

Prenatal Depression and Child Cognitive Development in Ghana

Tables and Results

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Data Source: Ghana Socioeconomic Panel Survey (GSPS), Waves 1–3 (2009, 2014, 2018).

Note: Prenatal depression identified via two strategies: (A) mothers pregnant at the time of K10 depression measurement, and (B) retrospective birth timing linking children born 0–9 months after a previous wave's interview to the mother's K10 score at that wave. All regression tables report standard errors clustered at the enumeration area (EA) level in parentheses. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Contents

| | |
|-----------------------|----------|
| 1 Main Results | 3 |
|-----------------------|----------|

1 Main Results

Table 1: Effect of Prenatal Depression on Child Cognitive Development

| | (1) OLS | (2) OLS | (3) EA FE | (4) EA FE | (5) EA FE |
|--|-------------------|-------------------|-------------------|------------------|-------------------|
| Prenatal depression (std. K10) | -0.007 (0.042) | -0.009 (0.038) | -0.002 (0.052) | | -0.027 (0.057) |
| Prenatally depressed ($K10 \geq 30$) | | | | 0.184 (0.263) | |
| Concurrent depression (std. K10) | | | | | 0.035 (0.053) |
| Controls | No | Yes | Yes | Yes | Yes |
| EA FE | No | No | Yes | Yes | Yes |
| Wave FE | No | No | Yes | Yes | Yes |
| Observations | 779 | 779 | 724 | 724 | 724 |
| R^2 | 0.000 | 0.071 | 0.297 | 0.298 | 0.297 |

Standard errors clustered at the EA level in parentheses.

Prenatal depression identified via (A) pregnancy at interview and
(B) birth timing (child born 0–9 months after previous wave interview).

Controls: child age, child gender, mother's age,
household size, and log per capita consumption.

*** p<0.01, ** p<0.05, * p<0.1

Table 2: Prenatal Depression: Sensitivity Analyses

| | (1) Baseline | (2) 6-month | (3) 12-month | (4) Raven's | (5) +Current | (6) Strat. A |
|----------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|------------------|
| Prenatal dep. (std. K10) | −0.002 (0.052) | | | −0.003 (0.057) | −0.027 (0.057) | 0.049 (0.068) |
| Prenatal dep. (6-mo) | | −0.049 (0.056) | | | | |
| Prenatal dep. (12-mo) | | | −0.027 (0.039) | | | |
| Concurrent dep. (std. K10) | | | | | 0.035 (0.053) | |
| Timing window | 0–9 mo | 0–6 mo | 0–12 mo | 0–9 mo | 0–9 mo | Strat. A only |
| Outcome | Cog Index | Cog Index | Cog Index | Raven's | Cog Index | Cog Index |
| Observations | 724 | 33 | 104 | 724 | 724 | 590 |
| R^2 | 0.297 | 0.952 | 0.738 | 0.262 | 0.297 | 0.292 |

Standard errors clustered at the EA level in parentheses.

All models include EA and wave fixed effects plus full controls.

*** p<0.01, ** p<0.05, * p<0.1