**KABARAK UNIVERSITY**

**SCHOOL OF EDUCATION**

**DEPARTMENT OF EDUCATION ARTS**

**Course: QUANTITATIVE METHODS IN GEOGRAPHY**

**CODE: GEOG 211**

**Task: ASSIQNMENT**

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**Two types of data in statistics.**

In accordance to statistics statistical data occurs in the form of qualitative and quantitative, based on the different types of variables under study.

1. **Quantitative**

As the definition statement defines, this form of data sample is used to quantify statistical information it answers key statements such as: how many. How much and how often. Quantitative data can be expressed as a number (quantified).

It can be obtained and measured by numerical variables, quantitative data can be easily manipulated statistically and have a wide variety of presentations in both charts and graphs. They take the forms of presentation as line graph, bar graph, pie chart. Quantitative data types occur in the discrete and continuous forms.

***Discrete***

This is a count that involves integral phenomenon. The discrete parts of values cannot be subdivided into parts and usually occupy a whole number form. The data variables cannot be divided into smaller parts and they usually occupy a limited number of possible values, examples include:

Number of students in a school club.

Number of workers in a company.

***Continuous***

This is information that would be meaningfully divided into finer levels. It can be measured on a scale and can have almost any numeric value e.g.

Height can be measured at various scales: meters, centimetres, millimetres.

Time can be measured in hours, minutes, seconds.

An individual (data collector) can collect and record this data at so many different measurements: width, temperature, time, some examples include:

Amount of time used to carry out an experiment.

Speed at which an object is moving at.

Height from on point to another.

1. **Qualitative/ categorical data.**

This is statistical data that cannot be expressed as a number and cannot be measured. Qualitative data considers words, pictures and symbols. This data form helps to answer questions such as:

Why something occurred/ its cause of occurrence.

How a certain phenomenon occurred?

Examples of its study entities are: colours, names, ethnicity. Categorical data can be grouped into the nominal and ordinal types.

***Nominal data***.

Here data is justified without following a specific order, such data is used for labelling variables without any form of quantitative value, examples include:

Gender - male / female.

Ethnicity -Christian /Muslim/Hindu/pagan.

Marital status- single /married.

Colour

***Ordinal data.***

This is statistical data that is placed into some kind of order by the position in which they lie within the borders of a certain scale. However, arithmetic cannot be carried with ordinal numbers as it only shows sequence; this is qualitative data in which the values are ordered.

Relatively positions can be shown by assigning numbers to ordinal data e.g. low, high, medium in terms of status, first, second, last in terms of arrivals and A.B.C in terms of letter grades.

References;

<https://www.abs.gov.au>

https://www.chi2innovations.com.

<https://www.intellspot.com>.

Sonyel, (o). (2017) ***Qualitative versus Quantitative data***.