

## Handling Non-Unitary Scores in the PPA Program

After inputting scores into the PPA program, hitting the green Calculate button will allow a psychologist to view any non-unitary scores. There are many possible reasons for non-unitary scores and methods for handling the scores.

Each assessment subtest that is administered has unique administration directions, task requirements and methods of student response. Examination of these factors may be helpful.

- **Scoring Error by the Examiner.** It can happen to anyone. Double-check your scoring on the protocol, and any data entry with scoring software or the PPA software. Be sure you are entering a subtest when needed on the PPA, not a composite, and vice-versa, and be certain you are pulling down the PPA menu to the correct test version. Make corrections and re-run the PPA, if needed.
- **Anxiety or Other Emotional Factors.** Are anxiety, depression, anger, or any other mood disorder factors possibly impairing student performance on particular types of tasks?
- **Student “Performance” Problem.** Was the student’s performance compromised in any way by distractions or misunderstandings? If you could subtract a condition or incident that occurred during testing on the involved subtests, might the student have demonstrated possession of greater *skill* than you were able to measure during *performance*? Check your notes from during administration of the subtests that comprise the non-unitary scores to see if anything unusual was going on.
- **Narrow Abilities.** Does the PPA process score include subtests that measure different narrow abilities, as defined under CHC theory? Might the student’s skills differ significantly across these narrow ability areas? For example, some fluid reasoning tasks are more inductive in their presentation while other tasks are deductive. Additionally, under the term “Working Memory” exists both short-term memory tasks as well as true working memory tasks. Long-Term Recall tasks include both rapid naming tasks as well as delayed recall tasks.
- **Rater Bias.** Is there rater bias? When using rating scales completed by parents and teachers, there is always the possibility that the rater may unknowingly evaluate a student in an extreme or biased manner.
  - A parent or teacher who feels strongly about a student in an emotionally-charged situation may mark responses that reflect their urgency to get help for the student. If responses from raters on the types of scales mentioned above yield scores that are far above or below the cut-off for significance, you may want to examine individual item responses more closely, to see if these responses are consistent with other evidence you have discovered during evaluation of the student.

This document is provided to assist individuals and teams in handling non-unitary scores. Please use your clinical judgment and the knowledge you have for the individual student when making decisions. Thank you to Kim Charnofsky for allowing us to adapt her original work.  
Ventura County SELPA, 6/12/19

- If you suspect that the responses you review are extreme and do not reflect the student's actual skills in this processing area – or if you think the rater did not understand the directions or the questions -- you have some choices. You may:
  - return to the rater and ask some follow-up questions to clarify responses or
  - do not use the score in your analysis. If the rater chooses to change any responses after discussion and clarification, you may re-run the scores, and/or
  - you may also select a different rater or a different rating scale.

### **TAKEAWAYS:**

- If there is any doubt that the score you received is a measure of best performance that reflects the student's actual skills in this processing area, do not use the score in your analysis. Do explain in your report why you have excluded the score from your analysis. If you need to do further testing to replace a score you cannot use, plan your time accordingly.
- Any time you do not use a score in your analysis, be prepared to explain why.

In Dr. Dehn's words: *A non-unitary composite can be remedied by administering at least one other subtest that measures the process under consideration. The additional subtest score should then be compared with the previous scores to determine if it is close enough with one of them to form a unitary composite. The outlying high or low score should then be dropped, and a new composite score computed. The unitary composite should then be used in the analysis of processing scores. (Essentials of Processing Assessment, pp. 245-256)*

Also: *An intra-individual weakness or strength can only be used if the two subtest scores involved are unitary. If three or more subtests have been administered, then at least two of the subtests must be unitary. (Essentials of Processing Assessment, p. 252)*

If you have non-unitary scores, but all scores are average or above, you may not need to do additional testing, as you are fairly certain that all skills in that processing area are "intact" and will not be weaknesses impacting learning.

## **Running the PPA With and Without Scores Guidelines for Selective Analysis Using the PPA:**

- \* In general, you will use all of the scores from your planned assessment in the PPA analysis. However, there are frequent, justifiable exceptions, and you should feel confident in knowing what they are.*
- \* Use only valid, reliable scores.*
- \* Take scores out of an analysis to help clarify the picture of what is going on with the student.*
- \* If you are choosing to use scores directly from the PPA program within your report, when you present your process scores in your report, be clear (in the text, a chart, table, or graphic form) about which subtest/composite scores go into which process scores.*
- \* Always have a reason for your choices and explain exactly why a score is not included in the analysis.*
- \* If you do take a score out of a statistical analysis, it does not mean you take it out of the assessment entirely. Discuss it in the text and present the score with your other report data.*
- \* To help clarify the picture, you may choose to try running an interim PPA (or several) with a certain set of scores, and then another PPA with a final set of scores. The PPA has a “save as” function, and you may wish to save two versions, and present two charts in your report, showing the processing strengths and weaknesses based on different scores for a processing areas where a “split” occurs.*
- \* Never take out a score to “hide it” because it doesn’t fit with the hypothesis.*
- \* When you end up with non-unitary scores due to Rater Bias or a rater not understanding the questions, you may need to exclude scores from a statistical analysis because they do not represent a true picture of the student’s processing skills, based on other evidence you have found during your assessment. If you need additional information after excluding these scores, you may need to do additional assessment, interviews, or observations. Always explain your choices.*
- \* When you end up with non-unitary scores due to issues related to the impact of differing narrow abilities, you may need to strategically engage in selective analysis. For example, if you have rapid naming scores that are much lower than delayed recall tasks, you may look at just the rapid naming scores within Long-Term Recall to determine if an intra-individual weakness exists.*