



Higher Education And Healthier Babies In Honduras: An Empirical Analysis

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Abstract: This study looks at whether Honduran mothers with higher education levels have healthier babies (N=19,176). According to our analysis, Honduran mothers with a higher level of education had healthier babies than Honduran mothers with a lower level of education. In terms of statistics, one extra school year in Honduras is associated with a 4.5646 gram increase in Honduran birth weight and a 0.31 percentage point decrease in Honduran low birth weight risk.

Keywords: Education; Honduras; Birth Weight

Introduction

Half of fatalities of Honduran children are caused by malnutrition in Honduras. Childhood malnutrition has long-term consequences for Hondurans, such as cognitive impairment, higher susceptibility to chronic diseases, worse educational attainment, and lower productivity. Thus, the focus of policy makers in Honduras has shifted to addressing Honduran children health concerns, with education viewed as a feasible answer.

This study looks at whether Honduran mothers with higher education levels have healthier babies (N=19,176). Other studies have concentrated on the more apparent results of schooling, such as earnings, occupations, and output, but this one contributes to the body of knowledge by focusing on less visible effects, such as baby health. Focusing on Honduras, our findings contribute to the growing body of research concerning the intergenerational relationship between health and education in Honduras.

According to our analysis, Honduran mothers with a higher level of education had healthier babies than Honduran mothers with a lower level of education. In terms of statistics, one extra school year in Honduras is associated with a 4.5646 gram increase in Honduran birth weight and a 0.31 percentage point decrease in Honduran low birth weight risk.

Data

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

Table 1: Honduran Summary Statistics			
	Mean	SD	N
	(1)	(2)	(3)
Honduran Birth Weight	3258.5	678.03	13822
Honduran Log Birth Weight	8.066	0.225	13822
Honduran Low Birth Weight	0.094	0.292	13822
Honduran Education	5.502	3.817	19175
Honduran Age	27.845	6.913	19176
Honduran Number of Offspring	3.177	2.235	19176
Honduran Living in Rural Areas	0.685	0.464	19176
Honduran Currently Married	0.952	0.214	19176
Honduran Offspring Age in Month	29.532	16.903	19176
Honduran Offspring Being Male	0.516	0.500	19176
Honduran Plural Birth	0.007	0.083	19176

The statistical breakdown of the variables in this Honduran investigation is shown in Table 1. Our sample includes around 19,176 Honduran births. Honduran offspring had an average birth weight of 3258.5 grams, a log birth weight of 8.066, and a low birth weight rate of 9.4%. The average length of time spent in school in Honduras is 5.502 years. The average age of Honduran responders is 27.845. The average number of children per Honduran respondent is 3.177. The Honduran population lives in rural areas is 68.5%, with 95.2% of married Honduran. The Honduran offspring have an average age of 29.532 months. Males make up 51.6 percent of all Honduran children. Multiple births make up 0.7% of all Honduran births.

Empirical Design

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

where the subscripts j , i , s , and t refer respectively to Honduran offspring, women, cluster, and survey date in Honduras. β_j stands for Honduran birth weight, β_i Honduran birth weight in log, and β_s Honduran risk of low birth weight.

β_t is the number of educational years Honduran respondents completed. β_{jt} includes Honduran number of offspring, age, squared-age, whether Honduran lives in rural areas, whether Honduran is currently married, whether Honduran offspring is a plural birth, whether Honduran offspring is male, Honduran offspring age in month, squared-age in month, Honduran birth date fixed effects, Honduran residential cluster fixed effects and Honduran survey time fixed effects. ϵ_{jt} is the error term.

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

Results

Birth Weight - The relationship between Honduran mother education and birth weight in Honduras are in Table 2. Column 1, where only Honduran mother education is controlled for, displays the relationship between Honduran mother education and birth weight in Honduras. We find that one extra school year in Honduras is associated with a 6.6585 gram increase in Honduran birth weight.

The estimate only represent the connection between Honduran mother education and birth weight in Honduras, while key elements in Honduras are not taken into consideration. For example, Honduran with advantage backgrounds may have better access to Honduran healthcare system and education simultaneously. As a result, from Columns 2 to 3, we add the collection of Honduran attributes and Honduran spatial-temporal fixed effects. Then, according to Column 3, we find that one additional school year in Honduras is linked to a 4.5646 gram gain in birth weight.

Table 2: Honduran Birth Weight			
	(1)	(2)	(3)
Honduran Education	6.6585*** (1.4925)	6.8975*** (1.7096)	4.5646** (2.0362)
Observations	13821	13821	13736
Cluster FE	.	.	X
Characteristics	.	X	X

Log Birth Weight - The relationship between Honduran mother education and log birth weight in Honduras are in Table 3. Column 1, where only Honduran mother education is controlled for, displays the relationship between Honduran mother education and log birth weight in Honduras. We find that one extra school year in Honduras is associated with a 0.27% increase in Honduran birth weight.

The estimate only represent the connection between Honduran mother education and birth weight in Honduras, while key elements in Honduras are not taken into consideration. As a result, from Columns 2 to 3, we add the collection of Honduran attributes and Honduran spatial-temporal fixed effects. Then, according to Column 3, we find that one more educational year of Honduran mother is associated with 0.10% gain in birth weight.

Table 3: Honduran Log Birth Weight			
	(1)	(2)	(3)
Honduran Education	0.0027*** (0.0005)	0.0027*** (0.0006)	0.0020*** (0.0007)
Observations	13821	13821	13736
Cluster FE	.	.	X
Characteristics	.	X	X

Low Birth Weight - The relationship between Honduran mother education and low birth weight in Honduras are in Table 4. Column 1, where only Honduran mother education is controlled for, displays the relationship between Honduran mother education and low birth weight in Honduras. We find that one more educational year of Honduran mother is associated with 0.38 percentage point reduction in low birth weight.

The estimate only represent the connection between Honduran mother education and birth weight in Honduras, while key elements in Honduras are not taken into consideration. As a result, from Columns 2 to 3, we add the collection of Honduran attributes and Honduran spatial-temporal fixed effects. Then, according to Column 3, we find that one more educational year of Honduran mother is associated with 0.31 percentage point reduction in low birth weight.

Table 4: Honduran Low Birth Weight			
	(1)	(2)	(3)
Honduran Education	-0.0038***	-0.0031***	-0.0031***

	(0.0006)	(0.0007)	(0.0009)
Observations	13821	13821	13736
Cluster FE	.	.	X
Characteristics	.	X	X

Conclusion

This study looks at whether Honduran mothers with higher education levels have healthier babies (N=19,176). Other studies have concentrated on the more apparent results of schooling, such as earnings, occupations, and output, but this one contributes to the body of knowledge by focusing on less visible effects, such as baby health. Focusing on Honduras, our findings contribute to the growing body of research concerning the intergenerational relationship between health and education in Honduras.

According to our analysis, Honduran mothers with a higher level of education had healthier babies than Honduran mothers with a lower level of education. In terms of statistics, one extra school year in Honduras is associated with a 4.5646 gram increase in Honduran birth weight and a 0.31 percentage point decrease in Honduran low birth weight risk.

Our findings are relevant to research into the impact of several variables on Honduran health. For example, policy reactions to diseases may have an impact on Honduran health; heavy rain and heat in Honduras can aggravate Honduran sickness; political violence and food scarcity in Honduras may connect to low survival rates; literacy, land reform, and nutrition programs in Honduras may enhance health ([Nguyen, 2021a, 2021b](#); [Le, 2021a, 2021b](#)).

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