Courtney Coleman, Post CCJ 4700 Week 11 Peer Response Introduction to Research Methods in Criminology

**NO COVER PAGE NEEDED**

**Please provide thought-provoking comments that spawn intelligent conversations to your classmate post below:**

Moving on nicely from last week’s discussion, once surveys, questionnaires, and/or interviews are complete, the next step is to pull the collected information and interpret it. To do so, the researcher creates a data matrix to then code said data; ultimately, a listing of the value of every variable for every case — raw and unprocessed — is presented in it (Dorsten & Hotchkiss, 2014, p. 215). Defined as a two-dimensional table used to organize and receive raw data, the numbers presented in data matrices are not always necessarily informative and/or meaningful. Because of this, a codebook is utilized, thereby listing all the variables in a data collection with each variable accompanied by a short name, brief description, location, and meaning of each value. It’s crucial to note that “without the codebook, the data matrix is meaningless,” almost walking hand-in-hand (Beaver, 2020).

When samples of people are questioned, the amount of data collected can typically be fairly large, and “because it is impossible to eyeball a survey and interpret any meaning from it, researchers must use different statistics” (Beaver, 2020). *Uni*variate analysis is the simplest way, examining summary statistics one variable at a time. With such, it can describe patterns through measures of central tendency and dispersion. Additionally, it can be conducted at various levels of measurement, including: 1) Nominal, including mode; 2) Ordinal, including mode and median; and 3) Interval/Ratio, including mode, median, mode, range, and standard deviation. With such, examples of univariate statistics include percentages and frequencies, which can be calculated for any type of variable; specifically, “for nominal and many ordinal variables, a univariate frequency distribution or frequencies is the most-often reported one-variable summary,” usually including the count (raw number) and percentage for each variable category, and often the cumulative frequencies and percentages (Dorsten & Hotchkiss, 2014, p. 221). Keeping all of this in mind, the easiest way to think of univariate data is as a category, only showing observations on a single characteristic. For example, a frequency chart could show one variable in the left column and its corresponding count in the right, and it could do so with age, the salaries of workers in an industry, and/or weight. However, let’s say age or weight was used — it wouldn’t look at them at the same time, nor a relationship between them. On the other hand, *bi*variate tables show the relationship between two variables — as it sounds, naturally. Typically, one is the IV while the other is the DV, comparing one variable against another to demonstrate their relationship. A prime example could be caloric intake vs. weight, ice cream sales vs. temperature, and so on, seeing how caloric intake (IV) *affects* weight (DV). According to our textbook, “A bivariate table displays univariate percentages for the dependent variable side by side, one for each category of the independent variable” (Dorsten & Hotchkiss, 2014, p. 224). If we were to keep moving forward, multivariate tables analyze three or more variables.

To conclude, once all of the data is coded and then entered into specific tables, it will be available for analysis which will ultimately allow for the report of a report (Beaver, 2020). While reading tables can be difficult sometimes, there are some rules to help: 1) If the table percentages down, compare across; 2) When tables are percentagized with the categories of the IV, it’s best to determine the IV based on what makes more logical sense.

**Sources:**

Beaver, K. (2020). CCJ 4700: *Introduction to Research Methods in Criminology, Week 11 Notes*. Retrieved from https://canvas.fsu.edu/courses/117048/assignments/770204

EXAMPLE RESPONSES:

Hello Courtney. I enjoyed your summary of this weeks assigned reading. First, i want to say that it is interesting to officially learn about methods and tools that I have used throughout my career  without knowing what they were called or having a formal understanding of it. I find a lot of this material to make logical sense in its means to summarize raw data to make it more easily understood. Bivariate tables are something that make it possible to summarize vast amounts of survey data into percentages thus allowing researchers to produce a tool able to be implemented. An example from within the Criminal Intelligence field would be a study of recidivism amongst offenders recently released from incarceration after committing a first offense. It would then need to be further dissected to account for variable such as gender, age, race, education, socioeconomic status, and category of crime committed. This would produce an incredible amount of data that would be impossible to derive any type of actionable intelligence from without the ability to break it down into bivariate tables and multivariate tables.