Kruskal–Wallis test pedagogica ~ 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, `pedagogica` ~ `formacao.continuada`))

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| .y. | n | statistic | df | p | method | p.signif |
| pedagogica | 92 | 0.6555 | 2 | 0.721 | Kruskal-Wallis | ns |

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| .y. | n | effsize | conf.low | conf.high | method | magnitude |
| pedagogica | 92 | -0.0151 | -0.02 | 0.08 | eta2[H] | small |

## Post-hoc Tests (Pairwise Comparisons)

pwc <- dunn\_test(dat, `pedagogica` ~ `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 |
| pedagogica | Doutorado - Concluído | Formação continuada - Concluída | 28 | 46 | 1.6848 | 0.2641 | 0.7917 | Dunn Test | 1 | ns |
| pedagogica | Doutorado - Concluído | Formação continuada - Em andamento | 28 | 18 | -4.3056 | -0.5355 | 0.5923 | Dunn Test | 1 | ns |
| pedagogica | Formação continuada - Concluída | Formação continuada - Em andamento | 46 | 18 | -5.9903 | -0.8096 | 0.4181 | Dunn Test | 1 | 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 | pedagogica | 28 | 2.527 | 2.375 | 1 | 4.75 | 1.149 | 0.217 | 0.446 | 2.062 |
| Formação continuada - Concluída | pedagogica | 46 | 2.538 | 2.500 | 1 | 4.25 | 0.931 | 0.137 | 0.276 | 1.688 |
| Formação continuada - Em andamento | pedagogica | 18 | 2.306 | 2.125 | 1 | 4.25 | 0.798 | 0.188 | 0.397 | 0.688 |

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

