Student’s name

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Course

Date

Graphical Methods in Statistics

Statistics is often used in reports and appears as the basis for numerous types of studies, since it is one of the most effective ways to approach, analyze, and address various issues and kinds of information. Statistical information is employed by different organizations, such as governmental, business, non-profit, and other organizations to display the results of performances, or to inform an audience on certain topics; in addition, it is also used in academic pieces to introduce research results. Notably, there are numerous ways and methods employed to provide statistics, including such widely applied ones as descriptive statistics, standard deviation, and graphs. Significantly, graphical methods are most popular and efficient in statistics, as they are considerably varied. They can be applied to most types of information, and display data in approachable ways.

First of all, graphical methods in statistics display certain data in various types of schemes. In particular, they summarize received or already existing information and introduce it in a visual form; notably, graphs are usually applied to quantitative information (Campbell and Shantikumar). In this case, one can assume that graphical methods in statistics require more time and effort than other ones, such as descriptive ones that display data, as graphs also interpret data in limited ways. In fact, from this point of view, graphical methods in statistics appear as a

synthesis of informational and analytical methods and, as follows, are especially helpful in academic research. This is due to the fact that they do not just introduce the data received from a study, but also provide a quick yet effective capture of it.

To add more, it should be highlighted that there are numerous types of graphical methods in statistics; they come from different types of graphics that are used to display various kinds of data. In particular, the main types of graphical methods include time series, box plots, histograms, and probability plots ("Graphical Methods"). Notably, all of the listed methods cover several subtypes, and each of them is used for specific kinds of data and research. Time series graphics display certain results, such as production or profit in relation to time, and are usually utilized to highlight changes in these rates ("Graphical Methods"). To add more, box plots are more complex, as they commonly divide data into four equal parts and represent certain rates in relation to each other. Histograms present each piece of information as a bar of a certain high in relation to the defined parameter and are also used to compare the rates and results of different years, companies, or other factors (Campbell and Shantikumar). Finally, probability plots are used to display the relation of real data to expected data, and to introduce these two types of factors in comparison with each other.

All things considered, graphical methods in statistics are significantly effective due to the fact that they combine informative and analytical functions, and display data in a simple visual manner. Notably, there are numerous types of graphical methods that are used in different types of research, reports, and other fields, and this diversity makes graphics even more widely used.

Works Cited

Graphical Methods". *ITRC*, 2013, https://www.itrcweb.org/gsmc-1/Content/GW%20Stats/5%20Methods%20in%20indiv%20Topics/5%201%20Grph%20Methods.htm. Accessed 13 Aug 2018.

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