**Unit 4 Discussion Question Revision**

Develop a hypothetical multiple regression (prediction) equation to predict something in your area of professional or personal interest.

1. **Identify the Variables:** First you should identify the dependent (criterion) variable that you are interested in predicting. What variable do you plan to predict? Next, choose two variables (called independent) that you will use to predict your chosen dependent criterion variable. List and describe your two chosen independent predictor variables, and why you feel that they are appropriate for predicting your dependent variable.
**b. Create – make-up at least 10 values for y, x1, and x2**. Your values should be based on research and common sense/knowledge. Use this table:

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| --- | --- | --- |
| Value of y | Value of x1 | Value of x2 |
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**c. Calculate two correlation coefficients in SPSS**: 1) the correlation coefficient for your x1 independent variable and your y-variable, and 2) the correlation coefficient for your x2 independent variable and your y-variable. Which of your two independent predictor variables has the strongest correlation with your dependent criterion variable? Explain. Include your output from SPSS.

**d.** Using your dependent criterion variable as “y,” and your predictor independent variables as x1 and x2, **use SPSS to create the multiple regression prediction equation** based on your table of 10 (or more) values for y, x1, and x2. Use your output from SPSS to write the standard equation **Ŷ = a + b1x1 + b2x2**.

**e.** **Use values for x1 and x2 to predict y using the equation you created in Step D**. Your value for x1 should fall within the range of values for x1 listed in your Step B table. Your value for x2 should fall within the range of values for x2 listed in your Step B table. Show your work.