

Abstract
Poster Session A

Wednesday, November 13, 2019 5:30 pm – 7:00 pm

NEUROPSYCHOLOGICAL DOMAINS: EXECUTIVE FUNCTIONS

A-17

Category Test performance in individuals with alcohol versus methamphetamine dependence

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Objective: The Category Test (CT) has consistently been found to be sensitive at detecting the effects of alcohol on the brain. However, this test has not been as widely used in examining the effects of methamphetamine. The current meta-analysis compared effect sizes of studies that have examined performance on the CT in alcohol versus methamphetamine dependent participants. **Data selection:** Three researchers independently searched nine databases (e.g., PsycINFO, Pubmed, ProceedingsFirst), extracted required data, and calculated effect sizes. **Inclusion criteria** identified studies that had (a) compared alcohol or methamphetamine dependent groups to healthy controls and (b) matched groups on either age, education, or IQ (at least 2 out of 3). Studies were excluded if participants were reported to have Axis I diagnoses (other than alcohol or methamphetamine dependence) or comorbidities known to impact neuropsychological functioning. Sixteen articles were coded and analyzed for the current study. **Data synthesis:** Alcohol studies showed a large effect size ($g = 0.745$, $p < 0.001$) while methamphetamine studies evidenced a moderate effect size ($g = 0.406$, $p = 0.001$); both without statistically significant heterogeneity ($I^2 = 0$). Subgroup analysis revealed a statistically significant difference between the effect sizes from alcohol versus methamphetamine studies (Q -between = 5.647, $p = 0.017$). **Conclusion:** The CT is sensitive to the effects of both alcohol and methamphetamine and should be considered when examining dependent patients who might exhibit problem solving, concept formation, and set loss difficulties in everyday living.