

| | Normal UAD PI | | Elevated UAD PI | | All individuals | | p-value |
|---|---------------|----------------|-----------------|----------------|-----------------|----------------|--------------|
| | Mean (SD) | Median (IQR) | Mean (SD) | Median (IQR) | Mean (SD) | Median (IQR) | |
| Recall of designs Ability Score | 97 (19) | 98 (87, 110) | 95 (21) | 96 (84, 108) | 96 (20) | 96 (87, 108) | 0.456 |
| Recall of objects immediate Verbal | 144 (21) | 146 (130, 159) | 137 (23) | 136 (123, 149) | 140 (22) | 140 (127, 153) | 0.044 |
| Recall of objects immediate Spatial | 18 (3) | 20 (16, 20) | 17 (3) | 18 (15, 20) | 17 (3) | 18 (16, 20) | 0.012 |
| Recall of objects delayed verbal | 16 (3) | 16 (14, 18) | 15 (3) | 15 (13, 17) | 15 (3) | 15 (14, 17) | 0.051 |
| Recall of objects delayed spatial | 18 (3) | 20 (16, 20) | 17 (3) | 18 (16, 20) | 17 (3) | 18 (16, 20) | 0.098 |
| Speed of information processing - ability score | 166 (29) | 172 (145, 183) | 165 (38) | 165 (149, 188) | 166 (34) | 168 (145, 188) | 0.974 |
| Recall of digits forward - ability score | 150 (18) | 148 (141, 160) | 152 (21) | 155 (141, 164) | 151 (20) | 150 (141, 160) | 0.351 |
| Recall of pictures - ability score | 123 (12) | 125 (115, 132) | 124 (13) | 125 (115, 132) | 123 (13) | 125 (115, 132) | 0.690 |
| Recall of digits backwards - ability score | 128 (17) | 127 (121, 136) | 128 (20) | 126 (121, 141) | 128 (18) | 126 (121, 138) | 0.685 |
| Number standard score | 112 (13) | 115 (104, 121) | 109 (15) | 108 (99, 120) | 110 (14) | 111 (101, 121) | 0.070 |
| Spelling standard | 103 (15) | 105 (94, 113) | 100 (15) | 102 (91, 110) | 102 (15) | 103 (92, 113) | 0.192 |
| Reading standard | 98 (17) | 97 (85, 106) | 97 (13) | 96 (89, 106) | 98 (15) | 97 (87, 106) | 0.809 |
| Verbal sums of scores | 103 (18) | 105 (94, 116) | 101 (20) | 105 (88, 115) | 102 (19) | 105 (90, 116) | 0.135 |
| Non-Verbal Reasoning sums of scores | 96 (17) | 96 (86, 107) | 93 (18) | 94 (82, 106) | 95 (18) | 94 (85, 107) | 0.075 |
| Spatial sums of scores | 100 (17) | 101 (88, 114) | 99 (18) | 100 (90, 112) | 100 (17) | 101 (89, 113) | 0.366 |
| Standard Verbal ability scores | 103 (14) | 104 (95, 113) | 100 (16) | 104 (90, 112) | 102 (15) | 104 (92, 113) | 0.148 |
| Standard Non-verbal reasoning ability | 97 (15) | 96 (88, 106) | 94 (15) | 95 (85, 105) | 95 (15) | 95 (87, 106) | 0.079 |
| Standard Spatial ability | 100 (15) | 100 (89, 112) | 99 (15) | 99 (91, 110) | 99 (15) | 100 (90, 111) | 0.374 |
| Standard GCA | 100 (15) | 103 (91, 110) | 97 (16) | 99 (87, 108) | 98 (16) | 100 (88, 109) | 0.078 |
| Common Behaviour Checklist | 18.0 (6.9) | 18 (13, 22) | 20.2 (9.4) | 21 (12, 26) | 19.1 (8.3) | 18 (13, 24) | 0.263 |
| CBLC Withdrawn | 1.5 (1.6) | 1 (0, 2) | 1.7 (1.9) | 1 (0, 3) | 1.6 (1.7) | 1 (0, 3) | 0.920 |
| CBLC Somatic problems | 3.7 (12.6) | 2 (0, 4) | 2.7 (2.2) | 2 (1, 4) | 3.2 (9.1) | 2 (1, 4) | 0.380 |
| CBLC Anxious / Depressed | 2.8 (3.0) | 2 (1, 4) | 3.9 (3.9) | 2 (1, 6) | 3.4 (3.5) | 2 (1, 5) | 0.162 |
| CBLC Social problems | 1.6 (1.7) | 1 (0, 2) | 2.1 (2.3) | 1 (0, 3) | 1.9 (2.1) | 1 (0, 3) | 0.289 |
| CBLC Thought / Behaviour | 0.6 (1.0) | 0 (0, 1) | 1.0 (1.6) | 0 (0, 1) | 0.8 (1.4) | 0 (0, 1) | 0.247 |
| CBLC Attention problems | 2.9 (2.8) | 2 (1, 4) | 3.7 (3.6) | 2 (1, 5) | 3.3 (3.3) | 2 (1, 5) | 0.394 |
| CBLC Delinquent behaviour | 1.1 (1.6) | 1 (0, 2) | 1.6 (2.2) | 1 (0, 2) | 1.4 (1.9) | 1 (0, 2) | 0.383 |
| CBLC Aggressive behaviour | 6.1 (5.7) | 5 (2, 9) | 7.2 (6.4) | 6 (2, 11) | 6.7 (6.1) | 5 (2, 10) | 0.439 |
| CBLC Other problems | 4.4 (4.4) | 4 (2, 6) | 5.2 (4.4) | 4 (2, 8) | 4.8 (4.4) | 4 (2, 7) | 0.713 |
| CBLC Internalizing | 6.3 (5.2) | 5 (2, 9) | 8.2 (6.5) | 6 (3, 11) | 7.3 (6.0) | 6 (3, 10) | 0.231 |
| CBLC Externalizing | 7.3 (7.1) | 6 (2, 11) | 8.9 (8.2) | 7 (2, 13) | 8.1 (7.7) | 6 (2, 12) | 0.417 |
| CBLC Internalizing Standard score | 49.8 (10) | 50 (43, 57) | 52.8 (10.0) | 52 (45, 58) | 51.3 (10.1) | 51 (45, 58) | 0.332 |
| CBLC Externalizing Standard score | 48.6 (10.1) | 49 (42, 56) | 50.7 (11.0) | 50 (40, 58) | 49.7 (10.6) | 49 (42, 56) | 0.365 |
| CBLC Total Standard Score | 43.7 (9.6) | 44 (39, 49) | 46.4 (9.8) | 45 (39, 53) | 45.1 (9.7) | 45 (39, 52) | 0.332 |

Supplemental Table: Unadjusted linear regression analysis for elevated (>90th centile) and normal (<90th centile) umbilical artery Doppler (UAD) pulsatility index (PI) for Validated British Ability Scales II diagnostic, achievement, General conceptual ability (GCA) scale and Achenbach child behaviour checklist parent rated version (CBLC) parameters at 28 weeks.