

# Package: rccme (via r-universe)

May 18, 2026

**Title** Regression Calibration for Classical Measurement Error

**Version** 0.0.1.9002

**Description** Contains functions to get calibrated latent trait estimates under assumption of classical measurement error.

**License** GPL (>= 3)

**Encoding** UTF-8

**Roxygen** list(markdown = TRUE)

**RoxygenNote** 7.3.3

**Imports** stats

**URL** <https://jamesuanhoro.github.io/rccme/>

**Suggests** knitr, modelsummary, quarto, sandwich, testthat (>= 3.0.0)

**Config/testthat/edition** 3

**VignetteBuilder** quarto

**Depends** R (>= 3.5)

**LazyData** true

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

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**RemoteUrl** <https://github.com/jamesuanhoro/rccme>

**RemoteRef** HEAD

**RemoteSha** c0670a373e3c9291f4e0cb8958e1f5456a585393

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estress	<i>ESTRESS data</i>
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**Description**

ESTRESS data

**Usage**

estress

**Format**

estress:

A data frame with 7 variables, 262 cases:

**tenure** Company Tenure

**estress** Economic stress

**affect** Depressed affect

**withdraw** Withdrawal intentions

**sex** Male (1) or Female (0)

**age** age

**ese** Entrepreneurial self efficacy

**Source**

Pollack, J., VanEpps, E. M., & Hayes, A. F. (2012). The moderating role of social ties on entrepreneurs' depressed affect and withdrawal intentions in response to economic stress. *Journal of Organizational Behavior*, 33, 789-810.

Hayes, A. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (2nd edn, p. 692). Guilford Press.

Moon K (2023). *processR: Implementation of the 'PROCESS' Macro*. R package version 0.2.8, commit c6c817b5b716f2615b9814cd5022aef1cbc5c09d, <https://github.com/cardiomoon/processR>.

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protest	<i>Protest data</i>
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**Description**

Protest data

**Usage**

protest

**Format**

protest:

A data frame with 6 variables, 129 cases:

**subnum** subject number

**protest** experimental condition, 0 = no protest, 1 = individual protest, 2 = group protest

**sexism** perceived pervasiveness of sex discrimination. Means of an 8 item Modern Sexism Scale

**angry** anger toward the attorney. "I feel angry towards Catherine"

**liking** liking of the attorney. Mean rating of 6 liking ratings of the target

**respappr** appropriateness of response. Mean of four items of appropriateness of the target's response

**Source**

Garcia, D. M., Schmitt, M. T., Branscombe, N. R., & Ellemers, N. (2010). Women's reactions to ingroup members who protest discriminatory treatment: The importance of beliefs about inequality and response appropriateness. *European Journal of Social Psychology*, 40(5), 733–745. <https://doi.org/10.1002/ejsp.644>

Hayes, A. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (2nd edn, p. 692). Guilford Press.

Moon K (2023). *processR: Implementation of the 'PROCESS' Macro*. R package version 0.2.8, commit c6c817b5b716f2615b9814cd5022aef1cbc5c09d, <https://github.com/cardiomoon/processR>.

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rccme\_calib\_me

*Calibrate scores under measurement error*

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**Description**

Calibrate scores under measurement error

**Usage**

```
rccme_calib_me(
  w_mat,
  rel_vec = NULL,
  w_se_vec = NULL,
  w_se_mat = NULL,
  z_mat = matrix(0, nrow = nrow(w_mat), ncol = 0),
  rescale = TRUE,
  standard = FALSE
)
```

**Arguments**

w_mat	(matrix) a matrix of trait estimates for n respondents on p latent variables
rel_vec	(vector) a vector of marginal reliability for p latent variables
w_se_vec	(vector) a vector of standard errors of measurement for p latent variables
w_se_mat	(matrix) a matrix of trait estimates standard-errors for n respondents on p latent variables
z_mat	(matrix) a matrix of error-free covariates for n respondents and q covariates
rescale	(logical) Should the trait estimates and their standard errors be re-scaled? Default is TRUE. The variables are rescaled under the assumption that the trait estimates were not conditioned on any background variables and that the marginal variance of the latent trait is 1. This is true for standardised latent variables in CFA or the default prior variance assumption of 1 in IRT score estimates. This rescaling ensures the trait coefficients are correct for the standardised traits.
standard	(logical) Only relevant when passing reliability. If TRUE, attempt to return the standardised version of the calibrated scores If FALSE (default), do not attempt standardisation.

**Value**

Calibrated trait estimates.

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