

advancing understanding of this encephalitis. Consistent with findings from several reviewed studies on long-term follow-up, the present study suggests that most children with a history of anti-NMDARE show good functional recovery over time. However, data on the neurobehavioral sequelae, quality of life, and adaptive behavior in patients diagnosed with anti-NMDARE are still sparse, especially at pediatric age. In order to understand and learn to manage the needs of patients with anti-NMDARE, particularly regarding the impact this disease can have on daily life and school performance, additional neuropsychological research involving larger samples, longitudinal studies, and increased methodological consistency is required.

**Categories:** Medical/Neurological Disorders/Other (Child)

**Keyword 1:** autoimmune disorders

**Keyword 2:** encephalitis

**Keyword 3:** pediatric neuropsychology

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### 83 WISC-V Profiles in a Pediatric Sickle Cell Disease Population

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**Objective:** Individuals with sickle cell disease (SCD) are at increased risk for developing impairment across cognitive domains, although the most common deficits are thought to be related to processing speed and executive functions. One of the most common ways of evaluating cognitive functioning is through the administration of intellectual tests. While lower overall intellectual functioning in individuals with SCD compared to healthy controls has been found, the specific pattern of strengths and weaknesses across indices is not well known. Anecdotally, it has been observed at our clinic that individuals with SCD are more likely to show relative or significant weaknesses in visuospatial abilities, but this has not been formally investigated. Further, based on the extant research, individuals with SCD would likely demonstrate lower working memory and processing speed indices, but, as far as we are

aware, this has not been investigated either. The purpose of the present study is to examine the intellectual profiles, including areas of relative and significant strengths and weaknesses, of children and adolescents with SCD.

**Participants and Methods:** Participants are children and adolescents (age 6-16) with SCD who were referred for a neuropsychological evaluation at Montefiore Medical Center's Neuropsychological Assessment Service from 2015 to 2022. These participants (N=54) were identified through a thorough review of patients seen through this service and were administered the Wechsler Intelligence Scale for Children, Fifth Edition (WISC-V; Wechsler, 2014). Mean scores were calculated for WISC-V indices. In addition, differences were calculated between WISC-V indices (e.g., VCI-VSI, etc.), and a discrepancy analysis was conducted comparing the base rates of these differences in the present sample to the WISC-V standardization sample.

**Results:** In our sample, the mean total FSIQ of our sample was 85 (SD=14.5). The following mean scores were obtained across indices: VCI, SS=90 (SD=14.5); VSI, SS=86.5 (SD=14.9); FRI, SS=90 (15.5); WMI, SS=89 (SD=15.6); and PSI, SS=82 (SD=17.4). Many of the index score discrepancy base rates were similar to the standardization sample. However, our sample had greater discrepancies between several indices compared to the standardization sample. In particular, the following base rate discrepancies between index scores emerged as being different in our sample compared to the standardization sample: VCI>VSI and VCI>PSI. Notably, a 30+ point difference VCI>VSI was found in 6% of our sample (compared to 1.6% of the standardization sample) and a 30+ point difference between VCI>PSI was found in 12% of our sample (compared to 4.6% of the standardization sample). In addition, a 10+ point difference found between VCI>PSI was found in 50% of our sample (compared to 29% of standardization sample).

**Conclusions:** In our sample, FSIQ and index scores fell approximately 0.5-1.33 SD below the standardization sample means, with the lowest index scores being PSI and VSI. Consistent with the literature, the PSI (but not WMI) emerged as an area most discrepant to other indices (particularly VCI). In line with our observations, the VSI emerged as an area of relative difficulty as compared to the VCI. These results suggest that, in addition to processing speed, visuospatial/constructional ability is an area that

warrants consideration in the assessment of individuals with SCD.

**Categories:** Medical/Neurological Disorders/Other (Child)

**Keyword 1:** sickle cell disease

**Keyword 2:** cognitive functioning

**Keyword 3:** intellectual functioning

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### 84 Parent Ratings of Everyday Social, Emotional, and Behavioral Functioning in Children with Unilateral versus Bilateral Hearing Loss

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**Objective:** Reduced hearing is associated with increased risk for social, emotional, and behavioral difficulties. Studies to date have typically compared DHH children with their hearing peers without regard for unilateral hearing loss (UHL) versus bilateral hearing loss (BHL). Children with UHL are often perceived as more like their typically hearing peers than their peers with BHL. Children with UHL typically access sound and spoken language which facilitates their functioning with fewer supports (e.g., interpreters, captioning). These children, however, show cognitive, academic, and communication profiles more similar to children with BHL than typically hearing peers. They may also experience similar social, emotional, and behavioral challenges as their BHL peers. We examined social, emotional, and behavioral functioning in a clinically referred sample of children with UHL versus BHL.

**Participants and Methods:** Parents of 100 children aged 2 to 17 years ( $M=7.12$ ) with either UHL ( $n=30$ ) or BHL ( $n=70$ ) completed the Behavioral Assessment System for Children, Third Edition (BASC-3) as part of neuropsychological evaluation in a Deaf and Hard of Hearing Program within a tertiary pediatric hospital. BASC-3 scores based on

General Combined norms were compared to an expected distribution of typically developing hearing children using non-parametric one-sample tests. Profiles of scores for children with UHL and BHL were examined in a repeated measures MANOVA.

**Results:** The groups of children with UHL and BHL showed similar age, gender, race, ethnicity, and Area Deprivation Index compositions. Eighty four percent of BHL children communicated with spoken language, and 100% of UHL children communicated with spoken language ( $p=.02$ ). There were similar rates of comorbid diagnoses for ADHD (20%), Anxiety/Depression (18%), Autism Spectrum Disorder (8%), and Intellectual Disability/Global Developmental Delay (9%). However, children with BHL tended to be at greater risk for Language Disorders (50%) than those with UHL (30%,  $\chi^2=3.41$ ,  $p=.065$ ). Together, children with hearing loss showed significantly higher scores on the BASC-3 Hyperactivity, Aggression, Attention Problems, Atypicality, and Withdrawal clinical scales than expected (One-Sample Kolmogorov-Smirnov Test;  $p<.01$ ). Profile analysis showed that children with any type of hearing loss had a varied pattern of scores across scales ( $F(7,686)=4.33$ ,  $p<.01$ ), with highest scores on Hyperactivity and Attention Problems scales and lowest scores on Somatization. Scale profiles did not differ, however, between UHL and BHL groups ( $p=.127$ ).

**Conclusions:** Children with UHL have access to auditory input, typically enabling early language development more like their hearing peers compared to children with BHL. In turn, these children may be overlooked more so than their BHL peers. However, the likelihood of social, emotional, and behavioral difficulties is similar between the two groups of children with hearing loss, whether that is unilateral or bilateral. Our study showed both groups of children had similar profiles across BASC-3 scales with elevations relative to norms. Measuring these everyday functions in children with hearing loss is important for early detection of risks to promote early intervention.

**Categories:** Medical/Neurological Disorders/Other (Child)

**Keyword 1:** assessment

**Keyword 2:** neuropsychological assessment

**Keyword 3:** child development disorders