

Neurocognitive Functioning in Community Youth with Suicidal Ideation: Gender and Pubertal Effects

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BACKGROUND: Although there are extensive data on clinical psychopathology in youth with suicidal ideation, data are lacking regarding their neurocognitive function. **AIMS:** To characterise the cognitive profile of youth with suicidal ideation in a community sample and evaluate gender differences and pubertal status effects. **METHOD:** Participants (N = 6151, age 11-21 years, 54.9% females) from the Philadelphia Neurodevelopmental Cohort, a non-help-seeking community sample, underwent detailed clinical evaluation. Cognitive phenotyping included executive functioning, episodic memory, complex reasoning and social cognitive functioning. We compared participants with suicidal ideation (N = 672) and without suicidal ideation (N = 5479). Regression models were employed to evaluate differences in cognitive performance and functional level, with gender and pubertal status as independent variables. Models controlled for lifetime depression or general psychopathology, and for covariates including age and socioeconomic status. **RESULTS:** Youth with suicidal ideation showed greater psychopathology, poorer level of function but better overall neurocognitive performance. Greater functional impairment was observed in females with suicidal ideation (suicidal ideation × gender interaction, $t = 3.091$, $P = 0.002$). Greater neurocognition was associated with suicidal ideation post-puberty (suicidal ideation × puberty interaction, $t = 3.057$, $P = 0.002$). Exploratory analyses of specific neurocognitive domains showed that suicidal ideation-associated cognitive superiority was more prominent in post-pubertal males compared with females (Cohen's $d = 0.32$ and $d = 0.11$, respectively) across all cognitive domains. **CONCLUSIONS:** Suicidal ideation was associated with poorer functioning yet better cognitive performance, especially in post-pubertal males, as measured by a comprehensive cognitive battery. Findings point to gender and pubertal-status specificity in the relationship between suicidal ideation, cognition and function in youth.

Journal:

<http://www.cambridge.org/core/journals/the-british-journal-of-psychiatry>

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