

# Inferential statistics case study example

[Education](#), [Discipline](#)



This piece of paper reports an analysis of a research carried out by Jared Wadley in October, 1, 2008. The research was carried out to investigate the effects of gun shows that were becoming so rampant not only in the USA but also globally. The research involved the sampling of the population samples that were used to represent various parts of America.

The hypotheses of the study were 1. Do gun shows lead to increase in the number of the gun related homicides? 2. Do gun shows lead to increase in suicidal cases in USA? 3. Do stringent regulations lead to reduced number of firearm related deaths?

These set of questions, I think, were used by the researcher to guide him appropriately on the kind of sampling procedure, data collection, data interpretation , data analysis and data presentation (Maxim, L. W. 2010).

Wadley, in his research used a combination of both dependent and independent variables to carry out the research. In this regard, the independent variables are those factors that are affected during the research, can be measured and depend on the independent variables. Some of the dependent variables that were used in this research include the number of deaths, suicides and homicides. This knowledge helped him to produce more precise result. On the other hand, dependent variables are those factors that do not depend on any other, are not affected during research.

They remain constant irrespective of the experimental conditions they are subjected to. Therefore, some of the independent variables in this research include the number of gun shows that were staged during this period (Maxim, L. W. 2010). Even if the number of deaths were changing as a result

of people's exposure to such shows, the number of shows was not affected by this negative development, in that people as they were never attributed these deaths to such shows, especially before a scientific research was carried out.

This research was carried in the larger USA. USA being a very big country with a high population, made it necessary for the researcher to adopt a better way of identifying and selecting the population to use as subjects of this research. Because it was not easy to engage the entire American population in the research, sampling procedure was appropriate. These population samples were used to act as a representative of the whole American population. Some of the sampling procedure used included the simple random in which the random number tables were carefully used to select the population; systematic sample in which the population was chosen depending on many factors that were seen as relevant to this research. For instance, the highest number of samples was taken from Texas and California, the two highest populated states in the USA. Besides, the researcher adopted stratified quota sampling system in which the general population was subdivided into smaller groups that were later given preferential treatment. This means that population was subdivided into children, men, women and the old folks. This is because these groups perceived the gun shows in their own way. Whereas the youths have a higher taste for gun shows, the old folks view as something very destructive and unworthy. This means that the number of youths involved in this research was to be higher was to be higher than the number in any other group of the American population. However, when carrying out this research,

a lot of biases were observed in the selection of the population, measurement of the data and treatment of the subject of this research.

Therefore, the selection biases were witnessed when the researcher did not comply with the general regulations of the sampling.

Some areas were overrepresented while others were underrepresented. This would translate into measurement bias. During this research, a combination of procedures and techniques were used to collect, analyze, interpret and represent data. This included the questionnaire, interview, direct observation, charts, and pie charts to mention but a few.

During this research a lot of ethical considerations had to be made. The subjects of the study were not to be compelled to give information or be exposed to such 'traumatizing' shows. This is contrary to their legal fundamental human right.

This research found out that there is no relationship between the increase in the number of suicides and homicides as a result of exposure to such shows. Besides, it was found out that exposure to such shows do not necessarily alter the behavior of the children because such movies are usually accompanied by warning statement like 'do not try this at home!' lastly, it was found out that the enforced of the stringent regulations do not obviously lead to an exponential decrease in the consumption of the gun shows.

In conclusion I think that this research was well carried out at a right time when this kind of information had to be revealed to the public. Even if a lot of challenges were faced, I would like to concur with the fact that a lot of efforts have to be put be put to make people perceive such shows as equally important in the society.

## **Reference**

Maxim, L. W, (2010). The Myth Of 90% Only a Small Fraction of Guns in Mexico comes from USA, New York: fox news.