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# The Effect Of Education Level On The Health Of Moroccan Infants

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**Abstract:** The purpose of this study is to see if Moroccan mothers with greater levels of education produce healthier infants (N=9,888). According to the findings, Moroccan mothers with a higher educational level had healthier infants than Moroccan mothers with a lower educational level. In terms of statistics, one additional education year in Morocco is linked to a 16.8572gram rise in Moroccan birth weight and a 0.43 percentage point reduction in Moroccan low birth weight risk.

**Keywords:** Education; Morocco; Birth Weight

## Introduction

Half of fatalities of Moroccan children are caused by malnutrition in Morocco. Childhood malnutrition has long-term effects on Moroccans, such as including cognitive impairment, a greater risk of chronic diseases, lower educational achievement, and lower productivity. Thus, policymakers in Morocco have moved their focus to solving the health challenges of Moroccan children, with education seen as a feasible remedy.

The purpose of this study is to see if Moroccan mothers with greater levels of education produce healthier infants (N=9,888). Other studies have concentrated on more visible results of schooling, such as earnings, professions, and productivity, but this one contributes to the body of knowledge by focusing on less apparent effects, such as newborn health. Our findings, which are focused on Morocco, contribute to the growing body of evidence concerning the health-education relationship across generations in Morocco.

According to the findings, Moroccan mothers with a higher educational level had healthier infants than Moroccan mothers with a lower educational level. In terms of

statistics, one additional education year in Morocco is linked to a 16.8572 gram rise in Moroccan birth weight and a 0.43 percentage point reduction in Moroccan low birth weight risk.

## Data

Using data from the Morocco Demographic and Health Surveys (MAR-DHS), we investigate whether better educated Moroccan mothers give birth to healthier Moroccan children. The MAR-DHS collects detailed information on Moroccan children aged 0 to 4. A number of Moroccan parental traits are also included in the MAR-DHS. The number of schooling years completed by the Moroccan respondents is the key explanatory variable (Education).

Table 1: Moroccan Summary Statistics			
	Mean	SD	N
	(1)	(2)	(3)
Moroccan Birth Weight	3248.3	724.78	3449
Moroccan Log Birth Weight	8.058	0.250	3449
Moroccan Low Birth Weight	0.099	0.299	3449
Moroccan Education	1.879	3.736	9885
Moroccan Age	30.769	6.806	9888
Moroccan Number of Offspring	3.574	2.229	9888
Moroccan Living in Rural Areas	0.605	0.489	9888
Moroccan Currently Married	1.000	0.000	9888
Moroccan Offspring Age in Month	29.848	17.229	9888
Moroccan Offspring Being Male	0.508	0.500	9888
Moroccan Plural Birth	0.011	0.104	9888

The statistical breakdown of the variables in this Moroccan investigation is shown in Table 1. Our sample includes around 9,888 Moroccan births. Moroccan offspring had an average birth weight of 3248.3 grams, a log birth weight of 8.058, and a low birth weight rate of 9.9%. The average length of time spent in school in Morocco is 1.879 years. The average age of Moroccan responders is 30.769. The average number of children per Moroccan respondent is 3.574. The Moroccan population lives in rural areas is 60.5%, with 100% of married Moroccan. The Moroccan offspring have an average age of 29.848 months. Males make up 50.8 percent of all Moroccan children. Multiple births make up 1.1% of all Moroccan births.

## Empirical Design

To see whether more educated Moroccan women had healthier Moroccan children, we estimate the following regression,

where the subscripts  $j$ ,  $i$ ,  $s$ , and  $t$  refer respectively to Moroccan offspring, women, cluster, and survey date in Morocco.  $bw_{ijt}$  stands for Moroccan birth weight,  $\ln bw_{ijt}$  Moroccan birth weight in log, and  $\text{risk}_{ijt}$  Moroccan risk of low birth weight.

$edu_{it}$  is the number of educational years Moroccan respondents completed.  $num_{it}$  includes Moroccan number of offspring, age, squared-age, whether Moroccan lives in rural areas, whether Moroccan is currently married, whether Moroccan offspring is a plural birth, whether Moroccan offspring is male, Moroccan offspring age in month, squared-age in month, Moroccan birth date fixed effects, Moroccan residential cluster fixed effects and Moroccan survey time fixed effects.  $\epsilon_{ijt}$  is the error term.

The coefficient  $\beta$  is the effects of more educated Moroccan mothers on birth outcomes. In other words, reflects the difference in birth outcome of Moroccan women living in the same area but with different levels of education.

**Results**

**Birth Weight** - The relationship between Moroccan mother education and birth weight in Morocco are in Table 2. Column 1, where only Moroccan mother education is controlled for, displays the relationship between Moroccan mother education and birth weight in Morocco. We find that one extra school year in Morocco is associated with a 18.9428 gram increase in Moroccan birth weight.

The estimate only represent the connection between Moroccan mother education and birth weight in Morocco, while key elements in Morocco are not taken into consideration. For example, Moroccan with advantage backgrounds may have better access to Moroccan healthcare system and education simultaneously . As a result, from Columns 2 to 3, we add the collection of Moroccan attributes and Moroccan spatial-temporal fixed effects. Then, according to Column 3, we find that one additional school year in Morocco is linked to a 16.8572 gram gain in birth weight.

Table 2: Moroccan Birth Weight			
	(1)	(2)	(3)
Moroccan Education	18.9428*** (2.4791)	18.2687*** (2.7609)	16.8572*** (3.3891)
Observations	3447	3447	3394
Cluster FE	.	.	X
Characteristics	.	X	X

**Log Birth Weight** - The relationship between Moroccan mother education and log birth weight in Morocco are in Table 3. Column 1, where only Moroccan mother education is controlled for, displays the relationship between Moroccan mother education and log birth weight in Morocco. We find that one extra school year in Morocco is associated with a 0.70% increase in Moroccan birth weight.

The estimate only represent the connection between Moroccan mother education and birth weight in Morocco, while key elements in Morocco are not taken into consideration. As a result, from Columns 2 to 3, we add the collection of Moroccan attributes and Moroccan spatial-temporal fixed effects. Then, according to Column 3, we find that one more educational year of Moroccan mother is associated with 0.58% gain in birth weight.

Table 3: Moroccan Log Birth Weight			
	(1)	(2)	(3)
Moroccan Education	0.0070*** (0.0009)	0.0066*** (0.0009)	0.0058*** (0.0011)
Observations	3447	3447	3394
Cluster FE	.	.	X
Characteristics	.	X	X

**Low Birth Weight** - The relationship between Moroccan mother education and low birth weight in Morocco are in Table 4. Column 1, where only Moroccan mother education is controlled for, displays the relationship between Moroccan mother education and low birth weight in Morocco. We find that one more educational year of Moroccan mother is associated with 0.63 percentage point reduction in low birth weight.

The estimate only represent the connection between Moroccan mother education and birth weight in Morocco, while key elements in Morocco are not taken into consideration. As a result, from Columns 2 to 3, we add the collection of Moroccan attributes and Moroccan spatial-temporal fixed effects. Then, according to Column 3, we find that one more educational year of Moroccan mother is associated with 0.43 percentage point reduction in low birth weight.

Table 4: Moroccan Low Birth Weight			
	(1)	(2)	(3)
Moroccan Education	-0.0063*** (0.0010)	-0.0059*** (0.0011)	-0.0043*** (0.0014)

Observations	3447	3447	3394
Cluster FE	.	.	X
Characteristics	.	X	X

## Conclusion

The purpose of this study is to see if Moroccan mothers with greater levels of education produce healthier infants (N=9,888). Other studies have concentrated on more visible results of schooling, such as earnings, professions, and productivity, but this one contributes to the body of knowledge by focusing on less apparent effects, such as newborn health. Our findings, which are focused on Morocco, contribute to the growing body of evidence concerning the health-education relationship across generations in Morocco.

According to the findings, Moroccan mothers with a higher educational level had healthier infants than Moroccan mothers with a lower educational level. In terms of statistics, one additional education year in Morocco is linked to a 16.8572 gram rise in Moroccan birth weight and a 0.43 percentage point reduction in Moroccan low birth weight risk.

Our findings are relevant to research into the impact of several variables on Moroccan health. For example, governmental responses to diseases may have an impact on Moroccan health; heavy rain and heat in Morocco worsen illness; political violence and food scarcity in Morocco may connect to poor survival rates; literacy, land reform, and nutrition efforts improve health ([Hang et al., 2020a, 2020b, 2021a, 2021b](#)).

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