Unit 3 Assessment - Descriptive Statistics

Start Assignment

* **Due** Sunday by 11:59pm

* **Points** 70

* **Submitting** a text entry box or a file upload

Instructions

In this assignment, you will be required to calculate descriptive statistics for each numeric variable in the Heart Rate Dataset

Steps

1. Open the Heart Rate Excel Dataset In [Read Me First](https://herzing.instructure.com/courses/24850/pages/heart-rate-dataset)
2. Sort the quantitative variables by class (e.g., Male at-rest heart rate and Female at-rest heart rate)
3. Use the Excel Data Analysis ToolPak\* tools to calculate each of the following statistics:
   1. Mean of each quantitative variable
   2. Sample variance of each quantitative variable
   3. Sample standard deviation of each quantitative variable
4. Create a table in Excel that summarizes the statistics for each variable.
5. Transfer your summary results to Word.
6. Interpret what the mean and standard deviation specifically tell you about the heart rates of males and females in the sample.  Are the heart rates for males or females higher?  Which data is more spread out and which is closest to the overall mean rate? Explain your responses.

**In the topic "Measures of Center", you were provided directions on how to upload the Data Analysis ToolPak to Excel. If you have not yet uploaded the add-in Data Analysis ToolPak, please view the appropriate video and follow the instructions.  You will not be able to complete this assignment without that add-in.**

**How to Install the Data Analysis ToolPac in Microsoft Excel**

https://youtu.be/\_yNxLFagKgw

(Quantitative Specialists, 2013)  
Estimated time to complete: 2 minutes

**How to Add the Data Analysis ToolPak in Excel on Mac 2018**

(Ben G. Kaiser, 2018)  
Estimated time to complete: 2 minutes

**Installing Excel Toolpak (Data Analysis) on Mac (versions other than 2018)**

https://youtu.be/HJay\_paA6T4

(Joseph C., 2016)

https://youtu.be/mtmrAXwLcuU

Estimated time to complete: 1 minute

For a review of how to use the Data Analysis ToolPak to create summary statistics

**Review: Descriptive Statistics in Excel Mean, Median, Mode …**

Directions: Review this video on how to use the Data Analysis ToolPak to create summary statistics.

(Joshua Emmanuel, 2017)

Estimated time to complete: 1 minute

Additional Instructions:

Your assignment should be typed into a Word or other word processing document, formatted in APA style. The assignments must include

* Running head
* A title page with
  + Assignment name
  + Your name
  + Professor’s name
  + Course

Estimated time to complete: 3 hours

References

Ben G Kaiser. (2018).&nbsp; How to add the Data Analysis ToolPak in Excel on Mac 2018 [Video]. Retrieved from https://youtu.be/HJay\_paA6T4

Joseph C. (2016). Installing Excel Toolpak (Data Analysis) on Mac [Video].&nbsp; Retrieved from https://youtu.be/mtmrAXwLcuU

Joshua Emmanuel. (2017). Descriptive statistics in Excel mean, median, mode, std. deviation… [Video]. Retrieved from https://youtu.be/qJR8OMQP3vw/p>

Quantitative Specialists. (2013). How to install the Data Analysis ToolPak in Microsoft Excel [Video]. Retrieved from https://youtu.be/\_yNxLFagKgw

Assignment Files

[Heart Rate Data Set](https://herzing.instructure.com/courses/24850/pages/heart-rate-dataset)

Rubric

**MA320 Unit 3 Assessment**

| MA320 Unit 3 Assessment | | |
| --- | --- | --- |
| **Criteria** | **Ratings** | **Pts** |
| This criterion is linked to a Learning OutcomeContent  MA320-CO1 | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **25 pts**  **Level 5**  Expresses content knowledge with the assignment purpose in a complete, organized, clear, professional, and culturally respectful manner. | **22.5 pts**  **Level 4**  Expresses content knowledge with the assignment purpose in a complete, organized, clear, professional, and culturally respectful manner with minor weaknesses in one or more of the areas. | **20 pts**  **Level 3**  Partially expresses content knowledge with the assignment purpose. Expresses ideas in a complete, organized, clear, professional, and culturally respectful manner with weaknesses in these area. | **17.5 pts**  **Level 2**  Partially expresses content knowledge with the assignment purpose. Ideas are partially expressed in an organized, professional, and culturally respectful manner with major weaknesses in these areas. | **15 pts**  **Level 1**  Expresses limited content knowledge with the assignment purpose. Ideas are not expressed in a complete, organized, clear, professional, and/or culturally respectful manner. | **0 pts**  **Level 0**  The assignment was not completed or there are no constructed concepts that demonstrate analytically skills and no evidences to support the content does not align to the assignment instructions | | 25 pts |
| This criterion is linked to a Learning OutcomeAnalysis  MA320-CO1 | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **25 pts**  **Level 5**  Constructs concepts related to course content, demonstrating strong analytical skills with strong evidence to support professional and personal subject knowledge through details, supporting evidence, and idea differentiation. | **22.5 pts**  **Level 4**  Constructs concepts related to course content, demonstrating strong analytical skills with evidence to support professional and personal subject knowledge through details, supporting evidence, and idea differentiation. | **20 pts**  **Level 3**  Constructs concepts related to course content, demonstrating analytical skills with some evidence to support professional and personal subject knowledge through details, supporting evidence, and idea differentiation. | **17.5 pts**  **Level 2**  Constructs concepts related to course content, demonstrating weak analytical skills with minimal evidence to support professional and personal subject knowledge through details, supporting evidence, and idea differentiation. | **15 pts**  **Level 1**  Constructs concepts related to course content, demonstrating inadequate evidence of analytical skills. There is minimal or no evidence to support professional and personal subject knowledge through details, supporting evidence, and idea differentiation. | **0 pts**  **Level 0**  The assignment was not completed or there was no evidence of constructed concepts that are supported by professional and personal subject knowledge through details, supporting evidence, and idea differentiation. | | 25 pts |
| This criterion is linked to a Learning OutcomeTechnology | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **10 pts**  **Level 5**  Manipulates multiple technological resources to effectively implement all assignment requirements. | **8.75 pts**  **Level 4**  Manipulates multiple technological resources to effectively implement most assignment requirements. | **7.5 pts**  **Level 3**  Manipulates multiple technological resources to effectively implement some assignment requirements. | **6.25 pts**  **Level 2**  Manipulates multiple technological resources for some assignment requirements. | **5 pts**  **Level 1**  Manipulates technological resources to minimally meet some assignment requirements. | **0 pts**  **Level 0**  The assignment was not completed or difficulties with technological manipulation were evident. The assignment submitted does not meet requriements. | | 10 pts |
| This criterion is linked to a Learning OutcomeWriting | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **5 pts**  **Level 5**  The assignment exhibits a excellent command of written English language conventions. The assignment has no errors in mechanics, grammar, or spelling. | **4.5 pts**  **Level 4**  The assignment exhibits a good command of written English language conventions. The assignment has no errors in mechanics, or spelling  with minor grammatical errors that impair the flow of communication. | **4 pts**  **Level 3**  The assignment exhibits a basic command of written English language conventions. The assignment has minor errors in mechanics, grammar, or spelling that impact the flow of communication | **3.5 pts**  **Level 2**  The assignment exhibits a  limited command of written English language conventions. The assignment has frequent errors in mechanics, grammar, or spelling that impede the flow of communication. | **3 pts**  **Level 1**  The assignment exhibits little command of written English language conventions. The assignment has errors in mechanics, grammar, or spelling that cause the reader to stop and reread parts of the writing to discern meaning. | **0 pts**  **Level 0**  The assignment does not demonstrate command of written English language conventions. The assignment has multiple errors in mechanics, grammar, or spelling that cause the reader difficulty discerning the meaning. | | 5 pts |
| This criterion is linked to a Learning OutcomeAPA | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **5 pts**  **Level 5**  In-text citations of sources and references in proper APA style are included with no errors. | **4.38 pts**  **Level 4**  In-text citations of sources and references in proper APA style are included but have 1-2 minor APA errors. | **3.75 pts**  **Level 3**  In-text citations of sources and references in proper APA style are included but have 3 - 4 minor APA errors. | **2.5 pts**  **Level 2**  In-text citations of sources and references in proper APA style are included but have more than 4 errors. | **1.25 pts**  **Level 1**  The errors demonstrate limited understanding of in-text citation and reference requirements | **0 pts**  **Level 0**  There are no in-text citations AND/OR references. | | 5 pts |
| Total Points: 70 | | |