

# Package ‘PSS.Health’

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**Type** Package

**Title** Power and Sample Size for Health Researchers via Shiny

**Version** 0.1.5

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**Language** pt

**Description**

Power and Sample Size for Health Researchers is a Shiny application that brings together a series of functions related to sample size and power calculations for common analysis in the healthcare field. There are functionalities to calculate the power, sample size to estimate or test hypotheses for means and proportions (including test for equivalence, non-inferiority and superiority), association, Pearson's correlation coefficient, regression coefficients (linear, logistic and Cox), linear mixed model, Cronbach's alpha, interobserver agreement, intraclass correlation coefficients, limit of agreement on Bland-Altman plots, area under the curve, sensitivity and specificity incorporating the prevalence of disease.

**Imports** DT, easypower, EnvStats, ICC.Sample.Size, kappaSize, longpower, MESS, plotly, powerMediation, powerSurvEpi, presize, pROC, pwr, pwr2, shiny, shinycssloaders, shinyFeedback, shinythemes, shinyhelper, tidyverse, TrialSize, WebPower, writexl

**License** GPL (>= 2)

**Encoding** UTF-8

**RoxygenNote** 7.1.0

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**NeedsCompilation** no

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**Repository** CRAN

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PSS_Health	<i>This function will start the Shiny application</i>
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### Description

Run locally an interactive Shiny application for Power and Sample Size determination.

### Usage

```
PSS_Health()
```

### Note

You can also use the online version at [https://hcpa-unidade-bioestatistica.shinyapps.io/PSS\\_Health/](https://hcpa-unidade-bioestatistica.shinyapps.io/PSS_Health/)

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### See Also

Agranonik, M., & Hirakata, V. N. (2011). Cálculo de tamanho de amostra: Proporções. *Clinical & Biomedical Research*, 31(3), Article 3. <https://seer.ufrgs.br/hcpa/article/view/23574>

Borges, R. B., Leotti, V. B., Mancuso, A. C. B., Castro, S. M. de J., Hirakata, V. N., & Camey, S. A. (2020). Equívocos Estatísticos: Perguntas que você sempre quis fazer, mas nunca teve coragem. *Clinical & Biomedical Research*, 40(1), Article 1. <https://seer.ufrgs.br/hcpa/article/view/101299>

Coster, R., Torman, V. B. L., & Camey, S. A. (2012). Um alerta sobre o uso de amostras pequenas na regressão logística. *Clinical & Biomedical Research*, 32(1), Article 1. <https://seer.ufrgs.br/hcpa/article/view/27267>

de Jesus Castro, S. M., Mancuso, A. C. B., Leotti, V. B., Hirakata, V. N., & Camey, S. A. (2020). Bioestatística e Epidemiologia: Perguntas que você sempre quis fazer, mas nunca teve coragem. *Clinical & Biomedical Research*, 39(3). <https://seer.ufrgs.br/hcpa/article/view/96394>

Douglas G. Bonett. (2020). Sample Size Planning for Behavioral Science Research. *Sample Size Planning for Behavioral Science Research*. <https://people.ucsc.edu/~dgbonett/sample.html>

Hirakata, V. N., Mancuso, A. C. B., & Castro, S. M. de J. (2019). Teste de Hipóteses: Perguntas que você sempre quis fazer, mas nunca teve coragem. *Clinical & Biomedical Research*, 39(2), Article 2. <https://seer.ufrgs.br/hcpa/article/view/93649>

Leotti, V. B., Mancuso, A. C. B., Borges, R. B., Castro, S. M. de J., Hirakata, V. N., & Camey, S. A. (2019). Modelagem estatística: Perguntas que você sempre quis fazer, mas nunca teve coragem. *Clinical & Biomedical Research*, 39(4), Article 4. <https://seer.ufrgs.br/hcpa/article/view/98944>

### Examples

```
if(interactive()){  
  PSS_Health()  
}
```

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