# Applied Statistics for Forensic Psychology Students

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Forensic Statistics texts tend to focus on probability rather than data, despite increasing availability of large crime data sets; population data, crime reports, police data and survey data. An invitation to teach statistics to a group of 50 psychology students, with a good background in data analysis methodologies relating to continuous variables and scale development, provided an opportunity to explore a number of these data sets. The first surprise was the preponderance of categorical data and binary variables in particular in this data. False/true confessions, guilty/non-guilty verdicts and recidivism were just the tip of the iceberg. The second surprise was the reliance on visual images to portray crime information and the third was the detailed nature of the available data on interesting topics such as drinking, drug taking, self defence behaviour of women, juvenile crime and public attitudes to issues such as DNA testing, drug laws, the use of CCTV by police for obtaining arrests and convictions. A 12-week program was constructed, starting with two sessions on media and police reports with a guest lecture by the Chief Statistician of the Victoria Police. This was followed with a raft of methods for the analysis of categorical data, one method per week, with the last two weeks devoted to choosing the best method for analysing particular scenarios and revision. Computer tutorials using SPSS were used to reinforce the understanding developed in lectures and apply the techniques to a variety of data sets.Assignments and weekly quizzes were designed to provide additional examples and to test and refine student learning. An Opinio survey at the end of the course showed that the students found the data very interesting and, on the whole, they felt that the statistical methods to which they had been introduced would be useful in the future. Crosstab analyses and the associated correspondence analyses were particularly well received, with students querying why more attention had not been paid to categorical data in previous statistics courses. Although binary logistic regression, survival analysis and cluster analysis did prove a bit of a challenge, these methods were also considered particularly useful for psychology students. In conclusion our Forensic Statistics experiment has been a success. By letting the available data drive the content it has been possible to produce an unusual applied statistics unit which is appropriate for psychology students, especially those with an interest in crime.

Key Words: data-driven, categorical data, media and police reports.