

Multiple Comparison Procedures To A Control

For AN(C)OVA Models

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Contributors*

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Basic Information

Automatic statistics for the file:

File
recovery.csv

Your selection for the encoding: UTF-8

Your selection for the decimal character: .

Observations (rows with at least one non-missing value): 41

Variables (columns with at least one non-missing value): 2

Variables considered continuous: 1

Variables considered continuous

Variables considered categorical: 2

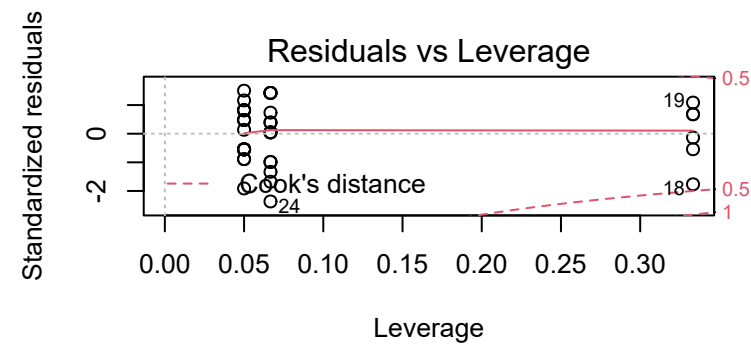
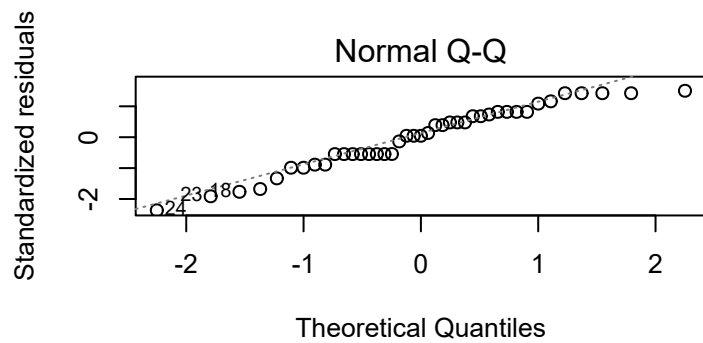
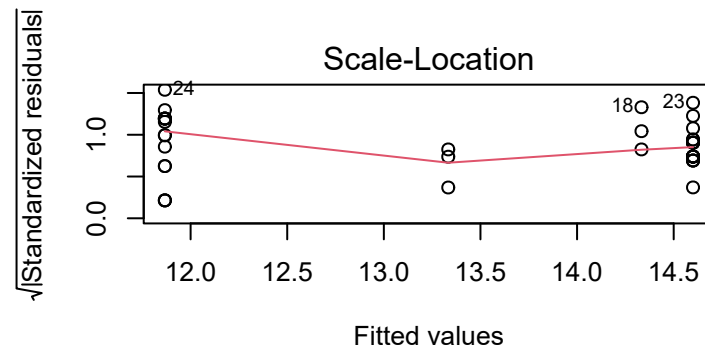
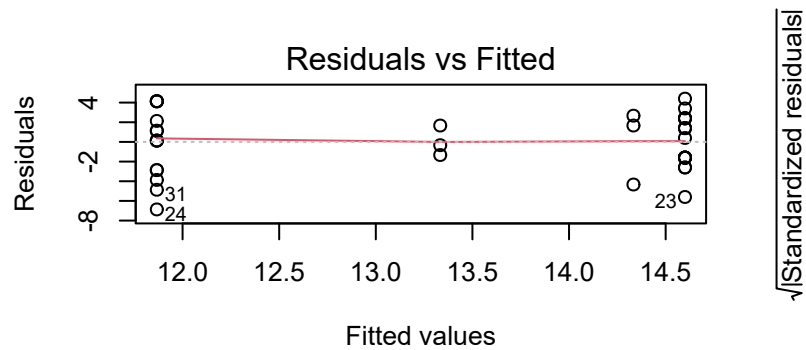
Variables considered categorical
blanket
minutes

Anova Table (Type III tests)

Response: minutes

	Sum Sq	Df	F value	Pr(>F)
(Intercept)	4263.2	1	472.459	< 2e-16 ***
blanket	66.4	3	2.452	0.07864 .
Residuals	333.9	37		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1



Simultaneous Tests for General Linear Hypotheses

Multiple Comparisons of Means: Dunnett Contrasts

Fit: `lm(formula = modelfunction, data = df_factorized)`

Linear Hypotheses:

	Estimate	Std. Error	t value	Pr(<t)
b1 - b0 >= 0	-1.2667	1.8598	-0.681	0.5314
b2 - b0 >= 0	-0.2667	1.8598	-0.143	0.7755
b3 - b0 >= 0	-2.7333	1.0260	-2.664	0.0165 *

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
(Adjusted p values reported -- single-step method)

Simultaneous Confidence Intervals

Multiple Comparisons of Means: Dunnett Contrasts

Fit: `lm(formula = modelfunction, data = df_factorized)`

Quantile = 2.1833
95% family-wise confidence level

Linear Hypotheses:

	Estimate	lwr	upr
b1 - b0 >= 0	-1.2667	-Inf	2.7938
b2 - b0 >= 0	-0.2667	-Inf	3.7938
b3 - b0 >= 0	-2.7333	-Inf	-0.4932

Simultaneous Tests for General Linear Hypotheses

Multiple Comparisons of Means: Dunnett Contrasts

Fit: `lm(formula = modelfunction, data = df_factorized)`

Linear Hypotheses:

	Estimate	Std. Error	t value	Pr(<t)
b1 - b0 >= 0	-1.2667	1.8598	-0.681	0.4234
b2 - b0 >= 0	-0.2667	1.8598	-0.143	0.4434
b3 - b0 >= 0	-2.7333	1.0260	-2.664	0.0165 *

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
(Adjusted p values reported -- free method)

Simultaneous Tests for General Linear Hypotheses

Multiple Comparisons of Means: Dunnett Contrasts

Fit: lm(formula = modelfunction, data = df_factorized)

Linear Hypotheses:

	Estimate	Std. Error	t value	Pr(<t)
b1 - b0 >= 0	-1.2667	0.9086	-1.394	0.2168
b2 - b0 >= 0	-0.2667	1.8687	-0.143	0.7706
b3 - b0 >= 0	-2.7333	1.0473	-2.610	0.0187 *

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
(Adjusted p values reported -- single-step method)

Simultaneous Confidence Intervals

Multiple Comparisons of Means: Dunnett Contrasts

Fit: lm(formula = modelfunction, data = df_factorized)

Quantile = 2.1804
95% family-wise confidence level

Linear Hypotheses:

	Estimate	lwr	upr
b1 - b0 >= 0	-1.2667	-Inf	0.7144
b2 - b0 >= 0	-0.2667	-Inf	3.8078

```
b3 - b0 >= 0 -2.7333      -Inf -0.4498
```

Simultaneous Tests for General Linear Hypotheses

Multiple Comparisons of Means: Dunnett Contrasts

```
Fit: lm(formula = modelfunction, data = df_factorized)
```

Linear Hypotheses:

	Estimate	Std. Error	t value	Pr(<t)
b1 - b0 >= 0	-1.2667	0.9086	-1.394	0.1583
b2 - b0 >= 0	-0.2667	1.8687	-0.143	0.4437
b3 - b0 >= 0	-2.7333	1.0473	-2.610	0.0187 *

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

(Adjusted p values reported -- free method)

References

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Madsen, Jacob H. 2018. DDoutlier: Distance & Density-Based Outlier Detection. <https://CRAN.R-project.org/package=DDoutlier>.

R Core Team. 2019. R: A Language and Environment for Statistical Computing. Vienna, Austria: R Foundation for Statistical Computing. <https://www.R-project.org/>.

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