

Free essay on measures of central tendency

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The three measures of central tendency include: The mean, mode and media. Statistically, these measures are important in various scenarios as they provide useful information regarding their statistics (Osborn, 2006). The following are some of the scenarios when you can apply the various measures of central tendency.

Mean

In a classroom setting, grade 8, composed of 20 students, with a composition of 8 female and 12 male students, mean, as a measure of central tendency would be beneficial in assessing performance in relation to the past year classes. For example, in 2010, the mean for grade 8 with a composition of 20 students in the final year examination was 56. 20. In 2011, the scores for the students were as follows: 45, 56, 78, 89, 90, 34, 67, 89, 88, 76, 56, 78, 50, 77, 67, 65, 49, 87, 82, and 83. Hence the mean for the grade 8 class of 2011 was 70. 3. From the mean grades of the two classes, one can make a comparison and attribute the scores to some of the challenges and advantages the students had before and during the examination. Hence, in this scenario, one can conclude that an improvement was recorded from the results of 2010 owing to this and that (Osborn, 2006).

In statistics, mean is often used when representing averages in a given data set. In the scenario above, it is the need to get the average of the given class that led us into using mean. In addition, it can also be used when dealing with ration or interval data (Osborn, 2006).

Mode

In carrying out research in an American classroom, grade 7 composed of 10 students to determine their racial background, the following were their responses.

Alex (African-American), Dennis (Latin), Murwa (African-American), Sabina (White), Bernard (White), Mary (White), Arnold (African-American), Mex (White), Derrick (White), Chung (Chinese).

Hence in the analysis of these results, whites are the majority with 5, then followed by African-American (3), then Latin (1) and Chinese (1).

Median

In a classroom setting, there are 21 students in grade 5. In a research to determine the ages of the various class members, the following were the results.

11, 10, 9, 10, 12, 13, 12, 11, 11, 12, 11, 10, 11, 12, 13, 12, 12, 12, 13, 13

Median is basically the middle data in a set of data arranged from the lowest to the highest value (Healey, 2009). In this case:

9, 10, 10, 10, 11, 11, 11, 11, 11, 11, 11, 11, 12, 12, 12, 12, 12, 12, 12, 13, 13, 13,

Hence in counting to get the middle number in this data set after arranging them from the lowest data set to the highest, then the middle data would be 11.

References

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