Smith, M. (2003). *Research Methods in Accounting*. Thousand Oaks, CA: Sage.

From page 61.
Summary: Run both parametric & non-parametric, if they give the same results, report the parametric.

Statistical tests can be classified into two major categories: *parametric statistics* and *non-parametric statistics*. They differ in the assumptions they make about the underlying distribution of the data under analysis. Parametric statistics require that data be drawn from normal distributions, which are smooth, bell-shaped symmetrical curves, defined by mean and standard deviation measures. Non-parametric statistics make no such assumptions regarding the underlying distribution; they describe relationships in terms of frequencies, rankings and directional signs, rather than means and standard deviations. Parametric tests are the more powerful, so we would normally prefer to use them, but if there is any doubt about the quality of the data, or the underlying assumptions, then we would move to the non-parametric alternative. Although this is technically required, the outcomes are usually no different because standard statistical techniques are incredibly robust in practice despite the violation of the underlying assumptions.

We may be conducting an essentially descriptive study, with very few numbers involved, but we still have at our disposal a powerful statistical armoury to add to the integrity of our findings. Descriptive studies often record simple proportions, cross-tabulations and measures of association, even where there is no formal hypothesis testing or model building. We want to know if the **observed** values differ significantly from what we would **expect** if, in fact, no relationship existed at all, and simple statistics allow us to draw such inferences. Table 4.1 provides a summary of the statistical tests at our disposal for typical descriptive situations. Examples of each are provided below.