

WHICH NORMAL LEVEL?

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Over the years, John Gittinger and Dave Saunders have generated over thirty different formulations for calculating the Normal Level. These have ranged from sublimely simple calculations (such as the average of all scores) to extremely complex weighted formulations suitable only for computer application. Gittinger's approach implicitly assumed that every test result has perfect reliability (although he often altered scores and formulation on wholly intuitive grounds), and he sought a Normal Level computation which would provide a perfect fit to his clinical determinations of the Normal Level in a sample of reference cases. Saunders, while providing technical support to Gittinger's efforts, sought independently to find a computation that provided optimal sortings of sub-groups in fairly large data manipulations. Over time, each of them moved further and further from the pragmatic needs of the operational assessor who evaluates individual test protocols. W. L. Rook, meanwhile, demonstrated on several occasions that the intercorrelations among various Normal Level formulations are in the neighborhood of .90 to .99, inciting serious question as to what this effort was all about.

What is the Normal Level? First and finally, it is a measure of central tendency, an intra-test reference point from which to determine deviations in PAS terms. Tautologically, it is the level of one's normal psychometric functioning; analogously, it is like the "proper weight" for one's height, with reference to which we determine whether one is overweight or underweight. It is not a measure of IQ (or, more generally, intelligence level) although the correlation between the two measures is, understandably, also in the high .90's.

One motivation for "fiddling with the Normal Level" in individual cases stems from a compassionate desire on the part of the operational assessor to make his subject "look good" or, at least, "look his best." This noble, but psychometrically unsound charity results in two kinds of administrator bias: a disposition to give the subject the benefit of the doubt in equivocal answers (particularly on Similarities and Comprehension, and in the time-credit scoring of Block Design and Arithmetic);

and a disposition to nudge the Normal Level if it "looks too low" in terms of other information we have about the subject's real-life performance. There is a tendency to make the subject "look bright," when we should properly be trying to find the PAS formals that "reads right." This is especially the case with EFU's; since the Normal Level qua intelligence estimate tends to look low for uncompensated EFU's; and conversely, it tends to provide an overestimate in the case of IRA's.

To control for this bias, it is wise (or at least defensible) to score the rest twice: once for IQ, and again for Normal Level. In scoring for IQ, give the Subject whatever benefits of doubt seem reasonable at the item level, and then calculate the Full Scale IQ score for purposes of establishing an intelligence level.

(1) When appropriate in the assessment write-up, use this' measure, and not the Normal Level, to characterize the individual's level of intellectual prowess.

Having achieved an IQ score, rescore the equivocal items more rigorously, and calculate the Normal Level (or Normal Levels) to find the most appropriate central reference for the pattern deviations. And do not be concerned in those rare cases when a Subject with an IQ of 140 shows up with a Normal Level of 12. At this stage, we want to know if a given sub-score is high or low, as separate from our estimate of overall brain-power.

The First Normal Level, of course, was Gittinger's clinical judgment of the psychometric center of the sub-score pattern. This has been the criterion for evaluating various Normal Level estimates. It is useful for all practitioners to acquire some skill in estimating Normal Level then become devices to confirm one's judgment, or to suggest modifications of a point or two in one direction or another. This process preserves the salience of clinical judgment in the interpretative process, and frees the analyst from a slavish commitment to the results of some arbitrary formulation. (2) It is especially appropriate when testing subjects for whom some wealth of behavioral and performance information exists. (3)

Weighed against Normal Level 29 and the other highly complex formulations that followed it, are several vastly simpler calculations and rules of thumb for estimating this critical central measure: (4)

- a. Third highest weighted score (errs on the high side)
- b. Fourth highest weighted score
- c. Mean of third, fourth and fifth highest weighted score
- d. Sixth highest score
(when using the 4th dimension)
- e. Mean of the five highest compensation-modifier scores

(A, I, S, C, PC, and OA). (Mean of all six tends to produce an underestimate.)

f. Model score emerging from all of the above.

As suggested earlier, all of these, along with the more complex calculations, tend to cluster; and rarely will they deviate more than +1 from any of the more than thirty approaches that have been examined over the years. Since the criterion is clinical judgment, and all of the estimates cluster so closely, it remains for the analyst to find the is most comfortable -- not only for consistent application, but also in each individual assessment.

Is one Normal Level enough? Conventionally, we think of establishing one Normal Level for the interpretation of any given profile; and for most assessment purposes, this is enough. We conclude that an individual is, for example, a 15 (Ecc Fuc Ucu) Tcu, and go about our assessment accordingly. Occasionally, however, it is worth establishing separate Normal Levels, or "functional" Normal Levels, for different parts of a highly diverse operational requirements. This does not require any additional calculations, but it invites attention to the utility of shifting our sense of the individual's effectiveness, depending on the demands of his tasks, or the various states in which he may find himself (given fatigue inebriation, etc.). It amounts to successive re-assessments of the individual's "functional" capacity, depending upon the match between the operative portions of his profile, and the demands of different situations.

Consider a 12 (I+c+c+Fuc U+u+c+) Tuu with a Full Scale IQ of 110. It is apparent that the functional capacity of this individual (and the esteem with which he or she is

held by co-workers and managers) will vary enormously according to whether the individual is assigned as a researcher/librarian/lab worker/translator-interpreter, on the one hand; or as a supervisor/bartender/tour guide, on the other. This person's "Functional Normal Level" is vastly higher in an isolated, independent, intellectual environment, than in a social, interactive, manipulative one. The Normal Level 12 and the 110 IQ are appropriate estimates of some kind of overall effectiveness, but it is also reasonably appropriate to say that this person functions at a higher Normal Level when working independently than when required to relate to others in a continuing basis. (5)

And consider a 13 (E+u+c+Foc+U+uu) Tuu with an IQ of about 130. To yield a Normal Level of 13, it follows that the Information and Comprehension scores are very high, and that at the contact level, this person can be extremely effective in performing an articulate, conventional role. Incapacitated by liquor, drugs, or fatigue, however, this person collapses into an inarticulate, dependent, socially inept and helpless blob. Again the "13 Normal Level" characterizes the "average abilities" of a person who is essentially a "14 Normal Level" when intact, and a "9 Normal Level" when circumstances disarm him of his most highly developed adaptive skills. Under certain kinds of stress, he shifts dramatically from a superior adult, to a dreadfully inadequate overaged adolescent.(6)

In short, the Normal Level is a reference point for determining subscore deviations in PAS terms. It should reflect one's characteristic level of psychometric functioning. It is fundamentally a clinical judgment, and all Normal Level computations reflect efforts to optimize or maximize this judg-

ment in systematic terms. (7) No single computational process is sacred; all procedures yield virtually identical results (rarely differing by more than one point). It is not a measure of intelligence *per se*, and conventional IQ computations should be used for this purpose. It is quite appropriate to use demonstrated, non-test behavior, along with conventional calculations, to adjust the Normal Level estimate to a figure which, in clinical judgment, yields a profile that best characterizes the subject's behavior in PAS terms. And just as Wechsler conceived that there are different levels of intelligence for different demands and functions, so also is it useful, for interpretative purposes, to note that an individual's normal level of effectiveness, in PAS terms, can also vary according to his "state", or the demands that are placed upon him in intellectual, emotional, social, contact, basic and primitive terms.

1. The Vocabulary sub-test is not used as part of the WB/G. It is therefore necessary (when using this version of the test) to make an adjustment before entering the tables for the verbal IQ. For this purpose, add 20% to the sum of the weighted scores for the verbal measures (Digit Span, Arithmetic, Information, Similarities and Comprehension), and enter the tables with this adjusted total. Since we use the "right number" of Performance measures, the tables for Performance IQ can be entered directly with the sum of the weighted scores of the five performance measures (Block Design, Picture Completion, Object Assembly, and Digit Symbol).
2. Some analysts panic when a slight shift in Normal Level produces a change in character of the PAS -- e.g., from a marginal Recc to a marginal Fuc. ("My

God! Is he an R, or an F?") Obviously, he is neither, and both. When test patterns are this sensitive to minor adjustments in scoring, it follows that the psychological adjustment we are dealing with embraces those characteristics that are common to the two neighboring, or overlapping adaptations; and does not contain those qualities that are typically extreme in either case. The marginal Rcc/Fuc, for example, is clearly conventional, sensitive, emotionally controlled, searching for a sense of perspective (since these are qualities of both of these adaptations). He is not given to the rigidity or inflexibility of the prototype R; nor is he susceptible to the confusion or the stress-produced chaos of the prototype F. But because he is keeping a foot on both sides, and not committed in one direction or another, there will be an element of tension in this aspect of his adjustment -- in this case, an effort to maintain balance and control in matters that involve emotion, temperament, and the organization of activity. This person is, by virtue of his ambiguity, emotionally uptight and "stressed" to keep things under control. As long as we understand that and can convey it to the client, it doesn't make much difference whether we call the subject an R or an F.

3. Consider a 14 (Ecc Fuu Acu) with an IQ of 130, and an established reputation for intellectual achievement, emotional control, social conformity, and social poise and effectiveness. An adjustment of the Normal Level to 13, or even 12, shifts the profile toward Ec+c+Fuc Auu, which seems much more consistent with the observed qualities, and attributes greater strength to intellectual control. Meanwhile, as noted in the text, this shift in Normal Level has no

bearing on IQ, which remains the same. We have merely adjusted our perception of the psychological dynamics that characterize this person's adjustment

4. This paper should not be construed as an argument against using NL 29, NL 32, or any of the other relatively complex procedures, insofar as they are found useful to the practitioner. It is, more generally, an argument for giving the practitioner freedom to use that procedure that best suits his particular purpose, as an assessor or researcher.
5. Such a person worked for several years as a transcriber-translator of foreign language broadcasts. He was so effective that his managers decided to retrain him as a supervisor. The prospects were so stressful that he quit altogether. While his good judgment saved his own emotional well-being, his office lost an outstanding transcriber in its efforts to produce a potentially ineffective manager.
6. One subject with this make-up was so addictive when intact, that he was known universally by his colleagues as "Mr. Ambassador". Situational stress drove him to drink; and when he was drunk, his friends lived in continual fear that he would kill himself, either intentionally while in morbid depression, or through sheer accident while driving or falling down the stairs. The therapeutic challenge, amounted to working him into a lifestyle so rewarding that he could give up the alcohol, and manage his life always at the contact level.
7. And systematic approaches are much to be desired. This paper does not intend, either, to be an argument for not calculating the Normal Level, or for using clinical judgment in lieu of actuarial predictions. Much has been written in recent years to demonstrate that good

actuarial processes are superior to clinical intuition (and everybody should read Robyn Dawes article on Linear Models in American Psychologist, July 1979, pp. 571-582).