

NEUROCOGNITIVE PROFILE HETEROGENEITY IN ADULTS WITH ADHD: WAIS-R VERBAL AND PERFORMANCE RANGES

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BACKGROUND AND AIM: This study examined whether adults with ADHD show a more “spiky” WAIS-R subtest profile than controls and whether this is reflected in the Verbal Range (SA) and Performance Range (PA).

METHODS: (Ethics Committee Approval must be obtained and the number should be specified). Adults with ADHD (n=55) presenting to the Selçuk University Faculty of Medicine, Department of Psychiatry, Neurodevelopmental Disorders Outpatient Clinic and diagnosed via the Structured Clinical Interview for DSM-5 Disorders–Clinician Version (SCID-5-CV), and healthy controls (n=42) were included. Participants completed the Adult ADHD Self-Report Scale (ASRS), the Wender Utah Rating Scale (WURS),

WAIS-R, and a neurocognitive battery (e.g., Stroop, Wisconsin Card Sorting Test). In WAIS-R, SA was defined as the difference between the highest and lowest scores across verbal subtests, and PA as the corresponding difference across performance subtests. The protocol was approved by the Selçuk University Local Ethics Committee (Decision No: 2025/53). Written informed consent was obtained from all participants prior to study inclusion.

RESULTS: The ADHD group was younger (24.65 ± 6.56 ; 18–43) than controls (32.57 ± 9.18 ; 21–55) ($t=4.741$, $p<0.001$). No between-group differences were found in WAIS-R total score or educational level. Compared with controls, the ADHD group had higher ADHD symptom severity in childhood ($t=6.315$, $p<0.05$) and adulthood ($t=11.55$, $p<0.05$) and performed worse on neurocognitive tests. In the overall sample, SA and PA did not differ between groups. In sex-stratified analyses, SA was higher in males with ADHD than in male controls ($t=1.77$, $p<0.05$), whereas PA did not differ; females showed no group differences in SA or PA.

CONCLUSIONS: Increased SA in males indicates cognitive-profile heterogeneity in ADHD and suggests that considering SA in WAIS-R reports may facilitate clinical planning. The lack of differences in females may relate to possible masking/compensatory strategies; age mismatch is the main limitation. Further studies are needed to determine whether SA differences index the neurodevelopmental spectrum.

Keywords: Cognitive heterogeneity, ADHD, performance range, verbal range, WAIS-R