Mindprint - Prelim analysis

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2018-07-10

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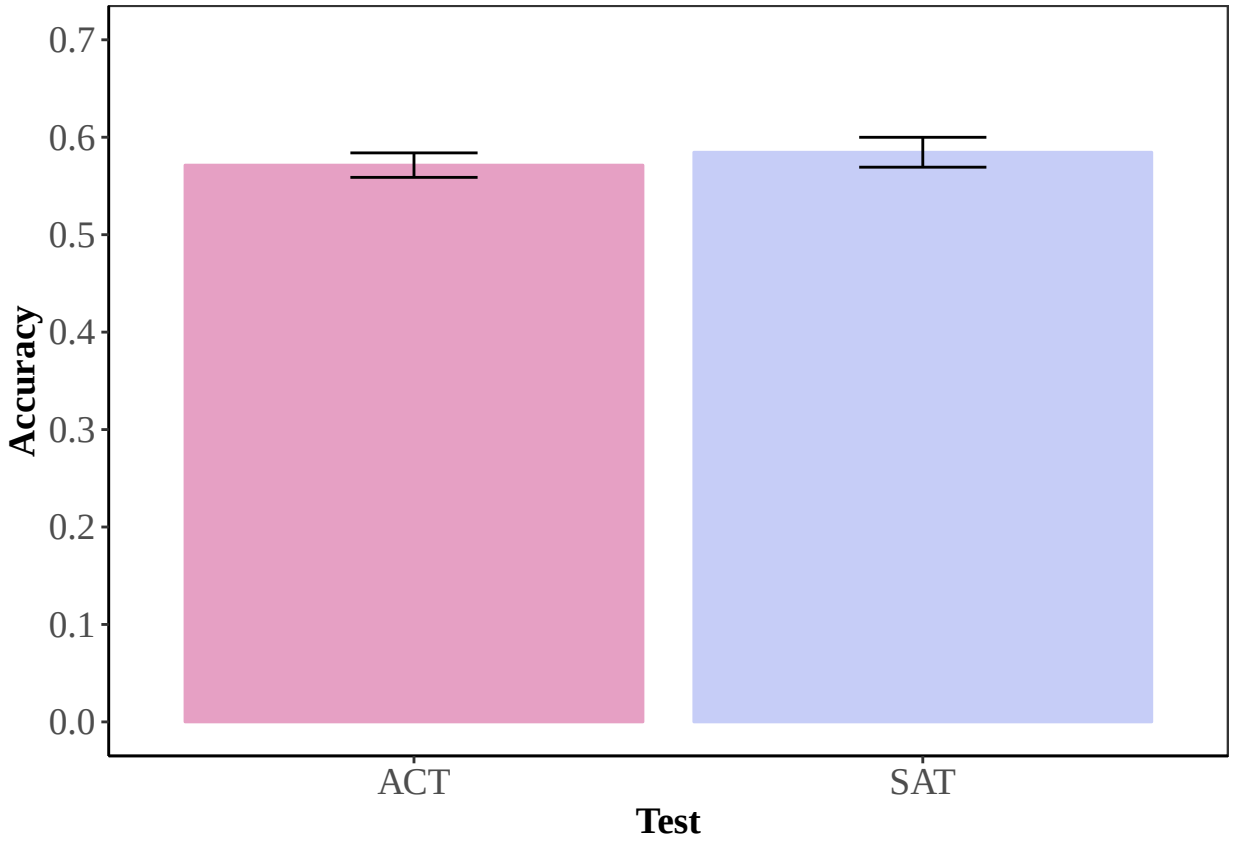
Questions: 1. Math tests get progressively difficult throughout the test. Other tests, difficulty of questions is mostly randomly ordered. 2. There is no penalty for guessing on either test so there is always a 25% chance of guessing correctly

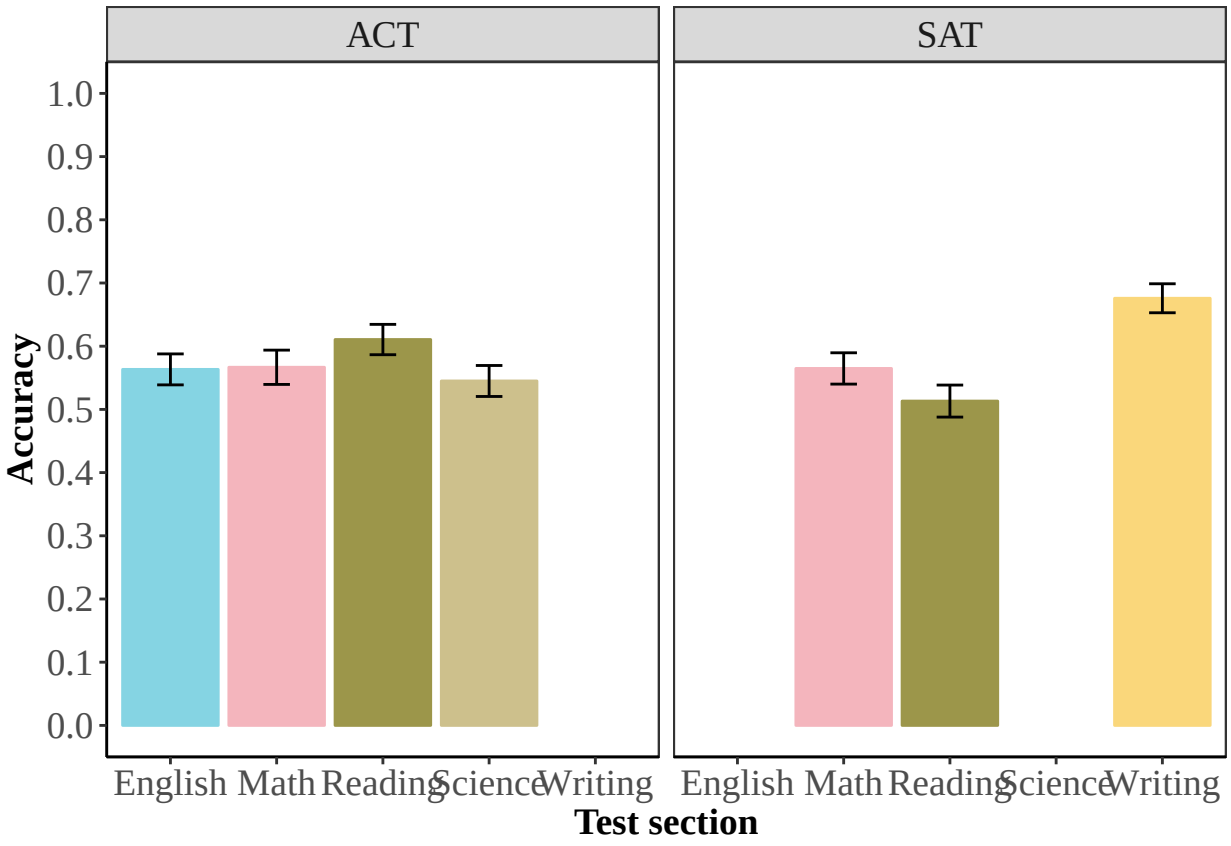
Compare SAT and ACT performance

Score

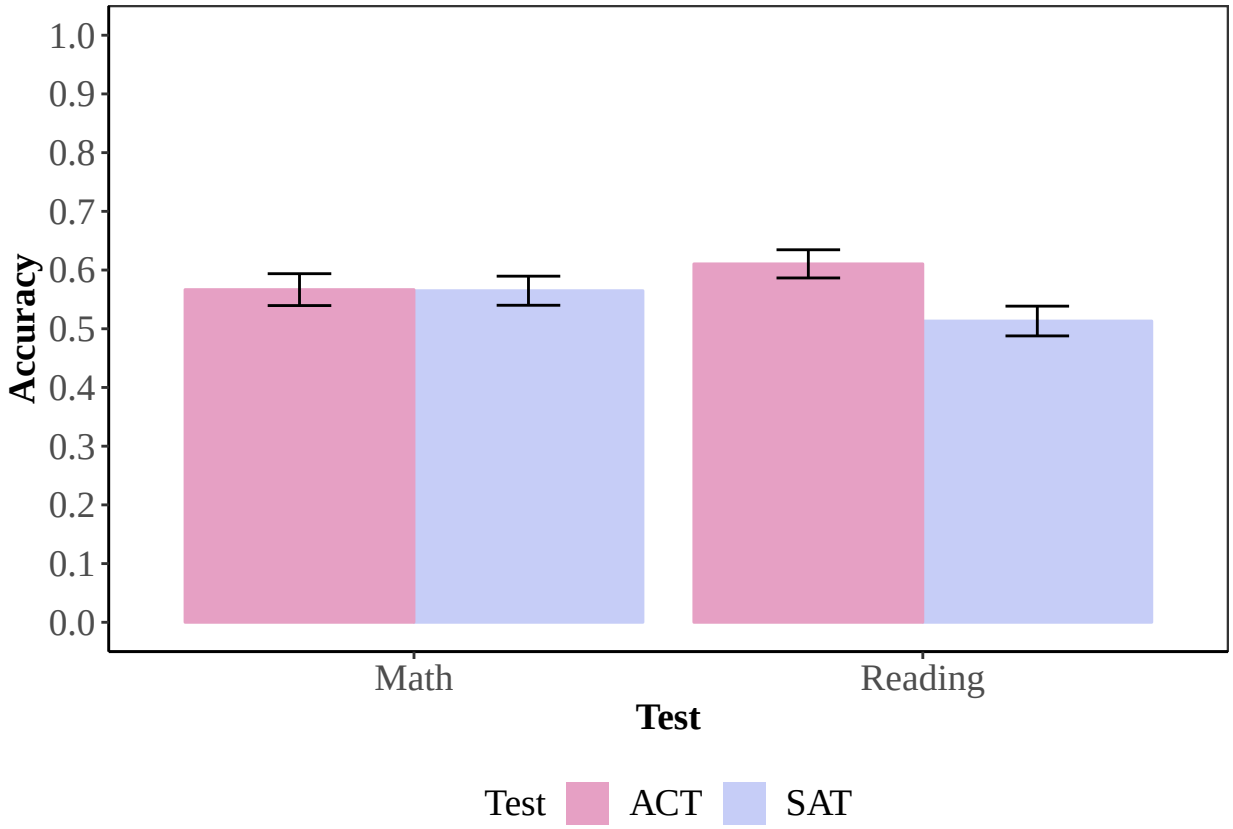
Overall



Each section



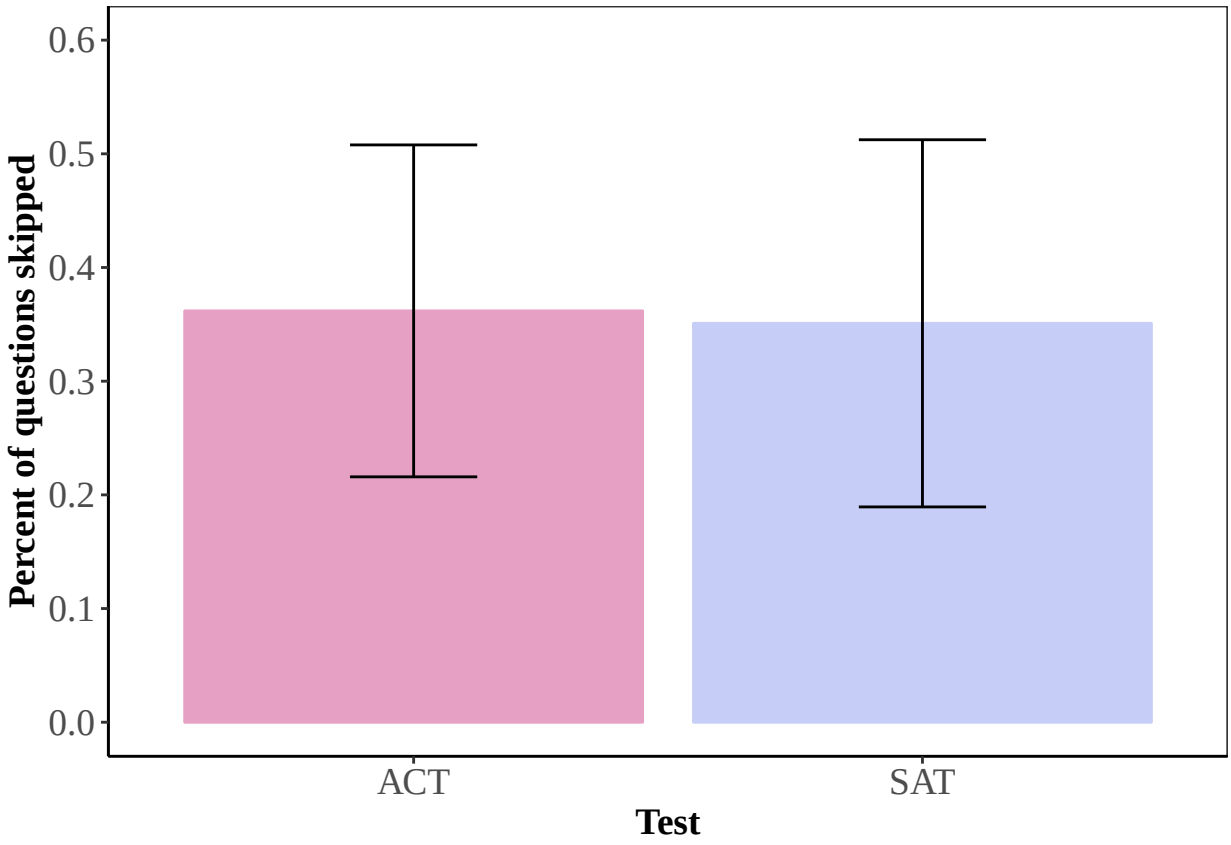
Overlap sections



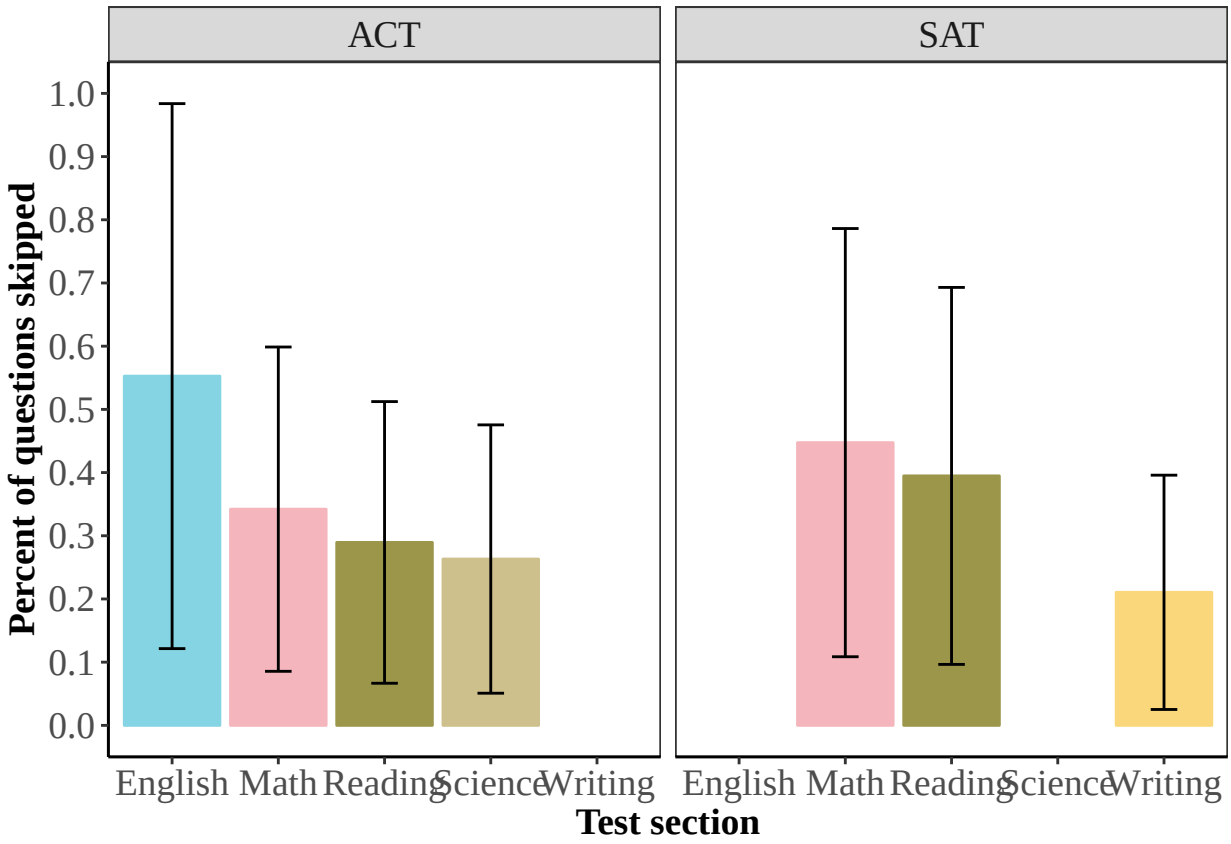
Students might do better on ACT reading than SAT reading.

Number of questions skipped

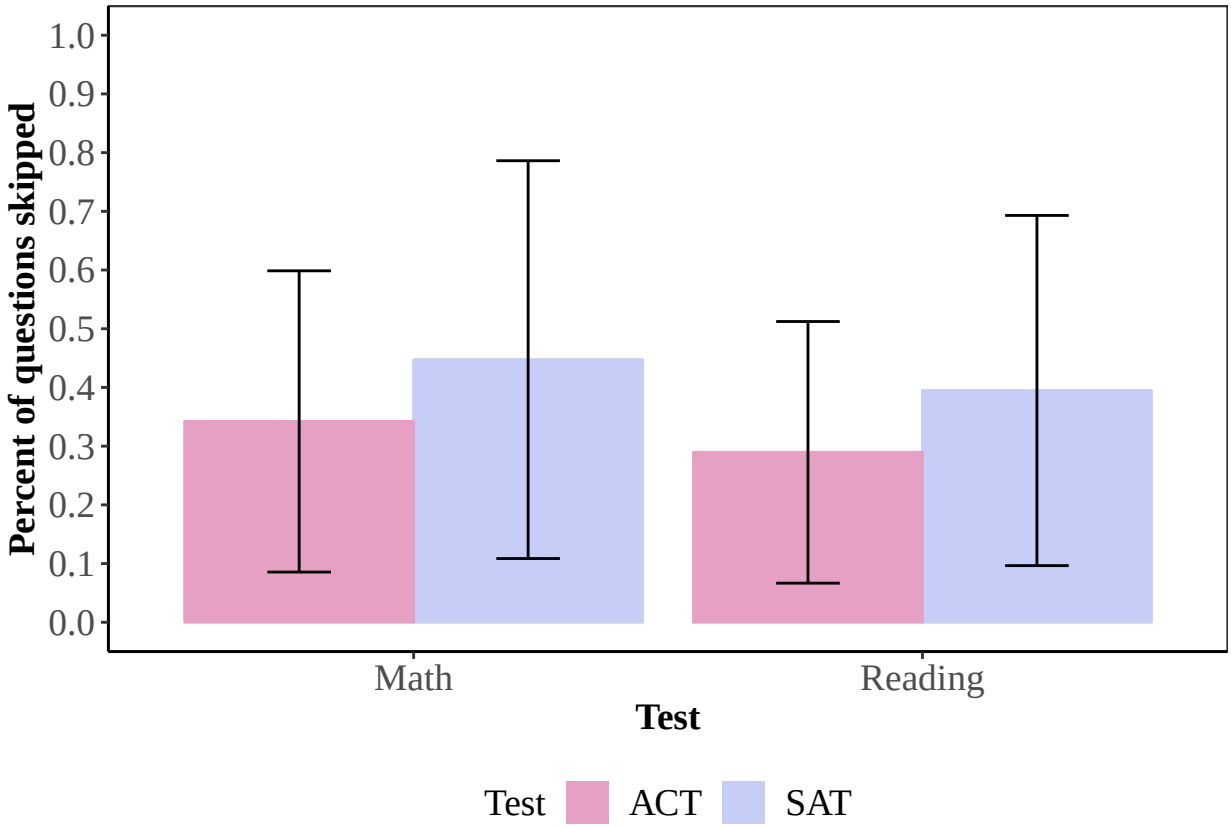
Overall



Each section

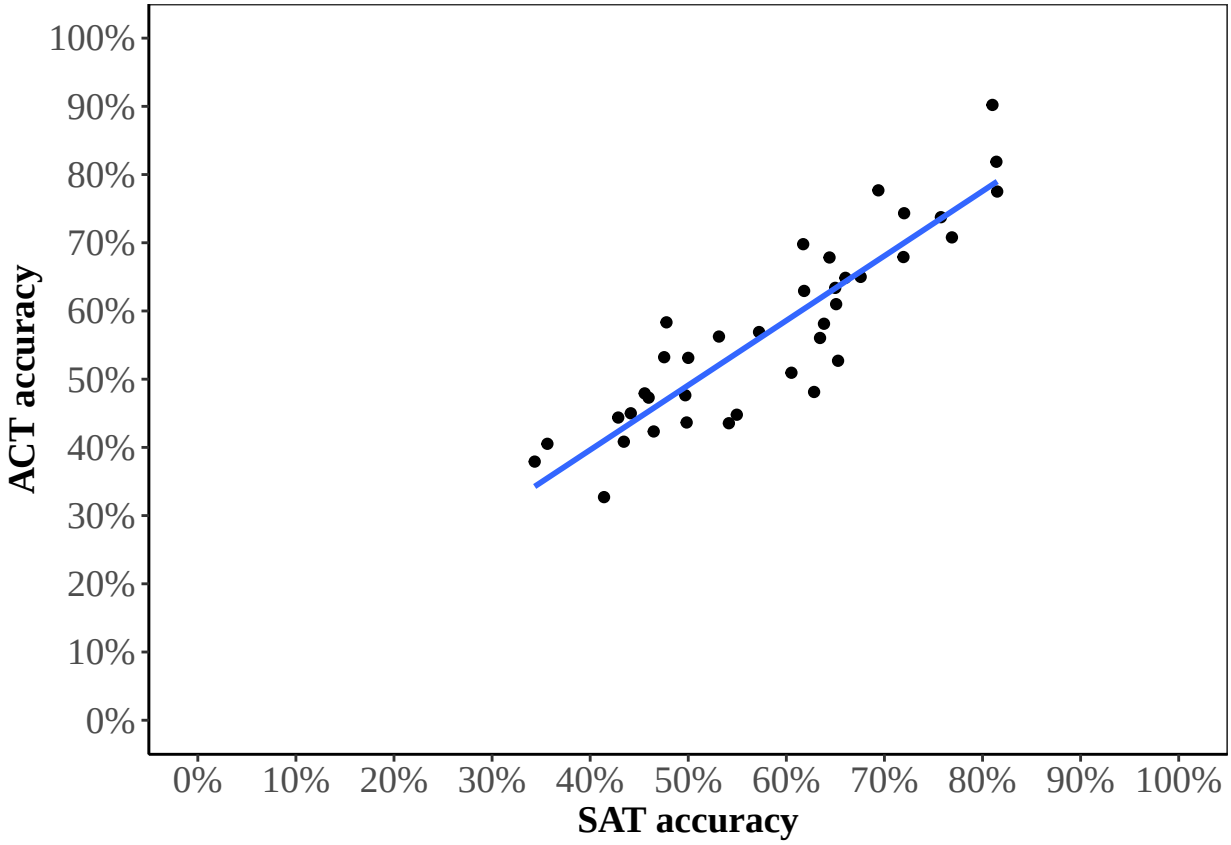


Overlap sections

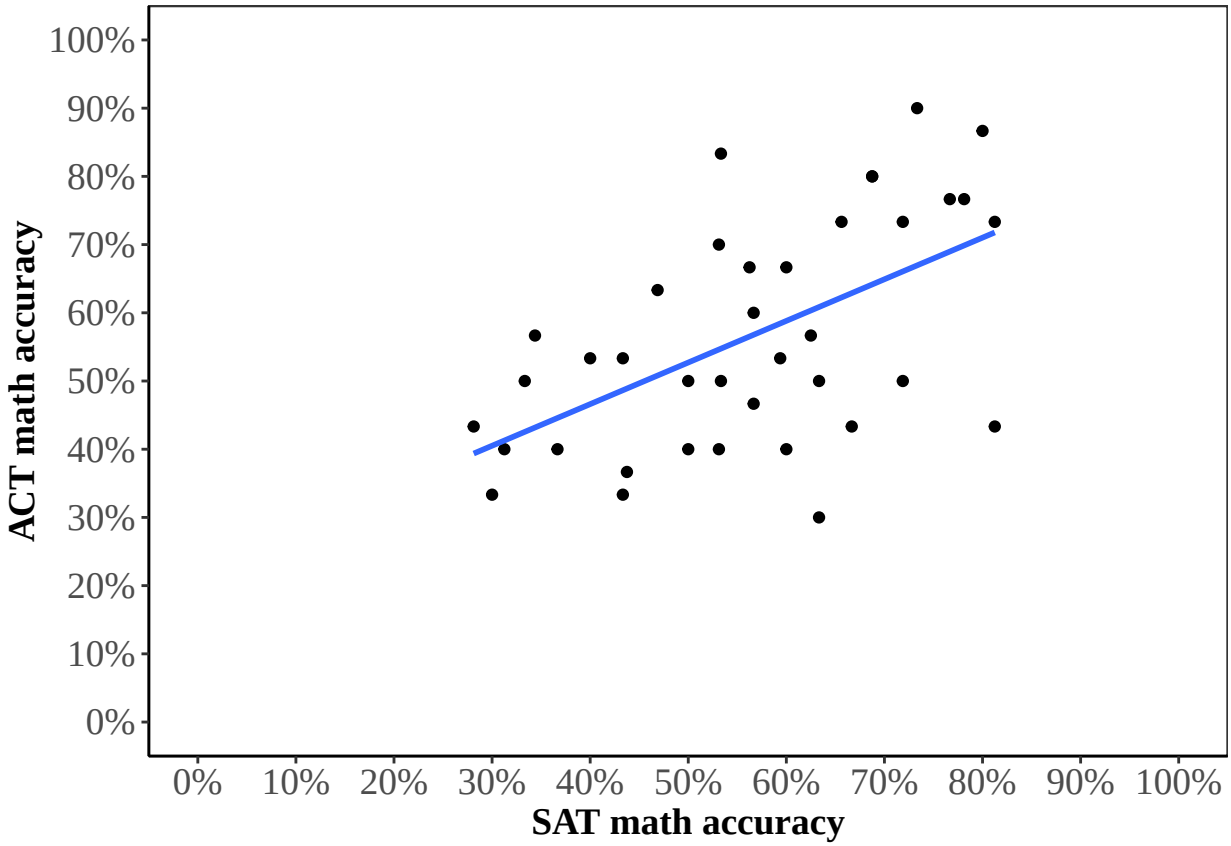


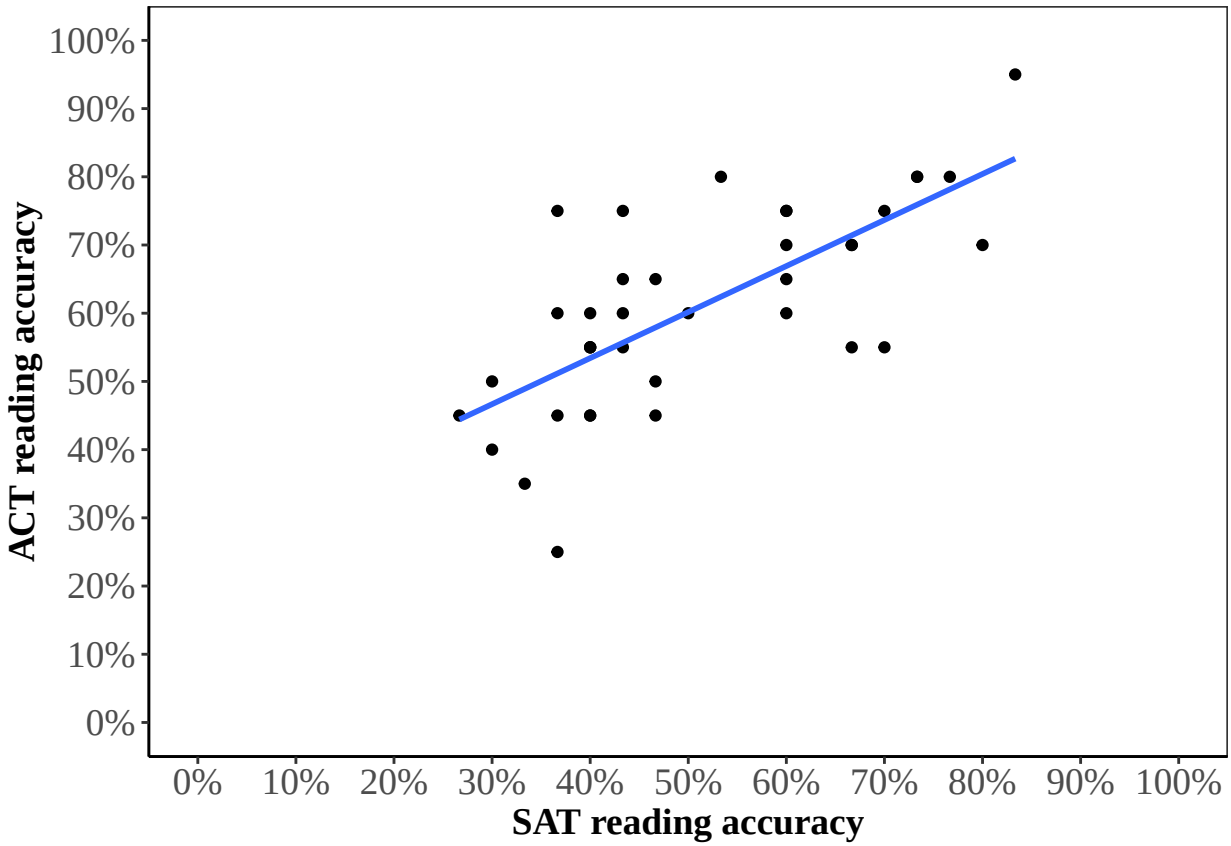
Correlations

Overall



Overlap sections



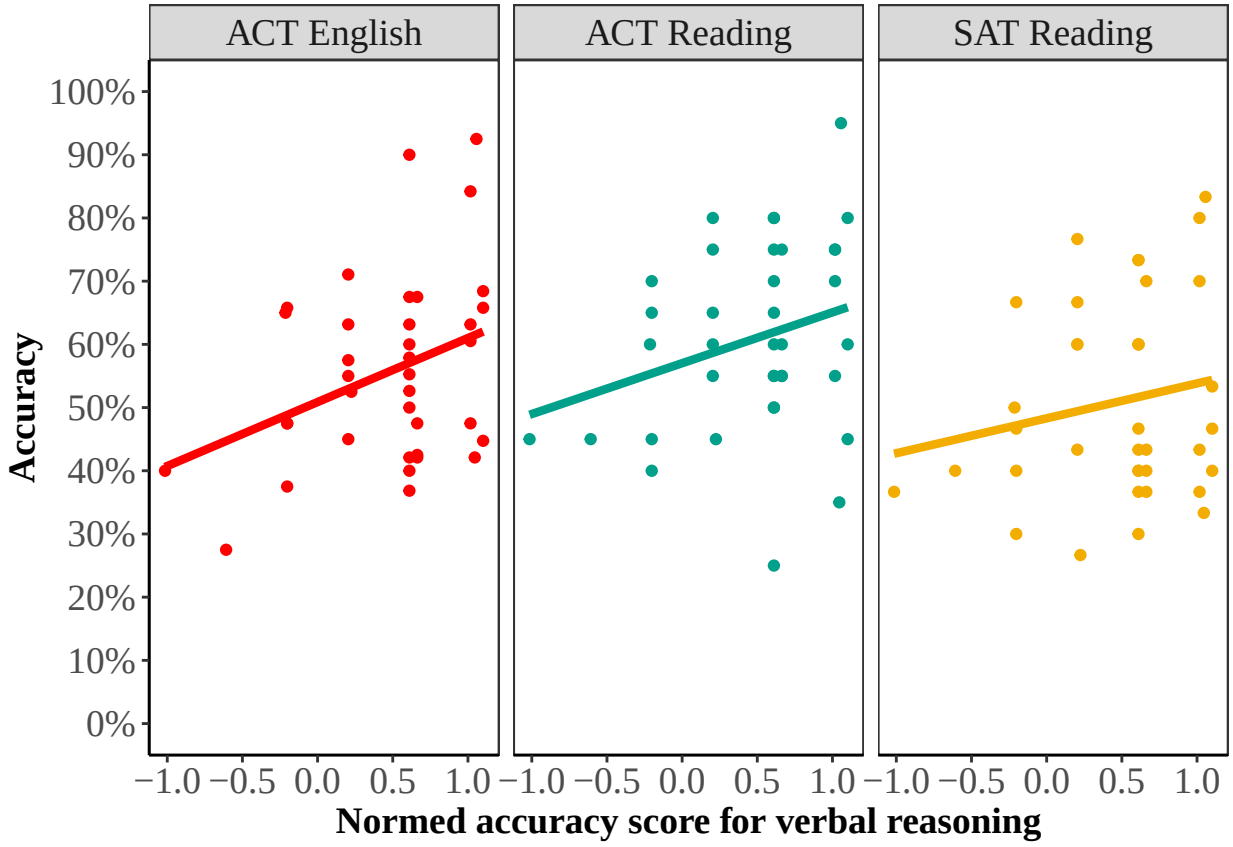

ACT reading accuracy
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
SAT reading accuracy

Does mindprint data predict SAT/ACT performance?

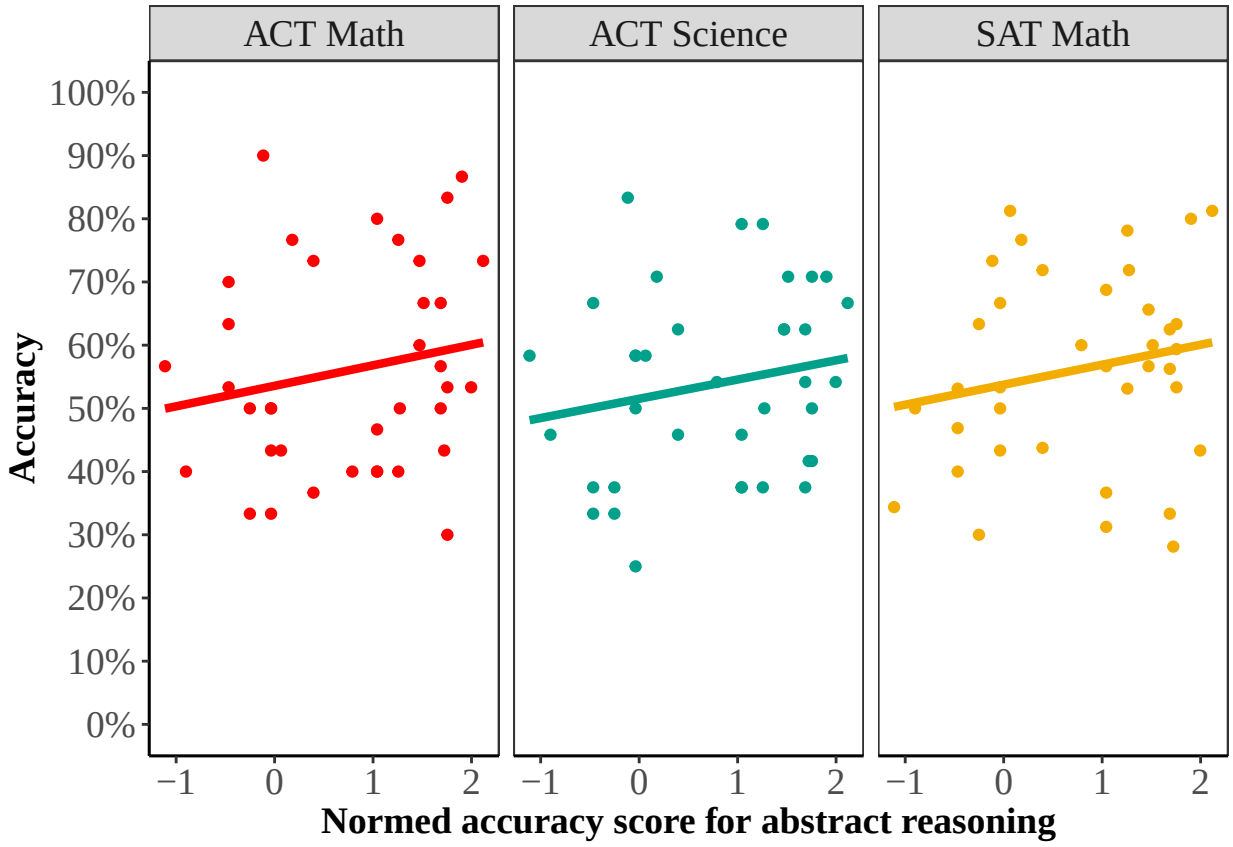
Hypotheses:
1. Students who have high expected in the respective reasoning skill have the ability to get all questions right (i.e. no difference if you're high expected or a strength); would look at discrepancy with flexible thinking for understanding performance on the most challenging questions (e.g. hardest 25%). In other words, if you have low expected flexible thinking and strong abstract reasoning you might get hardest 25% incorrect on Math
2. Students who have medium expected in the respective reasoning skill would get easy to medium difficulty questions correct but would struggle on the higher difficulty level questions (e.g. hardest 25%)
3. Relative difficulties with memory could impact performance on the easy or medium difficulty level questions. i.e. strong verbal reasoning but low expected verbal or visual memory might have errors on usage mechanics/grammar/punctuation
4. Difficulties with attention/working memory/processing speed would interfere with expected results based on reasoning and memory explanations

Hypothesis: Students who have high expected in the respective reasoning skill have the ability to get all questions right

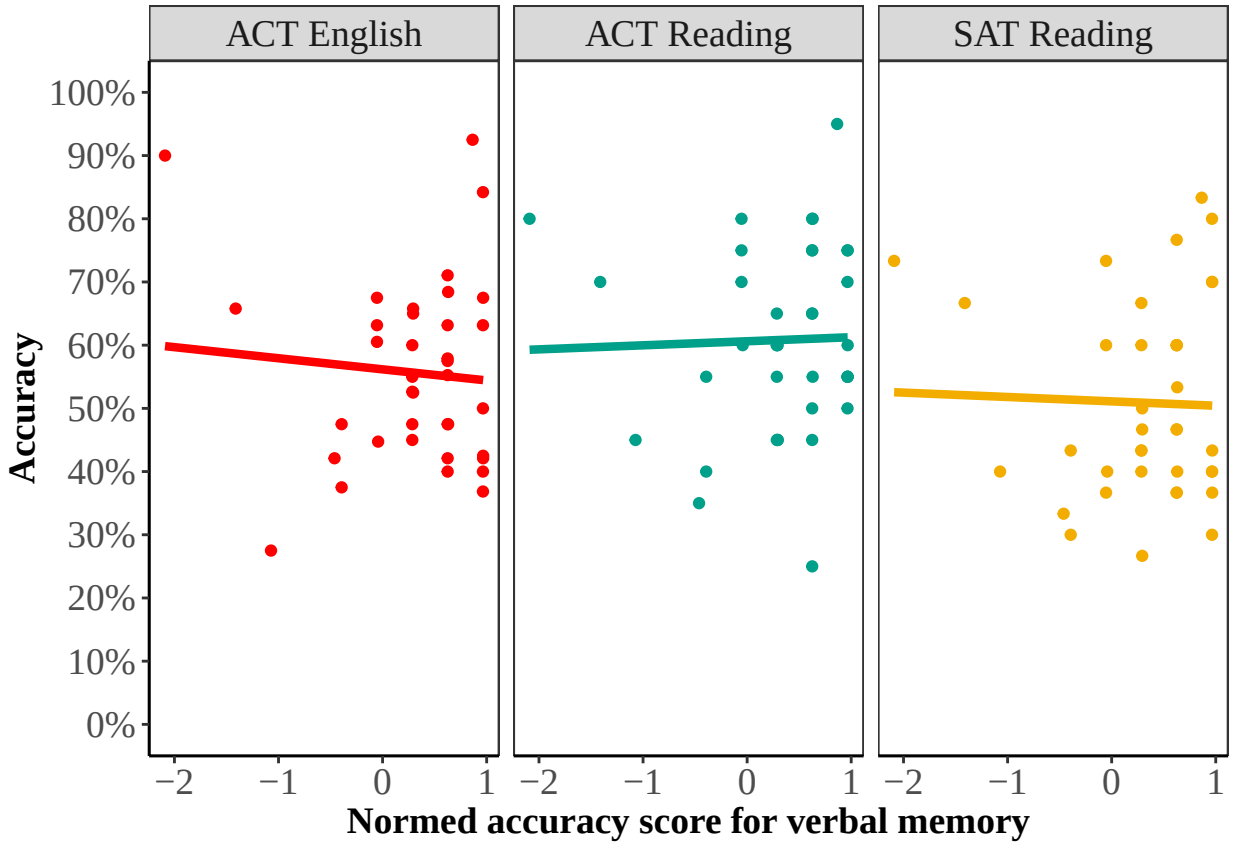
Verbal reasoning (english, reading)



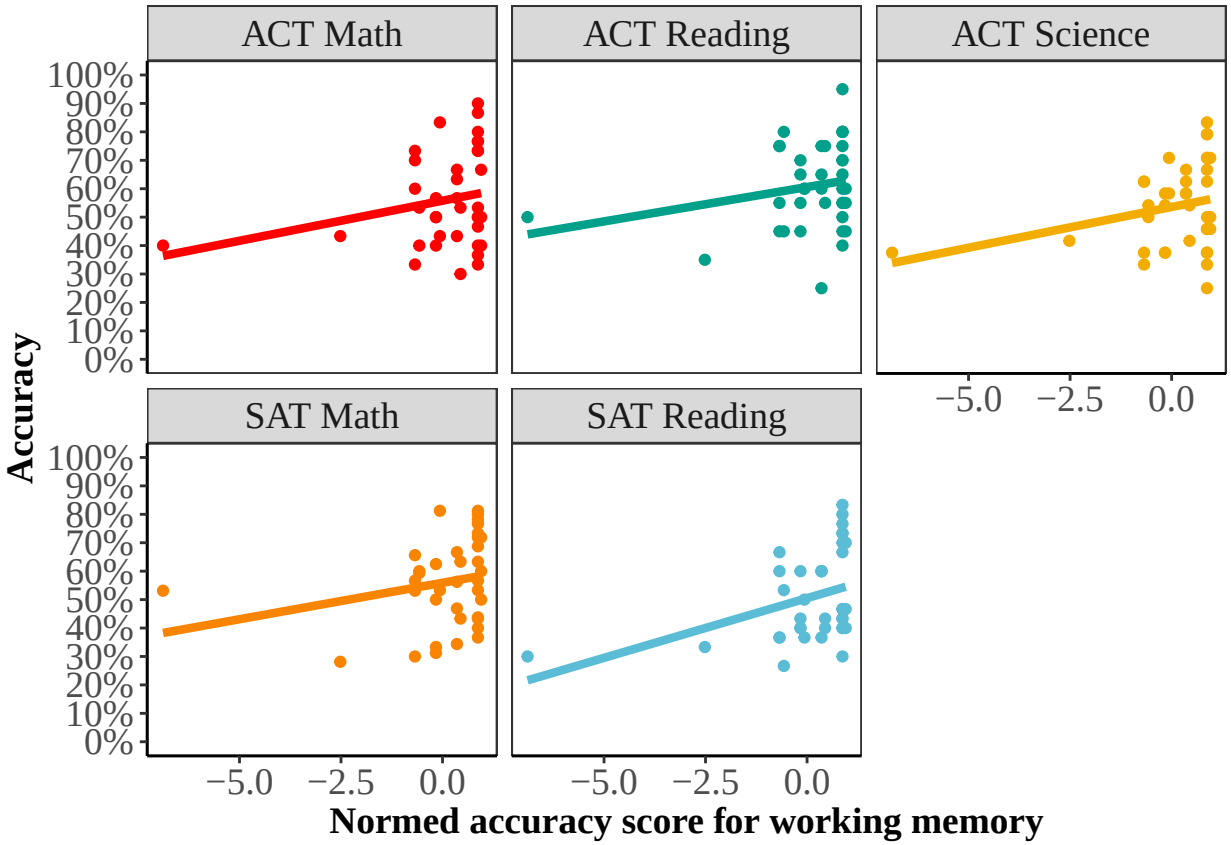
Abstract reasoning (math, science)



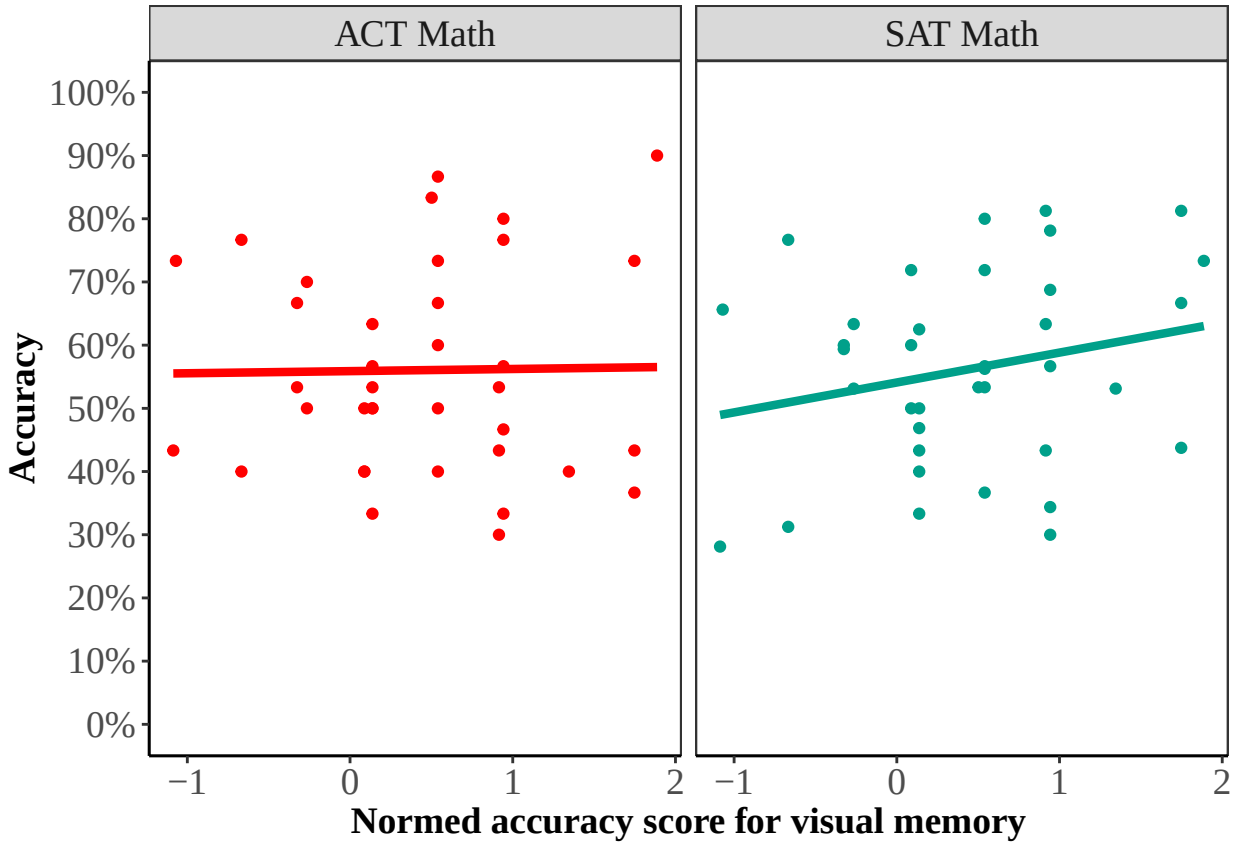
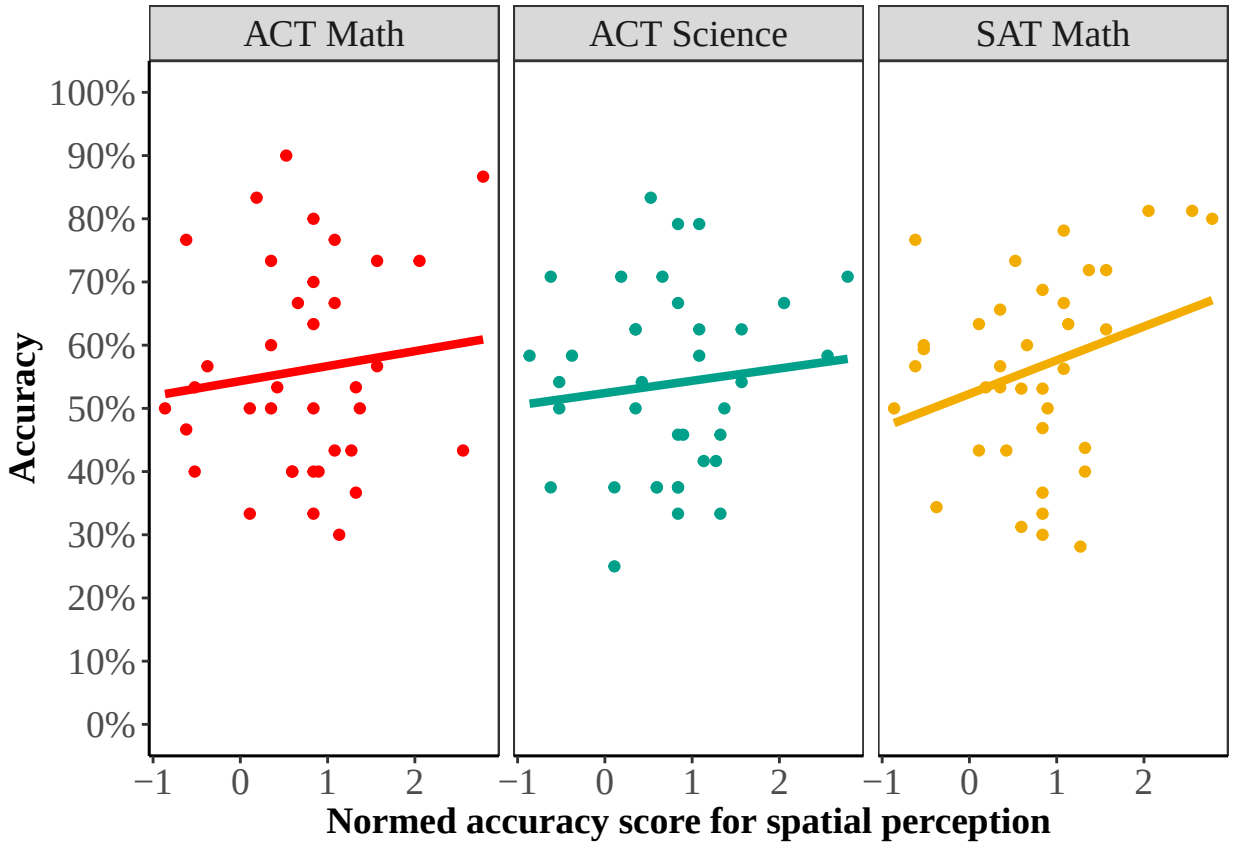
Verbal memory (english, reading)



Working memory (reading, math, science)



Visual memory (math)



Spatial perception (math, science)