BACKGROUND

- Generative fluency is considered an important aspect of executive function, and measures of both verbal and design fluency have been shown to be sensitive to frontal lobe lesions (Baldo et al., 2001)
- Demographic factors, especially age and education, are known to affect phonemic and semantic fluency, as well as design fluency (cf. Ivnik et al., 1996; Lucas et al., 1998; Strauss et al., 2006).
- The Delis-Kaplan Executive Function System (D-KEFS; 2001) is designed to assess several important aspects of executive function, including verbal and design fluency.
- While the D-KEFS tasks were standardized and co-normed on a large representative US sample of children and adults (n=1750; ages 8-89), demographic corrections are only provided for age, with subjects grouped into 16 age bands.

METHODS

- Participants: were drawn from the D-KEFS standardization sample (N = 1750), and data were obtained with permission from Harcourt Assessment, Inc. Normal adult subjects ages 20 to 89 (n=875) were stratified into four Education Levels: "Less-than-High School" (n=165), "High School" (n=310), "Some College" (n=225), and "College+/" (n=175).
- Data: consisted of the age-corrected scaled scores for the Verbal Fluency Letter, Category and Switching trials and the Design Fluency Filled, Open and Switching trials.

RESULTS

- Education Level x Age band ANOVAs showed significant education effects for all variables except the discrepancies between Letter-Category and Category-Design Switching. Means by Education Level are presented in Table 1. Table 1 also presents Spearman correlations between Education Level and age-corrected scaled scores for each of the D-KEFS variables.
- Base-rate data by Education Level are presented for each of the D-KEFS Fluency measures and their associated discrepancy scores.

OBJECTIVES

- To determine the degree to which education affects performance on the Verbal and Design Fluency tasks of the D-KEFS among adults.
- To enhance the diagnostic sensitivity of the age-corrected D-KEFS Fluency scores by providing Education level base-rate tables for each of the Fluency trials and their corresponding discrepancy scores.

CONCLUSIONS

- Results indicate that education is significantly associated with performance on the D-KEFS Fluency tasks, especially Letter and Category Fluency. As a result, lower educated individuals may be more likely to be classified as "impaired" on these measures, whereas higher educated individuals may be under classified as being "impaired."
- Base-rate data by Education Level are presented for each of the D-KEFS Fluency trials and their associated discrepancy scores to increase the diagnostic sensitivity and utility of the age-corrected Fluency scaled scores.