

Survey Project  
Data Analysis Guide

I. Computing Scale Scores.

- In the data file that I have given you, I have already done the following.
  - Selected the items that will be used for the Radford Morality Questionnaire measure that we created.  
Dropped Items (item total correlations): rmor1 (.187), rmor4r (.241), rmor11r (.084), rmor13r (.270), rmor17r (.242), rmor30r (.118), rmor31 (.113), rmor33r (.257).
    - Note: rmor4r, rmor11r, rmor13r, rmor17r, rmor30r, and rmor33r are all items have been reverse scored (see below).
  - Reverse scored all of the appropriate items.
    - For: Disgust Sensitivity: items 1, 6, & 18
      - A new variable was created for each of these so that a higher score indicates greater sensitivity to disgusting stimuli
      - Select **Transform** from the pull down menu in the data editor window
      - Transform => Compute
      - Target Variable = ds1r
      - Variable Label = Disgust Sensitivity Item 1 reverse scored (2-ds1)
      - Numeric Expression = 2-ds1
    - By subtracting each person's score from 2 it turns all the 2s into 0s, all the 1s to 1s, and all the 0s into 2s. This keeps the meaning of responses to these items consistent with the other items in the scale, where a higher score indicates greater disgust sensitivity.

For: International Personality Item Pool Morality Measure: Items 3, 5, 6, 7, 9, 10, 12

- A new variable was created for each reversed item (e.g. mor2r, mor5r, etc), so that a higher score indicates a greater sensitivity to disgusting stimuli.
- The procedure was the same, except for the numerical expression uses 8 as the base (e.g., 8-mor2), so all the 7s become 1s and the 1s become 7s.

For: Radford Morality Measure: Items 3, 4, 7, 10, 11, 12, 13, 17, 24, 26, 29, 30, 32, 33.

- Again, new variables were created for each reversed item (e.g., rmor3r, rmor4r, rmor7r, etc.).

- Calculated the Alpha Coefficient (measure of internal consistency)

Disgust Sensitivity Total:	.902
IPIP Morality Measure:	.757
Radford Morality Measure:	.882

Note: Report these alphas with the means, standard deviation, and ranges in the *Measures* section of the methods.

- Using the Compute commands, I averaged the items of each scale together to form a single score for each measure.

I computed the Disgust Sensitivity Total score by doing the following.

- Select **Transform** from the pull down menu in the data editor window
- Transform => Compute.
- Target Variable = dstotal
- Variable Label = Disgust Sensitivity Total Scale Score (average of all items)

- Numeric Expression: MEAN(ds1r, ds2, ds3, ds4, ds5, ds6r, ds7, ds8, ds9, ds10, ds11, ds12, ds13, ds14, ds15, ds16, ds17, ds18r, ds19, ds20, ds21, ds22, ds23, ds24, ds25, ds26, ds27, ds28, ds29, ds30, ds31, ds32).

Note: This function averages all the responses on these items together for each subject. You could also just add each item and divide by the number of items [e.g., (ds1r+ds2 + ds3 + ds4 ..... + ds37)/32].

- Click OK when you are done and the new variable is added to the end (right) of the data view spreadsheet (bottom of the variable view spreadsheet).

IPIP Morality Measure total score. Average of all scale items.

- Select **Transform** from the pull down menu in the data editor window

- Transform => Compute.

- Target Variable = mortot

- Variable Label = IPIP Morality Measure Total Score (average of all items)

- Numeric Expression: MEAN( mor1, mor2, mor3r, mor4, mor5r, mor6r, mor7r, mor8, mor9r, mor10r, mor11, mor12r).

- Click OK when you are done and the new variable is added to the end (right) of the data view spreadsheet (bottom of the variable view spreadsheet).

Radford Morality Measure total score. Average of all items that were retained.

- Select **Transform** from the pull down menu in the data editor window

- Transform => Compute.

- Target Variable = rmortot

- Variable Label = Radford Morality Measure Total Score (average of all items)

- Numeric Expression: MEAN(rmor2, rmor3r, rmor5, rmor6, rmor7r, rmor8, rmor9, rmor10r, rmor12r, rmor14, rmor15, rmor16, rmor18, rmor19, rmor20, rmor21, rmor22, rmor23, rmor24r, rmor25, rmor26r, rmor27, rmor28, rmor29r, rmor32r, rmor34, rmor35).

- Click OK when you are done and the new variable is added to the end (right) of the data view spreadsheet (bottom of the variable view spreadsheet).

## II Descriptive Analyses

- These analyses should be reported in the Methods section. Some of this information should be presented in the *Participants* section. The rest will be reported in the *Measures* section.

### A. Descriptive Analyses for Main Variables

#### 1. Descriptive Statistics for Continuous Variables

- Analyze —> Descriptive Statistics—>Descriptives

- Variable(s) = dstotal, mortot, rmortot.

- Request all statistics = Mean, Sum, Kurtosis, Skewness, Standard Deviation, Variance, Range, Minimum, Maximum, Standard Error of the Mean.

- Paste to Syntax Sheet

#### DESCRIPTIVES

VARIABLES= dstotal mortot rmortot

/STATISTICS=MEAN SUM STDDEV VARIANCE RANGE MIN MAX SEMEAN KURTOSIS SKEWNESS .

Report =

- *Measures* = For each measure (Disgust Sensitivity, IPIP Morality Measure, and Radford Morality Measure), provide separate paragraphs describing each measure (type and number of items), what it asks participants to do (e.g. characteristics of the rating scale), sample items, how it is scored (summed vs averaged), and what a

high/low score indicates. Also, at the end of each paragraph present the *M*, *SD*, *Range* and Alpha for each scale.

- Descriptive data could also be reported in a single table.

## 2. Scale Intercorrelations

- For our new morality measure we need to report the convergent validity which is indicated by the correlation between the established measure of morality and our new measure.

- Analyze → Correlate → Bivariate...

- Variables = mortot, rmortot

- Paste the syntax

### CORRELATIONS

```
/VARIABLES=rmortot mortot
```

```
/PRINT=TWOTAIL NOSIG
```

```
/MISSING=PAIRWISE .
```

Report =

- *Measures* = For the Radford Disgust Questionnaire report the correlation between Disgust Sensitivity and Radford Disgust Questionnaire.

- This could also be reported in a *Preliminary Analyses* subsection of the *Results* instead.

## B. Descriptive Analyses for Demographic Variables

### 1. Frequencies for Discrete Variables.

- Analyze → Descriptive Statistics → Frequencies

- Variable(s) = sex ethnic relstat order.

- Do not request any statistics or charts

- Paste to Syntax Sheet

### FREQUENCIES

```
VARIABLES=sex ethnic relstat order
```

```
/ORDER= ANALYSIS .
```

Report =

- *Participants* = Total number of Participants (n=?). Gender = % Male, % Female; Ethnicity %'s, Relationship Status %

- *Procedures* = Packet Order %

### 2. Descriptive Statistics for Continuous Variables

- Analyze → Descriptive Statistics → Descriptives

- Variable(s) = age, gpacur, gpahs

- Request all statistics = Mean, Sum, Kurtosis, Skewness, Standard Deviation, Variance, Range, Minimum, Maximum, Standard Error of the Mean.

- Paste to Syntax Sheet

### DESCRIPTIVES

```
VARIABLES=age gpacur gpahs
```

```
/STATISTICS=MEAN SUM STDDEV VARIANCE RANGE MIN MAX SEMEAN KURTOSIS SKEWNESS .
```

Report =

- *Participants* = Age range (Minimum age - Maximum age), Mean Age, Mean current GPA

## III. Demographic Analyses

- Should be reported as the first sub-section of the Results section.
- Age and GPA x Main Variables (dstotal, mortot, rmortot)
  - Analyze => Correlate => Bivariate
  - Variables = dstotal, mortot, rmortot, age, gpacur, gpahs,
  - Paste.

Note: in the syntax of the correlation you will need to insert the word “with” in the list of variables between **rmortot** and **age**. This will break the correlations up so that you get a 3 x 3 matrix of correlations instead of an 6 x 6 list of correlations. It really makes reading the output much easier, though it will not show you the correlations between age and gpacur and gpahs, nor will it show the correlations between the main variables.

#### CORRELATIONS

```
/VARIABLES=dstotal mortot rmortot with age gpacur gpahs
/PRINT=TWOTAIL NOSIG
/MISSING=PAIRWISE .
```

- Sex x Main Variables
  - Analyze => Compare Means => Independent Samples T Test
  - Test Variables = dstotal, mortot, rmortot
  - Grouping Variable = sex
    - Define Groups: Use Specified Values: Group 1 = 1, Group 2 = 2.
  - Paste.

#### T-TEST

```
GROUPS = sex(1 2)
/MISSING = ANALYSIS
/VARIABLES =dstotal mortot rmortot
/CRITERIA = CI(.95) .
```

- Ethnicity, Relationship Status, & Order x Main Variables
  - Normally you would need to test all of the demographic variables with the main variables of interest. However, I have already done these and none of them are significant. As the analyses below will not be covered until you take 202, you do not have to run them. However, if you decide to do them, they can be completed by following the steps below.
  - Analyze => Compare Means => One Way Anova
  - Dependent List = dstotal, mortot, rmortot
  - Factor = ethnic
  - Post Hoc = LSD
  - Options = Descriptives
  - Paste

Once you paste the syntax for the Ethnicity Anova, just copy it and paste it and replace **ethnic** with **relstat**. Then paste it again and replace **ethnic** with **order**. So you will end up with three separate Oneway syntax commands.

#### ONEWAY

```
dstotal mortot rmortot BY ethnic
/STATISTICS DESCRIPTIVES
/MISSING ANALYSIS
/POSTHOC = LSD ALPHA(.05).
```

#### ONEWAY

```
dstotal mortot rmortot BY relstat
/STATISTICS DESCRIPTIVES
```

```
/MISSING ANALYSIS
/POSTHOC = LSD ALPHA(.05).
```

```
ONEWAY
dstotal mortot rmortot BY order
/STATISTICS DESCRIPTIVES
/MISSING ANALYSIS
/POSTHOC = LSD ALPHA(.05).
```

### Reporting Results

- For the demographic analyses section, only report the statistical information for analyses that are significant.

## IV. Main Analyses

- Correlations between Disgust Sensitivity, Gender Roles, and Attachment Scales
  - Analyze => Correlate => Bivariate
  - Variables = dstotal, mortot, rmortot
  - Paste and insert “with” between **dstotal** and **mortot** before you run them.

### \*Main Analyses

```
CORRELATIONS
/VARIABLES= dstotal with mortot rmortot
/PRINT=TWOTAIL NOSIG
/MISSING=PAIRWISE .
```

### - Report

- I would like for you to report the correlations in a table and in the text of the Main analyses section. (Though normally you would do one or the other, but you need the practice)
- The format for reporting a correlation is  $r(df) = .??, p < .0?$
- if the correlation is non-significant then  $r(df) = .??, p > .05$ . Or  $r(df) = .??, p < .??, ns$ .
- Remember, for each analysis, restate the hypothesis, tell how it was tested (Pearson’s Product Moment Coefficient or Pearson’s  $r$ ), tell whether it was significant and report the statistic, and then tell the reader what it means with respect to people and their behaviors (see the paper writing guides for examples)

The table should look something like the one bellow (it should be on its own page after the references)

Table 1

### *Correlations between Disgust Sensitivity, IPIP Morality Measure, and the Radford Morality Measure*

	IPIP Morality	Radford Morality
Disgust Sensitivity	.??**	.??***

Note. \* =  $p < .05$ , \*\* =  $p < .01$ , \*\*\* =  $p < .001$ .