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Proof**CONTROL ID:** 947792**CONTACT (NAME ONLY):** Warren Brown**PRESENTER:** Kathryn Harrell**Abstract Details****PRESENTATION TYPE:** Paper or Poster**CURRENT CATEGORY:** Executive Functions/Frontal Lobes**KEYWORDS:** executive abilities, abnormal, corpus callosum, congenital disorders.**Abstract****TITLE:** Verbal and Design Fluency in Agenesis of the Corpus Callosum**AUTHORS (FIRST NAME INITIAL LAST NAME):** K. M. Harrell, E. J. Marco, L. K. Paul, E. H. Sherr, W. S. Brown**ABSTRACT BODY:**

Objective : Individuals with Agenesis of the Corpus Callosum (AgCC) have shown deficits in inhibition and cognitive switching, but further analyses indicated that slower processing speed made a substantial contribution to overall performance (Marco, et al., in review). This project further investigated executive function and processing speed in AgCC utilizing the Verbal Fluency (VF) and Design Fluency (DF) subtests of the Delis-Kaplan Executive Function System.

Participants and Methods: Individuals with complete or partial AgCC (N= 36, age = 26.89 +/- 13.58, FSIQ = 96.94 +/-13.25) were administered the VF and DF. Healthy controls (HC) matched for gender, age, and FSIQ (N=57, age = 27.68 +/-15.57, FSIQ = 98.84 +/- 10.74) were selected from the D-KEFS normative data set for comparison.

Results : MANOVA of VF scores revealed a trend towards an overall group difference (Pillai's Trace = .101, $F(4, 87) = 2.43$, $p = .053$), with poorer AgCC group performance on Category Fluency, Category Switching: Correct, and Category Switching: Accuracy. No differences were noted on contrast measures or error performance. MANOVA of DF scores indicated poorer overall performance by the AgCC group (Pillai's trace = .145, $F(5, 87) = 2.96$, $p < .05$). Further analysis revealed the AgCC group performed better than HC's overall on the contrast and error measures associated with the DF subtest.

Conclusions : Individuals with AgCC showed deficits in both verbal and non-verbal response generation, but were normal with respect to number of errors. It appears that slower processing speed is the primary contributor to these outcomes.