

Rapport package team

Outlier tests

2011-04-26 20:25 CET

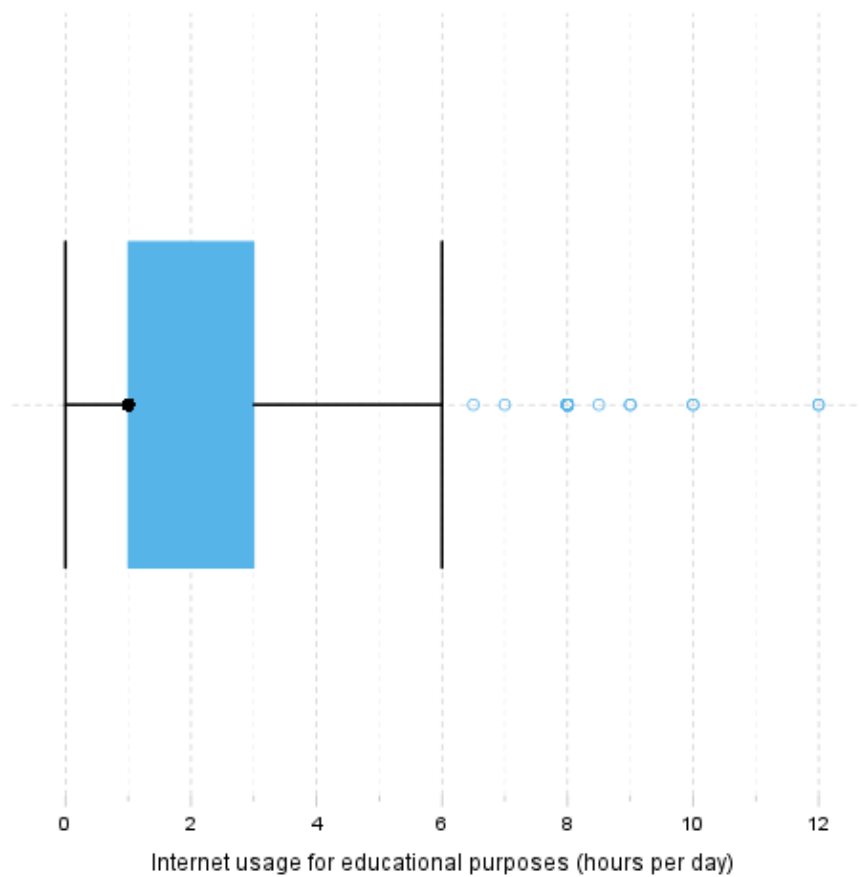
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Description

This template will check if provided variable has any outliers.

Charts



Lund test

It seems that 4 extreme values can be found in “Internet usage for educational purposes (hours per day)”. These are: 10, 0.5, 1.5, 0.5.

Explanation The above test for outliers was based on $lm(1 \sim edu)$:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	2.048e+00	7.797e-02	2.627e+01	7.939e-105

Table 1: Fitting linear model: $var \sim 1$

References

- Lund, R. E. 1975, “Tables for An Approximate Test for Outliers in Linear Models”, Technometrics, vol. 17, no. 4, pp. 473-476.
- Prescott, P. 1975, “An Approximate Test for Outliers in Linear Models”, Technometrics, vol. 17, no. 1, pp. 129-132.

Grubb’s test

Grubbs test for one outlier shows that highest value 12 is an outlier ($p=0.0001964$).

References

- Grubbs, F.E. (1950). Sample Criteria for testing outlying observations. Ann. Math. Stat. 21, 1, 27-58.

Dixon’s test

chi-squared test for outlier shows that highest value 12 is an outlier ($p=7.441e-07$).

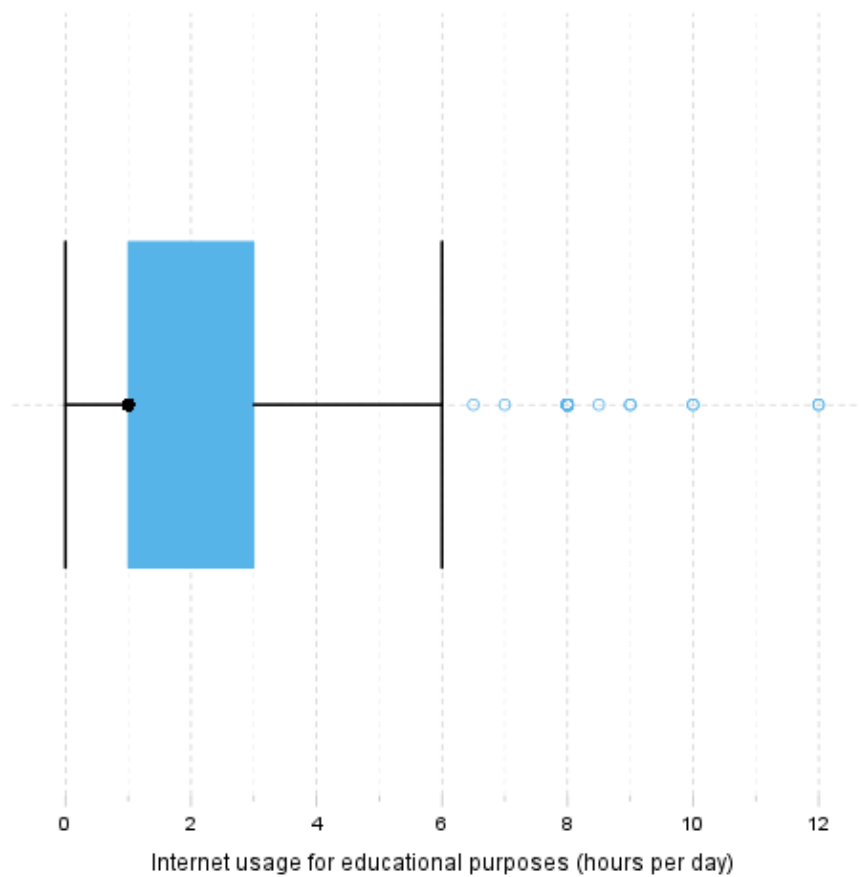
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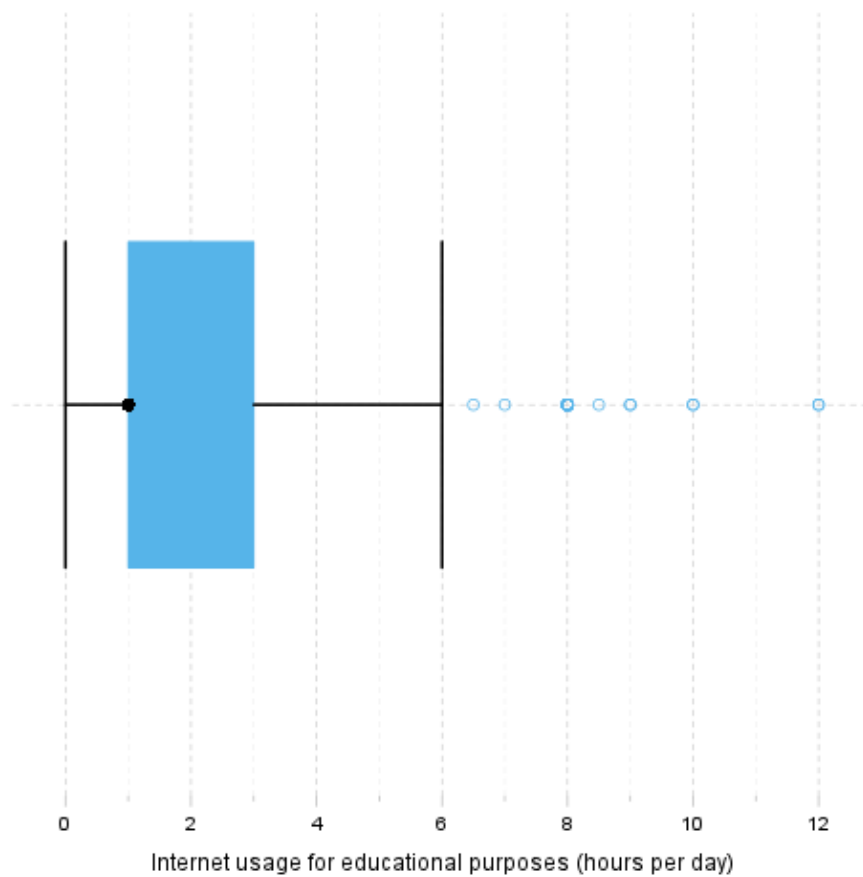
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Table 3: Fitting linear model: $var \sim 1$

This report was generated with [R](#) (2.15.1) and [rapport](#) (0.4) in *0.916* sec on
x86_64-unknown-linux-gnu platform.



Figure 1: