

An Empirical Study on Contribution of Women in Productive Human Capital Formation in Jharkhand



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Abstract

Productive human capital is essential for economic development. Developing countries have emphasized on human development which includes the aspect of education, health and nutrition of the common people. A person with qualitative primary education has every possibility to be an effective human capital. A qualitative childhood comprises of physical, cognitive and mental development. Nobody deny that major part of these developments depend on quality of mother and social environment. Education of women is play vital role in developing children's welfare in general and children's education in particular. But it is difficult to measure the contribution of mother's education on welfare of children. This study has investigated the impact of mother's education along with her personal and household characteristics on the expenditure for primary education of children. Researcher investigation has been carried out on the basis of a set of primary data collected from 124 households residing at rural area of Hazaribag District (Jharkhand).

Keywords: Human Capital, Cognitive, Education, Welfare and Development.

Introduction

Effective Human capital is essential for overall development of Nation. Developing countries have emphasized on human capital development which include the aspects of education, health and nutrition of the common people etc. A person with qualitative primary education has every possibility to be effective human capital. A qualitative childhood comprises of physical, cognitive and mental development. Nobody would deny that major part of these developments depend on quality of women and social environment. Conventionally women in India are engaged in unpaid household job including nurturing and teaching of their children. But these household jobs remain invisible in accounting GDP. In India women account for 60% of unpaid household's workers and 98% of those, engaged in domestic work. That means women's contribution in human capital formation does not get the credit it deserves. It indicates that women population is neglected in mainstream developmental process.

Women play important role in family welfare and social welfare which is necessary for economic development. the UNDP human Development report has highlighted "Human development if not Engendered is endangered " so we need to include the women in mainstream development process facilitating comprehensive education ,health, participation in active polities, controlled and accessed over resources etc. Once women have access to these facilities they can earn and thereby contribute to family income and broadly national income. It increases the dignity of women, potentiality of women, self-reliance and self-consciousness of women. These impacts are nothing but women's self improvement. It is not the end of the story; once women improve their own status in society, they contribute society by increased child education, improved sanitation and social-cultural improvement etc. Conscious women always desire that their children should be educated. Education is the main gateway to create knowledge, skill, and efficiency of person. Education of women not only improve their own capability but also improves the quality of children as well as economy of nation. Children's educational expenditure is likely to be affected by mother's education. With this end in view, this study seeks to examine the effect of women's education on productive human capital formation in Jharkhand.

Objective of Study

In this research work Researcher has set two objectives

1. To analyse the nature of Education of rural women in the district of Hazaribag (Jharkhand).
2. To examine and analyse the role of women's education along with her some personal and household characteristics on productive human capital formation

Factors Affecting The Spending for Human Capital Formation

The educational expenditure for children in a family is one of the major indicators of the development of family. It is expected that the development of family increases the expenditure for children's education. Current spending for children's education absolutely augments the future development of family. Indian economy can't achieve the higher destination if it bypasses primary education. Primary education is the base for productive human capital formation. This study has planned to identify the nature of spending for children's primary education. Researcher has considered those children who are studying in primary education in Hazaribag district of Jharkhand state .during the course of field survey researcher has observed that most of the children have to engage in job for earning their livelihood amenities. In the rural area educational infrastructure is provided by the government , primary education has been made compulsory and free by govt of india for all the children . For reducing dropouts rate, govt has also ensured free mid day meal for the school children. researcher has also observed that infrastructure of schools are far below the expected level. As for example high pupil-teacher ratio, inadequacy of class rooms, noisy and overcrowded class room, distance of school etc becomes hindrance for providing education. In this situation parents have to depend on alternative arrangement such as private tuition.

In this study the expenditure for education implies the cost of private tuition and cost of purchasing stationeries for educational purpose.in poor families there is some opportunity cost of sending their children to educational institution ,because these children can earn some money by engaging them as wage labour rather than studying. for the sake of simplicity ,in this study the opportunity cost of taking education has not been considered. It should be noted that this study has considered the spending for children 's education up to primary level only. Researcher has taken monthly **educational expenditure per children (PER ED UX)** of a family as dependent variable in our regression model. It is computed by dividing the total monthly education expenditure of a family for the children of age 5-10 years by the number of children of the family of this age group. It is a quantitative variable and measured in term of rupee as unit.

Education Level of Mother—(EDU MO)

Education level of mother is one of the important Factor which determines children's education. In this study mother's education has been considered as a main determinant of productive human capital formation in Jharkhand. An educated mother (women) wants her children to be educated.

Educated mother is a cognizant mother. She understands how education can help her children in building his/her future. She is ready to pay more for her children education. In this research study educational expenditure for children takes into account of the expenditure on private tuition and cost of purchasing educational kits. The children of educated mother do not need to take private tuition because the mother can teach her children by her own.

Father's Education (EDUFA)

Researcher are interested to examine the impact of father's education level on spending for children education. Usually, in rural poor households male person work whole day in farm of off –farm occupation for earning the household livelihood. In this situation in spite of his willingness an educated father could not spend time for guiding his children to learn. Father want to spend more for their children and his education increases the willingness to make their children educated. It is expected that the higher level of education of father higher will be the expenditure for education of children. the level of education of father of the children is a quantitative variable measured by the numbers of years attending educational institution. Researcher has asked educational qualification of father of the concerned children and have included how many years he attended the school or colleges. Finally, the number of years completing in the formal educational institution has been considered for measuring the father's education.

Per Capita Monthly Household Income (PC MIN)

Any kind of expenditure absolutely depends on income. Expenditure for children education depends on household income. Usually, the more the income the greater the possibility of spending for children education. To examine the expected relation researcher has considered the per capita household income as determinant of the children education expenditure. In the course of field survey researcher has found that respondent are not smart enough to tell the annual household income, rather they tell the expenditure on different heads and occasions. Based on this information I have computed total annual expenditure and saving if any. The total of expenditure and current saving has been considered as proxy for annual income. Dividing the total income by family size researcher has computed the per capita household income. Finally, the division of per capita annual income by 12 gives per capita monthly household income.

Occupational Status of Mother (OCCUP)

Occupation is that work in which an individual spends the most of the hour of a day in general. It is fact that earning of person closely related with their occupation. Nature of occupation determines the degree of freedom to spend for children. It is expected that if mother is engaged in organised manufacturing sector or service sector she spend more for children's education. In this research study area not a single women is engaged in these two sectors. Researcher has divided the occupation of mother into two categories namely, farming and off farming .farming includes all kind of the works of agricultural and allied sector. Off farm includes allthe

works of unorganised non-agriculture sector .occupational status is considered as a dichotomous variable indicating the occupational status of the individuals farming or off farming. We have OCCUP =1, if the mother is involved in farm activity and 0, otherwise.

Member of Self Help Group (SHGM)

Formation of self help group (SHG) in the grass root level is contemporary issue to the social planner for improving the socio-economic conditions of women in society. Being a member of SHG a women can get financial support through the microcredit package. It improves the literacy, leadership power and decision making power among women. It makes women conscious about good health, hygiene and necessity education .so member of SHGs are ready to spend more on productive human capital formation. Therefore, it is expected that the SHGs member of mother have positive impact on the children's education expenditure (more emphasis on human capital formation). To measure it, researcher scale it in such a manner that if she is a member of SHGs then it takes value 1 otherwise o. so the membership of women is a dummy variables.

Type of Family (F TYPE)

Family is one of the traditional determinants of education expenditure. In study researcher consider two types of family –nuclear and joint. In nuclear family mother has freedom in taking decision about her children. this type of family can expend more on education for their children .in general I can expect that in nuclear family education expenditure per family is higher than joint family. Researcher takes the type of family as a dichotomous variable taking value 1 when the women (mother) belong to nuclear family and 0 when the women (mother) belong to otherwise. Therefore type of family is taken dummy variable in this research study to compare the influence of type of family on the education expenditure of children.

Caste of Mother (SCASTE)

This research study done in rural area so that mostly family belong to scheduled caste category .generally scheduled caste family is recourse poor. They are generally marginal farmer or wage labour. they are forced to employ their children in their own land or household jobs or as wage labour. It is expected that the scheduled caste women are more eager to employ their children as supportive earning member of the family in remunerative jobs than to send them school. In this research researcher has scale the caste of the family in such a manner that the family, which belong to scheduled caste, take value 1 and 0 for other castes. So, caste is considered as a dummy variable to study the impact of caste on the educational expenditure of the children.

Therefore, educational expenditure for children = f (education of women, education of father ,per capita monthly household income, SHG membership, type of family ,caste and occupation of women). Not only these factors that have an effect on the educational expenditure of the children. Therefore many other factors that influence this expenditure. Apart from the educational attainment of women and father, educational background of the family, religion, family type, distance of educational institution etc also

affect it. But due to limitation of scope researcher take only above stated seven factors to determinants of per children educational expenditure (Productive human capital formation expenditure).

Research Methodology and Data Analysis

Statistics of several development indices of India in general and Hazaribag district in particular like literacy rate ,enrolment in educational institution, participation in active polities, controlled and accessed over recourses etc. Have focused that women are far below their men counterpart. In hazaribag district the value of HDI is only 0.33 whereas in Jharkhand as a whole it is 0.376. The value ofGDI is in this district which has occupied 8th position in Jharkhand. Therefore the district of hazaribag is one of the backward districts in Jharkhand. Our main purpose is to evaluate the impact of Women's contribution in productive human capital formation in this region .so the selection of hazaribsg district is justified. In order to carry out this study researcher have collected a set of primary data during august 2015 (Researcher is Associate professor in management department of VBU so he collected data after completion of their daily routine work of department at university i.e. at evening time). The condition of women and children is not satisfactory.This study covers 05 remote villages where we have randomly interviewed 124 women having children of age 5-10 years for required information .hence this empirical study is based on a sample size of 124. The required information is collected through personal interview and observation.

In this study researcher have planned to estimate a linear regression model for analysing the impact of women's education along some other factors, which are mentioned above, on the expenditure of productive human capital formation.

Result and Discussion

Table -1 presents the descriptive statistics for the quantitative variables in this study .average women do not complete primary education. The sample women have studied in formal educational institutions only for 3.23 years in average. In average every household wants to spend Rs. 104.35 per month per productive human capital formation. It is not a poor amount but there is wide dispersion in this amount. The average per capita monthly income is Rs.535. Fathers have attended the formal educational institution only 4.18years in average. This implies that educational background of family is very poor.

Table 1

Descriptive Statistics of the Quantitative Variables

	PCMIN	EDUFA	EDUMO	PEREDUX
Mean	535.1963	4.18	3.23	104.35
Median	447.222	4.00	0.00	75.50
Std.Deviation	302.69887	4.179	4.056	96.103
Skewness	1.320	0.672	0.941	2.378
Kurtosis	1.274	-0.527	-0.065	6.662
C V	56.55	99.976	125.573	92.097
Minimum	85.42	0	0	3
Maximum	1527.78	15	17	560

Source: Computation of Researcher

Table -2 shows that 51% of respondents are engaged in firm actively for earning their livelihood. A large number, nearly 62% of sample household belong to S C community. Among the respondents 60

% belongs to nuclear family. In this study major portion, nearly 75% of the sample members are member of joint family.

Table 2
Descriptive Statistics of the Quantitative Variables

	1	0
Categorical variable	Percentage distribution	
Occupation	51	49
Scheduled caste	62	38
Family type	60	40
Joint family	75	25

Source: Computation of Researcher

Table 3 presents the educational status of women. It shows that more than half of women have no formal education at all. Nearly 55% of sample women remain out of reach of formal education. Only 45% (65) of the respondents entered into the formal educational institutions. Of them 19 respondents discontinued their education in primary level, yet from the data yet we see the 26.62 % of the total sample member is able to get secondary education .at the higher secondary and higher education level this number is negligible. Only 1.61 % has education level up to higher secondary level. Very negligible percentage ,only 0.80 % has graduate level education and more than graduate level education. This analysis reveals that most of the women are beyond the reach of the formal education i.e. they are illiterate. As they have no education they take others help to teach their children (productive human capital formation).

Table 3
Women's Accessibility to Education (N=124)

Level of Education	Cumulative Number	Number	%
No Schooling	124	68	54.84
Primary education	56	19	15.33
Secondary education	37	33	26.62
Higher secondary education	4	02	1.61
Graduate	2	1	0.80
Above graduate	1	1	0.80
Total		124	100

Source: researcher's Computation

Table -04 presents the results of the empirical estimates of the regression model .value of F statistics and Durbin-watson's statistics justify that our model is properly specified. We now, analyse the statistical findings in a systematic way. we get a very surprising result about the impact of women's education level on the educational expenditure per children in the family. With the increases in women's education the educational expenditure per children in the family decreases significantly. With one year increase in education level of mother of the educational expenditure per children in the family decreases nearly by almost Rs 700. Researcher accept education level of mother as a determinant of women's empowerment at 2.6% level of significance. Yet this result is surprising, it is the reality of our society.

Independent Variables	Coefficient	Std. Errors	Statistics	Sig.
Costantant	50.123	31.861	1.573	.118
EDUMO (year)	- 6. 905	3.064	-2.253	.026
EDUFA (Year)	3.991	2.557	1.561	.121
FIYPE (1= Nuclear Family)	14. 154	16.276	.870	.326
SCASTE(1schedule caste)	-81.910	19.622	-4.174	.000
SHGM (1= SHG member)	59.816	19.063	3.138	.002
PCMIN (re)	.066	.031	2.168	.032
OCCUP (1=farming)	39.597	18.100	2.188	.031

Summary Statistics

R2	Adjusted R2	F -Statistics (sig)	D-W d-Statistics
0.232	0. 186	5.007(0.000)	1. 947

In our society there is parallel system of private education vis-a -vis public education system. Parents can't fully depend on public education system. In rural area student-teacher ratio is very high . Educational environment is not very much effective in rural for the students. So the women who are educated can teach their children by their own. But those who have not required education level have to depend on private tutor. In primary level there is no cost for studying in school . Hence the cost for private tuition is the main educational expenditure in rural area for primary education. Researcher get very surprising result about the impact of women education level on the educational expenditure per children in the family. With the increase in women education the educational expenditure per children in the family decreases significantly.

Per capita monthly income of the family is another important and significant determinant of children's education expenditure. This study shows that with the increase of monthly per capita income by Rs 100.00,monthly education expenditure per children in a family increases by almost Rs ,7.00. This result is significant at 1% level. Higher income means higher freedom to spend. So with the increase in income it becomes easy for the family to spend more for children education.

This study shows that the per capita education expenditure on child of a family is lower if mother belong to schedule caste community. The per capita education expenditure in a scheduled -caste family is lower than of other family by amount rs 81.91. This result is statistically significant at 1% level . In the costless public education system, schedule caste spends less for children education, not due to higher education level of the schedule caste mothers, rather due to less consciousness of these mother and income poverty of the households. These families are so poor that parents want their child should work as wage labour rather than going to school.

The member ship of shgs has a positive and significant impact on per child educational expenditure in the family. The education expenditure per children in family level is higher for a family where the mother of the children is the member of SHG than the other family by the amount Of Rs 59.61. The shgs membership makes the women more conscious regarding their child education and public education

system. It also has some income generating impact on women. Most of the mothers are not happy with the quality education in the public education system in the primary level. But due to low level of education they cannot teach their children of their own rather they are compelled to send their children to the private tuition. It raises the expenditure on child education. This study also shows that if the mother farming sector then the family spends Rs 39.60 more for the education of a child than other family where the mother works off-farming job.

However, this study has reported that education of the father is positive and significant at 12.1% level. Father's education is not as significant as mother's education. Actually in this study area the father's education and family type are immaterial in the determination of the educational expenditure per children in the family.

Conclusion

This study empirically shows that education of women is an essential factor in the determination of educational expenditure for children in the district of Hazaribag. It is seen that educated women compared to illiterate women spend less for their children. Another important problem related to child development is malnutrition. By taking the advantage of costless private education an educated woman can save some money which she can spend to increase the nutrition of children. They can easily guide their children and take the benefit of costless public education system. On the other hand households belonging to scheduled castes blindly depend on costless education system for their children. SHGs help the rural poor households in the district of Hazaribag to spend more for their children. Therefore, in order to improve the child education we need to create an environment that educates women. This study reveals that to take the full benefit of the costless education women have to be educated. Therefore, government and NGOs should take necessary steps or training camps to educate women. Finally, we have to inspire the rural poor women to participate in SHGs that help them undertake income generating activities and thereby spend more for their children.

References

Books

1. T.C. Jain and R.C. Gupta, consumer behavior, Alfa Publication, New Delhi
2. Agrawal P.K. advertising sales promotion and CRM, 2009, pragati parakashan, Meerut (UP).
3. Jagdish N. Sheth, Atulparvatiyar, G. Shainesh, customer relationship management- Emerging

concepts, tools and application: 2005, Tata Mc-Hill Publishing company Limited, New Delhi.

4. Shukla Kumar Ajit, Marketing management, 2010, Vaibhav Laxmi Prakashan, Varanashi (UP).
5. T. Srinivasa Rao, Changing life Style and consumer Behaviour, Deep and Deep Publications Pvt Ltd, New Delhi.
6. Kotler; Marketing management, Prentice Hall of India, 12th 2006.
7. Dale Carnegie; How to win friends and influence people, Simon and Schuster, ISBN 067142517x, 1981.
8. Bellur and Berkman; reading in personal selling and sales marketing. Himalaya publishing House, 1st edition 1990.
9. Jha and Singh, marketing management in Indian perspective, Himalaya publishing House, Bombay, P 549.
10. Jha Laxman, Customer relationship management : A strategic Approach, Global India private Ltd, New Delhi.
11. Rai Alok Kumar, customer relationship management, Prentice - Hall of India Pvt. Ltd; New Delhi.
12. Stanton William J; fundamentals of Marketing, MC Graw Hill, New Delhi, International student edition, P 414.

Magazines/Journals

1. Rajesh Srivastava, Seven Golden Rules', Dalal street, Nov., 14-27, 2005, Page, 24.
2. Delshad Irani, "Hungry for more" business India, September, 24, 2006, Page 98.
3. Archana Shukla, "The quest for the Real Consumer, Business today, April, 9, 2006 pages 104 to 108.
4. Shirani Lath, "Manco-Marketer of wellness", Business today, September, 24, 2006, Page 116.
5. Kapil Bajaj, "After sales service- Not quite sell and forget" Business today. June 18, 2006 Page 85.
6. Dr. Yarlaga Srinivasulu, "Cause related marketing-An incitement strategy", Indian Journal of marketing Sep., 2006 Pages 3 to 7.
7. Partha Sarathi Swami and Meenu Shekar, "Fun, games and soft sell", Business India, Dec. 17, 2006, Page 106
8. Mother education and spending for child, Maniklal A Dhikari, Papita Duta, Arth Anvesan, Bi-Annual Journal, 2012, page-28-38.