Kruskal–Wallis test cidadania ~ formacao.continuada

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* Report as Word format: <kruskal.docx>
* Report as LaTex format: <kruskal.tex>

## Initial Data and Preprocessing

R script: <kruskal.R> Inital data: <data.csv>

## Computation Kruskal-Wallis test and Effect Size

(res.kruskal <- kruskal\_test(dat, `cidadania` ~ `formacao.continuada`))

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| .y. | n | statistic | df | p | method | p.signif |
| cidadania | 92 | 9.3735 | 2 | 0.0092 | Kruskal-Wallis | \*\* |

(ezm <- kruskal\_effsize(dat, `cidadania` ~ `formacao.continuada`, ci = TRUE))

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| .y. | n | effsize | conf.low | conf.high | method | magnitude |
| cidadania | 92 | 0.0828 | 0.0015 | 0.23 | eta2[H] | moderate |

## Post-hoc Tests (Pairwise Comparisons)

pwc <- dunn\_test(dat, `cidadania` ~ `formacao.continuada`, detailed=T, p.adjust.method = "bonferroni")  
add\_significance(pwc)

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| .y. | group1 | group2 | n1 | n2 | estimate | statistic | p | method | p.adj | p.adj.signif |
| cidadania | Doutorado - Concluído | Formação continuada - Concluída | 28 | 46 | -7.7081 | -1.2079 | 0.2271 | Dunn Test | 0.6813 | ns |
| cidadania | Doutorado - Concluído | Formação continuada - Em andamento | 28 | 18 | -24.4762 | -3.0430 | 0.0023 | Dunn Test | 0.007 | \*\* |
| cidadania | Formação continuada - Concluída | Formação continuada - Em andamento | 46 | 18 | -16.7681 | -2.2654 | 0.0235 | Dunn Test | 0.0705 | ns |

## Report Kruskal-Wallis test with Plots and Descriptive Statistic

get\_summary\_stats(group\_by(dat, `formacao.continuada`), type ="common")

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| formacao.continuada | variable | n | mean | median | min | max | sd | se | ci | iqr |
| Doutorado - Concluído | cidadania | 28 | 2.815 | 2.667 | 1.333 | 4.500 | 0.616 | 0.116 | 0.239 | 0.667 |
| Formação continuada - Concluída | cidadania | 46 | 2.656 | 2.500 | 1.000 | 4.333 | 0.797 | 0.117 | 0.237 | 1.167 |
| Formação continuada - Em andamento | cidadania | 18 | 2.213 | 2.167 | 1.500 | 3.333 | 0.568 | 0.134 | 0.283 | 0.792 |

kruskal.plot(dat, "cidadania", "formacao.continuada", res.kruskal, pwc, c("jitter"))

