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# **Factors which lead to school dropouts in Burkina Faso**

# **Abstract**

Education is an important sector in developing countries. A lot of authorities of these countries try as they can to invest a lot in this sector, however, there is one issue that these authorities encounter. It is the rate of school dropouts.

The causes of the school dropouts are more related to socio-cultural factors than economic and systemic factors. Based on the regression, we can see that the economic factors have less and insignificant impact on the school dropout.

My key research findings are the fact that coefficient of the variable PersonMadeFormalStudies is unexpected as a person that made formal studies is normally more inclined to pursue her/his studies. However, the positive coefficient linked to that variable suggests the opposite. I also found that owning a cellphone decreases considerably the school dropout rate.

## **Introduction**

Education has always been a key driver of development for many countries. However, some countries really face some difficulties in developing this specific sector of their economy and this is the case of the Burkina Faso, a west African landlocked country. Among the multiple challenges that the country's education system faces, one of the most occurring is school dropouts. Following this fact, the question that we are allowed to ask is what can be the factors which lead to school dropouts in Burkina Faso?

Education is seen as the driving force behind sustainable human development. It can be considered as the set of activities with the aim to develop human beings physical, intellectual, moral, spiritual, psychological and social potential, in order to ensure their socialization, their autonomy, their fulfillment and their participation in economic, social and cultural development.

There is virtually a universal agreement in recognizing the pre-eminence of education in increasing the well-being of populations. Indeed, access to education contributes to skills development, but also to individual and collective development as well as the reduction of inequalities.

This perspective explains the central place that education occupies both with the public authorities and citizens as a whole. In Burkina Faso, Law No. 13-2007 / AN of July 30, 2007 establishing the Education Orientation states that: "Education is a national priority. Anyone living in Burkina Faso has the right to education, without any discrimination notably on sex, social origin, race, religion, political opinion, nationality or state of health. This right is exercised over the basis of equity and equal opportunities for all citizens".

However, despite these legislative provisions, the implementation of plans, programs and projects development of basic education (satellite schools project, bilingual schools, post-primary education projects, ten-year plan for the development of basic education, strategic development program basic education) and educational innovations (multigrade classes, double-flow classes, etc.), and efforts by the state and its partners, access to formal basic education remains weak and unequal in Burkina Faso.<sup>1</sup>

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<sup>1</sup> LES OBSTACLES A LA SCOLARISATION DES FILLES AU BURKINA FASO." Accessed April 19, 2021. <https://www.partagider.com/public/2015/Colloque/RDF-colloque-2015-VI-4-Les-obstacles-a-lascolarisation-des-filles-au-Burkina-Faso.pdf>

A lot of factors can explain the high rate of school dropouts but, some factors are more relevant than others. Actually, the causes of the school dropouts are more related to socio-cultural factors than economic factors.

In fact, with the willing of the government and international organizations to reach a minimum 9 years of education for all the citizens of Burkina Faso, it is crucial to take into consideration any factors that can slow that objective by tackling these issues at first. Then, the study of these factors can help to allocate efficiently the funds to reach that objective.

In addition, the knowledge of these factors can help the government to increase the internal efficiency of the sub-sector of primary education which is the first linchpin level that will determine if one will pursue or not her/his studies.<sup>2</sup>

## **Methodology**

The model used for the regression is a Binomial Logit Model. The method of estimation used is the method of Maximum Likelihood (ML).

Actually, we have as a theoretical relationship:

**Dependant Variable= SchoolDropout                      n=6327                      Likelihood Ratio=526.8613**

Variables	TheStudentOwnCellphone	ReadTextInAnyLanguage	WriteSmallTextInAnyLanguage	CalculationsInAnyLanguage	PersonMadeFormalStudies	PersonMadeKoranicStudies
<b>coefficient</b>	-2.2777	-3.4044	1.4659	-2.4947	0.5001	10.2109
<b>Standard error</b>	0.2560	0.7620	0.6480	0.5851	1.2120	235.9
<b>Wald Chi-Square</b>	79.1573	19.9593	5.1170	18.1774	0.1703	0.0019
<b>P-value</b>	<.0001	<.0001	0.0237	<.0001	0.6799	0.9655
<b>Expected sign</b>	(-)	(-)	(-)	(-)	(-)	(+)

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<sup>2</sup> Les déterminants De L'efficacité Interne Du Sous-Secteur Éducatif Primaire: Cas Du Burkina Faso  
<https://www.memoireonline.com/06/11/4582/Les-determinants-de-lefficacite-interne-du-sous-secteur-educatif-primaire-cas-du-Burkina-Faso.html>

**TheStudentOwnCellphone :** The expected sign of this dummy variable is negative in the sense that new technologies are supposed to make it easier for students to get access to their courses or information relative to their curricula and by doing so, decrease the school dropout rate. For the variable (ET26) from which this dummy has been created, the missing values have been dropped.

**ReadTextInAnyLanguage:** The expected sign of this variable is negative as the more a person is to read, the more he will be able to pursue and finish her/his studies very fast. For the variable(ET01) from which this dummy has been created, the missing values have been dropped.

**WriteSmallTextInAnyLanguage :** The expected sign of this dummy variable is negative as knowing how to write is a requirement to pursue or continue studies. Numerous studies have shown that a

six-year cycle was necessary for a child can read and write.(SYNHTESE NATIONALE CARTE EDUCATIVE 2012 2013." Accessed April 19, 2021) . This is the reason why the educational authorities have put the emphasis on a completion in fifth grade, at the same title, that it is the indicator chosen to measure progress towards primary schooling universal. In that sense, the more a student is able to read, the more he will have the necessary skills to continue his studies.

For the variable(ET02) from which this dummy has been created, the missing values have been dropped.

**CalculationsInAnyLanguage :** The expected sign of this dummy variable is negative as calculations are taught only at a certain level of studies, then, it implies that the person has already completed a certain level of studies and then decrease the school dropout rate. For the variable(ET03) from which this dummy has been created, the missing values have been dropped.

**PersonMadeFormalStudies :** The expected sign of this dummy variable is negative as a person who made formal studies is supposed to know the importance of school, have the ability to make critical assessments of situations and then has a less incentive to drop out from the school. For the variable (ET04) from which this dummy has been created, the missing values have been dropped.

**PersonMadeKoranicStudies** : The expected sign of this dummy variable is positive as a person who is making Koranic studies is cannot follow a formal curricula at the same time. Then, most of the time, the student(Actually his parents as most of the time, the student does not have) has to decide whether or not he want to drop out from the formal school to follow some Koranic studies. For the variable(ET04) from which this dummy has been created, the missing values have been dropped.

## Results

### Descriptive Statistic

Simple Statistics							
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum	Label
education2	7787	2.70720	1.25925	21081	0	7.00000	education2
ReadTextInAnyLanguage	7787	0.76866	0.42298	5970	0	1.00000	
Write SmallTextInAnyLanguage	7787	0.74085	0.43820	5769	0	1.00000	
CalculationsInAnyLanguage	7787	0.71735	0.45032	5586	0	1.00000	
PersonMadeFormalStudies	7787	0.99846	0.03923	7775	0	1.00000	
PersonMadeKoranicStudies	7787	0.0002568	0.01603	2.00000	0	1.00000	

### Correlation Table

Pearson Correlation Coefficients, N = 7787 Prob >  r  under H0: Rho=0						
	education2	ReadTextInAnyLanguage	Write SmallTextInAnyLanguage	CalculationsInAnyLanguage	PersonMadeFormalStudies	PersonMadeKoranicStudies
education2	1.00000	0.31081 <.0001	0.31425 <.0001	0.32945 <.0001	0.00386 0.7331	-0.00264 0.8160
ReadTextInAnyLanguage	0.31081 <.0001	1.00000	0.93278 <.0001	0.87888 <.0001	0.04025 0.0004	-0.01011 0.3726
Write SmallTextInAnyLanguage	0.31425 <.0001	0.93278 <.0001	1.00000	0.94222 <.0001	0.03654 0.0013	-0.00881 0.4370
CalculationsInAnyLanguage	0.32945 <.0001	0.87888 <.0001	0.94222 <.0001	1.00000	0.03350 0.0031	-0.00774 0.4649
PersonMadeFormalStudies	0.00386 0.7331	0.04025 0.0004	0.03654 0.0013	0.03350 0.0031	1.00000	-0.40799 <.0001
PersonMadeKoranicStudies	-0.00264 0.8160	-0.01011 0.3726	-0.00881 0.4370	-0.00774 0.4649	-0.40799 <.0001	1.00000

## Regression Table

The REG Procedure  
Model: MODEL1  
Dependent Variable: SchoolDropout

Number of Observations Read	7787
Number of Observations Used	7787

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	54.83576	10.96715	95.75	<.0001
Error	7781	891.21150	0.11454		
Corrected Total	7786	946.04726			

Root MSE	0.33843	R-Square	0.0580
Dependent Mean	0.85848	Adj R-Sq	0.0574
Coeff Var	39.42225		

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr >  t
Intercept	1	0.95781	0.10708	8.95	<.0001
ReadTextInAnyLanguage	1	-0.07363	0.02516	-2.93	0.0034
WriteSmallTextInAnyLanguage	1	0.05823	0.03458	1.68	0.0922
CalculationsInAnyLanguage	1	-0.17730	0.02542	-6.97	<.0001
PersonMadeFormalStudies	1	0.04119	0.10718	0.38	0.7007
PersonMadeKoranicStudies	1	0.13854	0.26216	0.53	0.5972

In our case, the coefficient of the variable PersonMadeFormalStudies is unexpected as a person that made formal studies is normally more inclined to pursue her/his studies. However, the coefficient of 0.5001 suggests the opposite.

All the variables present in the first model have been kept in the Logit model. However, the variable TheStudentOwnCellphone has been added to the Logit model and the impact of this variable in the model is that it made the variables **The StudentOwnCellphone**, **ReadTextInAnyLanguage**, **CalculationsInAnyLanguage** more significant.

## **Conclusion**

Making formal education accessible and compulsory in Burkina Faso is not necessarily the best solution to solve the school dropout issue as there are some endogenous and exogenous factors which impact education. Thus, even formal education is a national matter, the authorities will succeed in their objectives by making children's parents more aware of the importance of education rather than just make it compulsory.

- As a solution to overcome this situation, the following actions can be applied:
- The government can implement awareness campaigns in their agenda to get the population understand the importance of education for the country and for their children.
- Secondly, the government should increase the accessibility to communication technologies to allow students to easily get access to information.
- Finally, the government can try to modernize these koranic schools (Like Senegal where koranic schools are very present) by implementing some projects of bilingual and professional training, by introducing the French language in the regions without access to formal schools so that children can follow both educations without having to drop one of them.<sup>3</sup>

“I have neither given or received, nor have I tolerated others' use of unauthorized aid.”

Zongo Ivan

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<sup>3</sup> Educational booklet The "modernization" of daaras (Koranic schools) in Senegal - Actors and local actions, the case of the municipality of Diourbel



# **APPENDIX**

## **BIBLIOGRAPHY**

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