1 Reproducing the Mehr, Song & Spelke (2016)

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Abstract

A reproduction of the analysis for Experiment 1 from Mehr, Song & Spelke (2016). Five month old infants were exposed to one of two novel songs containing different melodies with lyrics and rhythms being the same. Infants either heard the songs through a toy in which their parent's voice was recorded or was sung live by a friendly unfamiliar person initially and later through video recording. Infant's selective attention was tested by having them listen to two presentations of either familiar or unfamiliar songs. Infants payed attention to the familiar song, sung by their parent in the past. No infant preference was observed between the toy onto which parent's voice was recorde or a video recording of an unfamiliar person, briefly met by an infant initially. Infants in the later two conditions retained the memory of the melody for longer than 8 months. These findings suggest that songs performed by parents at home convey social meaning to a child. One or two sentences providing a **basic introduction** to the field, comprehensible to a scientist in any discipline.

Two to three sentences of **more detailed background**, comprehensible to scientists in related disciplines.

One sentence clearly stating the **general problem** being addressed by this particular study.

One sentence summarizing the main result (with the words "**here we show**" or their equivalent).

Two or three sentences explaining what the **main result** reveals in direct comparison to what was thought to be the case previously, or how the main result adds to previous knowledge.

One or two sentences to put the results into a more **general context**.

Two or three sentences to provide a **broader perspective**, readily comprehensible to

35 a scientist in any discipline.

36 *Keywords:* music, social cognition, memory, infant development, open data, open

37 materials

38 Word count: X

³⁹   Reproducing the Mehr, Song & Spelke (2016)

⁴⁰   This is an example of creating an APA manuscript using papaja, and also an example

⁴¹ for part 2 (APA paper in R markdown) of the midterm assignment. This will enable to APA

⁴² style manuscripts using R markdown.

⁴³   This report re-produces the analysis of Experiment 1 reported in Mehr, Song & Spelke

⁴⁴ (2016) (**???**). The data were downloaded from

⁴⁵ https://github.com/693284/papajaTest/blob/master/MehrSongSpelke2016.csv

⁴⁶ (**???**) had participants perform a Stroop task in one of two posture conditions.

⁴⁷ Participants

⁴⁸   **Methods**

⁴⁹   We report how we determined our sample size, all data exclusions (if any), all

⁵⁰ manipulations, and all measures in the study.

⁵¹ **Participants**

⁵²   There were 32 participants

⁵³ **Material**

⁵⁴   The details of the Melodies are Social for Infants experiment are reported in Mehr et.al,

⁵⁵ (2016)

⁵⁶ **Procedure**

⁵⁷ **Data analysis**

⁵⁸   We used R (Version 3.5.2; R Core Team, 2018) and the R-packages *data.table* (Version

⁵⁹ 1.12.0; Dowle & Srinivasan, 2019), *dplyr* (Version 0.8.0.1; Wickham, François, Henry, &

60 Müller, 2019), *papaja* (Version 0.1.0.9842; Aust & Barth, 2018), *pwr* (Version 1.2.2;

61 Champely, 2018), and *summarytools* (Version 0.9.2; Comtois, 2019) for all our analyses.
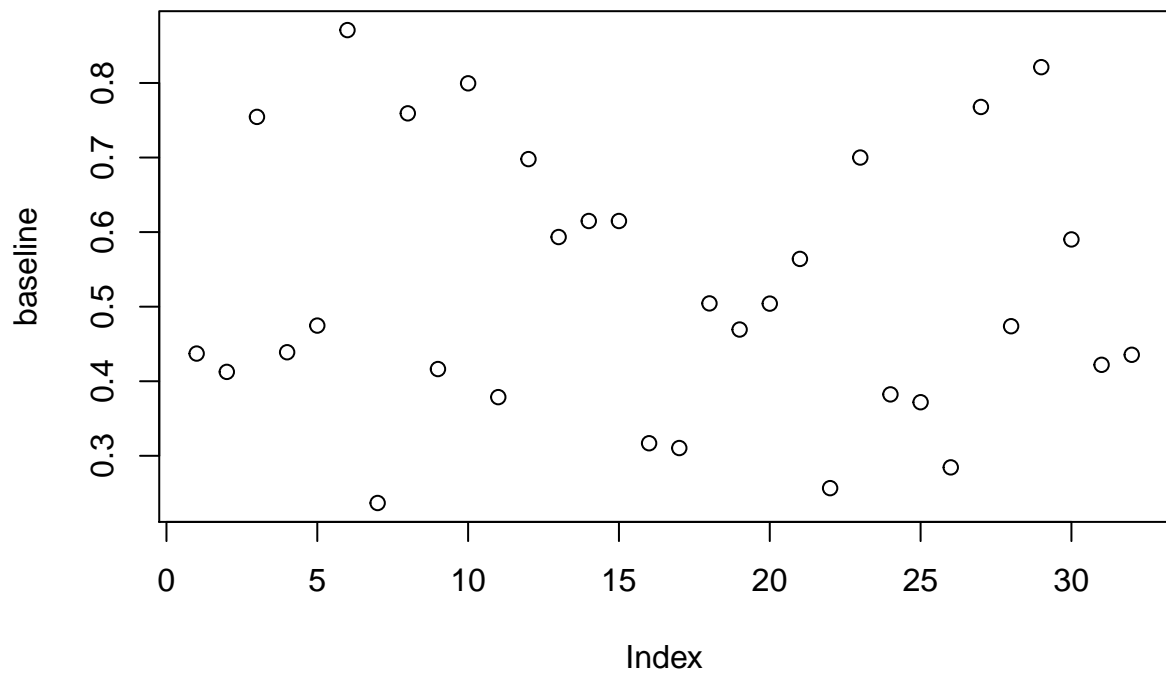
62

63 # Results

64 ## [1] 0.5210967

65 ## [1] 0.1769651

66 ##

67 ##   One Sample t-test

68 ##

69 ## data: baseline

70 ## t = 0.67438, df = 31, p-value = 0.5051

71 ## alternative hypothesis: true mean is not equal to 0.5

```
## 95 percent confidence interval:
```

```
##   0.4572940 0.5848994
```

```
## sample estimates:
```

```
## mean of x
```

```
## 0.5210967
```

```
## [1] 0.5210967
```

Discussion

References

Aust, F., & Barth, M. (2018). *papaja: Create APA manuscripts with R Markdown.* Retrieved from https://github.com/crsh/papaja

Champely, S. (2018). *Pwr: Basic functions for power analysis.* Retrieved from https://CRAN.R-project.org/package=pwr

Comtois, D. (2019). *Summarytools: Tools to quickly and neatly summarize data.* Retrieved from https://CRAN.R-project.org/package=summarytools

Dowle, M., & Srinivasan, A. (2019). *Data.table: Extension of 'data.frame'.* Retrieved from https://CRAN.R-project.org/package=data.table

R Core Team. (2018). *R: A language and environment for statistical computing.* Vienna, Austria: R Foundation for Statistical Computing. Retrieved from https://www.R-project.org/

Wickham, H., François, R., Henry, L., & Müller, K. (2019). *Dplyr: A grammar of data manipulation.* Retrieved from https://CRAN.R-project.org/package=dplyr