Academic Achievement of Young Adults Prenatally Exposed to Alcohol

Previous studies report academic underachievement in children with Fetal Alcohol Syndrome (FAS) and prenatal alcohol exposure. Both general and specific deficits in language and math are reported. To confirm adult outcomes, the MSACD Project evaluated 110 young adults from a longitudinal cohort across a range of skills necessary for academic success and effective adaptation to work environments.

Individuals with physical effects of alcohol exposure (dysmorphic features) were similar to a special education contrast group and both performed significantly less well than controls from the same low socioeconomic status, African-American population and individuals who were prenatally exposed to alcohol but without physical effects. Among both alcohol exposed groups, only the dysmorphic group was significantly lower in measures of broad reading, reading fluency, broad math, math calculation, reasoning, math fluency, applied problems and quantitative concepts. The dysmorphic group had more difficulty with math measures than with reading measures, while the special education contrast group showed more deficits in reading. When overall intellectual ability was controlled, effects were attenuated. Alcohol-affected (dysmorphic) individuals were significantly lower in both verbal and nonverbal intelligence compared to the control group and lower than the special education contrast group in nonverbal intellectual ability.

These data indicate that individuals with measurable physical effects of alcohol exposure show a significant pattern of academic deficits in comparison to other exposed individuals as well as those identified as needing special education services, and that these deficits are related to global cognition.
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The Maternal Substance Abuse and Child Development Project is funded in part by the Georgia Department of Behavioral Health & Developmental Disabilities (DBHDD).