

Effects of material properties and object orientation on precision grip kinematics

Supplementary Material

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Interaction effects: Material × Orientation

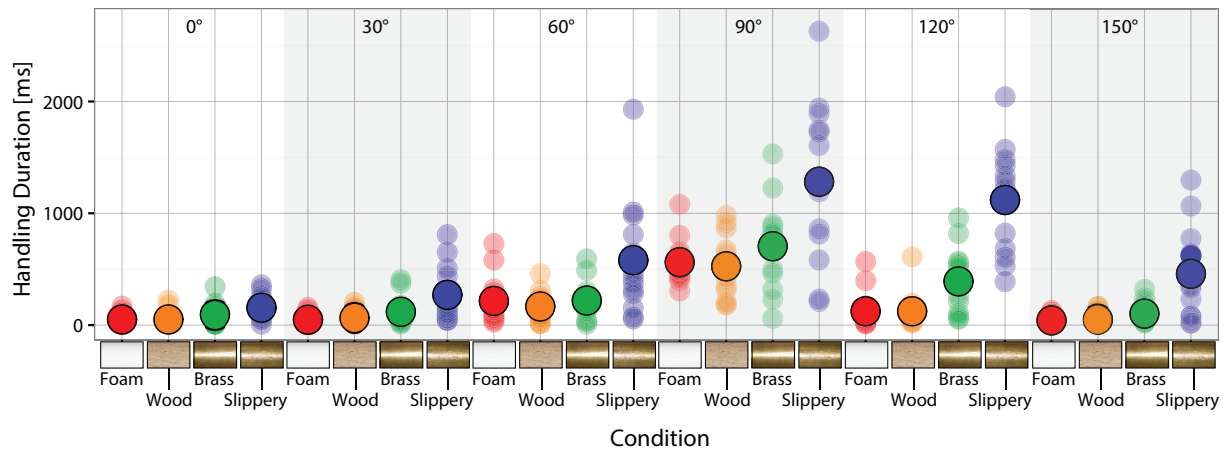


Figure S1. Interaction effects of material (different colors) and orientation (different columns) on handling duration. Large dots with black edging show the mean across participants, semi-transparent dots show the mean of individual participants, averaged across trials. The two factors showed a significant interaction ($F(3.44, 44.76) = 8.11, p < .001$) that appears to be in a superadditive manner.

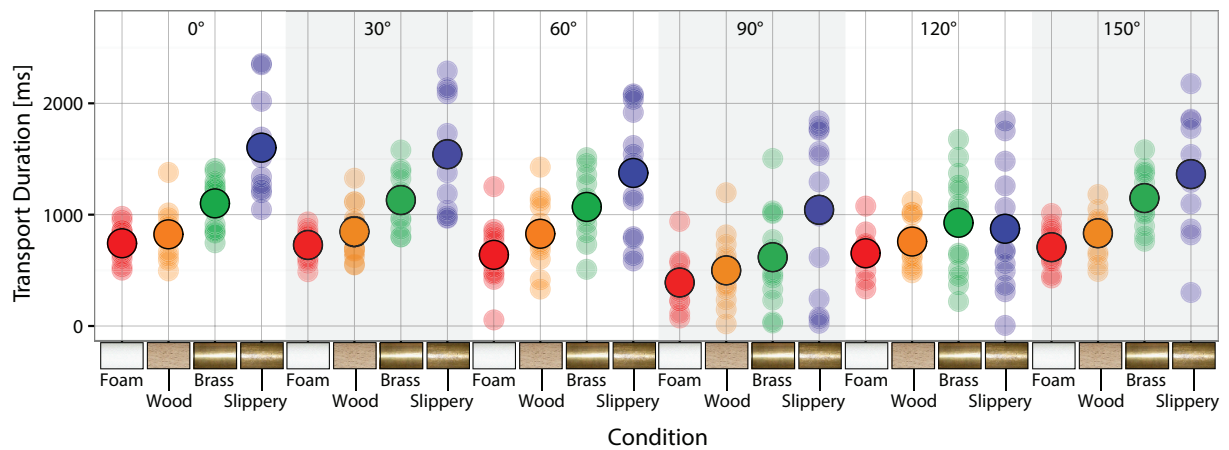


Figure S2. Interaction effects of material (different colors) and orientation (different columns) on handling duration. Large dots with black edging show the mean across participants, semi-transparent dots show the mean of individual participants, averaged across trials. The two factors showed a significant interaction ($F(3.49, 45.33) = 3.45, p < .05$). Similar to the effects on handling duration, the two main effects seem to be superadditive.

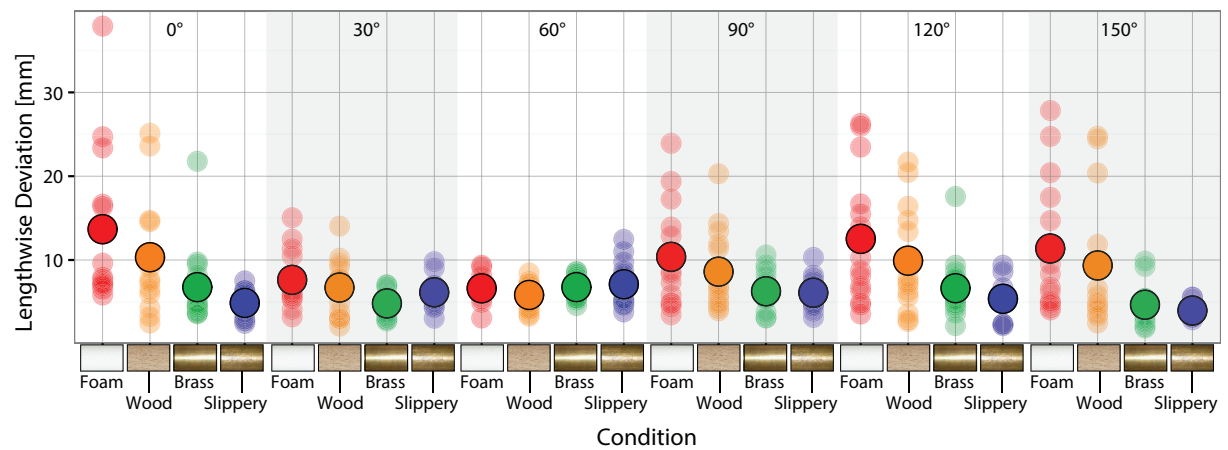


Figure S3. Interaction effects of material (different colors) and orientation (different columns) on the lengthwise deviation of the grasp center from the object's center of mass (COM). Large dots with black edging show the mean across participants, semi-transparent dots show the mean of individual participants, averaged across trials. Material and orientation showed a significant interaction ($F(3.15, 40.91) = 5.92, p < .001$): The effect of material was more pronounced at some angles than at others.