Poverty and Education in Algeria: the Impact of Non-School Factors using a Multinomial Econometric Approach

Samir MALIKI,
Ph.D. University of Tlemcen, MECAS Laboratory, Algeria
Email: maliki.samir@gmail.com

Abderrezzak BENHABIB
Professor, Director of MECAS Laboratory, University of Tlemcen, Algeria
Email: abenhabib1@yahoo.fr

Abdelnacer BOUTELDJA
Ph.D. University of Tlemcen, MIFMA Laboratory, Algeria
Email: bouteldja_nacer@yahoo.fr

Abstract

Using a multinomial logit measurement, we aim through this paper to quantify the relationship between poverty and education. A subjective measurement of poverty is used with non school factors in quantifying such relationship. For a better understanding of the linkage Poverty-Education, a Multinomial regression model is applied to a representative survey of 500 households in the region of Tlemcen.
According to our results , variables such as: individual housing, household's head instruction's level ,expenditures on education , the gender (male), and the age are common variables whatever poverty status.
As far as policy makers are concerned, education is seen as a vital player in economic and social development. Accordingly, the higher is the education level the more likely it contributes to household poverty alleviation.
Our results are of great importance to Algerian policy makers as long as it shows some significant variables which should be taken in consideration in drawing policies.

Key words: Poverty – Education – MDG - Multinomial – Algeria.

Jel Codes: I320-I290

1. Introduction

After the independence in 1962, the access to education in Algeria has become a legitimate right with the compulsory schooling of the children from 6 to 15 years, and from 3 to 5 years in 2008. This policy is recognized as a structuring element of human development. In fact, the last data on education show that the average rates of completion for a group of children approximate 95, 2% in the primary education and 66, 2% at the collegial level. However, Schools dropouts [4] estimated over the period 1999-2006 were 536.000 per year with 68, 9% coming from the compulsory teaching cycles. Some studies found that poor children perceive negative impact of their poverty on social and academic conditions. Moreover, household's poverty tends to increase vulnerability rate of children, particularly on their education. Other authors admit that poverty is also a source of improvement of human capital added to the value of national productivity.

Poverty can be defined as a privation of basic needs and capacity. This may suggests that a tentative explanation of the relationship between poverty and education can be broadly categorized into one of potentially two levels of analysis, namely private and social returns.

There are different approaches to modelling determinants of poverty. The current practice chosen for this analysis consists of two steps: in the first one, we attempt to identify a subjective poverty measure. In the second step; beside using a theoretical analysis of the linkage between poverty and education on the basis of domestic data [8] , for better understanding of poverty and education linkage, a multinomial regression model is used for a survey of 500 households in the region of Tlemcen . We consider that the main variables which determine the previous mentioned linkage are non school factors such as household's head education level, gender, education expenditure, and any additional courses for children.

As far as policy makers are concerned, our approach provides a useful tool to capture some missing variables that may be important to education sector.

Actual indicators in Algeria, confirm the existence of some improvements in poverty level. According to the Ministry of employment and national solidarity, a decrease of 2.3 % in 2006 compared to 2000 was recorded.

Yet, in contrast, the UNDP considers that the number of poor exceeds 10 millions, a figure that is far from the 723020 poor's presented by the ministry of employment and solidarity. Moreover, the [8] report shows that the proportion of the population living below the nutritional poverty threshold has moved from 3.6% in 1988 to 1.6% in 2004, representing 518000 individuals.

The global poverty threshold that concerned 3.98 million individuals in 1995 decreased to 2.2 million in 2004 with an annual average decrease of 6.37%.

The measurement of Human Poverty Index (HPI) shows a decreasing index between 1995 and 2005 from 25.23 to 16.60 [8].

Given this introduction the rest of the paper is structured as follows: section 2 reviews the literature of education poverty relationship. Section 3 describes the data, methodology and presents the empirical results. Section 4 concludes with some policy recommendations.

2. Literature review

Education is considered as the cornerstone of social development and a principal means of improving the character and peace of individual welfare. Considered as the most important constituent of social capital, education plays a determinant role in expanding human capabilities[i], contributes to improving well-off levels of individuals.

Human capital theory, elaborated in Chicago at the end of the fifties [3], [19] stipulates that education increases productivity, incurs an opportunity cost, and has a pay-off in terms of increased returns (whether private or social). As is argued, productivity increases lead to higher returns in forms of increased income.

Moreover, education with an easy access and higher levels leads to productivity gains and income, and hence to a reduced inequality and poverty.

Due to its complexity and multidimensionality, education should be comprehended within a general approach, in order, first to pinpoint the relevant factors for its efficiency, and second, to assess its outcome (individual and collective).

Currently, economic analysis of education relies mainly on the production function approach, which is how school factors-inputs, teaching, management and organization can cost-effectively promote cognitive skill acquisition (see for example, [9],[10], [11]).

Most of these studies measure educational output by using students' scores on standardized achievement tests, drop out rates, repetition rates, attendance rates or decision to pursue schooling.

Based on this approach, an optimal set of resources can be defined and policies that would likely produce high levels of educational achievements can be instituted and decided on.

Most of the previously mentioned studies reached the following conclusions:

-Empirical work of education production function has had mixed success in explaining scores on standardized achievement tests;

-There are divergences between the different findings on a definite systematic relation between key input and student performance;

-There are difficulties with the analytical approaches and methodologies used due partly to peculiarities in the available data, varying perspectives of the researchers, and missing key elements of the educational process;

-Schools are differentially effective in producing learning and the impact of each input differs from school to school;

-Educational performance is a product of complete, difficult, contentious and conflicting interactions of factors and agents who participate in the schooling process, and, there is a strong need for more research on the merits of incentive systems, decentralisation and school-based management.

One set of factors influencing learning is "school factors" which consists of physical inputs (facilities, instructional materials and expenditure per pupil) and pedagogical inputs which include curriculum, time, teacher education, experience and salary, school attendance, and repetition rates.

Management and organization factors are concerned with class size, staff stability, collegial relationship, parental and community involvement, school autonomy, evaluation schemes.

However, research has proved that non-school factors, such as gender, individual indicators, family factors like educational expenses , housing conditions and parental education's can be the most important determinants of performance during school life and after .

The impact of non school factors (individual, family and community) on school achievement (school factors) and Societal outcome that comprehend instructional output (cognitive and non cognitive), behavioural output and the well off degree (private and social) derived from such output like earnings and job promotion are summarize by Figure 1.
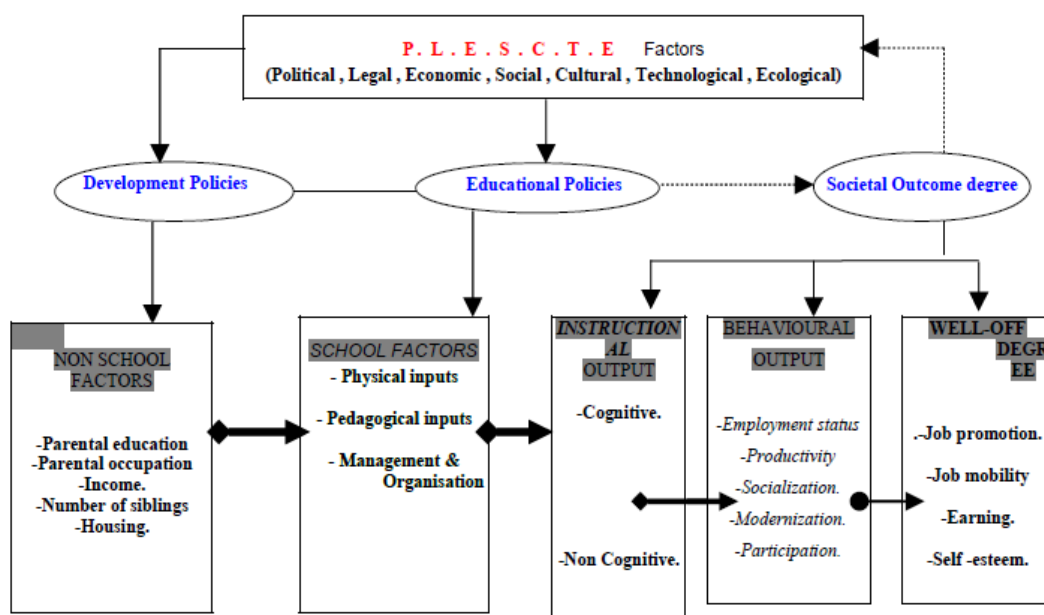
Figure 1: The learning system revisited: a multidimensional schematic framework

Recent evidence from different studies reveals that the most important Determinants of child learning capacity are among all non school factors such as: Gender, family factors such as educational expenses, parental education, income level, number of siblings and child rearing behaviour.

According to [21] deficiency in any of the above listed factors is responsible for an important part of school drop outs in developing countries and is likely to lead to an exacerbation of a poverty state of any individual.

In fact, both school and non-school factors are vital components of the determinants of what is called societal outcome; instructional output (learning), behaviour output, and well-off degrees.

The box on the top of the chart portrays present a set of exogenous variables related to political, legal, economic, social, cultural, technological and ecological policies (P.L.E.S.C.T.E factors) , which influence development, and educational policies.

3. Source of data, methodology and empirical results

3.1. Sample and data collection

The adopted survey method in this paper relates to a sample of 500 households covering twelve communes representative of the fifty three communes of the Wilaya (State) of Tlemcen taken on a random basis over of the 1998 Algerian official census indicators.

In order to determine the possible linkage between poverty and education, a multinomial logit model is applied. Non school factors are stressed as determining indicators to poverty levels.

3.2. The multinomial logit model

Let m be the number of alternatives reflecting four levels of well-off (very poor, poor, intermediate and rich) based on categories built upon subjective responses.

For computational purposes, the alternatives are labelled by an index j =1……., m, so that the response $y_i = j$ is a nominal (not an ordinal) variable.

Let n_j be the number of observations with response $y_i = j$ and let $n = \sum_{j=1}^{m} n_j$ be the total number of observations.

Suppose that, apart from the choices y_i, also the value x_i of k explanatory variables are observed, I = 1,…n.

The first element of x_i is the constant term $x_{1i} = 1$, and the other elements of x_i represent characteristics of the ith individual. A possible model in terms of stochastic utilities is given by [12]

$$U_i^j = u_{ij} + \varepsilon_{ij} = x_i'\beta_j + \varepsilon_{ij}.$$

………………………………(1)

Where:

x_i : is a k *1 vector of explanatory variables for individual i

β_j : is a k* 1vector of parameters for alternative j

Further $u_{ij} = x_i'\beta_j$ represents the systematic utility of alternative j for an individual with characteristics x_i

β_j: Measures the relative weights of the characteristics in the derived utility.

ε_{ij}: are individual-specific and represent non- modelled factors in individual preferences.

The estimation of the multinomial logit probabilities become:

$$p_{ij} = \frac{e^{x_i' \beta_j}}{\sum_{h=1}^{m} e^{x_i' \beta_h}} = \frac{e^{x_i' \beta_j}}{1 + \sum_{h=2}^{m} e^{x_i' \beta_h}}$$ ……………………………………………………..(2)

The estimation by maximum likelihood with respect to the parameters β_j , j = 2……m
Show the following results:

$$\log \left(L_{MNL}(\beta_2, \cdots, \beta_m) \right) = \sum_{i=1}^{n} \left(\sum_{j=2}^{m} y_{ij} x_i' \beta_j - \log \left(1 + \sum_{h=2}^{m} e^{x_i' \beta_h} \right) \right)$$ ……………………………………….(3)

3.3. Results and interpretation

The outcome variable represented by subjective poverty of the households is computed on the basis of four levels: very poor, poor, intermediate and rich. The intermediate household situation is taken as the reference group; it represents the highest marginal percentage (44, 4%). It is used for the model estimation, starting from very poor relative to intermediate and poor relative to intermediate and finally rich relative to intermediate.
The small p-value from the LR test, <0.00001, would lead us to conclude that at least one of the regression coefficients in the model is not equal to zero.
Since the parameter estimates are relative to the reference group, the standard interpretation of the multinomial logit is that for a unit change in the predictor variable, the logit of outcome relative to the reference group is expected to change by its respective parameter estimate given that the variables in the model are held constant.
Table 1 presents a summary of the independent variables used in the study.
Responses of the head of the household as far as subjective poverty is concerned, show that 19.2% are very poor, 32.4 % poor, 44.4% intermediate and only 4% are rich. As a result, we find that 51.6% of the households are poor.
As concerns the gender variable, the head of the household is male for 432 households, and 60% of the head of the households are more than 50 years old and only 5.6% are under 31 years old.
As is shown by Table 1, more than half (56.8%) of the head household males have either a primary instruction or without. For the female gender, the percentage is important (79.6%), and only 0.8% has a university level.
The household's expenditure for additional courses concerns only 226 households. The majority devote a monthly expense of 1500 AD. The percentage of the household's budget devoted to education may help explain the monetary linkage between poverty and education. In fact, our results show that 56% of the households spend less than 20% of their budget on education.
Table 2 shows the contribution of the two explanatory variables taken together. It can be seen that by including the two variables and the constants (intercepts) the model reduces the −2Loglikelihood by 183,399 compared with the results when excluding the two variables. This difference which is highly significant expresses the contribution of the two explanatory variables taken together.
Table 4 of the output presents the Likelihood Ratio Tests and shows the individual contribution of each of the explanatory variables. It can be seen that all explanatory variables make a significant contribution to the model except Inst_female denoted by the instruction level of the female head of the household.
The final element of the output is the model itself. We have three models based on the category intermediate as a reference category. Thus, the first section of the output compares very poor with intermediate, the second compares poor with intermediate and the third compare rich with intermediate.
The results of the gender (male =1)effect is significant for very poor (0.008) and poor (0.053) ,but not for rich (0.414).

As far as the results for very poor are concerned, the level of instruction of the household head (male or female) have a negative impact on the subjective poverty.

The outcome shows that for the first model (very poor relative to intermediate) the individual housing, the collective housing, the gender (male), the age of the head (20-25) and the level of instruction of the head of the household have smaller probability for the very poor to improve his well-off level to a higher i-e intermediate situation.

For the second model (poor relative to intermediate) only the individual housing, the university level of male, the level of instruction and expenditures for education have a smaller probability for the poor to improve his well-off level to a higher i-e intermediate situation.

The last model (rich to intermediate) shows that only the age category under 31 years for the head of the household, the primary and secondary level of instruction of the male head of household, the instruction level of female head of household have a negative impact on the rich level, i-e that the subjective probability of feeling rich is questioned through these variables leading to a transfer from a rich level to intermediate real level.

4. Conclusion

The link poverty –education has gained too much attention in recent years. However, most of the work done in this field emphasized on school factors as the main factors that influence poverty. Few studies revealed the impact of non school factors.

Using a multinomial econometric approach to a survey of 500 households, our results showed that some of non school factors such as housing type, instruction level of household's head and gender are the most relevant factors influencing poverty.

Great interest was devoted by the Algerian government in its latest program to the subject of poverty. Thus, in order to use the appropriate policy, policy makers should not ignore the non-school factors. Such factors may be as important as the school ones.

Such results implies that policy makers should take into account non school factors in drawing poverty reduction policies

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Table1: Case Processing Summary

		N	Marginal Percentage
Subjective poverty	Very poor	96	19,2%
	Poor	162	32,4%
	Intermediate	222	44,4%
	Rich	20	4,0%
Housing	Individual	282	56,4%
	collectif build	78	15,6%
	Precarious	140	28,0%
Gender of the head of the household	Male	432	86,4%
	Female	68	13,6%
Age of the head of the household	20 – 25	6	1,2%
	26- 31	22	4,4%
	32 – 37	16	3,2%
	38 – 43	72	14,4%
	44 – 49	84	16,8%
	50 – 60	174	34,8%
	60 ans et Plus	126	25,2%
Instruction level of male households head	Without	172	34,4%
	Primary	112	22,4%

	Lower	9(	19,2%
	Secondary	8(	17,2%
	University	3(	6,0%
	Professional Training	∠	,8%
Instruction level of female households head	Without	25(	51,2%
	Primary	14;	28,4%
	Lower	9(	18,0%
	Secondary	8	1,6%
	University	∠	,8%
% of household budge consacred to education	0	3(	6,0%
	10 %	9(	18,0%
	15 %	4∠	8,8%
	20 %	11(	23,2%
	25 %	8∠	16,8%
	30 %	5(	11,2%
	40 %	2{	5,6%
	50 %	4∠	8,8%
	60 %	{	1,6%
Households expenditure fo additional courses	0	37∠	74,8%
	500 DA	3(	7,2%
	1000 DA	3{	7,6%

1500 DA	2?	4,4%
2000 DA	1?	2,4%
2500 DA	1?	2,4%
3000 DA	(	1,2%
Valid	50(	100,0%
Missing	(	
Total	50(	
Subpopulation	245(a	

a The dependent variable has only one value, observed in 243 (99,2%) subpopulations

Table 2 : Model Fitting Information

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	1164,087			
Final	980,688	183,399	99	,000

Table 3 : Goodness-of-Fit

	Chi-Square	df	Sig.
Pearson	2321,856	633	,000
Deviance	873,263	633	,000

Table 4 : Likelihood Ratio Tests

Effect	-2 Log Likelihood of Reduced Model	Chi-Square	df	Sig.
Intercept	980,688(a	,000	0	
NPM	1012,143(b	31,455	3	,000
Housing	1321,861(b	341,173	6	,000
Gender	1004,676(b	23,989	3	,000
AGE	1023,039(b	42,352	18	,00
INST_Male	13104,810(b	12124,122	15	,000
INST_Female	989,910(b	9,222	12	,68
Budg_Educ	1567,262(b	586,575	24	,000
EXP_Cours	737,593		18	

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

a This reduced model is equivalent to the final model because omitting the effect does not increase the degrees of freedom.

b The log-likelihood value cannot be further increased after maximum number of step-halving.

Table 5 : Classification

Observed	Predicted				
	Very poor	Poor	Intermediate	Rich	Percent Correct
Very poor	62	16	18	0	64,6%
Poor	16	100	42	4	61,7%
Intermediate	16	26	160	20	72,1%
Rich	0	2	6	12	60,0%
Overall Percentage	18,8%	28,8%	45,2%	7,2%	66,8%
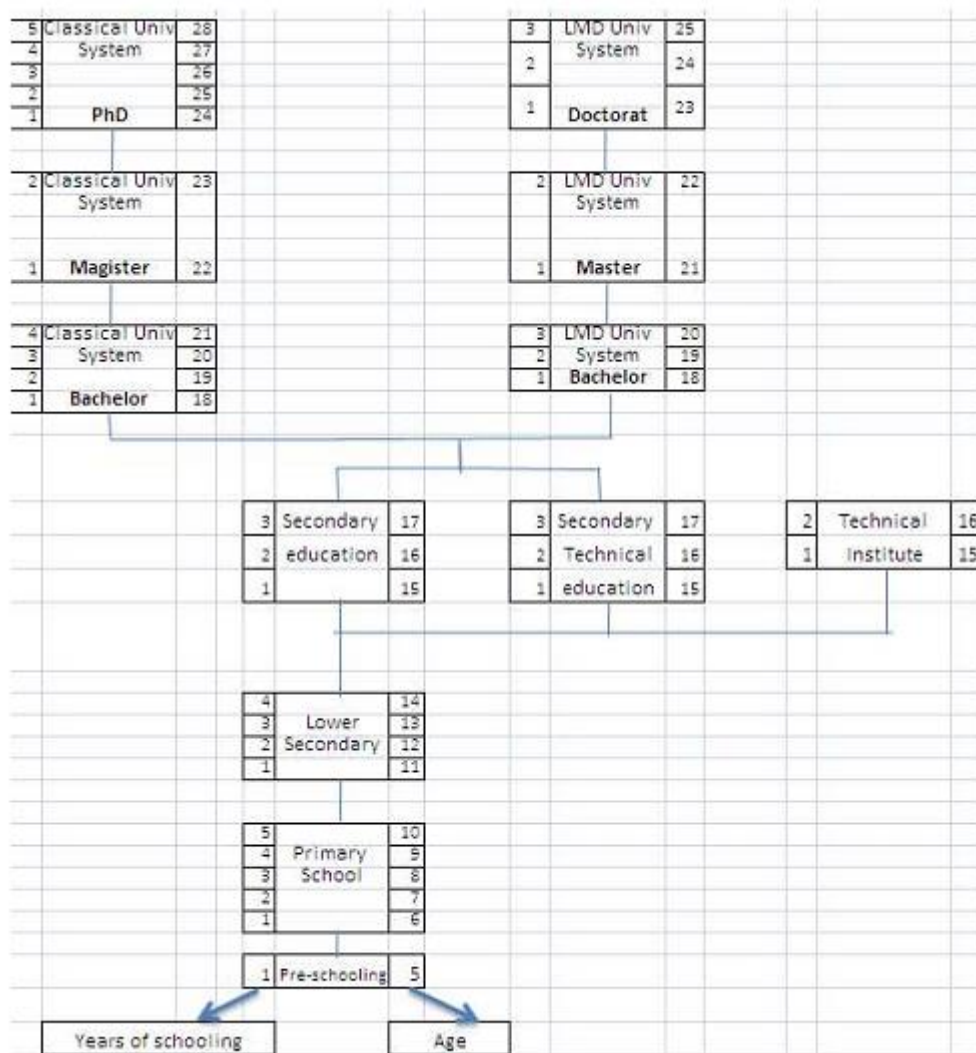
Figure 2: Education system in Algeria

Table 6 : Parameter Estimates

Subjective poverty(a)		B	Std. Error	Wald	Df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
Very poor	Intercept	5,19	4,25	1,48		,223			
	NPM	,18	,08	5,11		,024	1,20	1,02	1,41
	[Housing=1]	-1,74	,38	20,62		,000	,17	,08	,37
	[Housing=2]	-1,22	,57	4,57		,032	,29	,09	,90
	[Housing=3]	0(b				.			
	[Gender=1]	-1,18	,44	7,13		,008	,30	,12	,73
	[Gender=2]	0(b				.			
	[AGE=1]	-,03	2,03	,00		,985	,96	,01	51,71
	[AGE=2]	,84	,84	,99		,320	2,32	,44	12,27
	[AGE=3]	,50	1,71	,08		,769	1,65	,05	47,21
	[AGE=4]	,65	,54	1,47		,224	1,92	,66	5,56
	[AGE=5]	,60	,54	1,22		,269	1,83	,62	5,36
	[AGE=6]	1,46	,40	12,93		,000	4,32	1,94	9,61
	[AGE=7]	0(b				.			
	[INST_Male=1]	-,81	1,23	,43		,508	,44	,04	4,94
	[INST_Male=2]	-1,66	1,22	1,83		,176	,19	,01	2,10
	[INST_Male=3]	-1,15	1,23	,87		,349	,31	,02	3,53
	[INST_Male=4]	-1,44	1,23	1,37		,242	,23	,02	2,63
	[INST_Male=5]	-2,03	2,43	,69		,404	,13	,00	15,46
	[INST_Male=6]	0(b				.			

	[INST_Female=1]	-4,45	3,59	1,53	,215	,01	,00	13,26
	[INST_Female=2]	-4,91	3,59	1,86	,172	,00	,00	8,43
	[INST_Female=3]	-5,48	3,60	2,31	,128	,00	,00	4,85
	[INST_Female=4]	-7,59	4,00	3,59	,058	,00	,00	1,28
	[INST_Female=5]	0(b			.			
	[Budg_Educ=0]	1,72	1,61	1,14	,285	5,61	,23	132,59
	[Budg_Educ=1]	,41	1,52	,07	,788	1,50	,07	30,12
	[Budg_Educ=2]	-,37	1,64	,05	,819	,68	,02	17,17
	[Budg_Educ=3]	,13	1,54	,00	,929	1,14	,05	23,48
	[Budg_Educ=4]	-,40	1,56	,06	,797	,66	,03	14,42
	[Budg_Educ=5]	,22	1,58	,01	,889	1,24	,05	27,72
	[Budg_Educ=6]	,89	1,60	,30	,578	2,44	,10	57,06
	[Budg_Educ=7]	,75	1,59	,22	,636	2,12	,09	47,91
	[Budg_Educ=8]	0(b			.			
	[EXP_Cours=0]	,05	1,18	,00	,961	1,05	,10	10,85
	[EXP_Cours=1]	,35	1,28	,07	,782	1,42	,11	17,82
	[EXP_Cours=2]	-,60	1,29	,21	,640	,54	,04	6,94
	[EXP_Cours=3]	-1,36	1,47	,86	,353	,25	,01	4,56
	[EXP_Cours=4]	,00	1,83	,00	,999	1,00	,02	36,65
	[EXP_Cours=5]	,04	,00		.	1,04	1,04	1,04
	[EXP_Cours=6]	0(b			.			
Poor	Intercept	2,24	6,88	,10	,744			
	NPM	,09	,07	1,28	,257	1,09	,93	1,27
	[Housing=1]	-1,27	,34	13,88	,000	,27	,14	,54

[Housing=2]	,09	,43	,04	,826	1,10	,46	2,58
[Housing=3]	0(b			.			
[Gender=1]	,92	,47	3,73	,053	2,52	,98	6,46
[Gender=2]	0(b			.			
[AGE=1]	,36	1,20	,09	,762	1,44	,13	15,38
[AGE=2]	1,92	,68	7,89	,005	6,88	1,79	26,42
[AGE=3]	1,94	,92	4,37	,037	6,96	1,12	42,95
[AGE=4]	,24	,44	,29	,585	1,27	,53	3,04
[AGE=5]	,05	,44	,01	,902	1,05	,44	2,52
[AGE=6]	,49	,35	1,96	,161	1,64	,82	3,31
[AGE=7]	0(b			.			
[INST_Male=1]	1,14	2,14	,28	,592	3,14	,04	209,96
[INST_Male=2]	,80	2,13	,14	,708	2,22	,03	146,43
[INST_Male=3]	1,11	2,14	,26	,604	3,03	,04	201,70
[INST_Male=4]	,48	2,13	,05	,820	1,62	,02	107,49
[INST_Male=5]	-,39	2,54	,02	,877	,67	,00	99,46
[INST_Male=6]	0(b			.			
[INST_Female=1]	-1,01	6,32	,02	,872	,36	,00	86712,32
[INST_Female=2]	-1,57	6,32	,06	,804	,20	,00	50104,11
[INST_Female=3]	-1,39	6,32	,04	,825	,24	,00	59766,18
[INST_Female=4]	-2,22	6,46	,11	,731	,10	,00	34258,82
[INST_Female=5]	0(b			.			
[Budg_Educ=0]	-1,08	1,39	,61	,434	,33	,02	5,13
[Budg_Educ=1]	-1,82	1,27	2,04	,153	,16	,01	1,96

		B	Std. Error	Wald	df	Sig.	Exp(B)	Lower	Upper
	[Budg_Educ=2]	-1,95	1,33	2,15		,143	,14	,01	1,92
	[Budg_Educ=3]	-,70	1,25	,31		,574	,49	,04	5,80
	[Budg_Educ=4]	-1,57	1,27	1,53		,215	,20	,01	2,50
	[Budg_Educ=5]	-1,49	1,28	1,35		,244	,22	,01	2,77
	[Budg_Educ=6]	-1,40	1,35	1,08		,299	,24	,01	3,46
	[Budg_Educ=7]	-1,10	1,35	,67		,412	,33	,02	4,65
	[Budg_Educ=8]	0(b				.			
	[EXP_Cours=0]	-1,96	1,06	3,39		,066	,14	,01	1,13
	[EXP_Cours=1]	-1,84	1,16	2,53		,111	,15	,01	1,53
	[EXP_Cours=2]	-1,72	1,14	2,28		,131	,17	,01	1,67
	[EXP_Cours=3]	-2,02	1,19	2,86		,091	,13	,01	1,37
	[EXP_Cours=4]	-,95	1,61	,35		,554	,38	,01	9,11
	[EXP_Cours=5]	-,50	,00			.	,60	,60	,60
	[EXP_Cours=6]	0(b				.			
Rich	Intercept	10,76	6504,14	,00		,999			
	NPM	-,02	,14	,02		,886	,98	,74	1,29
	[Housing=1]	,35	,93	,14		,701	1,43	,22	8,95
	[Housing=2]	,35	1,21	,08		,773	1,42	,13	15,48
	[Housing=3]	0(b				.			
	[Gender=1]	,95	1,16	,66		,414	2,58	,26	25,35
	[Gender=2]	0(b				.			
	[AGE=1]	-1,01	3,22	,09		,754	,36	,00	201,69
	[AGE=2]	-,00	1,73	,00		,996	,99	,03	29,45
	[AGE=3]	1,36	1,56	,75		,384	3,91	,18	84,86

[AGE=4]	-,20	,90	,05	,822	,81	,13	4,80
[AGE=5]	-,27	,93	,08	,772	,76	,12	4,75
[AGE=6]	,43	,65	,44	,506	1,54	,42	5,63
[AGE=7]	0(b			.			
[INST_Male=1]	,15	5,09	,00	,976	1,16	,00	25296,11
[INST_Male=2]	-1,07	5,14	,04	,834	,34	,00	8138,36
[INST_Male=3]	-,33	5,09	,00	,948	,71	,00	15556,39
[INST_Male=4]	-1,00	5,10	,03	,843	,36	,00	8104,38
[INST_Male=5]	5,19	5,10	1,03	,309	179,62	,00	3952151,6
[INST_Male=6]	0(b			.			
[INST_Female=1]	-2,41	11,67	,04	,836	,08	,00	77650359,58
[INST_Female=2]	-2,38	11,68	,04	,839	,09	,00	81201672,96
[INST_Female=3]	-2,10	11,69	,03	,858	,12	,00	110620798,25
[INST_Female=4]	-4,25	12,18	,12	,727	,01	,00	33375454,94
[INST_Female=5]	0(b			.			
[Budg_Educ=0]	2,26	2,74	,68	,408	9,66	,04	2089,29
[Budg_Educ=1]	,35	2,63	,01	,891	1,43	,00	248,03
[Budg_Educ=2]	2,68	2,53	1,12	,289	14,63	,10	2092,12
[Budg_Educ=3]	2,05	2,54	,65	,420	7,77	,05	1129,78
[Budg_Educ=4]	,46	2,50	,03	,852	1,59	,01	217,96
[Budg_Educ=5]	-,04	2,57	,00	,986	,95	,00	147,23
[Budg_Educ=6]	1,57	2,78	,31	,572	4,81	,02	1125,85

[Budg_Educ=7]	,41	2,64	,02	,875	1,51	,00	267,63
[Budg_Educ=8]	0(b			.			
[EXP_Cours=0]	-12,99	6504,12	,00	,998	,00	,00	.(c
[EXP_Cours=1]	-13,43	6504,12	,00	,998	,00	,00	.(c
[EXP_Cours=2]	-14,10	6504,12	,00	,998	,00	,00	.(c
[EXP_Cours=3]	-13,84	6504,12	,00	,998	,00	,00	.(c
[EXP_Cours=4]	-7,81	6504,12	,00	,999	,00	,00	.(c
[EXP_Cours=5]	-12,91	6504,13	,00	,998	,00	,00	.(c
[EXP_Cours=6]	0(b			.			

a The reference category is: Intermediate.

b This parameter is set to zero because it is redundant.

c Floating point overflow occurred while computing this statistic. Its value is therefore set to system missing.