

Package ‘RDSsamplesize’

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Type Package

Title RDS Sample Size Estimation and Power Calculation

Version 0.1.0

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Description Provides functionality for carrying out sample size estimation and power calculation in Respondent-Driven Sampling.

License GPL-3

Depends R (>= 3.3.0)

Imports Rcpp

LinkingTo Rcpp

Encoding UTF-8

RoxygenNote 7.2.0

NeedsCompilation yes

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Suggests knitr, rmarkdown, dplyr, ggplot2, latex2exp

VignetteBuilder knitr

Repository CRAN

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R topics documented:

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calSize *Calculate the accumulated sample size distribution by each wave.*

Description

Calculate the accumulated sample size distribution by each wave.

Usage

```
calSize(n0, m, maxT, p_list_vec, tol)
```

Arguments

| | |
|------------|---|
| n0 | Number of seeds. |
| m | Number of coupons issued to each participant. |
| maxT | Planned field period. |
| p_list_vec | A vector of recruitment rates. |
| tol | Accuracy loss limit. |

Value

a list consisting of the following elements:

| | |
|------------|--|
| P_tau_list | vector; a vector of extinction probability at each wave. |
| Fk | list; probability mass function of the accumulated sample size by each wave, k=1,...,maxT. |

Examples

```
result <- calSize(n0=10,m=3,maxT=9,p_list_vec=rep(0.3,9),tol=0.005)
```

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