Looking into training effects on visual working memory capacity:
With individualized training and performance trends.

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Backgrounds

• There is not much evidence for VWM capacity increment by training (Olson & Jiang, 2004).
• The ability of suppressing irrelevant items (Vogel, McCollough, & Machizawa, 2005) and perceptual encoding during short SOA (Vogel, Woodman, & Luck, 2006) is important for VWM.
• Adaptive training was effective in WM improvement (Berry et al., 2010).

Pre- / Post-training Tests

- Color change detection task

Results

Conclusions

• Adaptive training did increase VWM capacity particularly in the distractor group by enhancing the ability to filter out irrelevant visual information.
• The extent to which VWM capacity increased was positively correlated with learning rate.

References


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