

Supplementary material

When height carries weight: Communicating hidden object properties for joint action

Example of color choice analysis for one participant

A

color \ weight	light	medium	heavy
blue	80 % (1)	30 % (2)	0 % (3)
red	20 % (2)	70 % (1)	25 % (2)
black	0 % (3)	0 % (3)	75 % (1)

B

color \ weight	light	medium	heavy
blue	80 % (1)	70 % (1)	65 % (1)
red	20 % (2)	30 % (2)	25 % (2)
black	0 % (3)	0 % (3)	10 % (3)

Figure S1. Example of color choice to illustrate the sampling-without-replacement procedure. For each weight, colors are ranked in order of their usage frequency, with the most used color ranked first (1). **A:** Blue has the highest overall usage percentage among the first-ranked colors, so it is selected first (for light). Black has the next larger percentage and is thus selected second (for heavy). Finally, red is selected (for medium). **B:** Here, blue also has the highest overall usage percentage among the first-ranked colors, so it is selected first (for light). However, blue is also ranked first for the other two weights, so the largest usage percentage among the second-ranked colors is selected instead (red for medium). Finally, for the heavy weight, the second-ranked color is also red, so the third-ranked color black is selected instead. This gave us one value (in %) per weight per participant, indicating how often each participant had used the selected color in those trials in which the given weight had occurred.

Data from additional control experiment

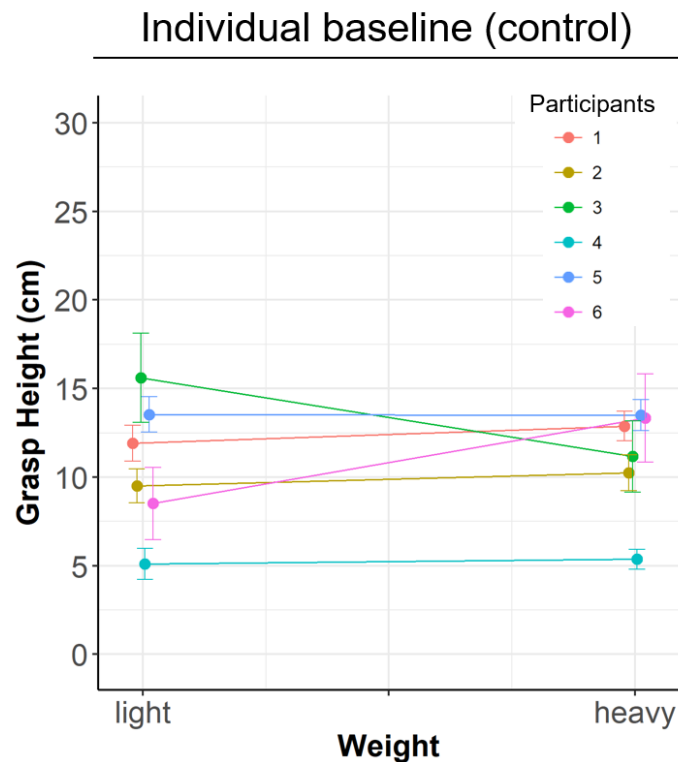


Figure S2. Grasp height is shown as a function of object weight and participant. This data comes from an additional control experiment we conducted to test whether grasp height differences in the individual baselines of our study were absent because the weights of the three objects we used only differed to a small extent (i.e., by 100 g). In the control experiment, a new group of individual participants ($N = 6$) repeatedly grasped two objects that strongly differed in weight (70 g vs. 1510 g) in a randomized order. As illustrated above, participants' grasp height did not differ as a function of weight ($B = 0.38, p = .739$).