



Florida Atlantic University
Christine E Lynn College of Nursing

Preliminary Steps in Setting up Data Analysis

Presented by:

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Topics

1. Coding of your Data
 - a. Coding Binary and Categorical Variables
 - b. Codebook/ Data Dictionary
2. Data Entry- Have ID for Matching if RM
 - a. Importing From Excel
3. Data Structure and Restructuring (Depends on Analysis)
 - a. Wide (Simple Correlations and RM Analysis)
 - b. Stacked (Advanced RM and Nested Designs)
4. Data Validation
5. Computing Variables
 - a. Revers Coding
 - b. Scales and Subscales
 - c. Dates

General Information

(Please check the ONE most appropriate choice for each question below; if you are responding to a couple, please use the highest appropriate answer choice among the two of you.)

1. **Marital Status:** Married _____ Single _____

2. **Gender:** Male _____ Female _____

3. **If married:** Do you give as a couple _____ OR _____ as an independent individual _____

4. **If married and giving as an individual:** are you the: husband _____ wife _____ SA _____

5. **Age:** Under 20 _____ 20 to 30 _____ 31 to 40 _____ 41 to 50 _____ 51 and older _____

6. **Highest level of education you have received:**

High School _____ Trade or Vocational School _____ Community College _____
Four year University Degree _____ Graduate School _____ Other _____

7. **In what region are you currently working and living:**

North Central _____ Northeast _____ South West _____
South Central _____ Southeast _____ South West _____

8. **How much money do you have:**

None \$100,000 _____ \$100,000 - \$200,000 _____ \$200,000 - \$500,000 _____ above \$500,000 _____

Involvement with The Serv Company

Have You... _____

A ... used any of our leadership tools? Yes _____ No _____ More than once? Yes _____ No _____

B ... use our assessment system? Yes _____ No _____ More than once? Yes _____ No _____

C ... attended our event or program at a local business or school venue? Yes _____ No _____

D ... learned events or programs with us in your home or a local venue? Yes _____ No _____

E ... attended a President's Forum? Yes _____ No _____ More than once? Yes _____ No _____

F ... thought an additional effort to attend a President's Forum? Yes _____ No _____

G ... had a relationship with one of our development representatives? Yes _____ No _____

H ... ever been on a service trip (with us)? Yes _____ No _____ With us? Yes _____ No _____

I ... presented our work to your local church or other Christian group? Yes _____ No _____

SPSS Homework 3 Data RM ANOVA.sav [DataSet1] - IBM SPSS Statistics Data Editor

	Name	Type	Width	Decimals	Label	Values
1	ID	Numeric	8	2	None	
2	Gender	Numeric	8	2	1.00, Female	
3	Memmeranta	Numeric	8	2	1.00, Control	
4	Age	Numeric	8	2	None	
5	Ethnicity	Numeric	8	2	11.00, EAJ	
6	Birth_Date	Date	10	0	None	
7	Birth_City	String	8	0	None	
8	Memory_Test0	Numeric	8	2	None	
9	Memory_Test1	Numeric	8	2	None	
10	Memory_Test2	Numeric	8	2	None	
11	Memory_Test3	Numeric	8	2	None	
12	Memory_Test4	Numeric	8	2	None	

Memory_Test1

	ID	Gender	Memmeranta	Age	Ethnicity	Birth_Date	Birth_City	Memory_Test1
1	1.00	00	00	66.00	1.00	12/21/1979	Avondale	3.00
2	2.00	00	100	67.00	1.00	07/21/1980	Scottsdale	4.00
3	3.00	00	00	70.00	2.00	11/04/1973	Tampa	4.00
4	4.00	100	100	74.00	3.00	02/02/1952	Miami	4.00
5	5.00	100	00	68.00	2.00	06/15/1959	Denver	3.00
6	6.00	100	100	66.00	4.00	06/15/1934	Cleveland	3.00
7	7.00	00	00	73.00	4.00	06/03/1970	San Francisco	2.00
8	8.00	00	00	66.00	2.00	02/08/1957	Atlanta	2.00
9	9.00	00	00	60.00	2.00	04/11/1933	Scottsdale	2.00
10	10.00	100	100	64.00	2.00	07/04/1958	Avondale	3.00
11	11.00	100	00	66.00	4.00	08/15/1953	Miami	2.00
12	12.00	100	100	71.00	1.00	03/15/1955	Miami	4.00
13	13.00	100	00	77.00	1.00	03/26/1953	Scottsdale	3.00
14	14.00	100	100	72.00	2.00	05/15/1948	Scottsdale	2.00
15	15.00	100	00	85.00	2.00	04/28/1950	Miami	4.00
16	16.00	00	100	78.00	2.00	03/28/1952	Denver	3.00
17	17.00	00	100	88.00	2.00	04/15/1948	Scottsdale	3.00
18	18.00	00	00	78.00	1.00	02/18/1934	Cleveland	2.00

Coding Data from a Survey

1. Coding Dichotomous Variables
2. Coding Categorical Variables
 1. Dummy Coding -Categorical
3. If you can Select Multiple Choices

General Information

(Please check the ONE most appropriate choice for each question below; if you are responding as a couple, please use the highest appropriate answer from among the two of you.)

1. **Marital Status:** Married Single
2. **Gender:** Male Female
3. **If married:** Do you give as a couple OR as an independent individual
4. **If married and giving as an individual,** are you the: husband wife NA
5. **Age:** Under 29 29 to 38 39 to 56 57 to 64 65 and older
6. **Highest level of education you have received:**
 High School Trade or Vocational School Community College
 Four year University Degree Graduate School Other
7. **In what region are you currently working and living:**
 North Central Northeast North West
 South Central Southeast South West
8. **Household annual income:**
 Below \$150,000 \$150,000 - \$250,000 \$250,000 - \$500,000 above \$500,000

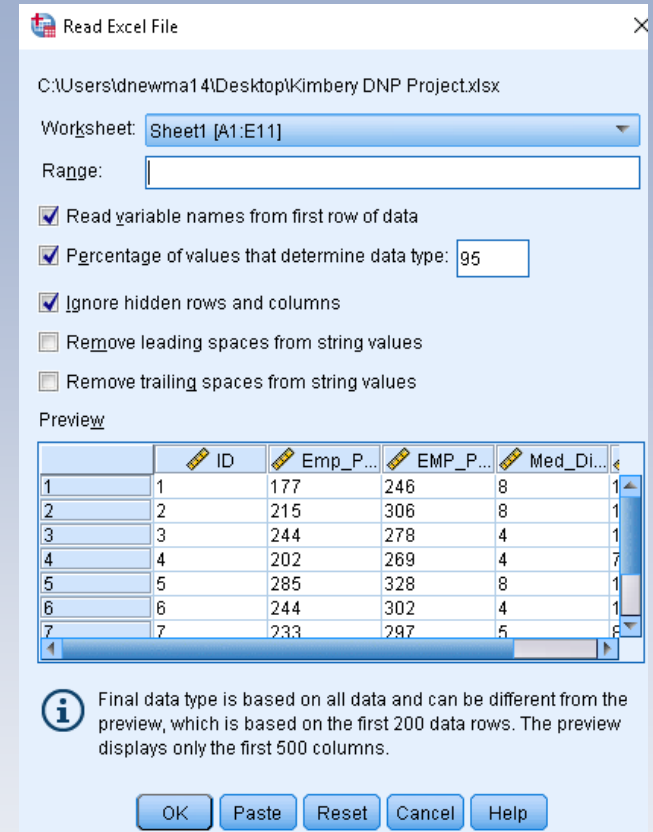
Involvement with The Seed Company

Have You....

- | | | | |
|--|--|-----------------|--|
| A ... met any of our leadership team? | Yes <input type="checkbox"/> No <input type="checkbox"/> | More than once? | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| B ... met our international partners? | Yes <input type="checkbox"/> No <input type="checkbox"/> | More than once? | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| C ... attended our events or programs at a friend's home or a local venue? | | | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| D ... hosted events or programs with us in your home or a local venue? | | | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| E ... attended a President's Forum? | Yes <input type="checkbox"/> No <input type="checkbox"/> | More than once? | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| F ... brought or influenced others to attend a President's Forum? | | | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| G ... built a relationship with one of our development representatives? | | | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| H ... ever been on a mission trip before? | Yes <input type="checkbox"/> No <input type="checkbox"/> | With us? | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| I ... presented our work to your local church or other Christian groups? | | | Yes <input type="checkbox"/> No <input type="checkbox"/> |

Importing from Excel and Reverse Coding

1. Save Excel to Desktop.
2. Open SPSS
3. Under File Click on Open then Data.
4. Under Look in Select **Desktop** the Select File Type of **Excel**
5. Reverse Coding if required enter straight from data sheet and recode later.



Data Structure

1. Wide Databases: Every ID only has one row. (Correlation, Dependent t-test, Repeated Measures ANOVA, MLR)

<https://youtu.be/MWwsd5orXDw>

2. Stacked Databases: Every Time point has its own row with IDs Repeating themselves. (Advances RM Analysis: GLMM, HLM, GEE, MLR with person vectors)

<https://youtu.be/-GNRFeHAVy0>

Wide

File Edit View Data Transform Analyze Direct Marketing Graphs Utilities Extensions Window Help

19 : Memory_Test.1 3.00

	ID	Gender	Memmera nta	Age	Ethnicity	Birth_Dat e	Birth_City	Memory_ Test.0	Memory_ Test.1	Memory_ Test.2	Memory_ Test.3	Memor_ Test.4
1	1.00	.00	.00	65.00	1.00	12/12/1978	Akron	3.00	3.00	3.00	4.00	5.
2	2.00	.00	1.00	67.00	1.00	07/12/1948	Boca	4.00	5.00	5.00	6.00	8.
3	3.00	.00	.00	70.00	2.00	11/04/1973	Tampa	4.00	3.00	4.00	4.00	4.
4	4.00	1.00	1.00	72.00	3.00	02/02/1952	Miami	4.00	4.00	5.00	5.00	7.
5	5.00	1.00	.00	69.00	3.00	05/15/1980	Denver	3.00	3.00	4.00	5.00	5.
6	6.00	1.00	1.00	66.00	4.00	06/15/1984	Cleveland	3.00	4.00	5.00	6.00	9.

Stacked

File Edit View Data Transform Analyze Direct Marketing Graphs Utilities Extensions Window Help

1 : Time 1

	ID	Time	Birth_City	Gender	Memmera nta	Age	Ethnicity	Birth_Dat e	Memory
1	1.00	1	Akron	.00	.00	65.00	1.00	12/12/1978	3.00
2	1.00	2	Akron	.00	.00	65.00	1.00	12/12/1978	3.00
3	1.00	3	Akron	.00	.00	65.00	1.00	12/12/1978	3.00
4	1.00	4	Akron	.00	.00	65.00	1.00	12/12/1978	4.00
5	1.00	5	Akron	.00	.00	65.00	1.00	12/12/1978	5.00
6	2.00	1	Boca	.00	1.00	67.00	1.00	07/12/1948	4.00
7	2.00	2	Boca	.00	1.00	67.00	1.00	07/12/1948	5.00
8	2.00	3	Boca	.00	1.00	67.00	1.00	07/12/1948	5.00
9	2.00	4	Boca	.00	1.00	67.00	1.00	07/12/1948	6.00
10	2.00	5	Boca	.00	1.00	67.00	1.00	07/12/1948	8.00
11	3.00	1	Tampa	.00	.00	70.00	2.00	11/04/1973	4.00
12	3.00	2	Tampa	.00	.00	70.00	2.00	11/04/1973	3.00
13	3.00	3	Tampa	.00	.00	70.00	2.00	11/04/1973	4.00
14	3.00	4	Tampa	.00	.00	70.00	2.00	11/04/1973	4.00
15	3.00	5	Tampa	.00	.00	70.00	2.00	11/04/1973	4.00

Data Validation

1. Descriptive Statistics Min and Max
 - a. Are data out of range.
 - b. Are the means reasonable
2. Frequencies
 - a. Search for out of range values
3. Missing Value Analysis

More YouTube Videos

1. Recode into Same or Different Variable

1. Same variable is faster
2. Different variable to keep initial values.

<https://youtu.be/xKJisOMvY54>

2. Compute Variables

1. Add up variables
2. Sum variables using (Sum)

<https://youtu.be/gtue2c7O8VA>