**Table C.2** Differences Between the FSIQ and the GAI Required for Statistical Significance (Critical Values), by Age Group and Overall Normative Sample

| Age Group | Level of Significance | Critical Value |
|---|---|---|
| 16–17 | .15 | 2.91 |
|  | .05 | 3.96 |
| 18–19 | .15 | 2.51 |
|  | .05 | 3.41 |
| 20–24 | .15 | 2.57 |
|  | .05 | 3.50 |
| 25–29 | .15 | 2.58 |
|  | .05 | 3.51 |
| 30–34 | .15 | 2.71 |
|  | .05 | 3.68 |
| 35–44 | .15 | 2.69 |
|  | .05 | 3.66 |
| 45–54 | .15 | 2.41 |
|  | .05 | 3.29 |
| 55–64 | .15 | 2.58 |
|  | .05 | 3.51 |
| 65–69 | .15 | 2.26 |
|  | .05 | 3.08 |
| 70–74 | .15 | 2.65 |
|  | .05 | 3.61 |
| 75–79 | .15 | 2.45 |
|  | .05 | 3.34 |
| 80–84 | .15 | 2.35 |
|  | .05 | 3.19 |
| 85–90 | .15 | 2.52 |
|  | .05 | 3.44 |
| All Ages | .15 | 2.56 |
|  | .05 | 3.48 |

*Note.* The differences required for statistical significance (critical values) are calculated with the following formula derived based on the logic of Davis (1959) Case 1, Equation [3].

$$\text{Critical Value of Difference Score} = Z\sqrt{SEM_{Xi}^2 + SEM_{Xj}^2 - 2\sqrt{\frac{\sum SEM_i^2}{\sum SEM_j^2}}(SEM_{Xi})(SEM_{Xj})}$$

where $Z$ is the normal curve value associated with the desired two-tailed significance level, $SEM_{Xi}$ and $SEM_{Xj}$ are the standard errors of measurement for the GAI and FSIQ composite scores, $\sum SEM_i^2$ is the sum of the squared standard errors of measurement for all subtests in the GAI, and $\sum SEM_j^2$ is the sum of the squared standard errors of measurement for all subtests in the FSIQ.