

# Older adults worse at distinguishing between lifted weights than younger counterparts

October 24 2012

---

As we grow older, we are less capable of correctly estimating differences in the weights of objects we lift, according to a study published Oct. 24 in the open access journal *PLOS ONE* by Jessica Holmin and Farley Norman from North Dakota State University and Western Kentucky University, respectively.

Previous studies have shown that aging is frequently associated with a decrease in [muscle mass](#) and consequently strength, making it more difficult to lift objects. As a result, [older adults](#) often perceive weights they lift as being heavier than they actually are. In the current study, the authors took this one step further and assessed the ability of younger and older participants to accurately judge the ratio of two weights lifted in succession.

Participants in two age groups, 18-31 and 64-78 years old were asked to lift paired weights, picking up each weight individually, and then to provide a weight ratio estimating how much heavier one object was than the other. For example, with 30g and 300g weights, the weight ratio would be 10.

The researchers found that the older adults were much farther off the mark than the younger group, consistently estimating the weight ratios as much higher than they actually were. The authors suggest that their results may be useful for designing [clinical tests](#) to assess the effects of ageing on the brain.

**More information:** *PLoS ONE* 7(10): e47701.  
[doi:10.1371/journal.pone.0047701](https://doi.org/10.1371/journal.pone.0047701)

Provided by Public Library of Science

Citation: Older adults worse at distinguishing between lifted weights than younger counterparts (2012, October 24) retrieved 6 May 2024 from <https://medicalxpress.com/news/2012-10-older-adults-worse-distinguishing-weights.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--