

# Package: DCEtool (via r-universe)

May 26, 2026

**Title** Efficient and Accessible Discrete Choice Experiments

**Version** 1.2.1

**Description** Design, conduct and analyze 'DCEs' from a virtual interface in shiny. Reference: Perez-Troncoso, D. (2022) [\(<https://github.com/danielpereztr/DCEtool>.](https://github.com/danielpereztr/DCEtool)

**License** GPL-3

**Encoding** UTF-8

**RoxygenNote** 7.3.2

**Depends** survival, shinyBS, shinycssloaders

**Imports** shiny, shinyWidgets, mvtnorm, DT, writexl, readxl, idfix, ggplot2, magrittr, remotes, rlist, shinyhelper, usethis, htmltools, httr, adjustedcranlogs

**Suggests** tidyr, mlogit, knitr, dfix, MASS, markdown, shinyjs

**VignetteBuilder** knitr

**NeedsCompilation** no

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**Config/pak/sysreqs** cmake git make libmagick++-dev gsfonds libgit2-dev libicu-dev libjpeg-dev libpng-dev libuv1-dev libxml2-dev libssl-dev libx11-dev zlib1g-dev

**Repository** <https://danielpereztr.r-universe.dev>

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dce\_toolbox

*Generate Efficient Optimal and Bayesian DCEs*


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### Description

Generates experimental designs for DCEs. (Backend of DCEtool) .

### Usage

```
dce_toolbox(attributes, csets, alts, nochoice, priors, alg)
```

### Arguments

attributes	A vector where each number represents an attribute and its values the number of levels.
csets	An integer indicating the number of sets in the DCE.
alts	An integer indicating the number of alternatives in each set.
nochoice	A boolean indicating whether there is an opt-out option (TRUE) or not (FALSE)
priors	A vector indicating the prior parameters of the conditional logit model.
alg	A string indicating the optimization algorithm: "cea" or "fedorov".

### Value

design	The design matrix
DB-error	The Bayesian D-error if the optimization algorithm is "cea"
D-error	The D-error if the optimization algorithm is "fedorov"
details	A string compiling the details of the procedure

### Examples

```
## Not run:
dce_toolbox(attributes = c(2,3), csets = 12,
             alts = 2, nochoice = FALSE,
             priors = c(0,0,0), alg = "fedorov")

## End(Not run)
```

DCEtool

*Efficient and Accessible DCEs: DCEtool***Description**

Design, conduct, and analyze discrete choice experiments from a visual interface.

**Usage**

```
DCEtool()
```

**Value**

Use the visual interface to generate, load and download designs and data bases.

**Examples**

```
## Not run:

DCEtool()

## End(Not run)
```

list.match

*Select members of a list that match given regex pattern***Description**

Select members of a list that match given regex pattern

**Usage**

```
list.match(.data, pattern, ...)
```

**Arguments**

.data	A list or vector
pattern	character. The regex pattern to match the name of the members
...	Additional parameters to pass to grep

**Examples**

```
x <- list(p1 = list(type='A',score=list(c1=10,c2=8)),
          p2 = list(type='B',score=list(c1=9,c2=9)),
          p3 = list(type='B',score=list(c1=9,c2=7)))
list.match(x, 'p[12]')
list.match(x, '3')
```

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