A Plot Method for "htest" Objects

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The numerical results of many statistical tests in R are stored in an "htest" object. The print method for the class displays a table. We have written a generic \texttt{plot.htest} function for the class and constructed the plot methods for normal, \textit{t}, chi-square, and \textit{F} tests. The plot methods call the graphing functions in the HH package. The hypothesis graphs display

1. the density function for the null hypothesis with critical bounds and shaded areas for the rejection region,
2. the location of the observed value with shading for the \textit{p}-value, and
3. a second density for the alternative hypothesis with shaded areas for the Type II error.

The confidence interval plots show

1. the density with parameters set at the observed value of the statistic,
2. the confidence interval, and
3. shaded areas for the confidence level.

The axes are labeled in both the data units (\(\bar{x}\), or \(s^2\), or \(s^2_{x}/s^2_{y}\)) and in standardized units. We also wrote menu items for the \texttt{RcmdrPlugin.HH} package that can be used with the \texttt{Rcmdr} point-and-click GUI.

References

http://www.r-project.org
http://socserv.socsci.mcmaster.ca/jfox/Misc/Rcmdr/

http://www.r-project.org
contributions from Burt Holland and G. Jay Kerns.

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