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ECE 314

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Television Sampling in the U.S.

Television program ratings have been collected and analyzed by the Nielson Media Research Company since 1950. Nielsen conducts random sampling of people across the country to select a broad range of subjects from different races, ages and locations, as well as different economic and demographic groups to provide as true an estimate as possible. There are two different techniques used in sampling the data. The purpose of this paper is to go into some detail over both approaches for sampling. The first method Nielsen uses is called “statistical sampling.” They simply create a "sample audience" and then count how many in that audience view each program. The other way samples are taken is by installing a “black box” that acts as a meter. This meter records the data and sends it back to Nielson for analysis.

The main way Nielsen samples data is with meters, or black boxes, in about 25,000 homes in the U.S. The data is recorded on a “minute-by-minute basis.” The figures show exactly what is being watched in that residence and by which members of the household. The sampling is done by giving every person in the house a button to press when he or she starts and stops watching the TV. Every night, the information is relayed back to Nielsen for the calculation of “overnight ratings.” According to Nielson’s web page, “Electronic metering technology is at the heart of the Nielsen ratings process. Our tools capture not only what channel is being watched, but also who is watching and when, including ‘time-shifted’ viewing.” To ensure accurate results, the company uses audits and quality checks and regularly compares the ratings it gets from different samples and measurement methods.

The other technique of sampling is done by conducting surveys. The Nielsen Company samples an additional 1.6 million people by having each person keep a notebook diary for four different "sweeps" months per year. The people chosen represent a specific demographic that other companies are interested in for advertising purposes. Viewers from the various demographics are asked to keep a written record of everything that they watch. The sample period is one week, after which the dairies are mailed back to Nielsen and then added into the cumulative ratings.

Nielsen ratings are ranked by percentage for each show from all viewers watching the program at a given time. A single national ratings point represents 1%, or 1,102,000 households for the 2006-2007 season. Share is the percentage of television sets in use tuned to a specific program. These numbers are usually reported as ratings points. It is said that“Nielsen may report a show as receiving a 8.0/15 during its broadcast, meaning 8.0%, or 9,254,000 households on average were tuned in at any given moment. Additionally, 15% of all televisions in use at the time were tuned into this program. Nielsen re-estimates the number of households each August for the upcoming television season.” Nielsen Media Research also provides statistics on estimated total number of viewers, and on specific demographics. Advertising rates are influenced not only by the total number of viewers, but also by particular demographics, such as age, sex, economic class, and area. Younger viewers are considered more attractive for many products, whereas in some cases older and wealthier audiences are desired, or female audiences are desired over males. Television ratings are not an exact science, but they are a powerful force in determining the programming in an industry where millions of dollars are at stake every day.

Sources:

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