WJ III Odd Scores Explained

I recently tested an 8 year old girl, referred in response to concerns regarding math difficulties and, to a lesser extent, reading delays. I gave her the first 17 tests on the WJ-III Cognitive, which produced a GIA score of 79. Her GIA is surprisingly low, given her scores on each of the 17 tests. Of the 17, one standard score was 79, one was lower, and the other 15 were higher. In some cases, scores were considerably higher than the GIA.

I understand that some scores carry more "weight" than others in determining the GIA, and that not all 17 scores I obtained are used in the GIA. I'm still surprised that the scores listed below yielded a GIA that low. I'd appreciate it if someone could enlighten me as to how this occurs. Many thanks.

GIA Ext. 79

VERBAL ABILITY Ext. 91   THINKING ABILITY Ext. 87   COG EFFICIENCY Ext. 72

Verbal Comp. 91
Vis-Aud 86
Spat. Rel. 90
Sound Blend. 87
Concept Form. 89
Vis. Match. 79
Num. Rev. 72

Gen Inf 91
Ret. Flu. 88
Pic. Recog. 102
Aud. Atten. 111
Analysis/Syn 86
Dec. Speed 84
Mem for Words 83

Inc. Words 95
Aud. Working Mem. 101
Vis-Aud Learning Del z=-.32

First, of course, Inc. Words 95 and Aud. Working Mem. 101 don't count in the GIA.

Second, the mean of the 14 tests that do count is 88.5. That would be equivalent to a scaled score of 7.7. If a student averaged 7.7 on ten WISC-III subtests, the FSIQ Sum of Scaled Scores would be 77, which would yield a FSIQ standard score of 85, so the difference between your GIA of 79 and the mean standard score of 88.5 is 9.8 points and the difference between the GIA and the FSIQ you would get on a WISC-III with similar subtest scores is only 6 points.

Third, if you multiply each test by its weight for age 8 (p. 153 of the Technical Manual), the weighted sum is 87.58. The two highest scores (Picture Recognition and Auditory Attention) had the two lowest weights.

Fourth is that issue we discussed at great length some time ago, and for which Mark Daniel solicited a name. [My choice, the Luke Composite Effect, from the Gospel of Luke 8:18, imitating Keith Stanovich's Matthew (25:29) Effects and Ron Dumont's Mark (4:25) Penalty was voted out.]   The point, though, as discussed most recently by Cathy Fiorello and Hubert Lovett, was that composite scores are more extreme (farther from the mean) than the average of the component scores.

 The fifth issue is how one defines general intelligence. [I don't, so I am out of the discussion from here on.] The Wechsler scales have traditionally emphasized mostly Gc and Gv, which would have left you with scores of 91, 91, 90, and 102 for a mean of 93.5. Colin Elliott included Gf in his Differential Ability Scales core subtests, which would add scores of 89 and 86 for your kid, making the mean 91.5. The WJ III, based on CHC theory, includes Ga, Gs, Gsm. and Glr, which pulls your kid's average down to 88.5 and the weighted sum farther down to 87.5 before the composite effect kicks in for the final pull to 79.

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