

Using Excel to Store & Score FACES IV Data

The design of the Excel file matches the answer sheet from the Administration Manual. You can simply type in each person answers in each row. The data columns have been set up for 500 cases. If you need more cases, you can use the Excel pull down feature to extend the formulas down. A sample Excel file has been included for your review.

The Excel program will also sum the 10 items in the *Family Communication and Family Satisfaction* scales and provide a Total Raw Score and Percentile score for each scale.

I. Creating & Plotting Dimension Scores for Cohesion and Flexibility

The dimension scores for Cohesion and Flexibility are used for plotting the one location of the family onto the updated graphic representation of the Circumplex Model of Couple and Family Systems. **Use percentile score (%), not raw scores.**

In order to create a single score for cohesion and flexibility dimensions, the following formula was created. This dimension score is created by using the balanced score and adjusting it up or down the scale based on whether the difference in the two unbalanced scale is at the high or low of the dimension. Percentile scores are used for each scale, which are derived from the raw scores. There is a table in the Manual for converting raw scores into percentile scores. The formulas for the dimension scores are:

$$\text{Cohesion Dimension Score} = \text{Balanced Cohesion} + \frac{(\text{Enmeshed} - \text{Disengaged})}{2}$$

$$\text{Flexibility Dimension Score} = \text{Balanced Flexibility} + \frac{(\text{Chaotic} - \text{Rigid})}{2}$$

So if the Enmeshed score is higher than Disengaged, then the Balanced cohesion score is adjusted upward. If the Disengaged score is higher than the Enmeshed, the Balanced cohesion score is adjusted downward. **** Note: in some cases, the Dimension scores can be a negative number or over 100.**

II. Creating Circumplex Ratio Scores (for research purposes)

The Excel program will also create a *Cohesion Ratio, Flexibility Ratio and Total Circumplex Ratio* scores. This Balanced/Unbalanced ratio score is very useful since it indicates the level of functional versus dysfunctional behavior perceived in the family system. The ratio score is obtained by assessing the Balanced/Average Unbalanced score for each dimension. The lower the ratio score below one, the more unbalanced the system. Conversely, the higher the ratio score above one, the more balanced the system. The formulas are:

$$\text{Cohesion Ratio} = \text{Balanced Cohesion} / \frac{(\text{Disengaged} + \text{Enmeshment})}{2}$$

$$\text{Flexibility Ratio} = \text{Balanced Flexibility} / \frac{(\text{Rigid} + \text{Chaotic})}{2}$$

$$\text{Total Circumplex Ratio} = (\text{Cohesion Ratio} + \text{Flexibility Ratio}) / 2$$