

Prenatal Alcohol Exposure, FASD, and Child Behavior: A Meta-analysis

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Abstract

CONTEXT: Fetal alcohol spectrum disorders (FASD) and prenatal alcohol exposure (PAE) are associated with behavioral difficulties, although there are no published systematic reviews that summarize and critique the literature.

OBJECTIVE: To describe the behavioral characteristics of children with PAE and/or FASD, assessed using the Achenbach System of Empirically Based Assessments (ASEBA) for school-aged children with parent, teacher, and youth (self-report) forms.

DATA SOURCES: Electronic literature databases, reference lists, hand-searches.

STUDY SELECTION: peer-reviewed observational studies.

DATA EXTRACTION: Study appraisal and data extraction were undertaken by 2 independent assessors. Meta-analyses were performed for parent-rated Internalizing, Externalizing, and Total problems scales. All other ASEBA scales were summarized qualitatively.

RESULTS: Included were 23 articles; 16 were used in meta-analyses. Pooled results showed higher Total (mean difference 12.1, 95% confidence interval [95% CI] 7.7–16.5), Internalizing (6.3, 95% CI 3.1–9.5), and Externalizing problems scores (12.5, 95% CI 7.9–17.0) in FASD than No FASD; and greater odds of scoring in the “Clinical” range in FASD. Pooled results demonstrated higher problem scores in children with PAE ($P > .05$). Qualitative summaries of other scales from parents, teachers, and self-report show poorer behavior ratings in children with FASD and PAE on composite Problem and Competence scores and many Syndrome subscales.

LIMITATIONS: Findings were restricted to behaviors assessed using the ASEBA. The published literature was limited, often with only 1 study reporting on a particular scale.

CONCLUSIONS: Meta-analysis reveals that FASD and PAE are associated with problematic behavior in many, but not all domains. This clearly affects families, and should be considered in clinical practice by providers.