

Does education depend on one's family size and income? A Study focused on young women residing in the Hooghly Industrial Belt's slums, West Bengal, India

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Abstract

The education of girls in society plays an important role in the social and economic development of the family, with consequent results for the development of society and the nation. Throughout the world, including in India, efforts are being made to educate girls. Despite numerous efforts and initiatives, no results were obtained. There are still differences on the basis of gender, caste, religion, culture, and economic background. This paper attempts to answer question of whether family size, defined as the number of children attending educational institutions exceeding the family's economic capacity and income, plays a role in obtaining a higher education, particularly for girls. To find answer, research has been carried out in the economically deprived societies in the slums of the Hooghly Industrial Belt of West Bengal, India. Girls belonging to economically deprived societies in the age group 15-29 have been included for the present study. To find out the answers of research questions, statistical analyses based of test of significance have been done. This study is helpful to understand conditions and growth of girl's education those living in slums.

Key Words: Higher Education, Income, Family Size, achievement

I. Introduction:

In different societies pace of development differ. The development of society depends on a large number of factors. Development of agriculture, industry, technology and above all human resources. A nation cannot develop without its human resources efficient in knowledge, technology and performing economic activities. For creating human resource, we need better educational infrastructure which is able to provide better education to individuals. To become a great nation, it is necessary to educate its citizen instead of caste, creed, race and gender. Men and women can equally contribute in the development of nation. Though, in many countries' women education is given priority in equal status of men but there are also instances where women education is ignored.

In India, status of women's education in the past was not satisfactory at all. Before independence, from ancient to medieval period women were ignored and they were not entitled to study. Reforms in women's education date back to the second half of 19th century. During the British period common women got opportunity to go to school. Though, at the time of independence, female literacy rate did not touch even two digits. Efforts of different governments help to bring status of education in a better position. Now, women are in every field and getting opportunities of education and employment. But, still there are societies where women education is not in satisfactory condition. Orthodox society, poverty, cultural norms and security etc. hurdle them in their education. Still in economically backward society girls are either less educated or their education does not support their chances of employment. To know this fact, we have selected slum girls and established our study to know the impact of the size of the family and income on educational achievement.

Bhaswati Das and Vimal Khawas (et.al 2009) in their study emphasized the role of women in the development of society. According to them education play an important role in the development of both women

and society. Pengcheng Wang and Xin Gong (2019) in their study based on data of China Family Panel Survey found that there is a big impact of family income on the pre schooling. They also found that in comparison to urban areas rural areas are more influenced. Pamela K. Poppleton (1968) in her studies found that among the social-educational factor and developmental factor, family size statistically more significant with education. Barbara S. Janowitz (1976) in his study found the impact of education on the size of the family and related it with the level of education of husband and wife. Miles Corak, G. Lipps, John Zhao(2004) in their study based on Canadian students found that there is direct impact of family income with higher education but they also found that with the time the gap is minimised.

Study Area:

Study area selected for present study are located in Hooghly Industrial Region of West Bengal. Chandannagar one of the renowned towns and historically a French colony in the past located on the western bank of river Hugli in the district of Hugli and Titagarh, one of the industrially developed town and highly slum populated municipality situated on the eastern bank of river Hugli in the North 24 Parganas district of West Bengal are selected for present study. Both towns are inhabited by large number of migrants. These migrants are jute mill labourer live in slums and engaged in nearby Jute mills. Other than jute mill labourers, small businessmen, traders, daily wage earner etc. compose the population of study area.

Target group and theme of the study: This study is based on exploration of status of education of girls living in slums of selected towns. Though various conditions and parameters influence education of an individual, focus of present study is on income and family size of households of respondents. High density of population, large family size and lower income are major issues in slums, therefore, this study concentrate primarily on these factors. This study is based on quarry that whether size of family and income affect enrolment and overall education of girls.

Research question: This research is based on the investigation to find the answers of the following questions:

- i) Does family income influence girls' enrolment in schools and higher education?
- ii) Is it true that the size of the family and number of children attending educational institutions affect the school and higher education of girls?

Hypotheses: H1: Income of the family affects the school education and higher education of girls.

H2: Size of the family affects enrolment of girls at school and higher education.

II. Data And Methodology:

This paper is based on the primary data obtained through household survey during the year 2019. To proof the statement samples were chosen from the selected study area. A total of 80 girls from each unit have been selected based on the stratified sampling method. During the selection of the sample's household monthly income range between INR 1000-20000 is considered. To depict the illustrations data and results are represented with the help of a suitable diagram. Statistical technique Chi-Square has been used to test the hypothesis

Income:

People living in the study area belong to the lower middle-income group. Their economic engagements affect their income. Mostly parents of girls selected for study work as laborers in a jute mill. Other occupations include small traders, daily wage earners, and in a few numbers' government employee are also there. The study found that the majority of people (42.86%) in the study area belong to a monthly average income of Rs. 6000-9000 while 23.38% households have average monthly income between 9001-12000. In the lower income group of Rs. 3000 and below 10.39% households while 23.38% people come under the average monthly income of Rs. 12000 and above.

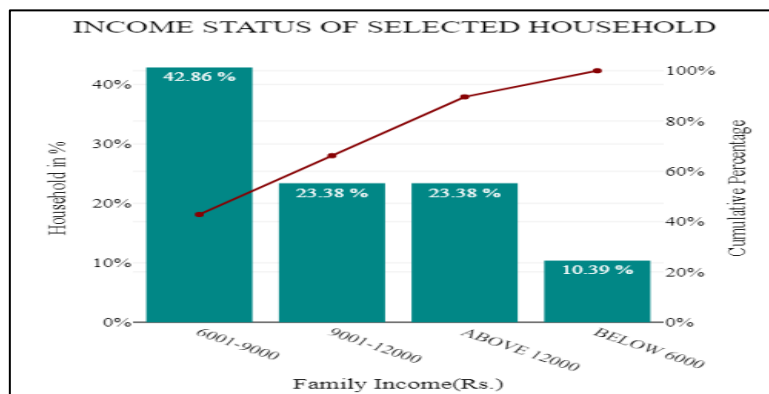


Fig.1 Distribution of household income under the study area

Educational status:

If we look at the educational levels of girls under study area, we find that out of the total girls surveyed 52% are in secondary and higher secondary levels while 45% of girls are in Junior High Schools, and only 10 % of girls are in Post Graduate levels while 47% are in Under-Graduate levels. This percentage is calculated on the basis of the total number of girls included in the study.

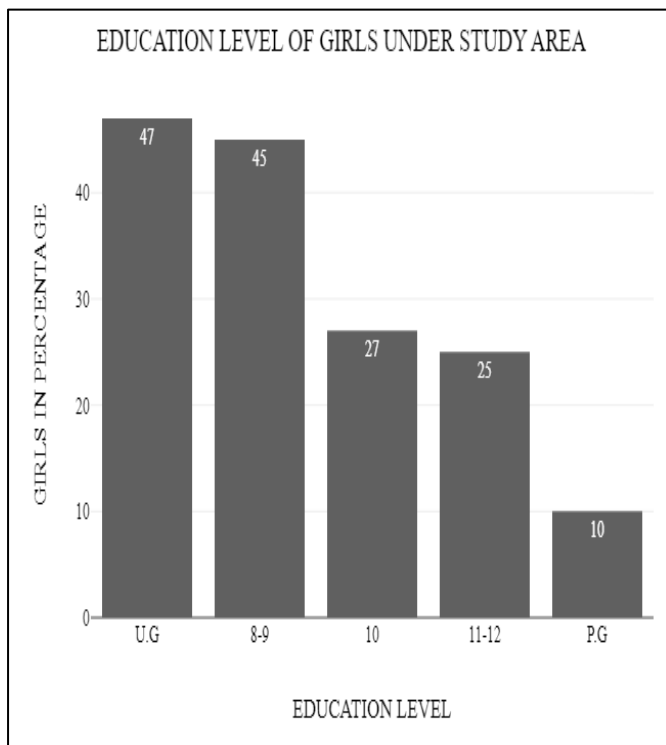


Fig.2 Education level of girls in the study area

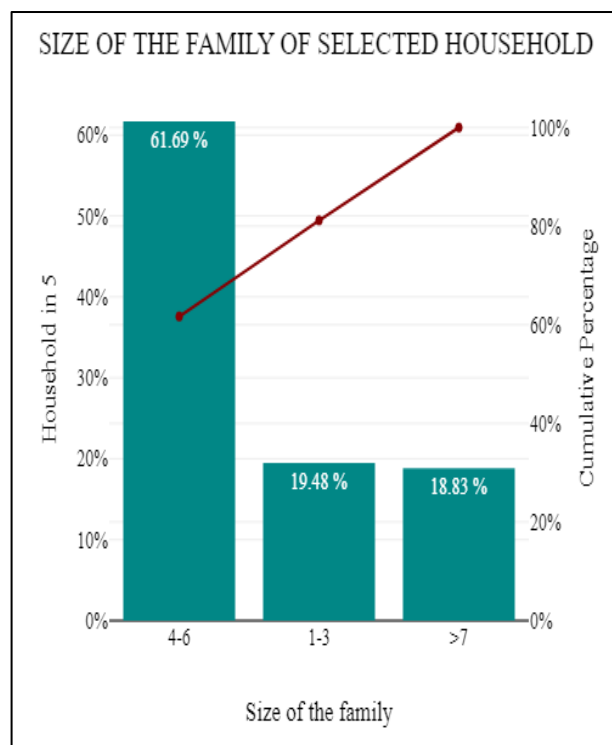


Fig.3 Education level of girls in the study area

Family Size:

Poverty, lack of space and higher density of population reason for bigger family size. In study area 61.69 % households have 4-6 person per households while 18.83% households have more than 7 persons per households while small family size having 1-3 persons per households constitute 19.48% households.

Hypothesis testing:

H1: Income of the family affects school and higher education of girls.

In general, for services, we have to pay money. Therefore, income is an important factor to decide whether you are eligible to get particular services or not. Though, quality and quantity regulate the price of a commodity. Education as a service, to get it individual has to pay money. This education cost changes as per level. However, there are provisions of free education in India including some major countries whole or up to a certain level. Therefore, family income and level of education individual are related. In case of higher education the cost of education increases. The higher cost has an adverse impact. To prove this statement, in the context of the selected study area hypotheses testing has been done.

The results of this test as follows:

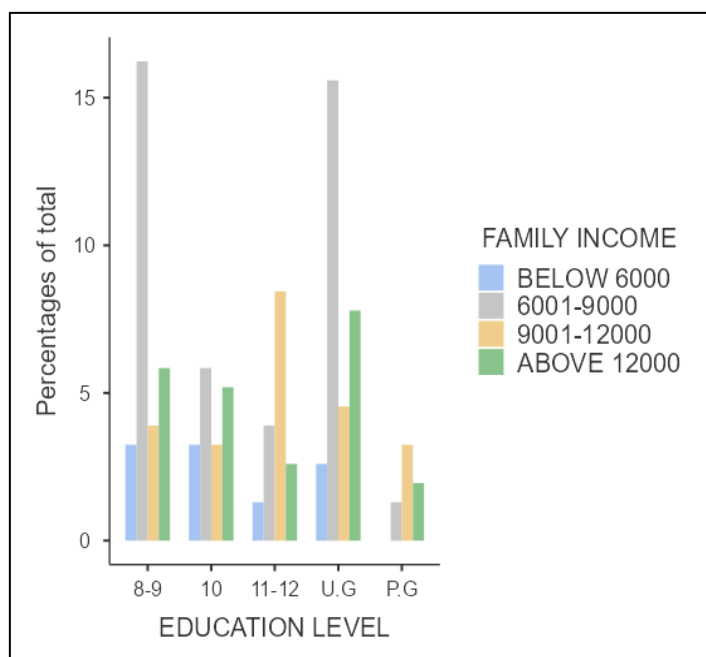


Fig. 1.4 Income and Education Level

Table. 1.0 Family income and Education level

		FAMILY INCOME				
		9001-12000	6001-9000	ABOVE 12000	BELOW 6000	Total
EDUCATION LEVEL	10	6.31	11.57	6.31	2.81	27
	11-12	5.84	10.71	5.84	2.6	25
	8-9	10.52	19.29	10.52	4.68	45
	U.G	10.99	20.14	10.99	4.88	47
	P.G	2.34	4.29	2.34	1.04	10
	Total	36	66	36	16	154

*For calculating Chi-Square class 7 (low frequency) was not counted and dropout is ignored.

Chi ²	26.36
df	12
p	.01

There was a significantly significant relationship between education level and family income, $\chi^2 (12) = 26.36$, $p = .01$. The calculated p-value of .01 is lower than the defined significance level of 5%. The Chi2 test is therefore significant and the null hypothesis is rejected that family income has no impact on the education level of girls. Hence, alternative hypothesis is accepted that family income significantly affect the education level of girls. .

H2: Size of the family affects enrolment of girls at school and in higher education.

The size of the family generally controls the expenditure of various kinds of commodities and service, a family consume. In developing country like India where poverty is a major concern, population is given the responsibility for this. Under study area majority of people belong to low income and bigger family size.

Therefore, question arise whether size of the family affect the education of girls particularly higher education. As we know that with the level of education cost of education increases and more number of learners from same family may hurdle the path of any learner member of family. To find this answer hypothesis testing has been done.

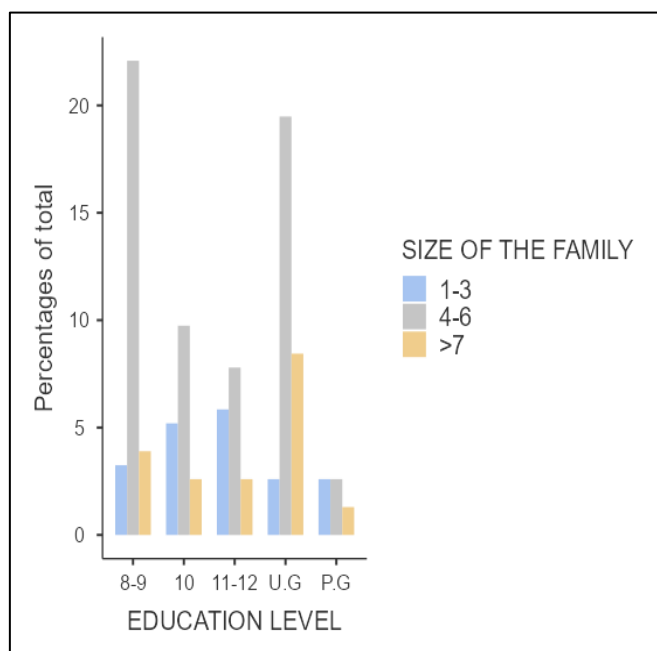


Table 2.0 Family Size and Education Level

		SIZE OF THE FAMILY			
		>7	4-6	1-3	Total
EDUCATION LEVEL	10	5.08	16.66	5.26	27
	11-12	4.71	15.42	4.87	25
	8-9	8.47	27.76	8.77	45
	U.G	8.85	28.99	9.16	47
	P.G	1.88	6.17	1.95	10
	Total	29	95	30	154

*For calculating Chi-Square class 7 (low frequency) was not counted and dropout is ignored.

Chi ²	17.75
df	8
p	.023

A Chi² test was performed between education level and size of family. There was a statistically significant relationship between education level and size of family, $\chi^2(8) = 17.75$, $p = .023$. The calculated p-value of .023 is lower than the defined significance level of 5%. The Chi² test is therefore significant and the null hypothesis is rejected that size of the family has no impact on education level. Hence, alternative hypothesis is accepted that family size has impact on level of education of girls.

III. Finding and Conclusion

From, the analyses of the data and test of hypotheses we can conclude that family size and income of family don't affect the higher education of girls under study area. It means other factors like other financial sources and schemes are playing role in the education of girls. In West Bengal cash incentive schemes and scholarships like Kanyashree and Swami Vivekananda Merit cum Scholarship have positively affected the enrolment of girls in higher education. On the other hand Kanayashree, Mid- Day Meal Scheme, Sabooj Saathi and free books reasons behind increasing of enrolment at school level.

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