Dataset of embodied perspective enhances self and friend-biases in perceptual matching

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\textbf{Abstract}

The data article includes reaction time and accuracy from four experiments. It describes three independent variables: the social meaning of geometric shape (include self, friend and stranger), the label of identify (self, friend and stranger), the body perceptive (first-person perspective and third-person perspective), see (Sun et al., 2016)\textsuperscript{[1]}. © 2016 Published by Elsevier Inc. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

\section*{Specifications Table}

\begin{tabular}{|l|l|}
\hline
Subject area & Psychology  \\
More specific subject area & Social Cognition  \\
Type of data & Table  \\
How data was acquired & PC with Dell Optiplex series, Intel Pentium Processor (Dual Core), Windows 7 Professional, 4GB Memory, 500GB Ha, rd Drive, and 22” CRT displayer  \\
Data format & Raw  \\
Experimental factors & Three factors: personal association, matching, and perspective taking  \\
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\end{tabular}
Experimental features | To assess whether embodied perspective can enhance self and friend-biases in perceptual matching task
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Data source location | Tsinghua University, Beijing, China
Data accessibility | Data is with this article

**Value of the data**

- The data across four experiments can be used to estimate the statistical power in social associative learning.
- The data can be used for meta-analysis in the domain of self processing.
- The data provide a link in the research fields of self and perspective taking.

1. **Data**

   There are four sheets in the data file (see online version of this article [1]). One sheet included the data from one experiment. In a sheet, the columns list the levels of factors and each row represents one participants. The reaction time and accuracy are included in each sheet.

2. **Experimental design, materials and methods**

   2.1. **Materials and methods**

   Three colours (blue, green, and red) were assigned to three people (friend, self, and stranger) and mounted on the T-shirt of an avatar. The avatar subtended a visual angle of $5^\circ \times 4.28^\circ$ it was presented above a white fixation cross ($0.8^\circ \times 0.8^\circ$) at the centre of the screen. A label ‘You’, ‘Friend’, or ‘Stranger’ ($1.76^\circ/2.52^\circ \times 1.76^\circ$ of visual angle) was displayed below the fixation of cross. The distance between fixation and both the centre of the avatar and the label was 2.9°. An avatar was presented either facing the participants (third-person perspective) or with its back to the participants (first-person perspective). Stimuli were shown on a grey background. Participants were not informed about the avatars in order to assess the implicit effect of embodied sensory processing on biases to the self and other people. The task was to judge whether the colour of the avatar’s T-shirt and the label matched their original assignments or not [1].

   Participants were first instructed to associate three colours to people – one to the self, one to a named best friend, and one to a stranger. The particular combinations of colours and labels were counterbalanced across participants. For example, a participant was told that blue represents your best friend – Mary; you are green; and red represented a stranger. The avatar was not presented during the instruction. This took about 1-min. After this participants carried out a colour-label matching task, where they judged whether pairings of the colour and the label matched or not. Each trial started with the presentation of a 500 ms central fixation cross, followed by the pairing of a colour and label for 100 ms. Half the pairings conformed to the instruction (match trials), and the other pairs had re-combined colours and labels (mismatch trials). The order of the combinations (which colour was paired with which label) on mismatch trials was counterbalanced across labels; for example, green (friend) was re-paired with either of two mismatched labels ‘You’ and ‘Stranger’. The next frame was a blank with a range of 800–1200 ms (to capture the response). Participants were encouraged to press one of the two responses keys as quickly and accurately as possible within this last timeframe. Subsequently, written feedback (correct, incorrect, or slow!) was given in the centre of the screen for 500 ms. Participants were also informed of their overall accuracy performance at the end of each blocks.
2.2. Design and analyses

Separate data analyses were conducted for the match and mismatch trials (organised according to the colour of the stimulus) as the different responses were made to these two types of stimuli. We conducted repeated-measures ANOVAs with two within-subject factors – association (self, friend, or stranger) and perspective (first- vs. third-person perspective). There was no trade-off between reaction times (RTs) and accuracy performance for any condition. We reported data on RTs and $d'$ respectively. We calculated the $d'$ in terms of the hits (‘yes’ responses to colour-label match pairs) and false alarms (‘yes’ responses to colour-label mismatch pairs, based on the colour assigned to the avatar), in order to calculate the sensitivity to the target colours. We tested if there is an enhanced sensitivity to the colour being associated with the self. Holm-Bonferroni corrections for $\alpha = 0.05$ were applied to all multiple comparisons.

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Transparency document. Supplementary material

Transparency data associated with this article can be found in the online version at http://dx.doi.org/10.1016/j.dib.2016.06.062.

Appendix A. Supplementary material

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Reference