Health Science Statistics using R and R Commander by Robin Beaumont

Chapter 22 Comparing an observed proportion to a population value: The Binomial test

Learning Outcomes

* = more advanced outcomes

Learning outcome	**Tick box**
Be able to describe the purpose of the binomial test and how this relates to a statistical model	q
Be able to give examples of the appropriate use of the binomial test	q
Be able to select the appropriate R Commander menu option/dialog box options to convert a numeric variable into a factor	q
Be able to select the appropriate R Commander menu option/dialog box options to carry out a binomial test on raw data	q
Be able to interpret a set of results including; population proportion, "number of successes", "number of trials", p-value, confidence interval and "sample estimate of success"	q
Be able to describe the binomial distribution	q
Be able to produce a plot of the binomial distribution for a specified number of trials (=n) and probability of success (π)	q
Be able to annotate the binomial distribution plot with the observed proportion using the *abline()* function	q
Be able to obtain the critical values using the correct R commander menu option and then annotate the binomial distribution plot accordingly	q
Be able to interpret appropriately the plot showing the binomial distribution with both critical values and observed values	q
*Be able to create R code to carry out the binomial test from counts and raw data	q
*Be able to write up a set of results in the appropriate style	q