

GRACA Abstract

Association between Adaptive Functioning & Intelligence in Children with Down syndrome

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Deficits in intelligence and adaptive functioning are hallmark diagnostic features of Down syndrome, and as such, understanding the relationship between these two constructs is critical. A recent meta-analysis reported that the relationship between intelligence and the adaptive functioning among people with Down syndrome is moderate (Alexander & Reynolds, 2020), but correlations vary widely across study.

In this project, we investigated the association between adaptive functioning and intelligence in a sample of children with Down Syndrome. Our sample included children with Down syndrome (N = 6; age: 8-13) recruited from the Eastern Nebraska region and tested at the University of Nebraska Medical Center and the Munroe Meyer Institute. Adaptive functioning was measured using the Vineland Adaptive Behavior Scale – Parent Report. Intelligence was measured using the Kaufman Brief Intelligence (Kbit) Scale.

Adaptive functioning was not significantly associated with intellectual abilities as measured by the Kbit when controlling for age, $r(3) = .204$, $p = .742$. However, the direction of the relationship between intellectual abilities and adaptive functioning (higher scores on a measure of intellectual ability with high adaptive functioning abilities) is consistent with previous literature (Alexander & Reynolds, 2020). Interestingly in this sample, performance on the kbit was negatively correlated with age, $r(5) = -.828$, $p = .042$.

These results suggest that better adaptive functioning abilities may be associated higher intellectual abilities, but findings were non-significant in the current dataset. Outside the scope of this analysis, we expect that in the future, a larger sample will provide greater statistical power to test the association of adaptive functioning and intellectual abilities.