**Statistical concepts**

In the two (imaginary) experiments summarized below, identify the independent variable, dependent variable, experimental group and control group (if they exist).

1. A group of ex-offenders with alcohol problems attend a morning of talks on strategies for controlled drinking. 12 weeks after attending the session, they complete a questionnaire about their social functioning, which is compared with previous measurements. In this experiment, what are the dependent and independent variables?

ANSWER…

If you are going to create a control and experimental group as part of the procedure in this experiment to better assess the effects of the stimulus, how would you implement it?

1. The police are trying to work out how to create an effective video to encourage members of the public to become volunteer community officers. Before watching the video, each participant is asked to complete a short scale, on the likelihood of their applying for the position. The video is short, to try to ensure full attention. Three different versions are shown to different people: although all relevant facts are covered, one version emphasizes the benefits to the community; another discusses the benefits of joining the service (job satisfaction, camaraderie, etc.); the third has a focus on the experiences of current volunteers. A fourth group watches a video offering a carefully balanced coverage of all three of these factors. After the video, participants are asked to fill in the scale again. Which are the independent and dependent variables?

Which groups are the control and experimental group?

**Data types**

For each variable, identify the data type: continuous, ordinal or categorical).

Sex / Marital status / Level of education / Age group / Convictions ('form') / Length of service / Serious prison sentence duration