Defining "High" and "Low" Scores

Given that raw scores on factor scales such as these have no absolute meaning, it may be useful for certain research and policy purposes to be able to classify students according to their scores (e.g., "How many students obtained 'high' scores on Equanimity?" "How much of a net increase in high scorers did we observe over time?")

Since any student's score on one of our measures of spirituality, religiousness, and related qualities reflects the *degree* to which the student possesses the quality being measured, defining "high" or "low" scores is, to a certain extent, an arbitrary decision. Nevertheless, an effort was made to introduce a certain amount of rationality into such definitions by posing the following question: In order to defend the proposition that someone possesses a "high" (or "low") degree of the particular trait in question, what *pattern* of responses to the entire set of questions would that person have to show? Let's use the quality of Equanimity to illustrate the procedure that was followed in answering such a question for each measure.

Equanimity is defined by five items, all of which happen to have three possible responses (scored 1, 2, and 3, respectively). The highest possible score (the highest "degree" of Equanimity) is thus 5 x 3 or 15, while the lowest possible score is 5 x 1 or 5. For three of the items, students were asked, "Please indicate the extent to which each of the following describes you," with the following response options: "to a great extent" (score 3), "to some extent" (score 2), and "not at all" (score 1):

Seeing each day, good or bad, as a gift Being thankful for all that has happened to me Feeling good about the direction in which my life is headed To be classified as being "high" in Equanimity, we decided that the student should respond "to a great extent" to at least two of these items, and at least "to some extent" to the other one. This would generate 8 points on the Equanimity scale (3+3+2).

The other two items comprising the Equanimity scale were preceded by the following instructions: "During the last year, how often have you…", with the following response options: "frequently (score 3), "occasionally" (score 2), and "not at all" (score 1):

Been able to find meaning in times of hardship

Felt at peace/centered

A person possessing a high degree of Equanimity, we felt, would not respond "occasionally" to either of these items. Consequently, we decided that, in order to be classified as "high" on Equanimity, the student should answer "frequently" to both items, which would generate 6 points on the Equanimity scale. Thus, the minimum score required to be classified as a "high" scorer on Equanimity would be 8 + 6 or 14. (Note that if a student happened to respond "occasionally" to either of the last two items, then that student would have to respond "to a great extent" on *all three* of the first three items in order to be classified as a "high" scorer.)

At the other extreme, we decided that a student with a "low" degree of equanimity should answer "not at all" to at least one of the first three items, and no more than "to some extent" on the other two, yielding a maximum of 5 points (1+2+2). If a student happened to respond "to a great extent" on any of these three items, then that student would have to answer "not at all" to *both* of the other two in order not to exceed 5 points. On the final two items, we decided that a student with a low degree of equanimity should

answer no higher than "occasionally" on both, generating 4 additional points (2+2). Answering "frequently" to one of these last two items would require a "not at all" response to the other in order not to exceed the total of 4 points. (A similar "tradeoff" in student responses would be possible, of course, between the first three and the last two items.) Thus, the maximum score to qualify as "low" on equanimity is 5 + 4 or 9 points.

A similar reasoning process was followed in choosing "high" and "low" cutting points on each of the eleven other measures.