

CASE STUDY: MEFS PREDICTS K OUTCOMES

SUMMARY

The MEFS (Minnesota Executive Function Scale) is a brief, tablet-based comprehensive measure of executive function skills that is nationally normed down to 2 years of age.

Reflection Sciences introduced the MEFS assessment to several independent schools to be used in conjunction with their established admissions measures.



THE CHALLENGE

The schools — all private institutions with rigorous academic standards — needed a reliable means during their admissions process to predict a candidate's performance and success.

OUR SOLUTION

The MEFS assessment was added to established measures such as interviews, preschool teacher reports, and academic tests of literacy and math. Reflection Sciences then received four schools' admissions data (names removed) for 232 students who applied for Kindergarten enrollment in the Fall of 2015, 2016, or 2017.

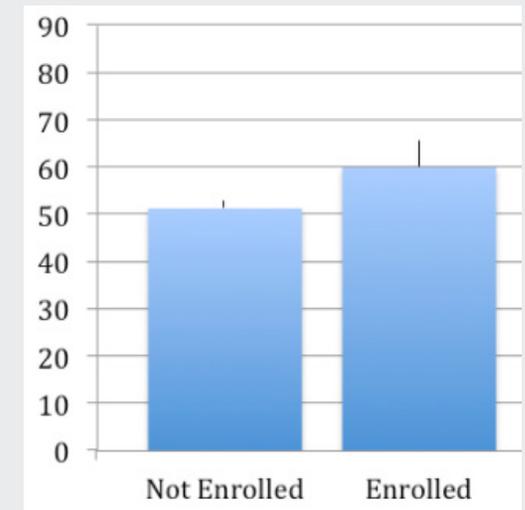
THE GOAL

Evaluate whether the MEFS:

1. Proved to be an accurate predictor of performance, particularly for math, reading, and social-emotional skills.
2. Added to the current admissions measures or created redundancies.

THE RESULTS

- Applicants who enrolled scored 10 points higher on average (out of 100) on the MEFS than those who did not. This is a statistically significant difference ($p < .05$), and suggests that the yield included students with higher EF skills.
- The MEFS was significantly correlated with admissions measures of math ($p < .05$) and social-emotional skills ($p < .01$).
- When all admissions variables were pitted against one another in a regression analysis, only the MEFS ($p < .05$) and academic knowledge ($p < .01$) were significant and unique predictors of Kindergarten Reading Level, showing that the MEFS was not redundant with other measures.
- Applicants with higher MEFS scores went on to have higher scores in Kindergarten on decoding text, phonemic awareness, alphabet recognition, reading accuracy, number identification, and teacher ratings of concentration.



MEFS SCORE (OUT OF 100)