

# Omega

## R-Pakete

```
library(psych)
library(tidyverse)
```

```
— Attaching core tidyverse packages — tidyverse 2.0.0 —
✓ dplyr      1.1.2      ✓ readr      2.1.4
✓ forcats    1.0.0      ✓ stringr    1.5.0
✓ ggplot2    3.4.2      ✓ tibble     3.2.1
✓ lubridate  1.9.2      ✓ tidyr      1.3.0
✓ purrr      1.0.1

— Conflicts — tidyverse_conflicts() —
✖ ggplot2::%+%( ) masks psych::%+%( )
✖ ggplot2::alpha( ) masks psych::alpha( )
✖ dplyr::filter( ) masks stats::filter( )
✖ dplyr::lag( ) masks stats::lag( )
i Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become errors
```

```
library(haven)
```

## Daten

```
fmi <- read_sav("Achtsamkeit_Daten_FFAEichung_rekodiert_2.sav")

names(fmi)
```

```
[1] "Nummer"      "STATUS"      "Einwilligung" "Alter"
[5] "Geschlecht"  "Bildung"     "Haushaltsgrösse" "Religion"
[9] "Evang"       "Islam"       "Judentum"     "keineRel"
[13] "Andere_Religion" "feste_Stelle" "Einkommen"     "PHQ_1"
[17] "PHQ_2"       "PHQ_3"       "PHQ_4"         "Kursteilnahme"
[21] "tägl_Übung"  "Achts_regel" "Vip_regel"     "Zen_regel"
[25] "TM_regel"    "Kontemp_regel" "Yoga_regel"    "TaiChi_regel"
[29] "ChiGong_regel" "Tantra_regel" "Ander_regel"   "Anderes"
[33] "Praxisjahre" "Retreats"     "Theorie"       "FFA_1"
[37] "FFA_2"       "FFA_3"       "FFA_4"         "FFA_5"
[41] "FFA_6"       "FFA_7"       "FFA_8"         "FFA_9"
[45] "FFA_10"      "FFA_11"      "FFA_12"        "FFA_13_rek"
[49] "FFA_14"      "Presence"    "Acceptance"    "Summe"
[53] "Acceptance13" "SummeFFA13" "PHQ_Sum"       "Filter"
```

## Omega

```
fmi_items <-
  fmi %>%
  select(FFA_1:FFA_13_rek)

fmi_items %>%
  omega(nfactors = 1)
```

Loading required namespace: GPArotation

Omega\_h for 1 factor is not meaningful, just omega\_t

Warning in schmid(m, nfactors, fm, digits, rotate = rotate, n.obs = n.obs, :  
Omega\_h and Omega\_asymptotic are not meaningful with one factor

Omega

Call: omegah(m = m, nfactors = nfactors, fm = fm, key = key, flip = flip,  
digits = digits, title = title, sl = sl, labels = labels,  
plot = plot, n.obs = n.obs, rotate = rotate, Phi = Phi, option = option,  
covar = covar)

Alpha:	0.86
G.6:	0.86
Omega Hierarchical:	0.87
Omega H asymptotic:	1
Omega Total	0.86

Schmid Leiman Factor loadings greater than 0.2

	g	F1*	h2	u2	p2
FFA_1	0.53		0.28	0.72	1
FFA_2	0.51		0.26	0.74	1
FFA_3	0.49		0.24	0.76	1
FFA_4	0.61		0.37	0.63	1
FFA_5	0.68		0.46	0.54	1
FFA_6	0.65		0.43	0.57	1
FFA_7	0.69		0.47	0.53	1
FFA_8	0.54		0.29	0.71	1
FFA_9	0.65		0.42	0.58	1
FFA_10	0.68		0.46	0.54	1
FFA_11	0.67		0.45	0.55	1
FFA_12	0.65		0.42	0.58	1
FFA_13_rek			0.00	1.00	1

With Sums of squares of:

g	F1*
4.5	0.0

general/max 3.592149e+16 max/min = 1  
mean percent general = 1 with sd = 0 and cv of 0  
Explained Common Variance of the general factor = 1

The degrees of freedom are 65 and the fit is 0.37

The number of observations was 1012 with Chi Square = 376.13 with prob < 2.4e-45

The root mean square of the residuals is 0.05

The df corrected root mean square of the residuals is 0.05

RMSEA index = 0.069 and the 10 % confidence intervals are 0.062 0.076  
 BIC = -73.65

Compare this with the adequacy of just a general factor and no group factors  
 The degrees of freedom for just the general factor are 65 and the fit is 0.37  
 The number of observations was 1012 with Chi Square = 376.13 with prob < 2.4e-45  
 The root mean square of the residuals is 0.05  
 The df corrected root mean square of the residuals is 0.05

RMSEA index = 0.069 and the 10 % confidence intervals are 0.062 0.076  
 BIC = -73.65

#### Measures of factor score adequacy

	g	F1*
Correlation of scores with factors	0.94	0
Multiple R square of scores with factors	0.88	0
Minimum correlation of factor score estimates	0.77	-1

#### Total, General and Subset omega for each subset

	g	F1*
Omega total for total scores and subscales	0.86	0.87
Omega general for total scores and subscales	0.87	0.87
Omega group for total scores and subscales	0.00	0.00