

Running reliability analysis on scale based questionnaires

Procedure:

IMPORTANT: - before starting, make sure you check that all negatively worded items in your scale have been reversed/recoded. If you don't do this, you will find that you have very low (and incorrect) Cronbach alpha values.

- 1) Select '**Analyse**' from the menu at the top
- 2) Select '**Scale**', then '**Reliability Analysis**'
- 3) Click on all of the individual items that make up the scale (all the reverse scored items must be included in place of original ones!)
- 4) In the **Model** section, make sure **Alpha** is selected (should be automatically selected)
- 5) In the **Scale label** box, type in the name of the scale or subscale (for example, sensation seeking)
- 6) Click on the **Statistics** button to the right hand side. In the **Descriptives for** section, select **Item**, **Scale** and **Scale if item deleted**. In the **Inter-Item** section, click on **Correlations**. In the **Summaries** section, click on **Correlations**.
- 7) Click on 'Continue' and then OK.

Interpreting the results:

Case processing summary: check that the number of cases is correct (the number of participants)

Reliability statistics: check the **Cronbach's Alpha**. Values above .7 are considered acceptable; however values above .8 are preferable. This statistic will give you an indication of whether the scale you are using is measuring what you want it to be measuring!

Inter-Item Correlation Matrix: you want to be checking this for negative values. All values SHOULD be positive, indicating that the items are measuring the same underlying characteristic. The presence of negative values could indicate that some of the items have not been correctly reverse scored.

Item-Total Statistics: the CORRECT ITEM-TOTAL CORRELATION will give you an indication of the degree to which each item correlates with the total score. Low values (less than .3) here indicate that an item is measuring something different from the scale as a whole. If your scale's overall Cronbach Alpha is too low (e.g., less than .7) and you have checked for incorrectly scored items, you may need to consider removing items with low item-total correlations.

Item-Total Statistics: the CRONBACH'S ALPHA IF ITEM DELETED will give you an indication of the impact of removing each item from the scale. Compare these values with the final alpha value obtained. If any of the values in this column are higher than your final alpha value, you may want to consider removing this item from the scale. This is useful if you are developing a scale, but if you are using established, validated scales, removal of items means that you could not compare your results with other studies using the scale.