# A STUDY ON PARTICIPATION BEHAVIOR OF STUDENT IN HIGHER EDUCATION IN UTTARAKHAND

Richa Pandey,

Research Scholar, Department of Economics, RDVV, Jabalpur, M.P.

Shailendra Kumar singh,

Assistant Professor in Economics, Department of Economics, GDC, Bhatronjkhan, Almora, Uttarakhand Corresponding Author: e mail: singhshailendraeco@gmail.com.

#### **ABSTRACT**

This paper presents and analysis of the determinants of Higher Education participation by the student in Uttarakhand Based on a recent College survey which includes detailed information on usual life. Higher education involvement, especially among girls, responds to a wide range of variables, including parental education and motivation, social background, dependency ratios, work opportunities, Quality of education etc. the state of Uttarakhand is fully accounted for by these variables. Analytical Tools was Logit Model and using the random and purposive sampling for collecting the data, total sample size was 100 students, this is a behavioral study about student's expectation Higher Education. Final result for the logit regression model indicated that all the variable (Gender, Economic status, Distance, Parental education, Employability, Transportations, Problem, and having the responsibility for their family) which we include in the model were significant factors that positively influenced student's decision to involvement in higher education.

Key Words: Logit model, Participation Behavior, Higher Education, Gender, Economic Status.

## Introduction

"For India to maintain its economic growth in a global marketplace fueled by the knowledge economy, it needs to nearly double its number of students in higher education by 2012. Fifty - one percent of India's population is under the age of 25. Without proper access to education the country's demographic dividend could turn into a demographic disaster". (Dukkipati, 2010)1.

Over the last two decades, India has remarkably transformed its higher education landscape<sup>2</sup>. It has created widespread access to low-cost high-quality university education for students of all levels. With well-planned expansion and a student-centric learning-driven model of education, India has not only bettered its enrolment numbers but has dramatically enhanced its learning outcomes. Because of government known that higher

Vol (2), Issue-2, June-2015 IJISSHR 63

-

<sup>&</sup>lt;sup>1</sup> http://csis.org/files/publication/sam\_141.pdf7

<sup>&</sup>lt;sup>2</sup> http://www.ey.com/IN/en/Industries/Indiasectors/Education/EY-Higher-education-in-India-Vision-2030

education improved the skill of the human resources and skilled human resources improved the economic growth. For this purpose government continue open up new colleges and institutes with it undertaken large-scale reforms to better faculty-student ratios by making teaching an attractive career path, expanding capacity for doctoral students at research universities and delinking educational qualifications from teaching eligibility.

Uttarakhand state is facing a new problem that is low involvement of intermediate student in Higher education. After completing the intermediate education they stopped their study, through this paper we want to examine their decision behavior about involvement in higher education, and also analysis constrains which barricade them to enroll in Higher education.

The Prime Minister, Dr. Manmohan Singh (2005) has optimistically forecast that the 21st Century will be the "knowledge century", by which he refers to the socio - economic transformation that the country is projected to go through in the 21st century as a knowledge creation. Mattoo (2009)<sup>3</sup> explicates the notion succinctly: "The whole idea of a knowledge society is the idea of empowering young men and women through education and ensuring that all our delivery systems are built on the premise of the latest knowledge" ( as cited in Bhatia and Dash, 2010, p. 46)<sup>4</sup>.

India is speculated to have the world's largest set of young people. While the correlation between higher education and nation building is indisputable, the working age population can be an asset only if their potential employability<sup>5</sup> is brought to fruition. Educational providers across all levels are expected

https://www.openknowledge.worldbank.org/bitstre am/handle/10986/4097/WPS4903.pdf?sequence=1

to respond to this new employability<sup>6</sup> imperative. For FE(T) colleges, the challenge has been especially stark as the rise of employability has been closely intertwined with the demise of apprenticeship and a related collapse of old business partnerships. Instead, the recent past has seen the rise of new, larger and more diverse clienteles whom colleges are now expected to make employable, and an imperative to include business interests in governance structures, programme planning and joint ventures<sup>7</sup>. Conversely, if the state does not harness the endowment, this demographic group can turn out to be a heavy economic and social millstone<sup>8</sup>.

The main focus of this paper is on college participation as a household decision. At a general level, this decision may be thought to depend on the socio - economic and individual variables. The costs, in turn, depend both on the opportunity cost of a child's time, this is an own asset of a family for their survival. These family have high dependency in agriculture land but forest animal destroy their crops in the field thus they works in the unorganized sector for their family livelihood so they are not involved in higher education. And the direct costs of higher education will be hilly way for college bus charges are very high. The benefits include tangible economic returns<sup>9</sup>, mainly in the form of improved earning opportunities as well as more productive work within the household 10. Other possible benefits of elementary education include better health,

http://www.pacificweb.org/DOCS/rmi/pdf/Educatio n%20and%20wages.pdf

https://www.nottingham.ac.uk/shared/shared ucce r/epa\_docs/what\_is\_employability.pdf

http://usm.maine.edu/sites/default/files/cepare/po verty achievement Web.pdf

<sup>9</sup> http://www.uned.es/dpto-analisiseconomico1/doctorado/education/articulos/rdtosed uc3.pdf

http://www.uh.edu/~adkugler/Ashenfelter&Krueger .pdf

f http://siu.edu.in/downloads/pdf/SSRN.pdf <sup>5</sup>Department of Education, Employment and Workplace Australian Council Relations, for Educational Research,

higher self-esteem, improved social status<sup>11</sup>, greater bargaining power, and the joy of learning, among others.

This is one major reason why college participation is likely to be sensitive to the quality of education<sup>12</sup>. On the cost side, it should be remembered that the costs of schooling are not confined to cash expenditure and foregone earnings. Sending children to school on a regular basis also require a great deal of parental effort in terms of, say, motivating them to study, preparing them to go to college in the morning, and helping them with homework.

There is a specific asymmetry of interests between parents and children when it comes to the education of girls<sup>13</sup>. In Uttarakhand, most daughters leave their parents at the time of marriage and join their husband's family, usually in a different village. After marriage, a daughter's relations with her parents are quite distant (usually confined to occasional visits). In the light of this practice, parents often consider that they have no direct stake in the education of a daughter. One qualification is that educating a daughter may facilitate her marriage, and/or reduce its costs. Also, parents may send a daughter to school out of genuine concern for her own wellbeing, even if they have little to gain from it themselves. Generally, involvements in higher education decisions are likely to depend not only on the perceived interests of individual household members, but also on how differences of interest are resolved within the family.

Fourth, the perceived costs and benefits of education reflect the information available to parents. For instance, in communities with low levels

https://www.ets.org/s/research/pdf/poverty\_and\_e ducation\_report.pdf

http://www.unicef.org/education/files/QualityEducation.PDF

of education, illiterate parents<sup>14</sup> often have a limited perception of the benefits of education. Parental low level literacy cannot properly judge the importance of higher education. And most rural parents<sup>15</sup> find it quite difficult to figure out what goes on in the classroom, whether their children are making good progress, and how much they will benefit from what they learn.

This study therefore investigating the socio economic and institution factors that influence Students' decision to participate in higher education study in Kumaun Region of Uttarakhand. Specifically, the study seeks to (1) Identify the factors that motivate student to participate in higher education; (2) analyze the constraints they face in their studies in higher education; (3) analyze the socio economic determinants of factors that motivate students into higher education using a logit regression analysis.

## **Research Design**

**Data Collection:** In this research, data collection was basically based on primary data which was collected through questionnaire, survey, Interval and observation method.

#### Sampling

Random Sampling was used for collecting from four intermediate colleges and four higher Education institute from four District of Kumaun Region in Uttarakhand.

#### Methodology

### Survey Method

Descriptive survey will be doing for the study. Whole Student population as a Universe hundred (100) from four intermediate and Graduate Colleges were randomly selecting as sample size from the four districts at Kumaun Region in Uttarakhand.

#### Analyzing Tools

65

<sup>11</sup> 

<sup>&</sup>lt;sup>13</sup> https://metranet.londonmet.ac.uk/research-units/ipse/research-clusters/gender-in-education.cfm

http://www.vanderbilt.edu/peabody/familyschool/papers/Explorations.pdf

<sup>&</sup>lt;sup>15</sup> https://www.bera.ac.uk/wp-content/uploads/2014/03/Researching-parent-school-relationships.pdf

A multivariate logistic regression<sup>16</sup> analysis will be using to examine the relationship between each of the predictor variables and the response variables because the response variables are categorical variables<sup>17</sup> and not normally distributed<sup>18</sup>.

In a logistic regression analysis, the relationship between the predictor variables and the response variables is better understood as the influence of other variables is controlled.

## **Specification of the Model**

The ordinary least square (OLS) regression model will not been used in this situation because of the following limitations (Retherfordand Choe 1993)<sup>19</sup>. First, the estimating value of the dependent variable (Y) Want to get higher Education can assume impossible values. However the dependent variable may have only two values, 0 and 1. Second, the linearity assumption of OLS regression is seriously violated, according to which the expected value of the dependent variable (Y) at any given value of predictor variable (X) falls on the regression line. But this is not possible for the parts of the line for which P<0 or P>1. In these regions, the observing points may be either all above the line or all below the line. Third, the homoscedasticity assumption<sup>20</sup> may be also violating. The variance of the dependent variable (Y) tends to be much higher in the middle range of the predictor variable(X) than at the two extremes, where the values of Y are either mostly zeroes or mostly ones. In such a situation the equal variance assumption is untenable. Fourth, since the linearity and homoscedasticity assumptions may be

<sup>16</sup>http://www.researchgate.net/publication/2616998 37\_Logistic\_regression\_analysis\_in\_higher\_educatio  $n\_An\_applied\_perspective$ 

http://link.springer.com/article/10.1023%2FA%3A10 14858517172#page-1

http://mathworld.wolfram.com/NormalDistribution. html

seriously violating, the usual procedure for hypothesis testing in OLS regression is invalid.

To overcome these limitations, we used logistic regression to find the relation between predictor variables and the response variable that want to get higher Education.

The multivariate logistic function involving K predictor variables  $(X_1, X_2, X_3, \ldots, X_k)$  is given by where P is the estimated probability (here the probability of Expectation of Higher Education).

P = 
$$1/1 + e^{-(b_0^{+b_1}x_1^{+b_1}x_2^{+.....b_k}x_k^{+})}$$
  
And Logit (P) =  $b_0 + bx_1 + b_2x_2 + ..... + b_kx_k$ 

The quantity e<sup>bi</sup> is calls the odds ratio, and represents the multiplicative effect of one unit change in the predictor variable Xi on the odds of receiving complete Expectation of the Higher Education. The odds ratio is interpret rather than "b".

For interpretation to be more intuitive and meaningful we are also calculating the effect of the predictor variable on the percentage change of odds of the response variable. This would be calculating by the following equation:

#### Percentage change = (Odds ratio -1) \*100.

The main purpose of the content analysis is to understand systematically Expectation of Higher Education messages by Predicting variables.

# Theoretical Framework – Motivation to Involvement in Higher Education

To analyze the socio-economic factors that influence Student's Expectation for getting higher Education with processors (APA)<sup>21</sup>, a logistical regression was

Vol (2), Issue-2,June-2015

IJISSHR

<sup>&</sup>lt;sup>19</sup>http://www.eastwestcenter.org/publications/statis tical-models-causal-analysis

<sup>&</sup>lt;sup>20</sup> https://www.google.co.in/#q=homoscedasticity

http://www.apa.org/pi/ses/resources/indicator/200 9/04/adjustment.aspx

used to determine the impact of those socio economic factors on student' Expectation for getting higher Education or not. Student Decision to participate in higher education, are influenced in part by the perceived balanced of benefits, opportunities and constraints of their social and economic life. Discrete choice models are used to identify and quantify the factors that affect the likelihood of a student participating in a Higher Education and/or well managed institutional arrangement. These models include the linear probability, Logit and Multinomial Logit models.

## The Empirical model

Qualitative response models, which are strongly linked to utility theory, have been widely used in economics to investigate factors affecting an individual's choice from among two or more alternatives (Amemiya<sup>22</sup> 1981; Greene<sup>23</sup>, 2000). The model aims at determining the probability that, given a set of attributes about the individual student and other socio economic character, the individual will choose either into participate in higher Education or not. Following the theoretical framework and the choice variables specified in studies by Philip Tristel et al (2002), Orley Ashenfelter et al (1992), Sadig Rasheed (2000), K.V. Hoover et al (2007), Crozier, G. (2013), Ramya R. (2003), ACER (2011), Simmon Mcgrath (2010), Ben Graham (2005), Decision to participate in higher Education in this study could described as a function of personal characteristics of the student, household characteristic, operation feature, geographical socio economic characteristics. These factors have been decomposed into explanatory variable shown in the Empirical model below. The empirical model is specification as follows:

22

http://garfield.library.upenn.edu/classics1993/A199 3KT90800001.pdf

http://stat.smmu.edu.cn/DOWNLOAD/ebook/econo metric.pdf

Decision to participate in H.E.  $(Q_1) = \theta_0 + \theta_1 * Gender$   $(Q_2) + \theta_2 * Economic Status (Q_3) + \theta_3 * Distance (Q_4) + \theta_4 * Parent Education (Q_5) + \theta_5 * Employability (Q_6) + \theta_6 * Quality of education (Q_7) + \theta_7 * Transportation Problem (Q_8) + \theta_8 * Family Responsibility (Q_9) + \theta_i$ 

Where Q<sub>1</sub> denotes the participation behavior of the student in higher Education, Q2 denotes the gender of student (1 = male and 0 = Female),  $Q_3$  denotes economic status of the student family, (1 = APL and 0 = BPL), Q<sub>4</sub> denotes distance related problem of the higher educational institute from their home, (1 = Distance generate no problem and 0 = distance generate the problem), Q<sub>5</sub> Denotes parental education (1 = Graduate and 0= not Graduate), Q<sub>6</sub> denote employability after getting higher education (1= getting employability and 0 = getting not Employability), Q<sub>7</sub> denote quality of higher education (1 = having Quality in H.E. and 0 = Having not Quality in H.E.),  $Q_8$  denote transportation problem (1 = Not facing the transportation problem and 0 = Facing the Problem), Q9 Denotes student bearer the family responsibility (1 = having the family responsibility and 0 = having no responsibility of the family).

Formulation of the model is influenced by number of working hypothesis. It is hypothesized that a student's decision to participate in higher education is influenced by the combining effect of a number of factors related to the student's future objective and socio economic constraint. The a *priori* expectations on the effect of each of explanatory variables on the likelihood of a student decided to participate in higher education.

## **Reliability Analysis**

Cronbach's alpha reliability coefficient normally ranges between 0 and 1. However, there is actually no lower limit to the coefficient. The closer Cronbach's alpha coefficient is to 1.0 the greater the internal consistency of the items in the scale. While increasing the value of alpha is partially dependent upon the number of items in the scale, it should be noted that this has diminishing returns. It shouldalso

be noted that an alpha of 0.79 is probably a reasonable goal. It should also be noted that while a high value for Cronbach's alpha indicates good internal consistency of the items in the scale, it does not mean that the scale is one-dimensional

Table 01
Reliability Statistics

Cronbach's	
Alpha	N of Items
.793	9

Source: Authors computation

The values in the column labelled *Alpha if Item is Deleted* are the values of the overall alpha if that item isn't included in the calculation. As such, they reflect the change in Cronbach's alpha that would be seen if a particular item were deleted. The overall alpha is .0.72, and so all values in this column should be around that same value. We're looking for values of alpha greater than the overall alpha because if the deletion of an item increases Cronbach's alpha then this means that the deletion of that item improves reliability. None of the items here would substantially affect reliability if they were deleted.

Table 02
Item-Total Statistics

	Scale Mean if Item Deleted			Cronbach's Alpha if Item Deleted
Want to get Higher Education	3.6400	6.112	.489	.771
Gender	3.6700	5.435	.806	.725
Economic Status	3.7100	5.764	.650	.749
Facing Transportation Problem	3.6600	5.924	.573	.760
Having Enough Responsibility for their Family Survival	3.7200	6.022	.532	.765
Quality of HE is Very Low	3.7600	6.326	.405	.783
H.E. is Not Employable	3.7600	6.790	.210	.807
Parents are Graduate	3.7800	6.577	.302	.796
Distance is Matter to Getting HE	3.6600	6.328	.394	.784

Source: Authors computation

Output is for a model that includes only the intercept (which SPSS calls the constant). Given the base rates of the two decision options (00/100 = 00 % decided to Not getting Higher Education, and 100 % decided to getting the Higher Education and no

other information, the best strategy is to predict, for every case, that the subject will decide to Expectation of Higher Education. Using that strategy, you would be correct 77 % of the time.

Table 03
Classification Table<sup>a,b</sup>

	1 11 1 11 1							
	-		Predicted					
			Want to get H	Percentage				
	Observed		Otherwise	Yes	Correct			
Step 0	Want to get	Higher Otherwise	0	23	.0			
Ed	Education Yes	Yes	0	77	100.0			
	Overall Percentag	e			77.0			

Source: Authors computation

a. Constant is included in the model.

b. The cut value is .500

Under Variables in the Equation you see that the intercept-only model is  $\ln (odds) = 25.857$ . If we exponentiate both sides of this expression we find that our predicted odds [Exp (B)] = 3.348. That is, the predicted odds of deciding to get the higher

Education are 3.348. Since 77 of our subjects having Expectation for getting the Higher Education and 00 having not expectation to getting Higher Education, our observed odds are = 25.857.

Table 04 Variables in the Equation

	-	В	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	1.208	.238	25.857	1	.000	3.348

Source: Authors computation

Now look at the Block 1 output. Here SPSS has added the gender variable as a predictor. Omnibus Tests of Model Coefficients gives us a Chi-Square of 144.80 on 1 *df*, not significant beyond .000. This is a test of the null hypothesis that adding the gender variable to the model has significantly increased our ability to predict the Expectation about the Higher education by the students.

Under Model Summary we see that the -2 Log Likelihood statistics is 93.82. This statistic measures how strong the model predicts the decisions -- the smaller the statistic the better the model. The Cox & Snell  $R^2 = 0.361$  can be interpreted like  $R^2$  in a multiple regression, but cannot reach a maximum value of 1. The Nagelkerke $R^2 = 0.481$  can reach a maximum of 1.

Table 05
Omnibus Tests of Model Coefficients

	<u>-</u>	Chi-square	df	Sig.
Step 1	Step	44.802	1	.000
	Block	44.802	1	.000
	Model	44.802	1	.000

Source: Authors computation

Table 06
<b>Model Summary</b>

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	93.828ª	.361	.481

Source: Authors computation

a. Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.

Table 07
Variables in the Equation

								95.0% C.I.for EXP(B)	
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1ª	Q2	3.081	.532	33.582	1	.000	21.779	7.682	61.744
	Constant	-1.718	.410	17.510	1	.000	.179		

Source: Authors computation

a. Variable(s) entered on step 1: Q2.

The Variables in the Equation output shows us that the regression equation is ODDS = a + b x

ODDs = - 1.718 + 3.081 Gender

We can now use this model to predict the odds that a subject of a given gender wills decide the Expectation of Higher Education. The odds prediction equation is

ODDS = 
$$e^{a+bx}$$

If our subject is student is female (Female = 0), then the ODDS =  $e^{-1.718 + 3.081} = e^{-1.718} = 0.1826$  That is, Female students having the expectation for Higher Education is only 0.1826 as likely to getting the admission in higher Education, As they are to decide not taking the Admission in Higher education.

If our subject is Male Student (Male = 1) then the ODDS =  $e^{-1.718 + 3.081}$  (1)=e = 0.2836 That is, male students having the expectation for Higher Education is only 0.2836 as likely to getting the admission in higher Education, As they are deciding not to take the Admission in Higher education.

We can easily convert odds to probabilities. For our Gender basis analysis

Y=ODDS/1+ODDS

The Variables in the Equation output also gives us the Exp (B). This is better known as the odds ratio predicted by the model. This odds ratio can be computed by raising the base of the natural log to the  $b^{th}$  power, where b is the slope from our logistic regression equation. For our model  $e^{-1.718}$ = 0.1826 that tells us that the model predicts that 18% of female<sup>24</sup> having the expectation for higher education, whereas 82% of the Female does not want to enrolled in Higher Education.

For our model  $e^{1.262}$ = 0.2836 that tells us that the model predicts that 28% of male having the expectation for higher education, whereas 72% of the male students want to not enrolled in Higher Education.

<sup>&</sup>lt;sup>24</sup> International Journal of Scientific and Research Publications, Volume 3, Issue 10, October 2013

	variables in the Equation									
								95.0% C.I.for EXP(B)		
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper	
Step 1 <sup>a</sup>	Q2	5.386	1.390	15.010	1	.000	218.410	14.317	3.332	
	Q3	.384	1.107	.121	1	.728	1.469	.168	12.850	
	Q4	1.654	.863	3.675	1	.055	5.230	.964	28.383	
	Q5	3.316	1.054	9.904	1	.002	27.543	3.493	217.180	
	Q6	2.126	.961	4.890	1	.027	8.379	1.273	55.133	
	Q7	1.141	.949	1.445	1	.029	3.131	.487	20.126	
	Q8	1.371	.935	2.148	1	.043	3.939	.630	24.628	
	Q9	2.222	1.157	3.692	1	.055	9.228	.956	89.049	
	Constant	-7.945	1.923	17.062	1	.000	.000			

Table 08
Variables in the Equation

Source: Authors computation

a. Variable(s) entered on step 1: Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9.

Cox & Snell R Square = 0.610, Nagelkerke R Square = 0.814,  $-2 \log likelihood = 44.400^a$ 

Hosmer and Lemeshow Test Chi-square = 1.471, df = 8,  $\rho$  = 0.993

a. Estimation terminated at iteration number 8 because parameter estimates changed by less than .001.

A Logistic regression analysis on the 100 observation in intermediate student data set was run using the SPSS 19<sup>25</sup> software to determine the effects of the factors that influence students' participation behavior in higher Education.

Table 08 represents the result of the estimated logistic regression of the model in equation. The Cox & Snell  $R^2$  Value & Nagelkerke  $R^2$  value of 0.61 & 0.814 respectively is acceptable because it is nearer to 1. The F statistic 1.471 which tests the overall significance of the mode, is significant at the 1 % level.

 $\triangleright$  β<sub>1</sub>: the odds ratio (exp (5.386) = 218.4) can be interpreted as the odds a Student with male status will attend to Higher Education is 218 (Increase of 21843%) times the odds that a Student of female status will.

- β<sub>2</sub>: the odds ratio (exp (0.384) = 1.469) can be interpreted as the odds a Student with APL status will attend to attained the Higher Education is 1.469 (Increases of 146 %) times the odds that a Student have BPL status.
- $\geqslant$   $\beta_3$ : the odds ratio (exp (1.654) = 5.23) can be interpreted as the odds a Student Coming from far away or very distance status will attend to Higher Education is 5.23 (Increases of 523%) times the odds that a student who are locals status.
- β<sub>4</sub>: the odds ratio (exp (3.316) = 27.54) can be interpreted as the odds a Student with Graduate Parental status will attend to Higher Education is 27.54 (increases of 2754%) times the odds that a student have Low Parental Education status.
- β<sub>5</sub>: the odds ratio (exp (2.126) = 8.37) can be interpreted as the odds a Student with Employability status will attend to Higher Education is 8.37 (Increases of 837%) times

<sup>&</sup>lt;sup>25</sup> Especially thank you the Department of Economics, BHU, for providing the software SPSS 19

the odds that a Student have Employability in their Mind.

- β<sub>6</sub>: the odds ratio (exp (1.141) = 3.13) can be interpreted as the odds a Student who think about the Quality of Education will attend to Higher education is 3.13 (increases of 313 %) times the odds that a student who are not thing about the quality of Education.
- $\triangleright$   $\beta_7$ : the odds ratio (exp (1.371) = 3.93) can be interpreted as the odds a student facing the problem of Transportation Cost will attend to Higher Education is 3.93 (increases of 393 %) times the odds that a student who are not facing the problem of transportation cost.
- β<sub>8</sub>: the odds ratio (exp (2.222) = 9.22) can be interpreted as the odds a student with having the responsibility for surviving of their family will attend to Higher Education is 9.22 (increases of 922 %) times the odds that a student who have not responsibility for their family survival.

A logistic regression analysis was employed to analysis the socio – economic and institution factors that influence student's decision to participate in higher education in Uttarakhand. The model specification with the decision to participate in higher education by students as dependent variable and Gender, Economic status, distance, parental education, employability, Quality of higher Education, transportation problem and having the responsibility for their family are independent variable.

Empirical results from the logistic regression analyse the table 08 revels that Gender, distance, parental education, Employability, Quality of higher Education, transportation problem and having the responsibility for their family are positive and significant predictor, whereas Economic status of the student is positive but not significant predictor of the probability to participate in higher education. Thus the final Logit model will be;

Prob. For Decision to participate in H.E.  $(Q_1) = -7.945 + 5.386$  Gender  $(Q_2) + 0.384$  Economic Status  $(Q_3) + 1.654$  Distance  $(Q_4) + 3.316$  Parent Education  $(Q_5) + 2.126$  Employability  $(Q_6) + 1.141$  Quality of education  $(Q_7) + 1.371$  Transportation Problem  $(Q_8) + 2.222$  Family Responsibility  $(Q_9) + \varepsilon_i$ 

#### Discussion and conclusion

Gender of the Students were found significant and positive related to decision about to participation in higher Education and their  $\beta$  coefficient value is very high that is 5.386, it means male having enough desire to enrolment in higher education in the respect of female student. Male student have enough mobility and less social bound  $^{26}$ .

This study also founded that economic status was not significant related to involvement in higher Education. And the  $\beta$  coefficient value is 0.384. Even though economic status playing significant role in their social life, but in the context of higher education involvement playing neutral role. Same as we can see that all the variable including in the model playing significant role for probability to determine involvement in higher education.

The objective of this study was examining the socio economic and individual factors that influences to student to involvement in higher education in Kumaun region in Uttarakhand. A random sample of 100 students from Kumaun region of Uttarakhand was conducted for the study. A well structured interview schedule was the main tool for data collection while descriptive statics and logistic regression analysis were the main analytical techniques.

Empirical results from the logistic regression analysis revel that Gender, Economic status, distance, parental education, and Student employability, Quality of higher Education; transportation problem

<sup>26</sup> 

https://www.middlesex.mass.edu/ace/downloads/a stininv.pdf

and having the responsibility for their family positive influenced to involvement in higher education by the student. The regression analysis finds the Gender, Economic status, distance, parental education, and employability, Quality of higher Education, transportation problem and having the responsibility for their family as significant predictors of the probability to involvement behaviour in higher Education. It is recommended that viable improving their social and economic life related variable increasing the involvement in higher education.

## References

- Adetunde, I., Akensina, A. and Peter, A. (2008). "Factors affecting the standard of female education: A case study of Senior Secondary Schools in Kssena- Nankana District", A journal of Social Sciences.
- Coley, Richard J. (2013), "Poverty and Education: Finding the Way Forward", ETS Center for Research on Human Capital and Education Research and Development Educational Testing Service Rosedale Road Princeton
- Dukkipati, U. (2010). "Higher Education in India: Sustaining Long-term Growth. In Center for Strategic Studies and International Studies, Washington D.C.
- Kainuwa, Ahmad & Yusuf, Najeemah Binti Mohammad. (2013), "Influence of Socio-Economic and Educational Background of Parents on their Children's Education in Nigeria" International Journal of Scientific and Research Publications, Volume 3, Issue 10, October 2013.
- McGrath, Simon. (2007), "What is Employability?" UNESCO Centre for Comparative Education Research, School of Education, University of Nottingham.
- ❖ Rasheed, Sadig (2002), "Defining Quality in Education" The Chief, Education Section,

- Programme Division UNICEF, 3 United Nations Plaza, H-7 New York, New York 10017 USA
- Trostel, Philip , Walker, lan , Woolley, Paul, (2002), "Estimates of the economic return to schooling for 28 countries" Labour Economics 9. 1–16
- V. Kayhleen. Dempsay, Hoover (1980) "Explorations Parent school relations" Journal of education.

## **Literature sites (Internet)**

- http://www.ey.com/IN/en/Industries/Indiasectors/Education/EY-Higher-education-in-India-Vision-2030
- http://siu.edu.in/downloads/pdf/SSRN.pdf
- http://csis.org/files/publication/sam\_141.p df7.
- http://www.uned.es/dpto-analisiseconomico1/doctorado/education/articulos /rdtoseduc3.pdf
- https://www.ets.org/s/research/pdf/povert y and education report.pdf
- http://usm.maine.edu/sites/default/files/ce pare/poverty achievement Web.pdf
- http://www.unicef.org/education/files/QualityEducation.PDF
- https://metranet.londonmet.ac.uk/research
   -units/ipse/research-clusters/gender-in-education.cfm
- http://www.vanderbilt.edu/peabody/family -school/papers/Explorations.pdf
- https://www.bera.ac.uk/wpcontent/uploads/2014/03/Researchingparent-school-relationships.pdf
- http://www.pacificweb.org/DOCS/rmi/pdf/ Education%20and%20wages.pdf

Copyright © 2015 Richa Pandey and Shailendra Kumar Singh. This is an open access refereed article distributed under the Creative Common Attribution License which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly cited.