

Supplementary Online Content

Valdes V, Zorrilla CD, Gabard-Durnam, L, et al. Cognitive development of infants exposed to the Zika virus in Puerto Rico. *JAMA Netw Open*. 2019;2(10):e1914061. doi:10.1001/jamanetworkopen.2019.14061

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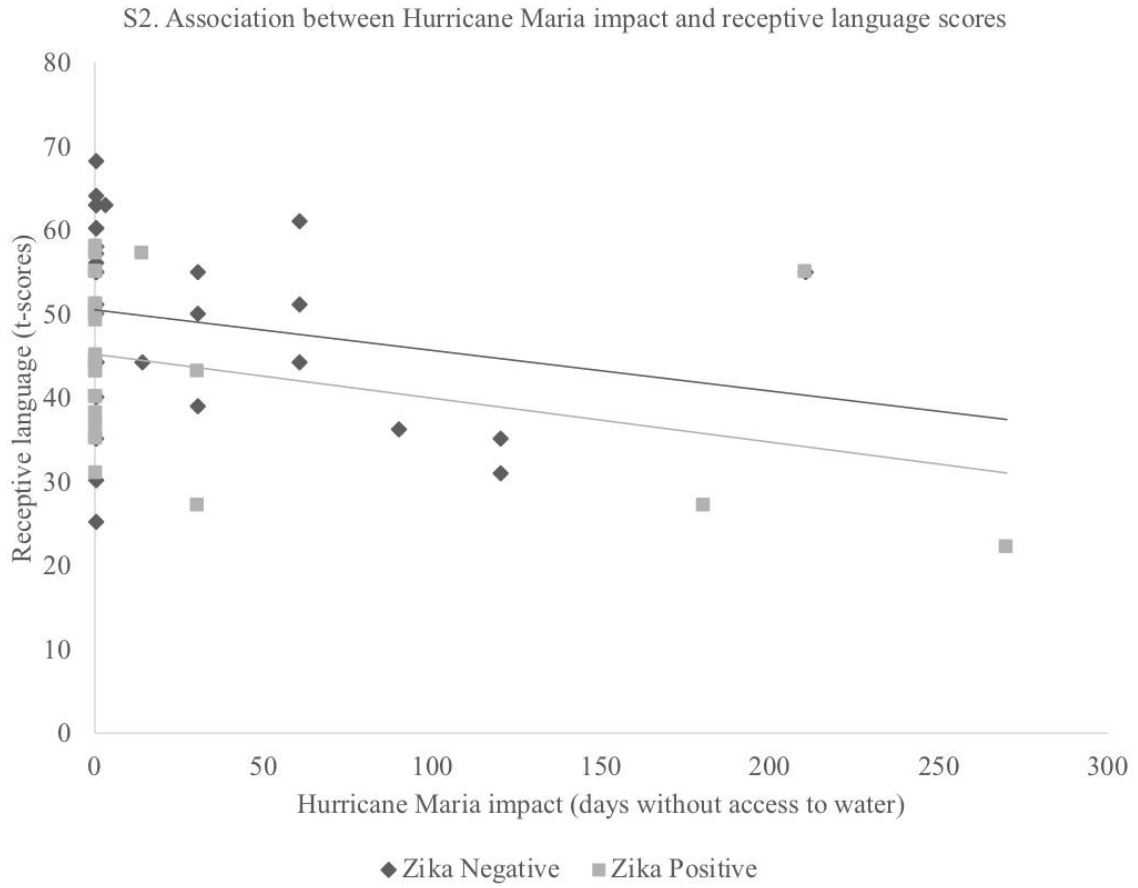
This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Associations Between ZIKV, Receptive Language, and Selected Covariates

| | ZIKV status (negative/positive) | Receptive language t- scores |
|--|---------------------------------------|---------------------------------|
| ZIKV status (negative/positive) | -- | -- |
| Receptive language t-scores | F = 4.40* | -- |
| Maternal education (less than high school, high school/GED, associate's, bachelor or higher) | $\chi^2 = 2.23$ Cramer's V = 0.19 | Rho = 0.09 |
| Paternal education (less than high school, high school/GED, associate's, bachelor or higher) | $\chi^2 = 2.50$ Cramer's V = 0.20 | Rho = 0.02 |
| Maternal employment (fulltime, part-time, unemployed/housework) | $\chi^2 = 6.72$ Cramer's V = 0.32* | Rho = 0.05 |
| Paternal employment (fulltime, part-time, unemployed/housework) | $\chi^2 = 0.28$ Cramer's V = 0.07 | Rho = -0.24 |
| Home status (owned, rented, occupied for free, public housing) | $\chi^2 = 6.02$ Cramer's V = 0.30 | Rho = -0.06 |
| Household size (number of people living in household) | F = 0.004 | r = 0.14 |
| Annual income (ordinal from low to high) | F = 0.17 | Rho = 0.07 |
| Hours in non-parental care | F = 2.01 | r = -0.23 |
| Maternal anxiety | F = 0.70 | r = 0.15 |
| Maternal depression (EPDS) | F = 0.37 | r = -0.05 |
| Maternal depression (PHQ) | F = 1.71 | r = 0.13 |
| Maternal perceived stress | F = 2.89 | r = 0.17 |
| Days without electricity | F = 0.20 | r = -0.02 |
| Days without water | F = 0.03 | r = -0.28* |
| Days without cell service | F = 0.44 | r = -0.15 |

*p < 0.05, two-tailed

eFigure. Association Between Hurricane Maria Impact and Receptive Language Scores



eTable 2. Multivariate Regression Model: Interaction Between Hurricane Impact and ZIKV on Receptive Language Scores, Adjusting For Covariates (n = 65)

| | Unstandardized coefficients (standard error) | Standardized coefficients | 95% Confidence interval | P-value |
|---|--|---------------------------|-------------------------|---------|
| Infant birthweight (in lbs) | 0.91 (1.22) | 0.10 | -1.54, 3.36 | 0.46 |
| Infant sex (male/female) | -1.13 (2.79) | -0.05 | -6.72, 4.46 | 0.69 |
| Infant race (white/black) | -3.46 (3.96) | -0.12 | -11.39, 4.48 | 0.39 |
| Infant ethnicity (Puerto Rican/Dominican) | 4.65 (11.32) | 0.05 | -18.04, 27.33 | 0.68 |
| Infant age (in months) | -0.82 (0.43) | -0.24 | -1.68, 0.04 | 0.06 |
| Primary language (Spanish, bilingual) | 2.81 (4.95) | 0.07 | -7.12, 12.74 | 0.57 |
| Mother's employment (fulltime, part-time, unemployed/housework) | 0.48 (1.64) | 0.04 | -2.81, 3.77 | 0.77 |
| Hurricane impact (days without water) | -0.05 (0.04) | -0.24 | -0.12, 0.03 | 0.25 |
| Zika status (negative/positive) | -5.70 (2.68)* | -0.26 | -11.07, -0.32 | 0.04 |
| Hurricane impact x zika status | -0.01 (0.05) | -0.05 | -0.11, 0.09 | 0.83 |
| Constant | 45.36 (19.83) | | | |
| R2 | 0.22 | | | |
| Adjusted R2 | 0.08 | | | |
| df for model F | 9 | | | |
| F | 1.52 | | | |

*p < 0.05, two-tailed