<u>Article Assignment 1 – Descriptive Statistics (10% of Final Grade):</u>

Goal: To develop a skill in and demonstrate the ability to move beyond the classroom and apply statistics to real-world research.

Directions: Find the article cited below, carefully and thoroughly read through the article, and answer the questions that follow.

Please **type your answers, Times New Roman, size 11 or 12 font, 1-inch margins**. This is a substantial assignment that needs to be formatted well. Be sure to have each question correctly numbered according to the questions below (i.e. make sure the numbers to your answers line up with the numbers to the questions, I should know I am grading your answer to question 3 by it being labeled with a 3). Short answer style questions need to be only a paragraph in length, I do not need page-long answers.

<u>I expect answers to be in your own words.</u> You may work together on the assignment, but must turn in your own work with your own answers and analyses. Keep quotes directly from the article <u>to a minimum</u>, but if you do use a quote from the article, or any other source for that matter, <u>be sure to properly cite using ASA or APA format *only*</u>.

Grading will be based on substance, accuracy, understanding of sociological and statistical language, and writing skills. Please see the attached rubric to better understand the grading of the assignment.

Turn this assignment in via Canvas by **<u>Wednesday, February 17th at 1:00 PM</u>**. This assignment is worth **<u>10% of your final grade</u>**.

Article: This article is in Canvas or can be found through the WSU library.

Rufai, Sohaib R. and Catey Bunce. 2020. "World Leaders' Usage of Twitter in Response to the COVID-19 Pandemic: A Content Analysis." *Journal of Public Health* (3):510–516. (https://doi-org.proxy.lib.wayne.edu/10.1093/pubmed/fdaa049).

Questions: Answer the following questions.

1. What is the primary research objective? (May be direct quote, properly cite.)

    a. Why might it be important to explore and examine this research objective? In other words, why does this research objective matter?

2. What are two of the secondary research objectives? (May be direct quote, properly cite.)

    a. How do these secondary research objectives help/assist in examining and understanding the primary research objective? In other words, how does understanding the secondary research objectives lead to better understanding of the primary research objective?

3. What data was collected on March 18, 2020. In other words, what variables or "outcome measures" were collected?

4. **Thematic Analysis**: *Themes*. Tweets were organized into the variable tweet "themes," what three categories/attributes made up the variable "theme"? What is the level of measurement and the best measure of central tendency? Find/report the value for the best measure of central tendency. Report how many tweets were in each theme, as a percentage. (Hint: Figure 1 provides the necessary numerical data.)

    a. Interpret your findings. Explain why you chose the level of measurement you did, as well as the measure of central tendency. What theme was used most?

5. **Table 1 Analysis**: *Followers (in millions)*. Identify the level of measurement, median, mean, and standard deviation for the "followers" variable. (You will need to calculate these answers.)

    a. Discuss your findings/evaluation of the "followers" data. Is there a skew to the data, in what direction and by whom, what does the median, mean, and standard deviation tell us about the data?

6. **Figure 1 Analysis**: *Informative*. Identify the level of measurement, median, mean, and standard deviation for "informative" tweets. (You will need to calculate these answers.)

    a. Discuss your findings/evaluation of the "informative tweets" data. Is there a skew to the data, in what direction and by whom, what does the median, mean, and standard deviation tell us about the data?

7. **Interpretation**: Discuss the main findings of the article and why they might be important. Use a sociological perspective. (If you're in another program, such as public health, use the paradigms/perspectives of your respective field.) In other words, why is it important to understand how world leaders use Twitter with regards to a public health crisis?

8. **Extra Credit**: What criticisms do you have of this paper? What are the strengths and weaknesses to the paper? Must relate to a sociological understanding of the paper. Could be the methods, the research question, the findings, etc.

*See rubric and rubric criteria on following two pages.

Evaluation Criteria: Article Assignment 1 (10%) – 100 Points Possible:

Question	Exemplary	Very Good	Satisfactory	Acceptable	Unacceptable
# 1	2.5	2	1.5	1	.5
# 1. a	5	4	3	2	1
# 2	2.5	2	1.5	1	.5
# 2. a	5	4	3	2	1
# 3	5	4	3	2	1
# 4	10	8	6	4	2
# 4. a	10	8	6	4	2
# 5	10	8	6	4	2
# 5. a	10	8	6	4	2
# 6	10	8	6	4	2
# 6. a	10	8	6	4	2
# 7	10	8	6	4	2
Grammar/ Spelling/ Presentation of Material	10	8	6	4	2
# 8 (Extra Credit)	+5	0	0	0	0

*Grading criteria are flexible, depend on overall quality of the assignment, and are subject to change.

Excellent – The student shows clear grasp of the material. All components have been addressed/answered. There are no errors in the answer (including grammar/spelling). Student has clearly interpreted solution in highly articulate sociological and statistical language.

Very Good – The student shows a good grasp of the material. All components of the have been addressed/answered. There are very few errors in the answer (including grammar/spelling). Student has interpreted solution in articulate sociological and statistical language.

Satisfactory – The student shows satisfactory grasp of the material. Most components have been addressed/answered. There are few errors in the answer (including grammar/spelling). Student has interpreted solution in decipherable sociological and statistical language.

Acceptable – The student shows questionable grasp of the material. Incomplete solutions/answers which demonstrates partial comprehension of the skill. Most components of the question have been addressed/answered. Errors in the answer (including grammar/spelling) are significant. Student has interpreted solution incompletely or misused sociological and statistical language.

Unacceptable – The student shows poor grasp of the material. Poor solution which demonstrates little to no comprehension of the skill. Few components of the question have been answered. Errors in the answer (including grammar/spelling) are striking. Student has misinterpreted solution completely or used unclear or incorrect sociological and statistical language.