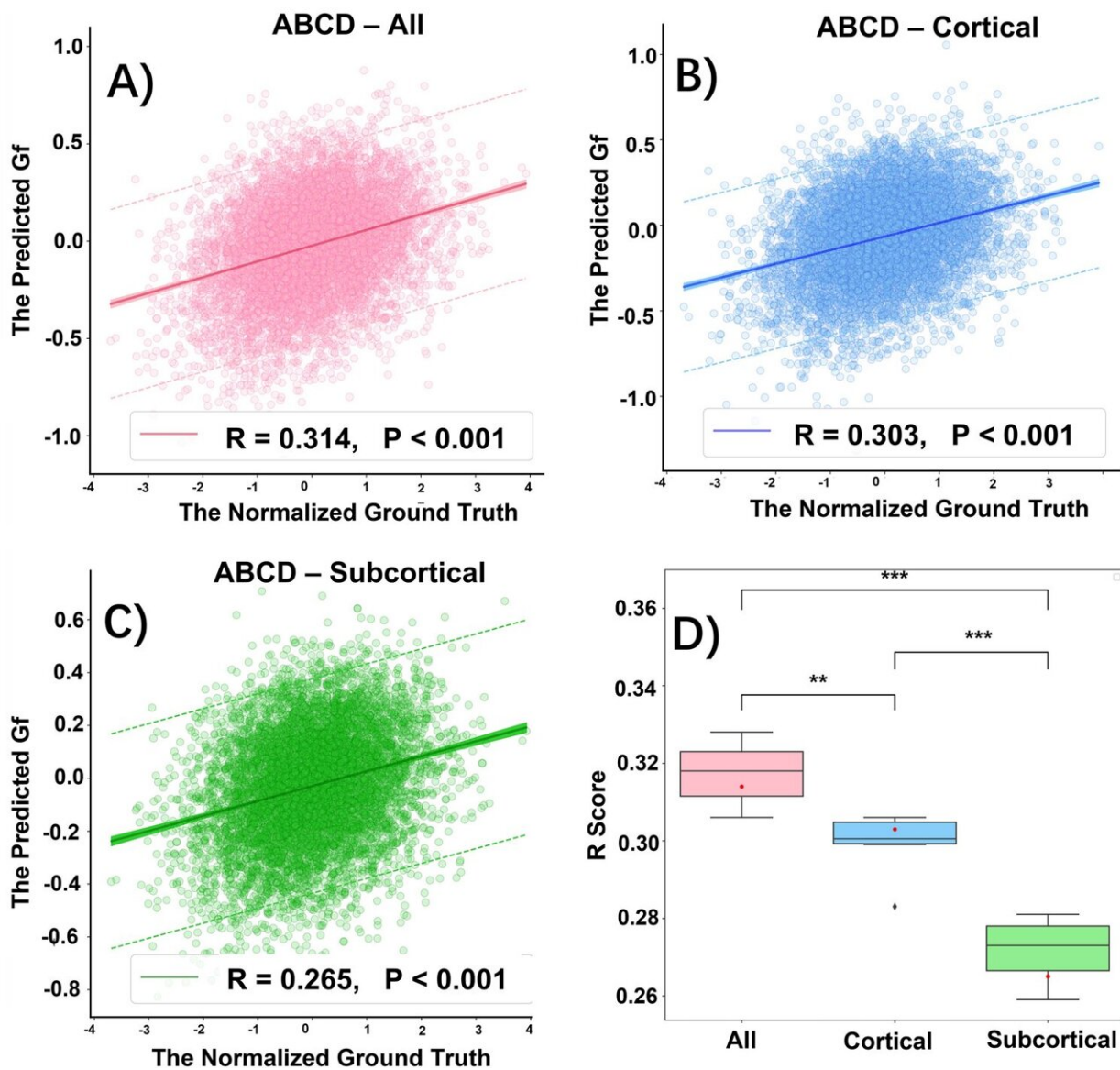


# Novel deep learning method may help predict cognitive function

November 4 2022, by Melissa Rohman



The statistical model performance of predicting fluid intelligence score on

ABCD testing dataset. (A) All: training with all cortical and subcortical structures. (B) Cortical: training with only cortical structures. (C) Subcortical: training with only subcortical structures. Significant correlations are found between the predicted Gf score and the ground truth among testing dataset using all structures (A), cortical only (B) and subcortical only (C) respectively. The correlation (R) and p-value of the predicted score vs. the ground truth scores are given. The dashed line shows 95% prediction intervals for a new observation and the shaded regions imply the 95% confidence intervals for the prediction population. (D) Boxplots compare R scores over all three different datasets across all five folds. The red dots correspond to the mean R score generated from all five folds. (n.s.) Non significant, \*p

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