# PSY 510 SPSS Assignment 3

**Before you begin the assignment:**

* Review the video tutorial in the Module Seven resources for an overview of conducting correlational analyses in SPSS.
* Download and open the Album Sales SPSS data set (this is the same data set that was used in SPSS Assignment 2). Data adapted from Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed.). Thousand Oaks, CA: Sage Publications, Inc.

**An overview of the data set:**

This data set contains data for 200 different rock albums (i.e., each row in the data set represents the data for one album). Specifically, the following variables are included:

* **AlbumNumber:** This is the ID number of the album. There are 200 albums, so this variable ranges from 1 to 200.
* **RecordCompany:** This is the record company that promoted the album. Values of “1” stand for Next Generation Records, and values of “2” stand for Worldwide Entertainment.
* **Adverts:** This is the advertising budget of the album. The values are in thousands of dollars.
* **Sales:** These are the sales of the album. The values are in thousands of sales.
* **Airplay:** This is the number of times that the album was played on the radio in the last year.
* **Attract:** This is the overall physical attractiveness of the band as rated by independent raters. The values for this variable range from 1 to 10.

**Questions:**

1a) Use a scatterplot to examine the relationship between **Adverts** and **Airplay**.

*Paste your scatterplot below:*

1b) From the scatterplot, does there appear to be a strong correlation between **Adverts** and **Airplay**? If so, is the relationship positive or negative?

*Type your answer below:*

2a) Use a matrix scatterplot to examine all of the relationships between **Sales, Adverts**, and **Airplay**.

*Paste your relevant output below:*

2b) Describe the relationships between the variables. More specifically, do any of the variables appear strongly correlated? If there are correlations, is the relationship positive or negative?

*Type your answer below:*

3a) Examine the correlation between **Adverts** and **Airplay**.

*Paste your relevant output below:*

3b) Describe this correlation. What is the r-value? Does the r-value suggest a positive or negative correlation? Is the correlation weak or strong? Looking at the significance value, is the correlation significant?

*Type your answer in complete sentences below:*

4a) Create a correlation matrix that depicts the correlations between **Sales, Adverts**, and **Airplay**.

*Paste your relevant output below:*

4b) Are there any significant correlations between the variables? If so, explain which variables are correlated, and describe the nature of the correlation (i.e., positive or negative).

*Type your answer below:*

5a) Create an example of two variables (unrelated to the Album Sales data set) that you think would be negatively correlated. Describe the variables below.

*Type your answer below:*

5b) Create a new SPSS dataset that includes the two variables described in 5a. Enter hypothetical data for at least 10 participants. Run a scatterplot and then calculate the correlation using SPSS.

*Paste your relevant output below:*

5c) Describe the correlation that exists in your hypothetical data. Is it positive or negative? Is it significant?

*Type your answer below:*