

## A COMPARATIVE STUDY OF THE SCHOOL DROPOUTS WITH A SOCIO-DEMOGRAPHICALLY COMPARISON GROUP OF URBAN SLUM INHABITANTS IN MAHARASHTRA

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### Abstract

**Background and Objective:** Getting children to school is one thing, keeping them there is quite another. Indeed a low school completion rate is one of the biggest threats to human development in India, it is imperative to find ways to reduce this and to do so one must examine the potential risk factors for the high dropout rate. This study was therefore undertaken to find out the magnitude of the problem of school dropouts and the etiological factors related to it.

**Methods:** This study uses a community based descriptive cross-sectional design to identify school dropouts, socio-demographic profile, and a comparison of these factors responsible for school dropouts with non-school dropouts conducted in an urban slum area after the informed consent from all the participants. Descriptive analysis for socio-demographic factors in dropouts was done using Univariate analysis. P value less than 0.05 was the level of significance.

**Result:** Comparison of socio-economic status in dropout and comparison group (Table-5) that the chances of dropouts were more in socioeconomic class V (69.1%) and IV (43.8%) than class III (16.7%). None of the 200 households belonged to Upper class (I). The relation between socio-economic status of dropout and comparison groups was found to be highly significant ( $p < 0.0001$ ).

**Conclusion:** In this study, the commonest reason as perceived by dropouts for dropping out of school was cited as poverty by 41.8% respondents.

**Keywords:** School dropouts, Socio-economic status, Socio-demographic profile, urban slum area.

### 1. Introduction

To the individual, education means expansion of cultural horizons and employment opportunities. To the nations, it means enhanced prospect of social and economic development. Education is a major factor influencing health. The world map of illiteracy coincides with map of poverty, malnutrition, ill health, and high child mortality rates<sup>1</sup>. It also leads to better utilization of health care and greater community and political participation. The Declaration of Human Rights, 1948, stated that everyone has a right to education. Yet, even today, this right is being denied to millions of children.

Outside the family, schools are the most socializing agents available to convey societal norms and prohibitions to young people. In some cases a positive school experience can compensate for the antisocial influence of family and community. A higher level of education

leads to increased income, which in turn decreases malnutrition. Educated mothers are more likely to implement simple health promoting practices, such as increasing cleanliness or utilizing health services. Educated fathers may boost their children's chances of survival through their greater affluence and knowledge. Education opens a vast world of opportunities and ideas for those who are privileged to receive it. It fuels the process of economic growth, human development and advancement. It is also true that a skilled and educated work force contributes to higher economic growth. Education promotes and plays a crucial role in demographic transition, female education in particular is perceived as a tool of empowerment, lowering fertility, mortality, and promoting better health.

Getting children to school is one thing, keeping them there is quite another. Indeed a low school

completion rate is one of the biggest threats to human development in India, it is imperative to find ways to reduce this and to do so one must examine the potential risk factors for the high dropout rate. High dropout rates are a critical problem in the country. There is a large difference between the number of children who enrol in school, or have ever attended school and the number of children who actually complete 14 years of schooling.

This study was therefore undertaken to find out the magnitude of the problem of school dropouts and the etiological factors related to it. Since the benefits that accrue to a country by having a literate population are multidimensional, it becomes imperative to study the determinants of school dropouts. The present study attempts the same in an urban slum in a metropolitan city as surveys indicate that majority of the dropouts belong to poorest and least developed areas of the country especially backward rural areas and urban slums<sup>2</sup>.

## 2. Materials and Methods

This study uses a community based descriptive cross-sectional design to identify school dropouts, socio-demographic profile, and a comparison of these factors responsible for school dropouts with non-school dropouts conducted in an urban slum area after the informed consent from all the participants. This study was conducted from July 2008 to October 2009 after the institutional ethical clearance.

In this study, multistage random sampling procedure was used. In first stage, amongst the different colonies, colony A was selected for study by simple random method. In second stage, out of 70 plots, 20 plots were selected by random sampling by using numbers allotted to each plot. In third stage, house to house survey was conducted. The first house in the plot was the starting point (as per house no. allotted by Municipal Corporation). From each plot 10 houses were selected. The house in which subjects in the age group (10-21 yrs.) were found was included in sample. After initial interview, the respondent was classified as either dropout (study group) or non-dropout (comparison group) and accordingly pro-forma was filled. If in a sampled house more than one individual in the given age group were present, only one individual was interviewed to avoid duplication as study involves assessment family background and socioeconomic factors. Respondents and their parents were interviewed separately to avoid influence of one on the other.

**2.1 Study Population:** Population of colony A = 49,150 (as per the Census of India, 2001). Colony A is divided into 73 plots, each plot comprising of 120 households. Three plots are unoccupied by households as 2 plots are occupied by maternity home and 1 plot by garden. There are in all 8400 households in colony A. Each plot is surrounded by an open drainage system (Nala) and a cemented road. Each plot comprises of two rows of 60 households each (Total 120 households) with entrances in opposite directions. There is a common public latrine (Sulabh Shauchalaya) for every 4 plots located in the centre at the junction of the cement road. The household receive water supply from urban local body tap whereas some households which do not have tap connection buy water at Rs.150-200 per month. Maximum houses are of pucca type with a tiled or cemented floor, brick walls plastered with cement and a cemented floor. Most of the households have a single door and a single window. The people living in this area are of mixed communities and religions. Majority of them being muslims followed by Hindus. Majority of them have migrated in search of jobs or to earn a livelihood. A large proportion migrating from Uttar Pradesh, Bihar and Madhya Pradesh reside in this area since many years and often visit their native places during off seasons (days when no work is available). Regarding occupation, majority of people are daily wage earners or labourers, mechanics or auto-rickshaw owners. They are also involved in small-scale business *viz.* zari work, electronic work, government or private jobs etc. Some of them make ornaments; get contracts from industries for embroidery & zari work. Subjects in the age group 10-21 years and who had left the school at any time before the completion of tenth standard were included. In the comparison group, the subjects in the 10-21 years age group and who had completed tenth standard or currently perceiving education were chosen.

The study was carried out in the following phases:

**Phase I:** The area was surveyed with the help of community health workers. Feasibility of the study was assessed.

**Phase II:** A pilot study was carried out by using a semi-structured questionnaire the purpose of which was to test the feasibility of the study and to decide the structure of the questionnaire. This partially structured questionnaire was used for interviewing 30 school dropouts and their

parents/ guardians residing in the same area to determine the reasons for dropout and the activities in which they have since engaged. The data was evaluated and reconstruction of questionnaire was done. A separate questionnaire was prepared after making minor changes in the questions which was used for the comparison group.

**Phase III:** During the pilot study, it was observed that the respondents were reluctant to talk on certain matters. Some males were not revealing everything when asked about their present earning status while some girls did not reveal the actual reason for dropping out of school. Thus, there was a need to build up an initial rapport with the respondents so as to gain their confidence and get proper answers to the asked questions. So, the help from Medical social workers (MSWs) and community health volunteers (CHVs) from health post was sought. They then accompanied during house to house visit i.e. at the time of actual data collection. During the house visit, face to face personal in-depth interviews were conducted with the help of the pre-tested semistructured questionnaire. The participants were explained about the purpose of the study. Initial rapport development ensured the truthfulness and sincerity of the answers.

In spite of the rapport building, some respondents were not showing interest, gave fake answers and ultimately showed their unwillingness to participate in the study. Such respondents were not included in the study. The average time taken to complete each interview was 15-20 minutes. The parents were also interviewed separately to know their perspectives about reason for dropout and desire for further education. A comprehensive health check up was also conducted after interview for all respondents. A total of 200 respondents in age group 10-21 yrs were interviewed. Out of 200 respondents, 98(49.0%) were identified as school dropouts and included in study group whereas remaining 102(51.0%) were included in comparison group. The data so collected was compiled and analysed.

**2.2 Statistical analysis:** It was done by using SPSS 16 software. Descriptive analysis for socio-demographic factors in dropouts and Univariate analysis (Chi-square test / Fisher's exact test) for comparison of socio-demographic factors in dropout with comparison group was performed. P value less than 0.05 was the level of significance.

### 3. Results:

The distribution of school dropouts according to their age and sex distribution (Table-1) shows that maximum number of school dropouts i.e. 87/98 (88.8%) belong to the 15.6-21 year age group while the 10-15.5 year age group has only 11/98 (11.2%) dropouts. Mean age was  $18.1 \pm 2.2$  yrs. There were more females i.e. 6(54.5%) as compared to males i.e. 5(44.12%) who dropped out of the school in group of 10-15.5 years whereas more males 51(58.6%) dropped out as compared to 36(41.4%) in 15.6-21 years age group in the study. But this sex-wise difference was not statistically significant.

Sex-wise comparison of marital status of school dropouts (Table-2) shows that out of 98 school dropouts, 24(24.5%) were married and 74 (75.5%) were unmarried. Amongst the 56 males, only 3(5.4%) were married whereas out of the 42 females, 21(50.0%) were married. The relation between sex and marital status among the dropout group was statistically significant ( $p < 0.001$ ). Minimum age at marriage was 14 years and 6(25.0%) out of 24 dropouts were married before completion of 18 yrs of age. Mean age at marriage was  $18.1 \pm 1.4$  yrs.

Distribution of school dropouts by marital status, religion, Family type, parents, native place and duration of stay at Present address (Table-3) indicates that among the 98 school dropouts, 74(75.5%) were Muslims and 24(24.5%) were Hindus. 77(78.6%) dropouts belonged to nuclear families whereas 21(21.4%) belonged to joint families. Out of 98 school dropouts, 82(83.7%) were staying with both the parents whereas 16(16.3%) were staying with either parent. Majority of the population was migrants 60(61.2%) originated from other states [of which Uttar Pradesh and Bihar contributes 42(70.0%)] followed by 10(10.2%) from rest of Maharashtra. Whereas 28(28.6%) were local (staying in area since birth or for more than 15 years). Out of total 98 dropouts, 66(67.3%) had been staying in the study area for more than 5 years and 32(32.7%) for less than 5 years. Distribution of school dropouts according to socio-economic status as per Modified Kuppaswamy classification (Table-4) shows that majority of dropouts belonged to social class IV 49(50.0%) or class V 47(48.0%) followed by socioeconomic status class III having 2(2.0%). None of the family belonged to social class I and II.

Comparison of socio-economic status in dropout and comparison group (Table-5) that the chances of dropouts were more in socioeconomic class V

(69.1%) and IV (43.8%) than class III (16.7%). None of the 200 households belonged to Upper class (I). The relation between socio-economic status of dropout and comparison groups was found to be highly significant ( $p < 0.0001$ ). Also the graph shows that as socio-economic status increases, the chances of dropout decreases whereas chances to continue education increases.

The univariate analysis of Age, sex, marital status and religion distribution in dropout and comparison group is shown in Table-6. The age group of 15.6-21 years showed higher no. of school dropouts i.e. 81.3% as compared to 11.8% in age group 10-15.5 yrs. The difference was statistically significant ( $p < 0.001$ ). Males were 118 (59.0%) and females were 82 (41.0%) of the total respondents. Out of 118 males, 56 (47.5%) were dropouts whereas out of 82 females, 42 (51.2%) were dropouts. There was no significant difference between male and female dropouts. Out of 200 respondents, 25(12.5%) were married and majority 175(87.5%) were unmarried. Out of 200 households interviewed, 143(71.5%) were Muslim and 57(28.5%) were Hindu. The dropout rate in Muslims was 51.7% whereas in Hindus it was 42.1%. The difference was not found to be statistically significant.

#### 4. Discussion:

In the present study, maximum number of school dropouts i.e. 87/98 (88.8%) belonged to the 15.6-21 year age group. When compared with non-dropouts, age group of 15.6-21 years showed higher no. of school dropouts i.e. 87 (88.8%) as compared to 11(11.2%) in age group 10-15.5 yrs. The difference was statistically significant. This may be due to the reason that many of them might be withdrawn from school after 15 years of age as they were needed for work and support family economically. A study done by *IIPS (2004)* reveals similar findings showing that the age group of 14-15 years showed highest no of school dropouts and that the school dropout showed an increasing trend by age and reaches maximum at age group 14-15 years<sup>3</sup>. The sex-wise comparison of school dropout showed that the education gap between girls (48.6%) and boys (57.1%) has declined largely owing to steady gains in educational achievement for girls. Sex-wise comparison of all respondents showed males constituted 118(59.0%) and females were 82(41.0%). Out of 118 males, 56(47.5%) were dropouts whereas out of 82 females, 42(51.2%) were dropouts.

The difference between male and female dropouts was not found to be significant. These estimates indicate that the gender gap, which was very wide in the early years of independence, has narrowed steadily and consistently, largely owing to steady gains in educational achievement for girls. The education gap between girls and boys has declined largely also because of the impressive improvement in schooling. Similar results are shown by some of the recent studies done by *Lloyd, Cynthia B. and Paul C. Hewett (2009)*<sup>4</sup> and *Population Council (2008)*<sup>5</sup>. This is in contrast to the studies done before 2005 like *A. Khokhar, S. Garg and N. Bharti (2005)*<sup>6</sup>, *International Institute for Population Sciences (IIPS)*<sup>7</sup> in 2004 etc. showed girls are more likely to drop out of school than boys and the difference was statistically significant.

In large families with more no. of people, the work load increases, also to manage the livelihood of more no. of people, there is more divisions in the family income and resources, the subject eventually dropout for stabilizing the economy of the family. Many of these male dropouts and their parents indicated that the children had developed a dislike of a school. The average monthly income of dropouts was Rs.3000/- per month. This reflects the effect of their educational and economic backwardness as they had to work due to economic constraints and due to low educational attainment and poor quality of education; they have fewer opportunities for good jobs and income.

This reflects the educational and economic status of the family which compels the parents to involve in above said occupations. Also those children of working mothers might have more chances of dropping out. *A. K. Pratinidhi et al (1989)*<sup>8</sup> and *A.K. Pratinidhi et al (1991)*<sup>9</sup> studies match the above findings. This implies that most of the dropouts were from downtrodden families and had to earn so had to work and thus had to dropout. They belong to lower socio-economic group and for them meeting the basic necessities of life are of more importance as compared to schooling. This is in accordance with the studies done by *IIPS (2008)*<sup>10</sup>, *IIPS (2004)*<sup>7</sup>, *Sunita Chugh (2004)*<sup>11</sup>, *Violet Dissa (2003)*<sup>12</sup>, *Cairns R B et al (1989)*<sup>13</sup> revealed similar results.

#### 5. Conclusion:

In this study, the commonest reason as perceived by dropouts for dropping out of school was cited as poverty by 41.8% respondents. It was seen that 70.7% males and 29.3% females had

dropped out due to this reason. About 32.7% parents perceived poverty as the reason for dropping out of the school. Among these, 59.4% were male dropouts and 40.6% were female dropouts.

**References:**

1. Wingard, D.L. Determinants of reasons of school dropout amongst dwellers of an urban slum of Delhi. *Am. J.Epid*, 1982 116 (1): 765.
2. Begum Bikees I.L. Literacy, Continuing Education and the Library Movement. *Indian Journal of Community Medicine* Vol. 30, No. 3, 2005, Page 92-93.
3. Dr.I.Satya. Sundaram. A Study on declining trend in Enrolment of Children standard I and II in Thane district Maharashtra. *Journal of Research on Adolescence* 2001:18(1): 99-120.
4. Violet Dissa. A study of effect of Alcohol Dependent on Domestic violence And Problems in families in an extant slum in Mumbai. *Am J. Drug Alcohol Abuse* 2002; 28(3):477-95.
5. Kasen S. Cohen P, Brook JS. Marriage considerations in sending girls to school in Bangladesh: Some qualitative evidence," *Poverty, Gender, and Youth Working. J. Adoles* 1998. Feb. 21 (1): 109-22.
6. Gomes N. Determinants of reasons of school dropout amongst dwellers of an urban slum of Delhi." *Indian Journal of Community Medicine* Vol. 32, No.1, 2005, 82-89.
7. Holmes, J. Measuring the Determinants of School Completion in Pakistan: Analysis of Censoring and Selection Bias. *Economics of Education Review*: 2003, 22(1).17-22.
8. A. K. Pratinidhi, P. V. Kurulkar and Madhavi Dalai. "Epidemiological aspects of School dropouts in children between 7- 15 years in Rural Maharashtra" *Indian Jr. Paediatric* 1992; 59: 423-427.
9. K. Pratinidhi, S. V. Warekar and S. B. Garad, "A study of school dropouts in an urban slum community". *Demography India*, Vol. 21, No. 2:1992, 301-305.
10. Sayeed Unissa. Pattern of dropout and results in the school of Maharashtra - A Field study Report. *Cad Saude Publica*. 1998: 14(2):391-400.
11. T. Hyphantis, V. Koutras, A. Liakos and M. Marselos. "Why Do Children Dropout? A case study of a metropolitan slum. *The International Jr. of social Psychiatry*, Vol. 37, No. 1, 1991, pp 35-42.
12. F. Lambay and M. Chavan. Alcohol and drug use, family situation and school performance in adolescent children of alcoholics. *Psychol. Rep*. 2002 Feb. 90(1):341-8.
13. Cairns RB, Cairns BD, Neckerman HJ. Early school dropout: configuration and determinants. *Child Dev* 1989 Dec; 60(6): 1437-52.

**Table -1: Distribution of school dropouts according to their age and sex distribution**

|           |            | SEX               |                   | Total              |
|-----------|------------|-------------------|-------------------|--------------------|
|           |            | Male              | Female            |                    |
| AGE GROUP | 10-15.5 yr | 5 (45.5%)         | 6 (54.5%)         | 11 (100.0%)        |
|           | 15.6-21 yr | 51 (58.6%)        | 36 (41.4%)        | 87 (100.0%)        |
| Total     |            | <b>56 (57.1%)</b> | <b>42 (42.9%)</b> | <b>98 (100.0%)</b> |

$\chi^2 = 0.691$  DF= 1 p value > 0.05 (Not Significant)

**Table-2: Sex-wise comparison of marital status of school dropouts**

|                |           | SEX                |                    | Total              |
|----------------|-----------|--------------------|--------------------|--------------------|
|                |           | Male               | Female             |                    |
| MARITAL STATUS | Married   | 3 (5.4%)           | 21 (50.0%)         | 24 (24.5%)         |
|                | Unmarried | 53 (94.6%)         | 21 (50.0%)         | 74 (75.5%)         |
| Total          |           | <b>56 (100.0%)</b> | <b>42 (100.0%)</b> | <b>98 (100.0%)</b> |

$\chi^2 = 25.87$  DF= 1 p value < 0.05 (Significant)

**Table-3: Distribution of school dropouts by marital status, religion, family type, parents, native place and duration of stay at present address**

|                                  |                            | Frequency | %            |
|----------------------------------|----------------------------|-----------|--------------|
| <b>RELIGION</b>                  | <b>Muslim</b>              | 74        | 75.5         |
|                                  | <b>Hindu</b>               | 24        | 24.5         |
| <b>Total</b>                     |                            | <b>98</b> | <b>100.0</b> |
| <b>FAMILY</b>                    | <b>Nuclear</b>             | 77        | 78.6         |
|                                  | <b>Joint</b>               | 21        | 21.4         |
| <b>Total</b>                     |                            | <b>98</b> | <b>100.0</b> |
| <b>LIVING WITH</b>               | <b>Both parents</b>        | 82        | 83.7         |
|                                  | <b>Single parent</b>       | 16        | 16.3         |
| <b>Total</b>                     |                            | <b>98</b> | <b>100.0</b> |
| <b>HAILING FROM</b>              | <b>Local</b>               | 28        | 28.6         |
|                                  | <b>Rest of Maharashtra</b> | 10        | 10.2         |
|                                  | <b>Other States</b>        | 60        | 61.2         |
| <b>Total</b>                     |                            | <b>98</b> | <b>100.0</b> |
| <b>LIVING AT PRESENT ADDRESS</b> | <b>Less than 5 years</b>   | 32        | 32.7         |
|                                  | <b>More than 5 years</b>   | 66        | 67.3         |
| <b>Total</b>                     |                            | <b>98</b> | <b>100.0</b> |

**Table-4: Distribution of school dropouts according to socio-economic status (Modified Kuppuswamy classification)**

| <b>SOCIAL CLASS</b>       | <b>Frequency</b> | <b>%</b>     |
|---------------------------|------------------|--------------|
| <b>I - Upper</b>          | NIL              | NIL          |
| <b>II - Upper middle</b>  | NIL              | NIL          |
| <b>III - Lower Middle</b> | 2                | 2.0          |
| <b>IV - Upper Lower</b>   | 49               | 50.0         |
| <b>V - Lower</b>          | 47               | 48.0         |
| <b>Total</b>              | <b>98</b>        | <b>100.0</b> |

**Table-5: Comparison of socio-economic status in dropout and comparison group**

|   |                           | <b>Group</b>      |                    | <b>Total</b>        |
|---|---------------------------|-------------------|--------------------|---------------------|
|   |                           | <b>Dropout</b>    | <b>Comparison</b>  |                     |
| <b>SOCIAL CLASS (Kuppuswamy classification)</b> | <b>II - Upper Middle</b>  | 0 (0.0%)          | 8 (100.0%)         | 8 (100.0%)          |
|   | <b>III - Lower Middle</b> | 2 (16.7%)         | 10 (83.3%)         | 12 (100.0%)         |
|   | <b>IV - Upper Lower</b>   | 49 (43.8%)        | 63 (56.2%)         | 112 (100.0%)        |
|   | <b>V - Lower</b>          | 47 (69.1%)        | 21 (30.9%)         | 68 (100.0%)         |
| <b>Total</b>                                    |                           | <b>98 (49.0%)</b> | <b>102 (51.0%)</b> | <b>200 (100.0%)</b> |

$$\chi^2 = 24.95$$

$$DF = 3$$

$$p \text{ value} < 0.05 \text{ (Significant)}$$

Table-6: Age, Sex, Marital status and religion distribution in dropout and comparison group

|                       |                     | Group      |             | Total        | p value<br>(chi-square test)                                   |
|-----------------------|---------------------|------------|-------------|--------------|--|
|                       |                     | Dropout    | Comparison  |              |  |
| <b>AGE GROUP</b>      | <b>10 - 15.5 yr</b> | 11 (11.8%) | 82 (88.2%)  | 93 (100.0%)  | $\chi^2 = 96.12$<br>p value < 0.05<br><b>(Significant)</b>     |
|                       | <b>15.6 - 21 yr</b> | 87 (81.3%) | 20 (18.7%)  | 107 (100.0%) |  |
| <b>SEX</b>            | <b>Male</b>         | 56 (47.5%) | 62 (52.5%)  | 118 (100.0%) | $\chi^2 = 0.274$<br>p value > 0.05<br><b>(Not Significant)</b> |
|                       | <b>Female</b>       | 42 (51.2%) | 40 (48.8%)  | 82 (100.0%)  |  |
| <b>MARITAL STATUS</b> | <b>Married</b>      | 24 (96.0%) | 1 (4.0%)    | 25 (100.0%)  | $\chi^2 = 25.26$<br>p value < 0.05<br><b>(SIGNIFICANT)</b>     |
|                       | <b>Unmarried</b>    | 74 (42.3%) | 101 (57.7%) | 175 (100.0%) |  |
| <b>RELIGION</b>       | <b>Muslim</b>       | 74 (51.7%) | 69 (48.3%)  | 143 (100.0%) | $\chi^2 = 1.516$<br>p value > 0.05<br><b>(Not Significant)</b> |
|                       | <b>Hindu</b>        | 24 (42.1%) | 33 (57.9%)  | 57 (100.0%)  |  |