**LEVELS OF DATA**

1. Explain what is meant by the term Nominal Data & give an example
2. Explain what is meant by the term Ordinal Data & give an example
3. Explain what is meant by the term Interval Data & give an example

Remember the level of Data refers to the DV. What level of data are the following?

|  |  |
| --- | --- |
| a) Scores on a measure of how masculine or feminine participants consider themselves, scores range from +7 (very feminine) to -7 (very masculine)  |  |
| b) The percentage mark achieved on a psychology exam test |  |
| c) A set of records of phobic patients who are classified as 'improved', 'worse' or 'no change'.  |  |
| d) As data in (c) but the patients are put on a' scale of 1 to 10 depending on degree of improvement  |  |
| e) Measuring the weight of participants at the beginning and end a weight loss program  |  |
| f) An observation study of children in terms of how co-operative they are on a scale of I to 10  |  |
| g) The time taken for participants to read a script which is hand-written as opposed to typed  |  |
| h) Participants are asked to choose which of the four TV channels they watch most.  |  |
| i) Participants are asked to order the TV channels from their least to their most favourite.  |  |
| j) A receptionist is asked to rate people in the waiting room as 'calm', 'anxious', 'very anxious' or hysterical'.  |  |
| k) Reaction times on a task are collected for people when they have had alcohol and no alcohol.  |  |
| l) Rank ordering a group of participants based on IQ score  |  |
| m) Asking how many people in an area vote for each political party.  |  |
| n) Measuring the temperature (in Celsius) of a bucket of cold water that men and women people can stand having their hand in for 1 minute.  |  |
| o) The number of words remembered by participants in one of two conditions: when they are given 30 seconds or 45 seconds to memorise them.  |  |

Extension: What measure of central tendency would be best to calculate in each study?

**LEVELS OF DATA - ANSWERS**

**Exam style questions:**

1. Explain what is meant by the term Nominal Data

*Data that is in groups or categories – favourite things*

1. Explain what is meant by the term Ordinal Data

*Data that is in order in some way – favourite things are ordered from top to bottom*

1. Explain what is meant by the term Interval Data

*Data that has numerical intervals of equal amounts*

**What level of data are the following?**

|  |  |
| --- | --- |
| a) Scores on a measure of how masculine or feminine participants consider themselves, scores range from +7 (very feminine) to -7 (very masculine)  | ORDINAL |
| b) The percentage mark achieved on a psychology exam test | INTERVAL |
| c) A set of records of phobic patients who are classified as 'improved', 'worse' or 'no change'.  | NOMINAL |
| d) As data in (c) but the patients are put on a' scale of 1 to 10 depending on degree of improvement  | ORDINAL |
| e) Measuring the weight of participants at the beginning and end a weight loss program  | INTERVAL |
| f) An observation study of children in terms of how co-operative they are on a scale of I to 10  | ORDINAL |
| g) The time taken for participants to read a script which is hand-written as opposed to typed  | INTERVAL |
| h) Participants are asked to choose which of the four TV channels they watch most.  | NOMINAL |
| i) Participants are asked to order the TV channels from their least to their most favourite.  | ORDINAL |
| j) A receptionist is asked to rate people in the waiting room as 'calm', 'anxious', 'very anxious' or hysterical'.  | NOMINAL |
| k) Reaction times on a task are collected for people when they have had alcohol and no alcohol.  | INTERVAL |
| l) Rank ordering a group of participants based on IQ score  | ORDINAL |
| m) Asking how many people in an area vote for each political party.   | NOMINAL |
| n) Measuring the temperature (in Celsius) of a bucket of cold water that men and women people can stand having their hand in for 1 minute.  | INTERVAL |
| o) The number of words remembered by participants in one of two conditions: when they are given 30 seconds or 45 seconds to memorise them.  | ORDINAL/INTERAL |