

Introduction

- Malingering is expensive to society and occurs with high base rates. Thus, it is important to develop tools to detect malingering.
- Individuals who are malingering do so by performing noncredibly on cognitive tests or by reporting symptoms noncredibly. Thus, validity of both self-report and performance should be assessed.
- We examined cutoffs on two executive function (EF) measures: DKEFS Stroop and BDEFS as detectors of malingering.

Results

- The two groups did not differ in demographic variables.
- Consistent with an effective manipulation, malingeringers performed worse on the TOMM.
- As shown in Table 1, the malingering group performed worse on the Inhibition raw score and the Inhibition scaled score of the D-KEFS Stroop.
- Receiver Operating Characteristic (ROC) curve analyses were used to identify cutoff scores that maximized specificity at .90 for the two significant Stroop variables. The Inhibition raw score AUC was .68. A cut score of 59 was 90% specific and showed a sensitivity of .48. The Inhibition scaled score AUC was only .330.
- As shown in Table 1, the malingering group scored higher than controls on the BDEFS total score, as hypothesized.
- The ROC analysis yielded a significant AUC (.796). A cut score of 74 was .90 specific, with sensitivity of .56.
- Supplemental analysis showed that 80.48% of malingeringers reported scores in the clinically impaired range for their age on the Executive Function Symptom Count score compared to 42.42% of controls

Methods

Participants

- 74 undergraduates, mean age 21.20, $SD = 5.85$, range 18 to 46; 66.7% women, 28% men, 4.4% trans/gender queer; 77.3% white 12.0% black/African American, 6.7% Asian/Asian American, and 4.0% other. 41 were randomly assigned to malingering and 33 were controls.
- 12% reported prior ADHD diagnosis, 20% reported a history of mild TBI, and 38.7% reported current psychological diagnoses.

Measures

- **D-KEFS Stroop Inhibition and Inhibition/Switching Raw and Scaled Scores**
- **BDEFS total score and EF Symptom Count**
- **TOMM** (to assess effectiveness of the manipulation)
- **Adherence Items**; Participants were asked to describe the purpose of the experiment in their own words, to relay the instructions they were given to follow, and to rate the extent to which they followed the given directions (ranging from did not follow the instructions at all, to mostly, to some, to throughout all). Any participants who did not indicate understanding of the directions they were given to follow or who rated themselves as not following the instructions at all were removed from analyses

Table 1. Performance on Study Variables in the Study Groups

Variable	Malingeringers		Controls		p
	Mean	SD	Mean	SD	
Inhibition Raw Score	60.22	18.31	48.61	10.06	<.001
Inhibition Scaled Score	8.29	3.74	10.69	2.33	<.001
BDEFS total	72.34	18.62	52.18	14.48	<.001
Executive Function Symptom Count	21.00	13.48	8.12	8.31	<.001

Conclusions

- In the current study, we investigated whether individuals malingering mild TBI would perform worse than controls on the D-KEFS Stroop and would endorse more symptoms on the BDEFS, which would suggest that they are vulnerable to malingering
- Preliminary malingering cutoffs need to be replicated in other, larger studies with clinical control groups