# The Relationship Between Higher Education And Baby Health In Jordan

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**Abstract:** The purpose of this study is to see if Jordanian mothers with greater levels of education produce healthier infants (N=32,111). According to the findings, Jordanian mothers with a higher educational level had healthier infants than Jordanian mothers with a lower educational level. In terms of statistics, one additional education year in Jordan is linked to a 14.6887 gram rise in Jordanian birth weight and a 0.63 percentage point reduction in Jordanian low birth weight risk.

Keywords: Education; Jordan; Birth Weight

## Introduction

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

The purpose of this study is to see if Jordanian mothers with greater levels of education produce healthier infants (N=32,111). 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 Jordan, contribute to the growing body of evidence concerning the health-education relationship across generations in Jordan.

According to the findings, Jordanian mothers with a higher educational level had healthier infants than Jordanian mothers with a lower educational level. In terms of statistics, one additional education year in Jordan is linked to a 14.6887 gram rise in

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Jordanian birth weight and a 0.63 percentage point reduction in Jordanian low birth weight risk.

## **Data**

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

| Table 1: Jordanian Summary Statistics |        |        |       |
|---------------------------------------|--------|--------|-------|
|                                       | Mean   | SD     | N     |
|                                       | (1)    | (2)    | (3)   |
| Jordanian Birth Weight                | 3151.6 | 673.85 | 30520 |
| Jordanian Log Birth Weight            | 8.030  | 0.239  | 30518 |
| Jordanian Low Birth Weight            | 0.115  | 0.319  | 30520 |
| Jordanian Education                   | 9.736  | 4.407  | 32108 |
| Jordanian Age                         | 30.472 | 6.227  | 32111 |
| Jordanian Number of Offspring         | 4.180  | 2.475  | 32111 |
| Jordanian Living in Rural Areas       | 0.307  | 0.461  | 32111 |
| Jordanian Currently Married           | 1.000  | 0.000  | 32111 |
| Jordanian Offspring Age in Month      | 29.628 | 16.978 | 32111 |
| Jordanian Offspring Being Male        | 0.510  | 0.500  | 32111 |
| Jordanian Plural Birth                | 0.013  | 0.114  | 32111 |

The statistical breakdown of the variables in this Jordanian investigation is shown in Table 1. Our sample includes around 32,111 Jordanian births. Jordanian offspring had an average birth weight of 3151.6 grams, a log birth weight of 8.030, and a low birth weight rate of 11.5%. The average length of time spent in school in Jordan is 9.736 years. The average age of Jordanian responders is 30.472. The average number of children per Jordanian respondent is 4.180. The Jordanian population lives in rural areas is 30.7%, with 100% of married Jordanian. The Jordanian offspring have an average age of 29.628 months. Males make up 51.0 percent of all Jordanian children. Multiple births make up 1.3% of all Jordanian births.

## **Empirical Design**

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

where the subscripts j, i, s, and t refer respectively to Jordanian offspring, women, cluster, and survey date in Jordan. stands for Jordanian birth weight, Jordanian birth weight in log, and Jordanian risk of low birth weight.

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

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

#### Results

**Birth Weight** - The relationship between Jordanian mother education and birth weight in Jordan are in Table 2. Column 1, where only Jordanian mother education is controlled for, displays the relationship between Jordanian mother education and birth weight in Jordan. We find that one extra school year in Jordan is associated with a 9.1938 gram increase in Jordanian birth weight.

The estimate only represent the connection between Jordanian mother education and birth weight in Jordan, while key elements in Jordan are not taken into consideration. For example, Jordanian with advantage backgrounds may have better access to Jordanian healthcare system and education simultaneously. As a result, from Columns 2 to 3, we add the collection of Jordanian attributes and Jordanian spatial-temporal fixed effects. Then, according to Column 3, we find that one additional school year in Jordan is linked to a 14.6887 gram gain in birth weight.

| Table 2: Jordanian Birth Weight                     |          |          |          |
|---|----------|----------|----------|
|   | (1)      | (2)      | (3)      |
| Jordanian Education 9.1938*** 15.6139*** 14.6887*** |          |          |          |
|   | (0.9172) | (1.0215) | (1.1994) |
| Observations  | 30517    | 30517    | 30495    |
| Cluster FE  |          |          | X        |
| Characteristics                                     |          | X        | X        |

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**Log Birth Weight -** The relationship between Jordanian mother education and log birth weight in Jordan are in Table 3. Column 1, where only Jordanian mother education is controlled for, displays the relationship between Jordanian mother education and log birth weight in Jordan. We find that one extra school year in Jordan is associated with a 0.41% increase in Jordanian birth weight.

The estimate only represent the connection between Jordanian mother education and birth weight in Jordan, while key elements in Jordan are not taken into consideration. As a result, from Columns 2 to 3, we add the collection of Jordanian attributes and Jordanian spatial-temporal fixed effects. Then, according to Column 3, we find that one more educational year of Jordanian mother is associated with 0.57% gain in birth weight.

| Table 3: Jordanian Log Birth Weight               |          |          |          |
|---|----------|----------|----------|
|   | (1)      | (2)      | (3)      |
| Jordanian Education 0.0041*** 0.0061*** 0.0057*** |          |          |          |
|   | (0.0003) | (0.0004) | (0.0004) |
| Observations                                      | 30515    | 30515    | 30493    |
| Cluster FE  |          |          | X        |
| Characteristics                                   |          | X        | X        |

**Low Birth Weight -** The relationship between Jordanian mother education and low birth weight in Jordan are in Table 4. Column 1, where only Jordanian mother education is controlled for, displays the relationship between Jordanian mother education and low birth weight in Jordan. We find that one more educational year of Jordanian mother is associated with 0.59 percentage point reduction in low birth weight.

The estimate only represent the connection between Jordanian mother education and birth weight in Jordan, while key elements in Jordan are not taken into consideration. As a result, from Columns 2 to 3, we add the collection of Jordanian attributes and Jordanian spatial-temporal fixed effects. Then, according to Column 3, we find that one more educational year of Jordanian mother is associated with 0.63 percentage point reduction in low birth weight.

| Table 4: Jordanian Low Birth Weight |            |            |            |
|-------------------------------------|------------|------------|------------|
|                                     | (1)        | (2)        | (3)        |
| Jordanian Education                 | -0.0059*** | -0.0071*** | -0.0063*** |
|                                     | (0.0004)   | (0.0005)   | (0.0006)   |

| Observations    | 30517 | 30517 | 30495 |
|-----------------|-------|-------|-------|
| Cluster FE      |       |       | X     |
| Characteristics |       | X     | X     |

## Conclusion

The purpose of this study is to see if Jordanian mothers with greater levels of education produce healthier infants (N=32,111). 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 Jordan, contribute to the growing body of evidence concerning the health-education relationship across generations in Jordan.

According to the findings, Jordanian mothers with a higher educational level had healthier infants than Jordanian mothers with a lower educational level. In terms of statistics, one additional education year in Jordan is linked to a 14.6887 gram rise in Jordanian birth weight and a 0.63 percentage point reduction in Jordanian low birth weight risk.

Our findings are relevant to research into the impact of several variables on Jordanian health. For example, governmental responses to diseases may have an impact on Jordanian health; heavy rain and heat in Jordan worsen illness; political violence and food scarcity in Jordan 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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