiveness on Science Achievement, Truancy, and Dropping out. *Social Forces*, 78, 117-144.
- Morris, J. D., Ehren, B. J., and Lenz, B. K. (1991): Building a Model to Predict which Eighth Graders will Drop out in High School. *Journal of Experimental Education*, 59(3), 286-293.
- Mukudi, E. (2004): Effects of User-Fee Policy on Attendance rates among Kenyan Elementary School Children. *International Review of Education*, 50 (5-6) 447-461

- National Council of Educational Research and Training, All India Educational Surveys (for various years)
- P. Geetha Rani (2008): Economic Reforms and Privatisation of Education in India. *Man & Development*, Vol. XXX, No.2, June 2008
- Pong, S.-L., & Ju, D.B. (2000): Effects of change in family structure and income on dropping out of middle and high school. *Journal of Family Issues*, 21(2), 147-169.
- Public Report on Basic Education in India* (1999): The PROBE Team, Oxford University Press, New Delhi.
- Rauderbusch, S.W. & Willms, J.D. (1995): The Estimation of School Effects. *Journal of Educational and Behavioral Statistics*, 20, 307-335.
- Roderick, M. (1993): *The Path to Dropping out*. Westport, CT: Auburn House.
- Rumberger, R.W. & Thomas, S.L. (2000): The Distribution of Dropout and Turnover Rates among Urban and Suburban High Schools. *Sociology of Education*, 73, 39-67.
- Reddy, Anugula N. (2005): Privatization of Secondary Education in India: Emerging Trends and Challenges, *NORD-SUD Aktuell*, Vol. XIX, No. 2, pp. 193-203
- Reddy, Anugula N. (2007b): Financing of secondary education in India: Trends and Prospects, *Man and Development*, Vol. XXIX, No. 1, pp. 39-66.
- Report of the CABE Committee (2005): Universalisation of Secondary Education, Ministry of Human Resource Development.
- Report of the Working Group on Secondary and Vocational Education for 11th Five Year Plan (2007-12), Planning Commission, Government of India.
- Rumberger, R.W (1995): Dropping out of middle school: A multilevel analysis of students and schools. *American Educational Research Journal*, 32, 583-625
- Rumberger, R.W & Larson, K.A (1998): Student Mobility and the increased Risk of High School Dropout. *American Journal of Education*, 107, 1-35.
- Selected Educational Statistics (for various years) Department of Education, Ministry of Human Resource Development, Government of India.
- Smith, R.L. (2003): School dissatisfaction – Africa’s growing problem. *International Journal on School Disaffection*, 1(1): 7-12.
- Sujatha, K. (2006): *Private tuitions among secondary students in four states*. National University of Educational Planning & Administration, New Delhi.
- Swanson, C.B. & Schneider, B. (1999) Students on the Move: Residential and Educational Mobility in America's Schools. *Sociology of Education*, 72, 54-67.
- Wehlage & Rutter (1986): Dropping out: How much do schools contribute to the problem? in Natriello, G (ed.) *School dropouts: pattern and policies*, pp 70-88, New York

Table 1
Total enrolment and the Dropouts from Sample Schools
(2006-07 Academic Session)

		IX		X		XI		XII	
		Total Enrol	Dropout	Total enroll.	Dropout	Total enroll.	Dropout	Total enroll.	Dropout
1	S.B.V.C.C Colony(1309001) (boys)	63	03	49	04	100	01	96	01
2	G S R SKV C Block , Defence Colony, New Delhi (1924023) (Coed)	68	08	59	04	48	04	27	-
3	GBSSS Rampura, Delhi (boys)	45	03	32	0	0	0	0	0
4	Sant Eknath S.K.V, J&K Block, Dilshad Garden (girls)	140	08	195	Nil	166	Nil	116	Nil
5	GBSSS No.2, Uttam Nagar, New Delhi-59 (boys)	118	07	128	04	183	07	89	04
6	S.B.V Jhandewalan, Delhi (boys)	177	Nil	98	Nil	82	Nil	67	Nil
7	G B S S S Narang Colony, Delhi (boys)	57	01	49	Nil	0	N.A	0	N.A
8	S.B.V.(Kaseruwalan) Pahar Ganj, New Delhi-55(boys)	91	11	69	04	67	02	75	01
9	S.B.V.(Kaseruwalan) Pahar Ganj, New Delhi-55 (girls)	110	07	78	02	70	02	76	Nil
10	Sister Nivedita Sarvodya Vidyalaya 'A' block, Defence Colony, New Delhi (girls)	123	08	109	Nil	111	Nil	75	Nil
11	S.B.V Rani Garden, Delhi (boys)	99	2	90	01	85	01	76	Nil
12	S.K.V B-13, Geeta Colony, Delhi (girls)	110	06	110	Nil	102	01	122	Nil
13	G.S.K.V., E-Block, Nand Nagari, Delhi-93(girls)	302	04	220	03	272	02	210	01
14	G.B.S.S.S. No.1 Roop Nagar, Delhi (boys)	179	06	134	Nil	222	05	160	Nil

NUEPA Occasional Papers

15	Sarvodaya Seh-Siksha Vidyalaya, Nehru Vihar, Delhi (Coed)	235	09	281	02	166	05	56	Nil
16	Sarvodaya Vidyalaya, Lancer's Road Delhi (Coed)	137	05	120	03	93	01	48	Nil
17	Govt. Co-Ed. Sr. Sec. School, Paprawat, New Delhi (Coed)	144	07	49	01	102	02	41	Nil
18	Govt. Co-Ed. Sr. Sec. School, Laxmi Bai Nagar, New Delhi (Coed)	72	05	53	Nil	117	05	87	Nil
19	R.S.K.V. Moti Bagh-I. New Delhi (1719073) (Coed)	64	06	78	Nil	80	Nil	69	Nil
20	Govt.Co-Ed. Sr. Sec. School, Sector-5, R.K Puram, New Delhi	188	13	194	01	214	09	182	Nil
21	G.B.S.S.S. No.1, Najargarh, New Delhi-110043 (boys)	199	13	155	02	222	09	133	Nil
22	Govt.Co-Ed. Sr. Sec. School, I.A. Karampura, New Delhi (Coed)	70	06	33	Nil	Nil	Nil	0	Nil
23	S.K.V Shadi Khampur, New Delhi-110008 (girls)	114	06	58	01	40	Nil	28	Nil
24	S.K.V Ramseh Nagar, New Delhi-15(girls)	140	07	125	03	192	06	146	01
25	G.G.Sr. School, West Patel Nagar, New Delhi (girls)	216	11	188	01	161	02	109	01
26	G.G.Sr.School, Prem Nagar, New Delhi (girls)	98	07	42	Nil	-	-	0	-
27	Govt. Co-Ed. Sr. Sec. School, H-Blk, Karam Pura, New Delhi-110015 (coed)	141	16	86	03	128	05	121	01
28	Sarvodaya Kanya Vidyalaya, Ranjit Nagar, N. Delhi (girls)	162	28	94	11	27	01	22	Nil
29	G.S. Bal Vidyalaya, Rani Jhansi Road, New Delhi-55(boys)	76	23	17	01	22	03	19	Nil

30	G.B.S.S.S. 'G' Block Kalkaji, New Delhi-19(boys)	137	10	109	06	71	02	89	01
31	G.B.S.S.School A.P. Block, Shalimar Bagh, New Delhi - 19 (boys)	144	09	86	03	151	09	104	01
32	G.G.S.S School, Janta Flats,Nand Nagai,Delhi-93 (girls)	304	81	151	05	100	13	56	Nil
33	G.G.S.S School No.1 Madi Pur, New Delhi (girls)	117	13	82	01	56	Nil	036	Nil
	Total	4440	349	3421	66	3450	99	2535	12

Table 2
Enrolment in the Sample Schools

S. No	School	IX	X	XI	XII	Total
1	S.B.V.C.C Colony (1309001) (boys)	63	49	100	96	308
2	G S R SKV, C Block, Defence Colony, New Delhi (1924023) (coed)	68	59	48	27	202
3	GBSSS Rampura, Delhi(boys)	45	32	-	-	77
4	Sant Eknath S.K.V, J&K Block, Dilshad Garden (girls)	140	195	166	116	617
5	GBSSS No.2,Uttam Nagar, New Delhi-59 (boys)	118	128	183	89	518
6	S.B.V Jhandewalan, Delhi (boys)	177	98	82	67	424
7	G B S S S Narang Colony, Delhi.(boys)	57	49	-	-	106
8	S.B.V.(Kaseruwalan) Pahar Ganj, New Delhi-55 (boys)	91	69	67	75	302
9	S.B.V.(Kaseruwalan) Pahar Ganj, New Delhi-55 girls)	110	78	70	76	334
10	Sister Nivedita Sarvodya Vidyalaya 'A' block, Defence Colony, New Delhi (girls)	123	109	111	75	418
11	S.B.V Rani Garden, Delhi (boys)	99	90	85	76	350
12	S.K.V B-13,Geeta Colony, Delhi (girls)	110	110	102	122	444
13	G.S.K.V.,E-Block, Nand Nagari, Delhi-93 (girls)	302	220	272	210	1005
14	G.B.S.S.S. No.1, Roop Nagar, Delhi (boys)	179	134	222	160	695
15	Sarvodaya Seh-Siksha Vidyalaya, Nehru Vihar, Delhic (co-ed)	235	281	166	56	738
16	Sarvodaya Vidylaya, Lancer's Road, Delhi (coed)	137	120	93	48	398
17	Govt. Co-Ed. Sr.Sec. School, Paprawat, New Delhi (co-ed)	144	49	102	41	336
18	Govt. Co-Ed. Sr.Sec. School, Laxmi Bai Nagar, New Delhi (co-ed)	72	53	117	87	329
19	R.S.K.V.Moti Bagh-I. New Delhi.Id-1719073 (coed)	64	78	80	69	291
20	Govt. Co-Ed. Sr.Sec. School,Sector-5,R.K Puram, New Delhi (coed)	188	194	214	182	778
21	G.B.S.S.S. No.1, Najafgarh, New Delhi-110043(boys)	199	155	222	133	709
22	Govt. Co-Ed. Sr.Sec. School, I.A. Karampura, New Delhi (coed)	70	33	-	-	103
23	S.K.V Shadi Khampur, New Delhi-110008(girls)	114	58	40	28	240
24	S.K.V Ramseh Nagar New Delhi-15(girls)	140	125	192	146	603
25	G.G. Sr.School, West Patel Nagar, New Delhi (girls)	216	188	161	109	674
26	G.G. Sr.School, Prem Nagar, New Delhi(girls)	98	42	-	-	140
27	Govt. Co-Ed. Sr. Sec. School, H-blk, Karampura, New Delhi-110015 (coed)	141	86	128	121	476
28	Sarvodaya kanya Vidyalaya,Ranjit Nagar, New Delhi (girls)	162	94	27	22	305
29	G.S. Bal Vidyalaya, Rani Jhansi Road, New Delhi-55(boys)	76	17	22	19	134
30	G.B.S.S.S.'G' Block, Kalkaji, New Delhi-19(boys)	137	109	71	89	406
31	G.B.S.S.School A.P. Block, Shalimar Bagh, New Delhi-19 (boys)	144	86	151	104	485
32	G.G.S.S School, Janta Flats, Nand Nagai, Delhi-93(girls)	304	151	100	56	611
33	G.G.S.S School No.1 Madi Pur, New Delhi (girls)	117	82	56	36	291
		4440	3421	3450	2535	

Table 3
Enrolment, Section and Class Size in Sample Schools

		IX		X		XI		XII	
		Enrolment	Section	Enrolment	Section	Enrolment	Section	Enrolment	Section
1	S.B.V., C.C Colony (1309001) (boys)	63 (31)	02	49 (49)	01	100(33)	03	96 (32)	03
2	G S R SKV, C Block Defence Colony, New Delhi (1924023) (coed)	68 (34)	02	59 (30)	02	48 (24)	02	27 (14)	02
3	GBSSS Rampura, Delhi (boys)	45 (45)	01	32 (32)	01	-	-	-	-
4	Sant Eknath S.K.V, J&K Block, Dilshad Garden New Delhi (girls)	140(35)	04	195 (49)	04	166(55)	03	116 (58)	02
5	GBSSS No.2, Uttam Nagar, New Delhi-110059 (boys)	118(39)	03	128(43)	03	183(61)	03	89 (50)	02
6	S.B.V Jhandewalan, Karol Bagh Delhi (boys)	177(44)	04	98 (49)	02	82 (41)	02	67 (33)	02
7	G B S S S Narang Colony, Delhi (boys)	57 (57)	01	49 (49)	01	-	-	-	-
8	S.B.V. (Kaseruwalan) Pahar Ganj New Delhi-55 (boys)	91 (30)	03	69 (35)	02	67 (33)	02	75 (37)	02
9	S.B.V. (Kaseruwalan) Pahar Ganj New Delhi-55 (girls)	110(37)	03	78 (39)	02	70 (35)	02	76 (38)	02
10	Sister Nivedita Sarvodya Vidyalaya 'A' Block, Defence Colony, New Delhi (girls)	123(41)	03	109(36)	03	111(34)	03	75 (37)	02
11	S.B.V Rani Garden, New Delhi (boys)	99 (33)	03	90 (30)	03	85 (43)	02	76 (38)	02
12	S.K.V B-13, Geeta Colony, Delhi (girls)	110(24)	05	110 (22)	05	102(25)	04	122(30)	04
13	G.S.K.V., E-Block, Nand Nagari, Delhi-93 (girls)	302(60)	05	220 (55)	04	272(39)	07	210(42)	05
14	G.B.S.S.S. No.1 Roop Nagar, Delhi (boys)	179(45)	04	134 (48)	03	222(45)	05	160 (40)	04

NUEPA Occasional Papers

15	Sarvodaya Seh-Siksha Vidyalaya, Nehru Vihar, Delhi (co-ed)	235(58)	04	281 (56)	05	166(55)	03	56 (56)	01
16	Sarvodaya Vidyalaya Lancer's Road, Delhi (co-ed)	137 (46)	03	120 (40)	03	93 (46)	02	48 (48)	01
17	Govt. Co-Ed. Sr. Sec. School, Paprawat, New Delhi (co-ed)	144 (48)	03	49 (49)	01	102(51)	02	41 (41)	01
18	Govt.Co-ed. Sr.Sec. School, Laxmi Bai Nagar, New Delhi (Co-ed)	72 (36)	02	53 (27)	02	117(39)	03	87 (29)	03
19	R.S.K.V. Moti Bagh-I New Delhi.-1719073 (coed)	64 (21)	03	78 (39)	02	80 (27)	03	69 (35)	02
20	Govt. Co-Ed. Sr. Sec. School, Sector-5, R.K Puram, New Delhi (Co-ed)	188(38)	05	194 (48)	04	214(43)	05	182(45)	04
21	G.B.S.S.S. No.1, Najafgarh, New Delhi-10043 (boys)	199(40)	05	155 (39)	04	222(56)	04	133(33)	04
22	Govt. Co-Ed. Sr. Sec. School, I.A. Karampura, New Delhi (co-ed)	70 (35)	02	33 (33)	01	-	-	-	-
23	S.K.V Shadi Khampur, New Delhi-110008 (girls)	114(38)	03	58 (29)	02	40 (40)	01	28 (28)	01
24	S.K.V Ramseh Nagar, New Delhi-15 (girls)	140(35)	04	125 (31)	04	192(34)	06	146(24)	06
25	G.G. Sr. School, West Patel Nagar, New Delhi (girls)	216(43)	05	188 (47)	04	161(32)	05	109(27)	04
26	G.G.Sr.School, Prem Nagar, New Delhi (girls)	98 (33)	03	42 (42)	01	-	-	-	-
27	Govt. Co-Ed. Sr. Sec. School, H-Blk, Karampura, New Delhi-110015 (co-ed)	141(35)	04	86 (43)	02	128(43)	03	121(40)	03
28	Sarvodaya Kanya Vidyalaya, Ranjit Nagar, N. Delhi (girls)	162(54)	03	94 (47)	02	27 (27)	01	22 (22)	01
29	G.S. Bal Vidyalaya, Rani Jhansi Road, New Delhi-110055 (boys)	76 (76)	01	17 (17)	01	22 (22)	01	19 (19)	01

30	G.B.S.S.S.'G' Block, Kalkaji, New Delhi-19 (boys)	137(46)	03	109 (55)	02	71 (36)	02	89 (44)	02
31	G.B.S.S. School A.P. Block, Shalimar Bagh, New Delhi-19 (boys)	144(48)	03	86 (43)	02	151(50)	03	104(35)	03
32	G.G.S.S School, Janta Flats, Nand Nagai, Delhi-110093 (girls)	304(44)	07	151 (50)	03	100(50)	02	56 (56)	01
33	G.G.S.S School No.1 Madi Pur, New Delhi (girls)	117(39)	03	82 (41)	02	56 (28)	02	36 (18)	02
	Total	4440		3421		3450		2535	

* Figures in the parenthesis represent class size in sample schools

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