

Probability and hypothesis testing essay

[Business](#), [Marketing](#)



In this case, there are various variables that affect the performance of other data sets. More than one factor is dependent on the behavior and the performance of other factors. By looking at the data however, it is hard to establish the extent to which the data sets affect each other. For this reason therefore, it becomes important to investigate individually the relationship between individual sets of data. Finding the relationship will determine whether the statements made before are true or false.

Our major concern is the relationship between age and income. It is believed that age and income are related in that; income increases with age to a certain point where it starts to decline. We will establish using the given data whether this statement is true by analyzing the data set.

It is prudent to establish whether these facts are true because it affects the economy of one state and region to another. Understanding the relationship between age, income and the distribution of age across one region and state helps to establish the truth behind the statement. Knowing whether this fact is true will help placing measures to ensure that no group is marginalized.

Hypothesis proof

Each region is composed of people of various age groups. Each individual contributes to the economy in one way or the other. Engagement in income generating activities assists the individuals to have basic sources of income. It also defines how wealthy one is. Wealth rating therefore is a reflection of the state of income of an individual. Due to the fact that individual states contribute to the performance of the overall region, it is important to find the average score of the states in the determination of the regions score. This is achieved as tabulated below.

This shows the distribution of age across the regions. The histogram indicates the age of residents from different regions. By testing the first hypothesis which states that; Age (of residents) of Region 1 > Age of Region 7, we have to check whether the statement is correct according to the graph. In the graph however, it indicates a different result. The age of individuals in region 7 is more than the age of individuals in region one. Therefore the hypothesis is not correct.

Wealth score increases with age and indication that income increases with age to a certain point when it reduces. The reduction may be as a result of several factors such as retirement. The wealth score of the mail donors is also high and indication that these two factors are correlated.

Secondly, concerning the employed group, it is essential to note and understand the fact that positions are yet another determining factor that affects the concentration of wealth among specific age groups. For example, age is one of the factors that have, traditionally, been a constituting determining factor to promotion, whereby organizations tend to promote employees who have worked in an organization for a longer time. These are the employees that understand the company more than the new employees. As a result, promotion is in most cases, accorded to these employees. However, this has drastically changed in the twenty first century, whereby promotion is in most cases, conducted in accordance to qualification (Clark, 2008).

Conclusively, it is evident that wealth increases with an increase in age. This is derived from the fact that access to wealth through the various avenues

such as employment, investment and inheritance is easier and wider with increase in age, based on factors such as experience, skill and trust.

References

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