

Examining play and learning across a year: The PLAY Project

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## Abstract

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18 *Keywords:* keywords

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## Examining play and learning across a year: The PLAY Project

## Pilot Study

## Methods

We report how we determined our sample size, all data exclusions (if any), all manipulations, and all measures in the study. A publicly-accessible wiki [?] was used to document all procedures and code definitions.

**Participants.** A total of  $n = 20$  infants were tested,  $n = 4$  12-month-olds (3 female),  $n = 12$  18-month-olds (5 female), and  $n = 4$  (0 female). All were from the New York City area. Fifteen infants were White, one was Asian, two reported more than one race, and two did not report a race. Six were of Hispanic or Latino ethnicity.

**Material.****Procedure.**

**Data analysis.** We used R (Version 3.4.4; R Core Team, 2017b) and the R-packages *acs* (Version 2.1.3; Glenn, 2018), *bindrcpp* (Version 0.2; Müller, 2016), *choroplethr* (Lamstein, 2017; Version 3.6.1; Lamstein & Johnson, 2017), *choroplethrMaps* (Version 1.0.1; Lamstein, 2017), *dplyr* (Version 0.7.4; Wickham & Francois, 2016), *forcats* (Version 0.3.0; Wickham, 2018a), *foreign* (Version 0.8.69; R Core Team, 2017a), *Formula* (Version 1.2.2; Zeileis & Croissant, 2010), *ggplot2* (Version 2.2.1; Wickham, 2009), *gmodels* (Version 2.16.2; Warnes et al., 2015), *googlesheets* (Version 0.2.2; Bryan & Zhao, 2017), *Hmisc* (Version 4.1.1; Harrell Jr, Charles Dupont, & others., 2017), *httr* (Version 1.3.1; Wickham, 2017a), *jsonlite* (Version 1.5; Ooms, 2014), *lattice* (Version 0.20.35; Sarkar, 2008), *MASS* (Version 7.3.49; Venables & Ripley, 2002), *multilevel* (Version 2.6; Bliese, 2016), *nlme* (Version 3.1.131.1; Pinheiro, Bates, DebRoy, Sarkar, & R Core Team, 2017), *papaja* (Version 0.1.0.9709; Aust & Barth, 2017), *plyr* (Wickham, 2011; Version 1.8.4; Wickham & Francois, 2016), *psych* (Version 1.7.8; Revelle, 2017), *purrr* (Version 0.2.4; Henry & Wickham, 2017), *readr* (Version 1.1.1; Wickham, Hester, & Francois, 2017), *stringr* (Version 1.3.0; Wickham, 2018b), *survival*

(Version 2.41.3; Terry M. Therneau & Patricia M. Grambsch, 2000), *tibble* (Version 1.4.2; Wickham, Francois, & Müller, 2017), *tidyr* (Version 0.8.0; Wickham, 2017b), *tidyverse* (Version 1.2.1; Wickham, 2017c), and *XML* (Version 3.98.1.10; Lang & CRAN Team, 2018) for all of our statistical analyses. Datavyu [?] was used for video coding. All code used in data analysis and for this manuscript may be found in the GitHub repository associated with the paper [?].

## Results

### Sample characteristics.

### Ambient sound levels.

## Discussion

### Proposed study

The proposed study builds on and extends the pilot study in several ways.

## Methods

The same publicly-accessible wiki [?] will be used to document all procedures and code definitions.

**Participants.** We plan to collect data from  $n = 900$  infant-mother dyads from 30 different communities located around the U.S. Each site will collect data from 30 infants, 10 each at 12-, 18-, and 24-months of age (+/- 1 week), with equal numbers of females and males. Figure ?? shows the proposed data collection sites and non-collecting, data coding and analysis sites.

While not designed to be nationally representative, the data collection sites are diverse in aggregate, based on Census data. ?? shows the proportion of African American, Hispanic/Latino, and Asian residents in the counties surrounding the collection sites from which participating researchers will recruit. Figure ?? and figure ?? show economic and

70 educational attainment indicators. Data collection sites will have soft, advisory recruiting  
71 targets based on these sorts of measures for their individual communities.

72 Readers may wish to know that these data are downloaded from the Census Bureau  
73 using R's `choroplethr` [?] package.

74 **Material.**

75 **Procedure.**

76 **Data analysis.**

77 **General Discussion**

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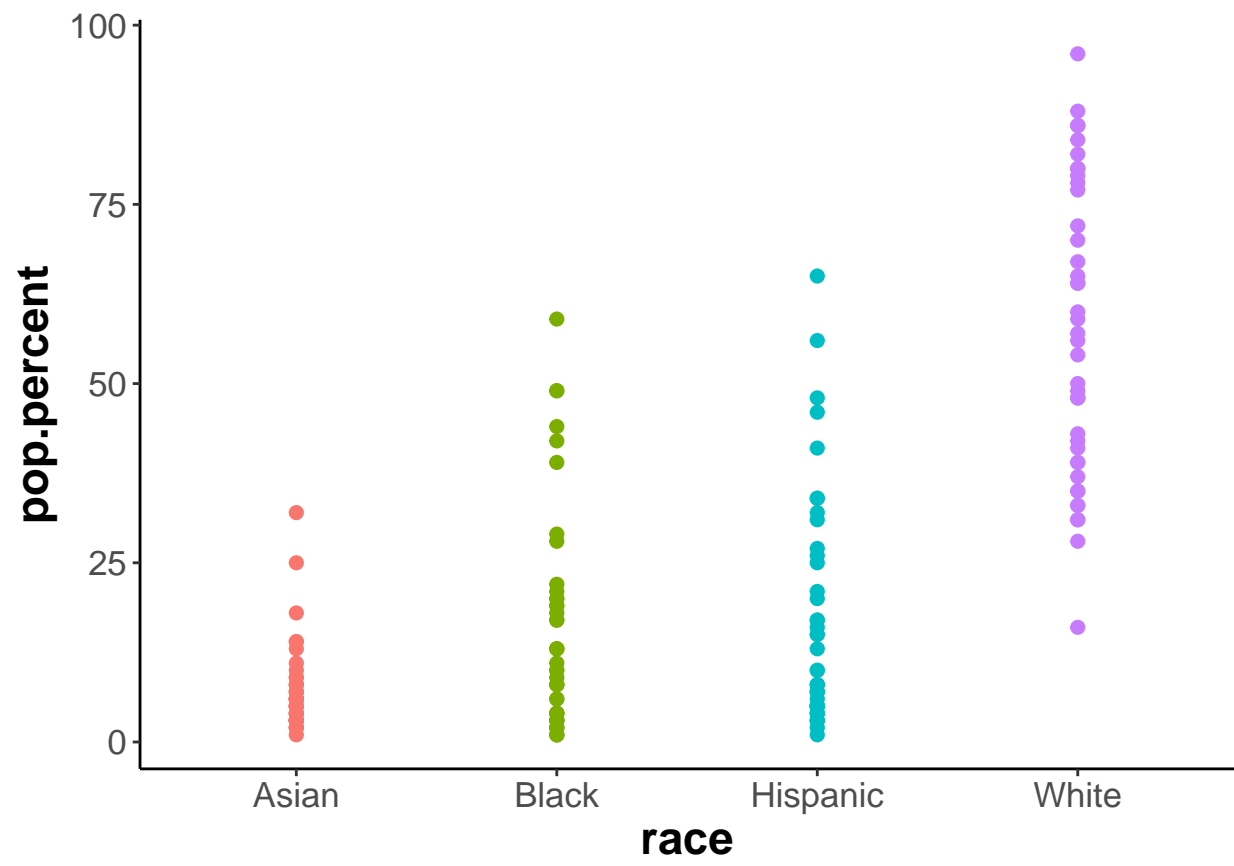


Figure 1

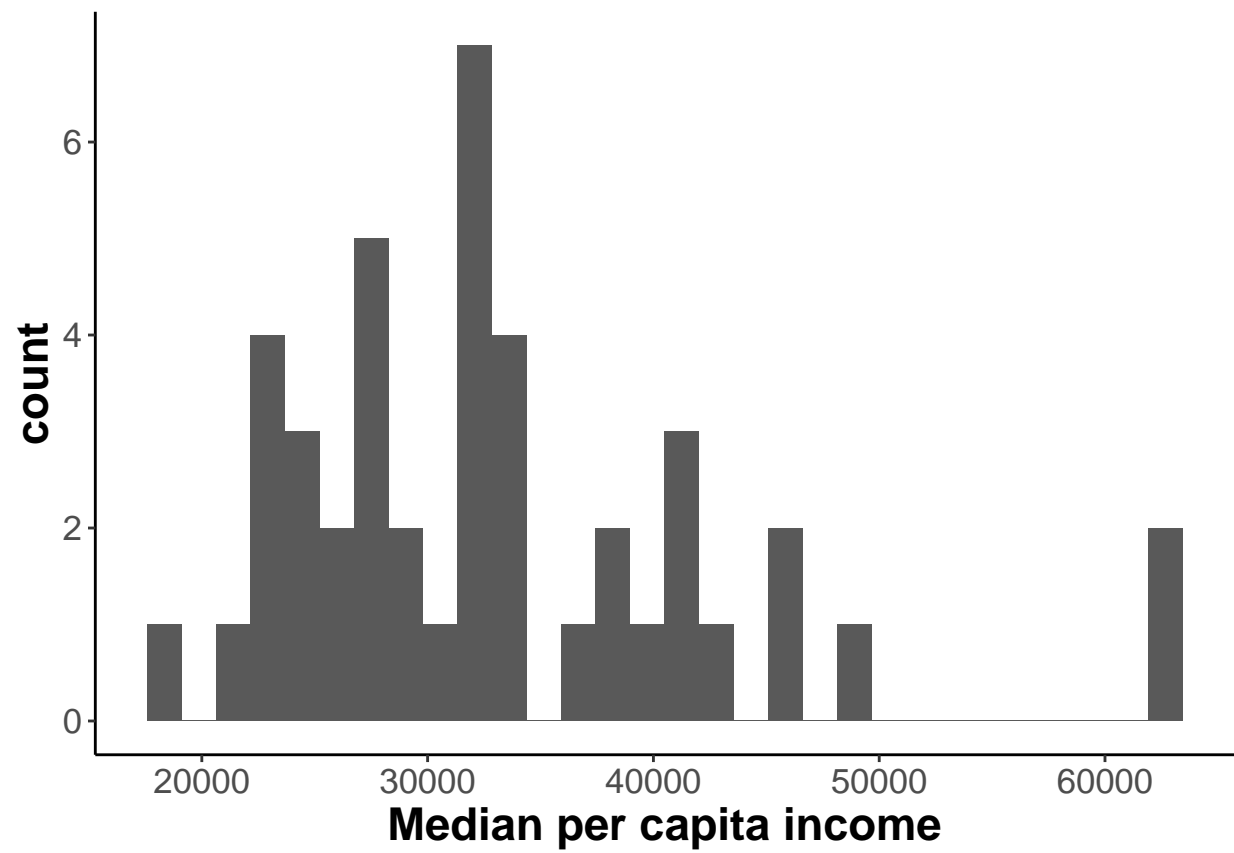


Figure 2