Statistics in News Article

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**Introduction**

The great influence of different statistical concepts can be a witness in the case of different aspects of daily life. It is noteworthy to indicate that consideration of different statistical concepts such as mean, median, proportion, standard deviation, etc. ultimately helps people to better figure out different trends and developments of life (Ahn & Fessler, 2003). An appropriate statistical analysis of various issues helps to find out possible solutions according to the need of society. Standard deviation is defined as one crucial concept of statistics that express the specific quantity by how much the members of a group diverge from the mean value for the group (Altman & Bland, 2005). A measurement of the amount of dispersion is important to condition to evaluate the idea of variation. A CNN news article, "marijuana's effects on young brains diminish 72 hours after use; research says," is considered to critically apprehends the statistical concept of standard deviation.

**Discussion**

Identification of the broad question of the selected article is important to understand the overall research scenario relevant to statistical consideration. The central concern that was addressed in the article is to evaluate the real effect of marijuana on the brains of young individuals. In other words, the focal point of this research work is to critically examine the potential influences of marijuana on people's activities by focusing on the functioning of their brains. The negative influences of using marijuana can mainly be observed in the forms of great damage to cognitive functioning, such as in the forms of learning, memory, and attention span.

           The statistical technique of meta-analysis is used by the researchers to examine the influence of marijuana on young people’s minds. The main question of this exploratory research work applies to the population of adolescents to determine the influence of marijuana use on their brains. The research study mentioned in this article is characterized as an observational study as it is based on critically examining 69 research studies to determine the real effects of frequent use of marijuana on the brain operations of young individuals. The useful statistical outcomes obtained by observing former research is the study that compared the 2,152 frequent marijuana users with the 6,575 non-users (Leiber, 2018). The primary aim of this approach is to find out the influence of regular use of marijuana on the participants, who constantly use drugs as compared to non-users.

Exploration of the relevant variables in the case of this research study is also a necessary condition to examine the prevailing connection between the issue of the negative influence of marijuana on the dependent variable of brains of young individuals. The factors of learning, memory, and attention span are used as the associated variables to determine the actual effects of marijuana on young people's minds. The size of the sample for this exploratory research work is comprised of 60 former research studies to examine the marijuana' effects on young individuals considering the benchmark of 72 hours. The factor of standard deviation is used as the parameter of interest in this explanatory research study. The parameter of standard deviation helped to examine the largest influence of marijuana on adolescents' minds. It is observed that the major impact of marijuana approximately appeared as a third of a standard deviation.

**Conclusion**

To conclude the discussion on the statistical approach in the form of standard deviation, it is vital to indicate that regular use of marijuana has the capacity to reduce by one-third of a standard deviation. The small effect size played a crucial role in determining the worse impact of marijuana on the larger population. The results of this research work are mainly related to the worse application of drugs in case of cognitive outcomes.

**References**

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