FFA-Norm values

Based on the 2009 Paper by Kohls, Sauer and Walach

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2025-05-05 18:44:57.759932

Contents

1 Summary

- This analyses comprises (a) descriptive (summary) statistics as well as (b) norm values
- All analyses were based on the FMI13 as presented in Kohls, Sauer and Walach (2009):

  Kohls, N., Sauer, S., & Walach, H. (2009). Facets of mindfulness – Results of an online study investigating the Freiburg mindfulness inventory. *Personality and Individual Differences, 46*(2), 224–230. https://doi.org/10.1016/j.paid.2008.10.009

- Results are presented for (a) a general factor solution (b) and for the two factor solution, based on the paper of Kohls, Sauer and Walach (2009)
- The present norm analyses includes the following norm values: z-values, T values, percentage rank empirical, percentage rank based on a normal distribution
- For the descriptive analyses, typical statistics are reproted, ie. mean, sd, range, quartiles, skewness, kurtosis as well as a "0-1-standardized mean", defined as mean/3 (as 3 is the theoretical upper limit of each score). This statistics is meant to easy comparison.
- A number of subgroup results are presented: by sex (female and male), continuous mindfulness training (yes or no), whether intensive mindfulnes retreats have been conducted (yes or noy), whether Vipassana training is practiced (yes or no), age (median split, ie., 49 years)

2 Setup

Load R-Packages and other functions used.

```
library(easystats)
library(here)
library(tidyverse)
#library(knitr)
library(DataExplorer)
#library(scales)
library(knitr)
library(gt)
```

```r
library(magrittr)  # extract2
library(lavaan)
library(semPlot)
```

```r
source("R-code/funs.R")
source("R-code/01-prepare-data.R")
```

3 Data

3.1 Prepare data

```r
d_w_items <- prepare_FMI_data()
```

```
## The following items were matched to the *presence* factor:  ffa_1 ffa_2 ffa_3 ffa_5 ffa_7 ffa_10
## The following items were matched to the *acceptance* factor:  ffa_4 ffa_6 ffa_8 ffa_9 ffa_11 ffa_12 f
## mutating factors to character variables
```

```r
names(d_w_items)
```

```
##  [1] "Nummer"                "STATUS"                "Einwilligung"
##  [4] "Alter"                 "Geschlecht"            "Bildung"
##  [7] "Haushaltsgrösse"       "Religion"              "Evang"
## [10] "Islam"                 "Judentum"              "keineRel"
## [13] "Andere_Religion"       "feste_Stelle"          "Einkommen"
## [16] "Kursteilnahme"         "tägl_Übung"            "Achts_regel"
## [19] "Vip_regel"             "Zen_regel"             "TM_regel"
## [22] "Kontemp_regel"         "Yoga_regel"            "TaiChi_regel"
## [25] "ChiGong_regel"         "Tantra_regel"          "Ander_regel"
## [28] "Anderes"               "Praxisjahre"           "Retreats"
## [31] "Theorie"               "Presence"              "Acceptance"
## [34] "Summe"                 "Acceptance13"          "SummeFFA13"
## [37] "fmi13_mean"            "presence_mean"         "acceptance13_mean"
## [40] "fmi14_mean"            "ffa_1"                 "ffa_2"
## [43] "ffa_3"                 "ffa_4"                 "ffa_5"
## [46] "ffa_6"                 "ffa_7"                 "ffa_8"
## [49] "ffa_9"                 "ffa_10"                "ffa_11"
## [52] "ffa_12"                "ffa_13r"               "ffa_14"
## [55] "mindfulness_experience"
```

3.2 Item labels

```r
item_labels <-
  read_csv("metadata/FMI-items.csv") |>
  mutate(item_name = paste0("FFA_", nr))
```

3.3 Matching items to factors

Presence items:

```
item_labels |>
  filter(facet_PAID_2009 == "Presence") |>
  select(nr) |>
  extract2(1)
```

```
## [1]  1  2  3  5  7 10
```

Acceptance items:

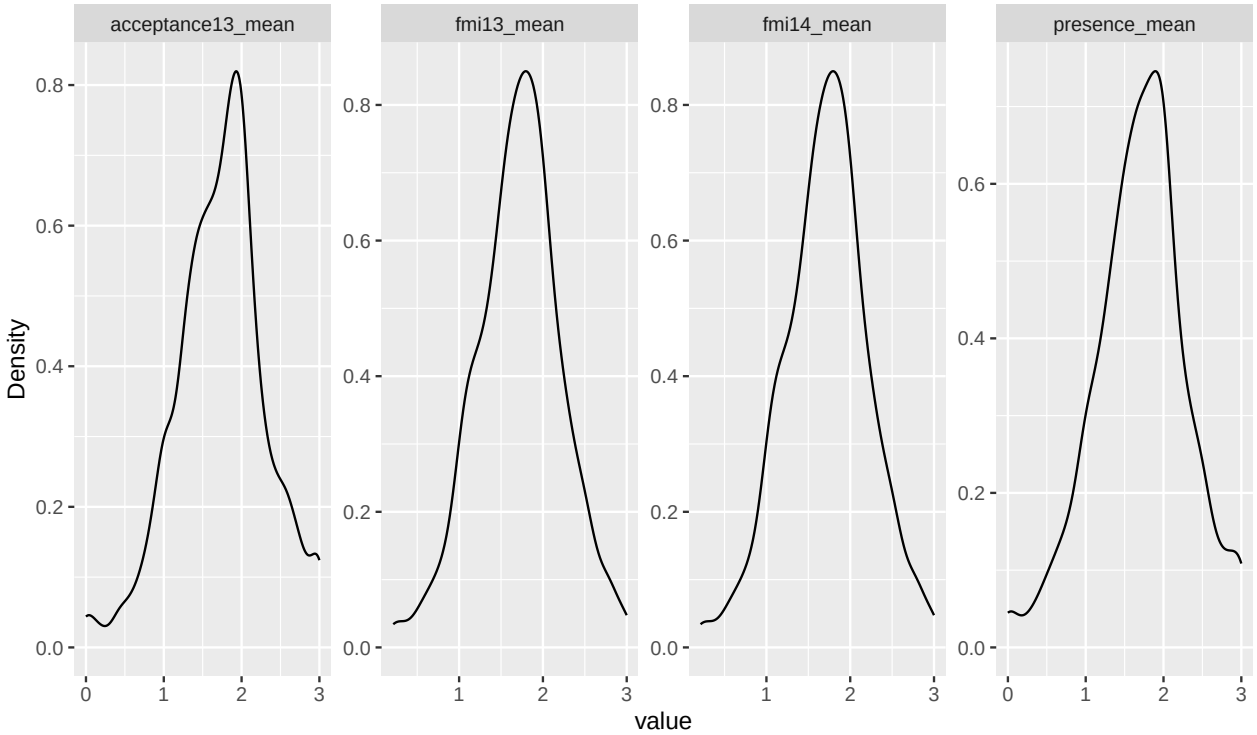
```
item_labels |>
  filter(facet_PAID_2009 == "Acceptance") |>
  select(nr)|>
  extract2(1)
```

```
## [1]  4  6  8  9 11 12 13 14
```

4 Describe factors

4.1 Visualization of factor distributions

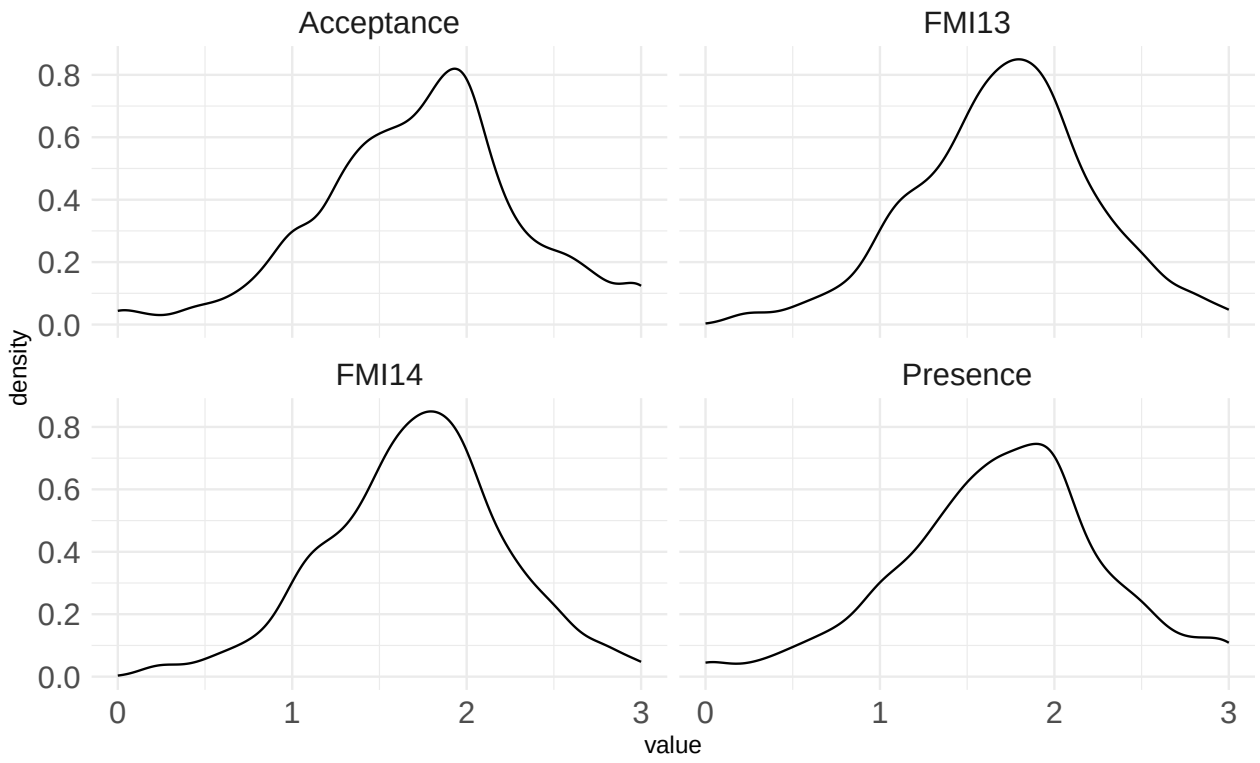
```
d_w_items %>%
  select(ends_with("_mean")) %>%
  plot_density() + theme_minimal()
```



```
## NULL
```

Alternative visualization, keeping the x-axis constant:

```
facet_labs <- c(acceptance13_mean = "Acceptance",
                fmi13_mean = "FMI13",
                fmi14_mean = "FMI14",
                presence_mean = "Presence")


d_w_items %>%
  select(ends_with("_mean")) %>%
  pivot_longer(everything()) %>%
  ggplot(aes(x = value)) +
  geom_density() +
  facet_wrap(~ name, labeller = as_labeller(facet_labs)) +
  theme_minimal() +
  theme(strip.text = element_text(size = 14),
                axis.text = element_text(size =14))
```



4.2 Descriptive statistics

"Mean01" refers to a 0-1-standardized mean.

```
d_w_items %>%
  select(ends_with("_mean")) %>%
  describe_distribution(iqr = FALSE, range = TRUE, quartiles = TRUE) %>%
```

```
  mutate(Mean01 = Mean/3) %>%
  relocate(Mean01, .after = Mean) %>%
  knitr::kable(digits = 2)
```

Variable	Mean	Mean01	SD	Min	Max	Q1	Q3	Skewness	Kurtosis	n	n_Missing
fmi13_mean	1.71	0.57	0.51	0.21	3	1.36	2	-0.15	0.16	1012	0
presence_mean	1.70	0.57	0.59	0.00	3	1.33	2	-0.24	0.19	1012	0
acceptance13_mean	1.73	0.58	0.58	0.00	3	1.43	2	-0.22	0.27	1012	0
fmi14_mean	1.71	0.57	0.51	0.21	3	1.36	2	-0.15	0.16	1012	0

4.3 Norms

```
d_w_items %>%
  select(ends_with("_mean")) %>%
  map(~ knitr::kable(compute_all_norms(., min_score = 0, max_score = 3, by = .1),
                     digits = 2))
```

$fmi13_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-3.37	1.00	16.35	0.00
0.1	0.00	-3.17	1.00	18.31	0.00
0.2	0.00	-2.97	1.00	20.28	0.00
0.3	0.01	-2.78	1.00	22.24	0.00
0.4	0.01	-2.58	1.00	24.21	0.00
0.5	0.02	-2.38	1.00	26.17	0.01
0.6	0.02	-2.19	1.00	28.13	0.01
0.7	0.03	-1.99	1.02	30.10	0.02
0.8	0.04	-1.79	1.41	32.06	0.04
0.9	0.05	-1.60	1.80	34.02	0.06
1.0	0.09	-1.40	2.20	35.99	0.08
1.1	0.12	-1.20	2.59	37.95	0.11
1.2	0.15	-1.01	2.98	39.92	0.16
1.3	0.21	-0.81	3.38	41.88	0.21
1.4	0.25	-0.62	3.77	43.84	0.27
1.5	0.34	-0.42	4.16	45.81	0.34
1.6	0.40	-0.22	4.55	47.77	0.41
1.7	0.45	-0.03	4.95	49.74	0.49
1.8	0.58	0.17	5.34	51.70	0.57
1.9	0.64	0.37	5.73	53.66	0.64
2.0	0.76	0.56	6.13	55.63	0.71
2.1	0.80	0.76	6.52	57.59	0.78
2.2	0.83	0.96	6.91	59.56	0.83
2.3	0.89	1.15	7.30	61.52	0.88
2.4	0.91	1.35	7.70	63.48	0.91
2.5	0.95	1.54	8.09	65.45	0.94
2.6	0.96	1.74	8.48	67.41	0.96
2.7	0.97	1.94	8.88	69.38	0.97
2.8	0.99	2.13	9.00	71.34	0.98

score	perc_rank	z	stanine	T	perc_normal
2.9	0.99	2.33	9.00	73.30	0.99
3.0	1.00	2.53	9.00	75.27	0.99

$presence_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.01	-2.86	1.00	21.37	0.00
0.1	0.01	-2.69	1.00	23.06	0.00
0.2	0.02	-2.53	1.00	24.74	0.01
0.3	0.02	-2.36	1.00	26.43	0.01
0.4	0.02	-2.19	1.00	28.12	0.01
0.5	0.04	-2.02	1.00	29.80	0.02
0.6	0.04	-1.85	1.30	31.49	0.03
0.7	0.06	-1.68	1.64	33.18	0.05
0.8	0.06	-1.51	1.97	34.86	0.07
0.9	0.09	-1.34	2.31	36.55	0.09
1.0	0.15	-1.18	2.65	38.24	0.12
1.1	0.15	-1.01	2.98	39.92	0.16
1.2	0.21	-0.84	3.32	41.61	0.20
1.3	0.21	-0.67	3.66	43.30	0.25
1.4	0.29	-0.50	4.00	44.99	0.31
1.5	0.40	-0.33	4.33	46.67	0.37
1.6	0.40	-0.16	4.67	48.36	0.43
1.7	0.52	0.00	5.01	50.05	0.50
1.8	0.52	0.17	5.35	51.73	0.57
1.9	0.64	0.34	5.68	53.42	0.63
2.0	0.77	0.51	6.02	55.11	0.70
2.1	0.77	0.68	6.36	56.79	0.75
2.2	0.84	0.85	6.70	58.48	0.80
2.3	0.84	1.02	7.03	60.17	0.85
2.4	0.89	1.19	7.37	61.85	0.88
2.5	0.93	1.35	7.71	63.54	0.91
2.6	0.93	1.52	8.05	65.23	0.94
2.7	0.96	1.69	8.38	66.91	0.95
2.8	0.96	1.86	8.72	68.60	0.97
2.9	0.98	2.03	9.00	70.29	0.98
3.0	1.00	2.20	9.00	71.97	0.99

$acceptance13_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.01	-2.99	1.00	20.06	0.00
0.1	0.01	-2.82	1.00	21.78	0.00
0.2	0.01	-2.65	1.00	23.51	0.00
0.3	0.02	-2.48	1.00	25.24	0.01
0.4	0.02	-2.30	1.00	26.96	0.01
0.5	0.03	-2.13	1.00	28.69	0.02
0.6	0.04	-1.96	1.08	30.42	0.03
0.7	0.04	-1.79	1.43	32.14	0.04

score	perc_rank	z	stanine	T	perc_normal
0.8	0.05	-1.61	1.77	33.87	0.05
0.9	0.08	-1.44	2.12	35.60	0.07
1.0	0.13	-1.27	2.47	37.33	0.10
1.1	0.13	-1.09	2.81	39.05	0.14
1.2	0.17	-0.92	3.16	40.78	0.18
1.3	0.24	-0.75	3.50	42.51	0.23
1.4	0.24	-0.58	3.85	44.23	0.28
1.5	0.33	-0.40	4.19	45.96	0.34
1.6	0.42	-0.23	4.54	47.69	0.41
1.7	0.42	-0.06	4.88	49.41	0.48
1.8	0.51	0.11	5.23	51.14	0.55
1.9	0.63	0.29	5.57	52.87	0.61
2.0	0.75	0.46	5.92	54.60	0.68
2.1	0.75	0.63	6.26	56.32	0.74
2.2	0.82	0.80	6.61	58.05	0.79
2.3	0.87	0.98	6.96	59.78	0.84
2.4	0.87	1.15	7.30	61.50	0.87
2.5	0.90	1.32	7.65	63.23	0.91
2.6	0.94	1.50	7.99	64.96	0.93
2.7	0.94	1.67	8.34	66.68	0.95
2.8	0.96	1.84	8.68	68.41	0.97
2.9	0.98	2.01	9.00	70.14	0.98
3.0	1.00	2.19	9.00	71.87	0.99

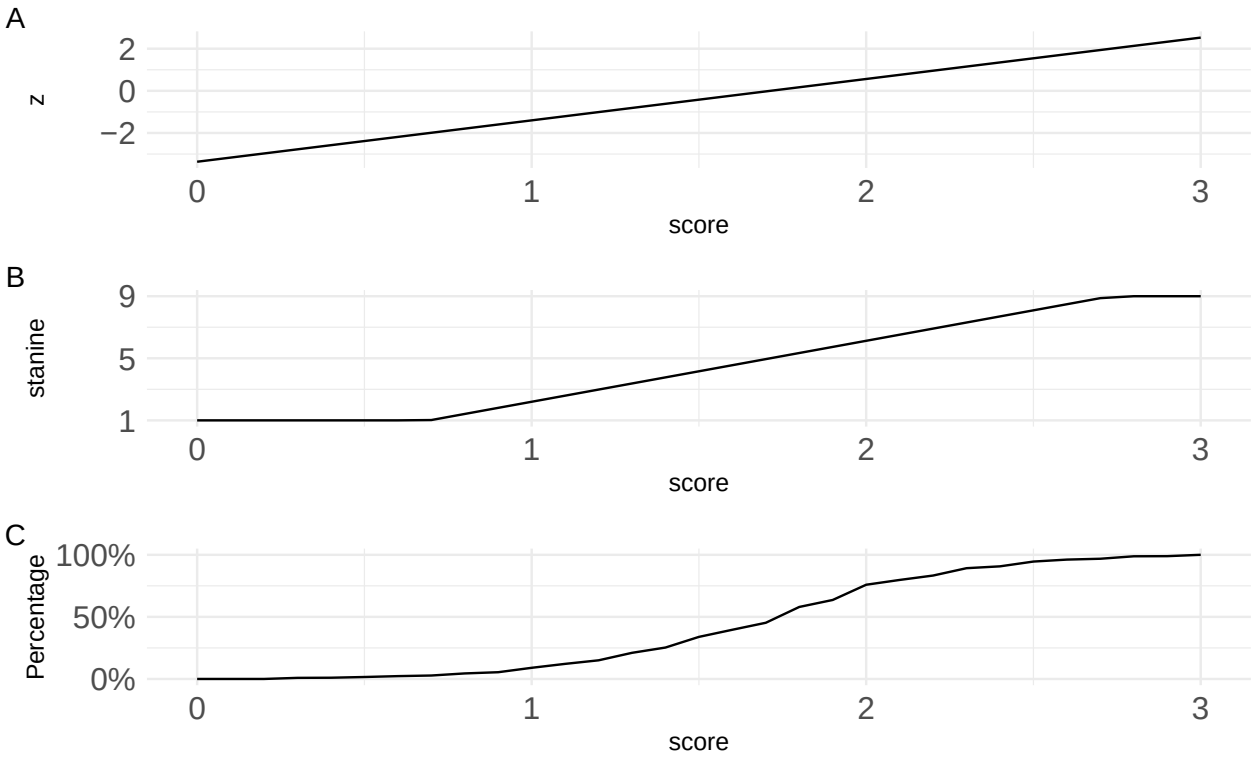
$fmi14_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-3.37	1.00	16.35	0.00
0.1	0.00	-3.17	1.00	18.31	0.00
0.2	0.00	-2.97	1.00	20.28	0.00
0.3	0.01	-2.78	1.00	22.24	0.00
0.4	0.01	-2.58	1.00	24.21	0.00
0.5	0.02	-2.38	1.00	26.17	0.01
0.6	0.02	-2.19	1.00	28.13	0.01
0.7	0.03	-1.99	1.02	30.10	0.02
0.8	0.04	-1.79	1.41	32.06	0.04
0.9	0.05	-1.60	1.80	34.02	0.06
1.0	0.09	-1.40	2.20	35.99	0.08
1.1	0.12	-1.20	2.59	37.95	0.11
1.2	0.15	-1.01	2.98	39.92	0.16
1.3	0.21	-0.81	3.38	41.88	0.21
1.4	0.25	-0.62	3.77	43.84	0.27
1.5	0.34	-0.42	4.16	45.81	0.34
1.6	0.40	-0.22	4.55	47.77	0.41
1.7	0.45	-0.03	4.95	49.74	0.49
1.8	0.58	0.17	5.34	51.70	0.57
1.9	0.64	0.37	5.73	53.66	0.64
2.0	0.76	0.56	6.13	55.63	0.71
2.1	0.80	0.76	6.52	57.59	0.78
2.2	0.83	0.96	6.91	59.56	0.83
2.3	0.89	1.15	7.30	61.52	0.88

score	perc_rank	z	stanine	T	perc_normal
2.4	0.91	1.35	7.70	63.48	0.91
2.5	0.95	1.54	8.09	65.45	0.94
2.6	0.96	1.74	8.48	67.41	0.96
2.7	0.97	1.94	8.88	69.38	0.97
2.8	0.99	2.13	9.00	71.34	0.98
2.9	0.99	2.33	9.00	73.30	0.99
3.0	1.00	2.53	9.00	75.27	0.99

```
norms <-
d_w_items %>%
  select(ends_with("_mean")) %>%
  map(~ compute_all_norms(.,
                          min_score = 0,
                          max_score = 3,
                          by = .1),
      digits = 2)


p_norm1 <-
norms %>%
  pluck(1) %>%
  ggplot(aes(x = score, y = z)) +
  geom_line() +
  scale_y_continuous(breaks = c(-2, 0, 2)) +
  theme(strip.text = element_text(size = 14),
                axis.text = element_text(size =14))


p_norm2 <-
norms %>%
  pluck(1) %>%
  ggplot(aes(x = score, y = stanine)) +
  geom_line() +
  scale_y_continuous(breaks = c(1, 5, 9)) +
  theme(strip.text = element_text(size = 14),
                axis.text = element_text(size =14))


p_norm3 <-
norms %>%
  pluck(1) %>%
  ggplot(aes(x = score, y = perc_rank)) +
  geom_line() +
  labs(y = "Percentage")  +
  scale_y_continuous(breaks = c(0, .5, 1),

                     labels = c("0%", "50%", "100%")) +
  theme(strip.text = element_text(size = 14),
                axis.text = element_text(size =14))


see::plots(p_norm1, p_norm2, p_norm3, tags = TRUE,
```

```
          n_rows = 3)
```




```
#
# see::plots(p_norm1, p_norm2, p_norm3, tags = TRUE,
#            n_rows = 3,
#            title =  "FMI-13R mean value (x-axis) vs. different norm values (y-axis)")
```

5 Item statistics and reliability

5.1 FMI14

Item statistics:

```
fmi14_desc1 <-
d_w_items |>
  select(starts_with("ffa_", ignore.case = FALSE)) |>
  psych::alpha()

col_names <- c("Nr.", "mean", "*SD", "*r*", "*r<sub>it</sub>*")

fmi14_desc1[["item.stats"]] |>
  select(mean, sd, r.cor, r.drop) |>
    kable(col.names = col_names, escape = FALSE, digits = 2)
```

Nr.	mean	*SD	*r*	*rit*
ffa_1	1.91	0.85	0.53	0.49
ffa_2	1.51	0.89	0.50	0.46
ffa_3	1.42	0.86	0.49	0.45
ffa_4	1.89	0.86	0.62	0.57
ffa_5	1.84	0.83	0.67	0.63
ffa_6	1.80	0.82	0.65	0.60
ffa_7	1.78	0.84	0.68	0.63
ffa_8	1.84	0.77	0.53	0.49
ffa_9	1.71	0.84	0.66	0.61
ffa_10	1.72	0.85	0.67	0.62
ffa_11	1.74	0.84	0.68	0.64
ffa_12	1.54	0.86	0.66	0.61
ffa_13r	1.67	0.90	0.01	0.00
ffa_14	1.60	0.84	0.55	0.51

Omega:

```
fmi14_omega <-
d_w_items |>
  select(starts_with("ffa_", ignore.case = FALSE)) |>
  psych::omega(nfactors = 1)

fmi14_omega
```

```
## 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:                 0.87
## G.6:                   0.87
## Omega Hierarchical:    0.87
## Omega H asymptotic:    1
## Omega Total            0.87
##
## Schmid Leiman Factor loadings greater than  0.2
##            g  F1*   h2   h2   u2 p2 com
## ffa_1   0.53      0.28 0.28 0.72  1   1
## ffa_2   0.51      0.26 0.26 0.74  1   1
## ffa_3   0.49      0.24 0.24 0.76  1   1
## ffa_4   0.61      0.37 0.37 0.63  1   1
## ffa_5   0.67      0.45 0.45 0.55  1   1
## ffa_6   0.65      0.43 0.43 0.57  1   1
## ffa_7   0.69      0.47 0.47 0.53  1   1
## ffa_8   0.53      0.28 0.28 0.72  1   1
## ffa_9   0.65      0.42 0.42 0.58  1   1
## ffa_10  0.67      0.45 0.45 0.55  1   1
## ffa_11  0.67      0.45 0.45 0.55  1   1
## ffa_12  0.66      0.43 0.43 0.57  1   1
## ffa_13r               0.00 1.00  1   1
## ffa_14  0.56      0.31 0.31 0.69  1   1
```

```
##
## With Sums of squares  of:
##   g F1*  h2
## 4.9 0.0 1.9
##
## general/max  2.55   max/min =   1.939515e+16
## mean percent general =  1    with sd =  0 and cv of  0
## Explained Common Variance of the general factor =  1
##
## The degrees of freedom are 77  and the fit is  0.4
## The number of observations was  1012  with Chi Square =  402.03  with prob <  1.7e-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 =  0.065  and the 10 % confidence intervals are  0.058 0.071
## BIC =  -130.78
##
## Compare this with the adequacy of just a general factor and no group factors
## The degrees of freedom for just the general factor are 77  and the fit is  0.4
## The number of observations was  1012  with Chi Square =  402.03  with prob <  1.7e-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 =  0.065  and the 10 % confidence intervals are  0.058 0.071
## BIC =  -130.78
##
## Measures of factor score adequacy
##                                                 g F1*
## Correlation of scores with factors            0.94   0
## Multiple R square of scores with factors      0.89   0
## Minimum correlation of factor score estimates 0.78  -1
##
##  Total, General and Subset omega for each subset
##                                                 g  F1*
## Omega total for total scores and subscales    0.87 0.87
## Omega general for total scores and subscales  0.87 0.87
## Omega group for total scores and subscales    0.00 0.00
```

5.2 FMI13-R

```
fmi13_desc1 <-
d_w_items |>
  select(starts_with("ffa_", ignore.case = FALSE)) |>
  select(-ffa_13r) |>
  psych::alpha()

col_names <- c("Nr.", "mean", "*SD", "*r*", "*r<sub>it</sub>*")

fmi13_desc1[["item.stats"]] |>
  select(mean, sd, r.cor, r.drop) |>
    kable(col.names = col_names, escape = FALSE, digits = 2)
```

Nr.	mean	*SD	*r*	*rit*
ffa_1	1.91	0.85	0.53	0.50
ffa_2	1.51	0.89	0.52	0.49
ffa_3	1.42	0.86	0.50	0.47
ffa_4	1.89	0.86	0.61	0.57
ffa_5	1.84	0.83	0.67	0.63
ffa_6	1.80	0.82	0.65	0.61
ffa_7	1.78	0.84	0.68	0.64
ffa_8	1.84	0.77	0.53	0.50
ffa_9	1.71	0.84	0.64	0.60
ffa_10	1.72	0.85	0.67	0.63
ffa_11	1.74	0.84	0.67	0.63
ffa_12	1.54	0.86	0.66	0.62
ffa_14	1.60	0.84	0.56	0.52

Omega:

```
fmi13_omega <-
d_w_items |>
  select(starts_with("ffa_", ignore.case = FALSE)) |>
  select(-ffa_13r) |>
  psych::omega(nfactors = 1)

fmi13_omega
```

```
## 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:                 0.88
## G.6:                   0.88
## Omega Hierarchical:    0.88
## Omega H asymptotic:    1
## Omega Total            0.88
##
## Schmid Leiman Factor loadings greater than  0.2
##           g  F1*   h2   h2   u2 p2 com
## ffa_1  0.53      0.28 0.28 0.72  1   1
## ffa_2  0.51      0.26 0.26 0.74  1   1
## ffa_3  0.49      0.24 0.24 0.76  1   1
## ffa_4  0.61      0.37 0.37 0.63  1   1
## ffa_5  0.67      0.45 0.45 0.55  1   1
## ffa_6  0.65      0.43 0.43 0.57  1   1
## ffa_7  0.69      0.47 0.47 0.53  1   1
## ffa_8  0.53      0.28 0.28 0.72  1   1
## ffa_9  0.65      0.42 0.42 0.58  1   1
## ffa_10 0.67      0.45 0.45 0.55  1   1
## ffa_11 0.67      0.45 0.45 0.55  1   1
## ffa_12 0.66      0.43 0.43 0.57  1   1
## ffa_14 0.56      0.31 0.31 0.69  1   1
##
```

```
## With Sums of squares  of:
##   g F1*  h2
## 4.9 0.0 1.9
##
## general/max  2.55   max/min =   Inf
## 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  0.32
## The number of observations was  1012  with Chi Square =  323.71  with prob <  5.3e-36
## The root mean square of the residuals is  0.04
## The df corrected root mean square of the residuals is  0.05
## RMSEA index =  0.063  and the 10 % confidence intervals are  0.056 0.07
## BIC =  -126.07
##
## 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  0.32
## The number of observations was  1012  with Chi Square =  323.71  with prob <  5.3e-36
## The root mean square of the residuals is  0.04
## The df corrected root mean square of the residuals is  0.05
##
## RMSEA index =  0.063  and the 10 % confidence intervals are  0.056 0.07
## BIC =  -126.07
##
## Measures of factor score adequacy
##                                                 g F1*
## Correlation of scores with factors            0.94   0
## Multiple R square of scores with factors      0.89   0
## Minimum correlation of factor score estimates 0.78  -1
##
##  Total, General and Subset omega for each subset
##                                                 g  F1*
## Omega total for total scores and subscales    0.88 0.88
## Omega general for total scores and subscales  0.88 0.88
## Omega group for total scores and subscales    0.00 0.00
```

6 CFA

rename the items for the sake of brevity:

```
fmi_items <-
 d_w_items %>%
  select(starts_with("ffa"), mindfulness_experience) |>
  rename_with(~ gsub("^ffa_(\\d+[a-zA-Z]?)$", "i\\1", .),
              starts_with("ffa_"))
```

6.1 Setup

```
cfa_results <- list()
```

```r
get_results_list <- function(cfa_model) {
  out <- list()

  out <- list(
    model_name = deparse(substitute(cfa_model)),
   # overview = list(summary(cfa_model)),
    cfi = fitMeasures(cfa_model)["cfi"],
    tli = fitMeasures(cfa_model)["tli"],
    rmsea = fitMeasures(cfa_model)["rmsea"],
    srmr = fitMeasures(cfa_model)["srmr"]
  )
}
```

6.2 One general mindfulness factor, including item 13

```r
model_one_dim <-
  "General_Factor =~  i1 + i2 + i3 + i4 + i5 + i6 + i7 + i8 + i9 + i10 + i11 + i12 + i13r + i14"
```

6.2.1 items as categorical

```r
model_one_dim_fit_ordered <- cfa(model_one_dim,
                                 data = fmi_items,
                                 estimator = "DWLS",
                                 ordered = TRUE)

cfa_results[["model_one_dim_fit_ordered"]] <-
  get_results_list(model_one_dim_fit_ordered)
```

6.2.2 items as numerical

```r
model_one_dim_fit_numeric <- cfa(model_one_dim, data = fmi_items)

  cfa_results[["model_one_dim_fit_numeric"]] <-
  get_results_list(model_one_dim_fit_numeric)
```

6.3 Two factors (presence, acceptance) without item 13, correlated factors

```r
model_pres_acc <- "
# Presence:
presence =~ i1 + i2 + i3 + i5 + i7 + i10

acceptance =~ i4 + i6 + i8 + i9 + i11 + i12 + i14

presence ~~ acceptance
"
```

6.3.1 items as numeric:

```
model_two_dim_wo_13 <- cfa(model_pres_acc,
                           data = fmi_items)

cfa_results[["model_two_dim_wo_13"]] <-
  get_results_list(model_two_dim_wo_13)
```

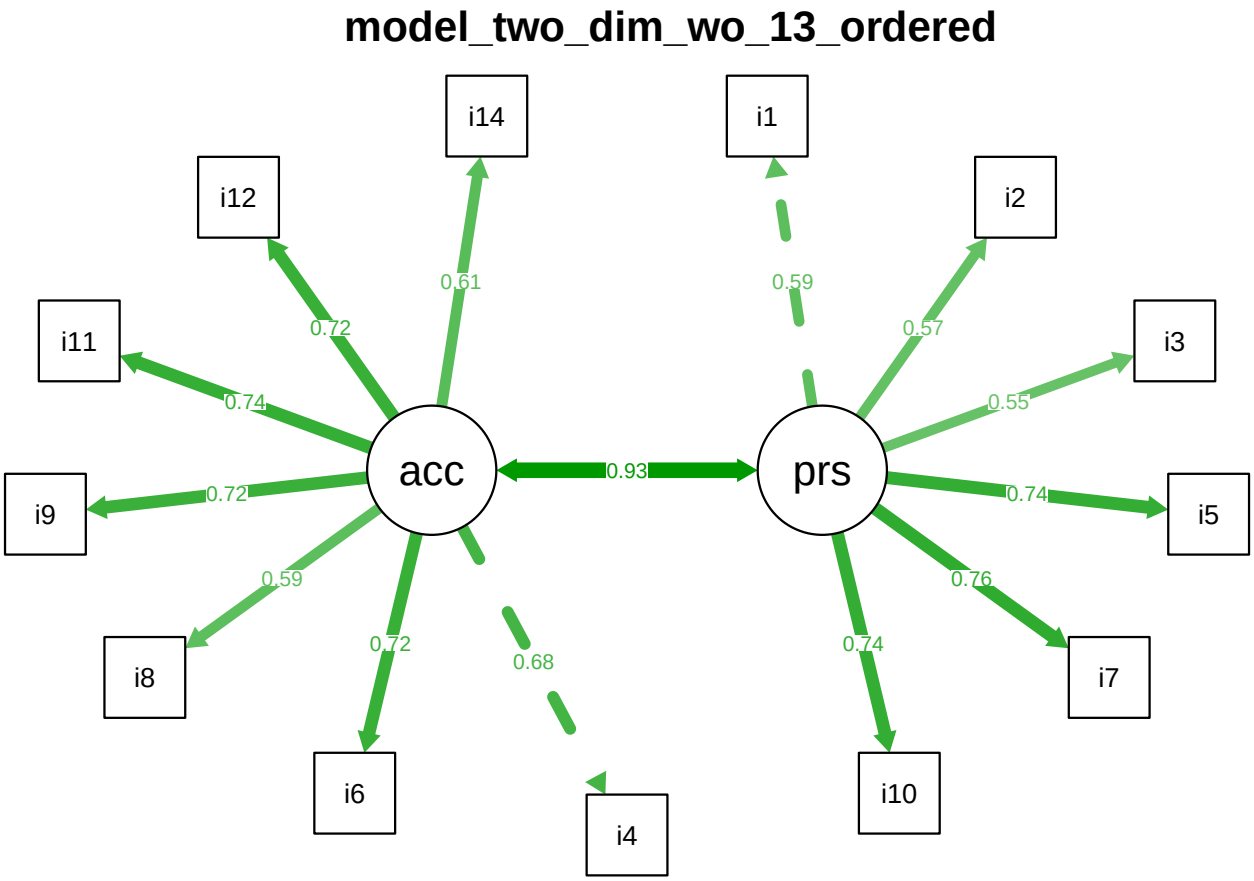
6.3.2 items as categorical

```
model_two_dim_wo_13_ordered <- cfa(model_pres_acc,
                                   data = fmi_items,
                                   estimator = "DWLS",
                                   ordered = TRUE)


cfa_results[["model_two_dim_wo_13_ordered"]] <-
  get_results_list(model_two_dim_wo_13_ordered)
```

6.3.3 Plot

)

```
semPaths(model_two_dim_wo_13_ordered,
         what = "stand",
         whatLabels = "stand",
         layout = "circle",
        # sizeMan = 3,
         #style = "lisrel",
         residuals = FALSE,
         #fixed = FALSE,
         intercepts = FALSE,
         normalize = FALSE,
         thresholds = F,
         width = 12,
         height = 6,
        # rotation = 2,
         intAtSide = TRUE,
       #  nCharNodes = 0
)
title("model_two_dim_wo_13_ordered")
```



6.4 Two correlated factors, individuals with meditation practice only ——-

6.4.1 items as numeric

```
model_two_dim_wo_13_meditators_only <-
  cfa(model_pres_acc,
      data = fmi_items |> filter(mindfulness_experience == 1))


cfa_results[["model_two_dim_wo_13_meditators_only"]] <-
  get_results_list(model_two_dim_wo_13_meditators_only)
```

6.4.2 items as categorical

```
model_two_dim_wo_13_meditators_only_categorical <-
  cfa(model_pres_acc,
      estimator = "DWLS",
      ordered = TRUE,
      data = fmi_items |> filter(mindfulness_experience == 1))

cfa_results[["model_two_dim_wo_13_meditators_only_categorical"]] <-
  get_results_list(model_two_dim_wo_13_meditators_only_categorical)
```

6.5 Results

```r
cfa_results_df <- as.data.frame(cfa_results)

cfa_results_df |>
  kable(digits = 2)
```

	[illegible]
cfi	[illegible]

7 Norm values for different subgroups

The following subgroup variables were considered:

```r
subgroup_vars <- c("Geschlecht", "Achts_regel", "Retreats", "Vip_regel", "age_below_md")
subgroup_vars
```

```
## [1] "Geschlecht"   "Achts_regel"  "Retreats"     "Vip_regel"    "age_below_md"
```

7.1 Split by sex

7.1.1 Stats

```r
d_w_items %>%
  #filter(Geschlecht %in% c("männlich", "weiblich")) %>%
  mutate(Geschlecht = as.character(Geschlecht)) %>%
  describe_fmi_stats(
                    var = Geschlecht)
```

Table 9: Geschlecht=female

Variable	Mean	Mean_01	SD	Range	Quartiles	Skewness	Kurtosis	n	n_Missing
acceptance13_mean	1.73	0.58	0.57	(0.00, 3.00)	1.29, 2.07	-0.09	-0.13	515	0
fmi13_mean	1.71	0.57	0.51	(0.21, 3.00)	1.36, 2.07	-0.11	-0.27	515	0
fmi14_mean	1.71	0.57	0.51	(0.21, 3.00)	1.36, 2.07	-0.11	-0.27	515	0
presence_mean	1.72	0.57	0.58	(0.00, 3.00)	1.33, 2.00	-0.11	-0.10	515	0

Table 10: Geschlecht=male

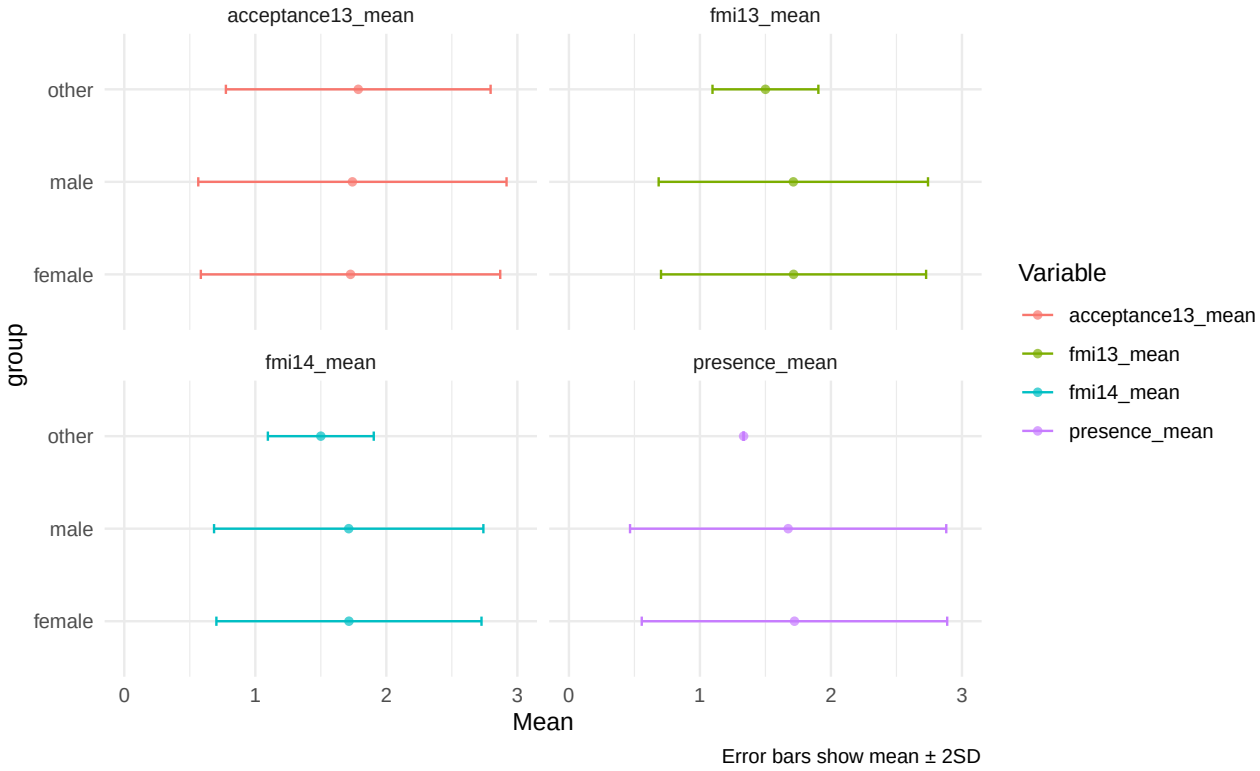
Variable	Mean	Mean_01	SD	Range	Quartiles	Skewness	Kurtosis	n	n_Missing
acceptance13_mean	1.74	0.58	0.59	(0.00, 3.00)	1.43, 2.00	-0.34	0.65	495	0
fmi13_mean	1.71	0.57	0.51	(0.21, 3.00)	1.43, 2.00	-0.19	0.58	495	0
fmi14_mean	1.71	0.57	0.51	(0.21, 3.00)	1.43, 2.00	-0.19	0.58	495	0
presence_mean	1.67	0.56	0.60	(0.00, 3.00)	1.33, 2.00	-0.35	0.42	495	0

Table 11: Geschlecht=other

Variable	Mean	Mean_01	SD	Range	Quartiles	Skewness	Kurtosis	n	n_Missing
acceptance13_mean	1.79	0.60	0.51	(1.43, 2.14)	1.61, 1.96	9.14e-16	-2.00	2	0
fmi13_mean	1.50	0.50	0.20	(1.36, 1.64)	1.43, 1.57	0.00	-2.00	2	0
fmi14_mean	1.50	0.50	0.20	(1.36, 1.64)	1.43, 1.57	0.00	-2.00	2	0
presence_mean	1.33	0.44	0.00	(1.33, 1.33)	1.33, 1.33			2	0

Plot:

```
plot_fmi_descriptives(data = d_w_items,
                      var = Geschlecht)
```



7.1.2 Norms

```
for (i in unique(d_w_items$Geschlecht)) {
  cat("Group: ", i, "\n")
  d_w_items %>%
    filter(Geschlecht == i) %>%
    select(ends_with("_mean")) %>%
    map(~ knitr::kable(compute_all_norms(., min_score = 0, max_score = 3, by = .1),
                       digits = 2))  %>% print()
}
```

Group: male $fmi13_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-3.33	1.00	16.67	0.00
0.1	0.00	-3.14	1.00	18.61	0.00
0.2	0.00	-2.94	1.00	20.56	0.00
0.3	0.01	-2.75	1.00	22.50	0.00
0.4	0.02	-2.55	1.00	24.45	0.01
0.5	0.02	-2.36	1.00	26.40	0.01
0.6	0.03	-2.17	1.00	28.34	0.02
0.7	0.03	-1.97	1.06	30.29	0.02
0.8	0.05	-1.78	1.45	32.23	0.04
0.9	0.05	-1.58	1.84	34.18	0.06
1.0	0.08	-1.39	2.23	36.13	0.08
1.1	0.12	-1.19	2.61	38.07	0.12
1.2	0.15	-1.00	3.00	40.02	0.16
1.3	0.19	-0.80	3.39	41.96	0.21
1.4	0.23	-0.61	3.78	43.91	0.27
1.5	0.33	-0.41	4.17	45.86	0.34
1.6	0.39	-0.22	4.56	47.80	0.41
1.7	0.46	-0.03	4.95	49.75	0.49
1.8	0.59	0.17	5.34	51.69	0.57
1.9	0.65	0.36	5.73	53.64	0.64
2.0	0.77	0.56	6.12	55.58	0.71
2.1	0.81	0.75	6.51	57.53	0.77
2.2	0.84	0.95	6.90	59.48	0.83
2.3	0.90	1.14	7.28	61.42	0.87
2.4	0.91	1.34	7.67	63.37	0.91
2.5	0.94	1.53	8.06	65.31	0.94
2.6	0.96	1.73	8.45	67.26	0.96
2.7	0.96	1.92	8.84	69.21	0.97
2.8	0.98	2.12	9.00	71.15	0.98
2.9	0.98	2.31	9.00	73.10	0.99
3.0	1.00	2.50	9.00	75.04	0.99

$presence_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.02	-2.77	1.00	22.27	0.00
0.1	0.02	-2.61	1.00	23.92	0.00
0.2	0.03	-2.44	1.00	25.58	0.01
0.3	0.03	-2.28	1.00	27.24	0.01
0.4	0.04	-2.11	1.00	28.90	0.02
0.5	0.05	-1.94	1.11	30.55	0.03
0.6	0.05	-1.78	1.44	32.21	0.04
0.7	0.07	-1.61	1.77	33.87	0.05
0.8	0.07	-1.45	2.11	35.53	0.07
0.9	0.10	-1.28	2.44	37.18	0.10
1.0	0.15	-1.12	2.77	38.84	0.13
1.1	0.15	-0.95	3.10	40.50	0.17
1.2	0.21	-0.78	3.43	42.15	0.22
1.3	0.21	-0.62	3.76	43.81	0.27
1.4	0.29	-0.45	4.09	45.47	0.33
1.5	0.40	-0.29	4.43	47.13	0.39

score	perc_rank	z	stanine	T	perc_normal
1.6	0.40	-0.12	4.76	48.78	0.45
1.7	0.53	0.04	5.09	50.44	0.52
1.8	0.53	0.21	5.42	52.10	0.58
1.9	0.65	0.38	5.75	53.76	0.65
2.0	0.78	0.54	6.08	55.41	0.71
2.1	0.78	0.71	6.41	57.07	0.76
2.2	0.86	0.87	6.75	58.73	0.81
2.3	0.86	1.04	7.08	60.38	0.85
2.4	0.90	1.20	7.41	62.04	0.89
2.5	0.94	1.37	7.74	63.70	0.91
2.6	0.94	1.54	8.07	65.36	0.94
2.7	0.96	1.70	8.40	67.01	0.96
2.8	0.96	1.87	8.73	68.67	0.97
2.9	0.97	2.03	9.00	70.33	0.98
3.0	1.00	2.20	9.00	71.99	0.99

$acceptance13_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.01	-2.96	1.00	20.4	0.00
0.1	0.01	-2.79	1.00	22.1	0.00
0.2	0.02	-2.62	1.00	23.8	0.00
0.3	0.03	-2.45	1.00	25.5	0.01
0.4	0.03	-2.28	1.00	27.2	0.01
0.5	0.03	-2.11	1.00	28.9	0.02
0.6	0.04	-1.94	1.12	30.6	0.03
0.7	0.04	-1.77	1.46	32.3	0.04
0.8	0.05	-1.60	1.80	34.0	0.05
0.9	0.06	-1.43	2.14	35.7	0.08
1.0	0.12	-1.26	2.48	37.4	0.10
1.1	0.12	-1.09	2.82	39.1	0.14
1.2	0.15	-0.92	3.16	40.8	0.18
1.3	0.22	-0.75	3.50	42.5	0.23
1.4	0.22	-0.58	3.84	44.2	0.28
1.5	0.31	-0.41	4.18	45.9	0.34
1.6	0.41	-0.24	4.52	47.6	0.41
1.7	0.41	-0.07	4.86	49.3	0.47
1.8	0.51	0.10	5.20	51.0	0.54
1.9	0.62	0.27	5.54	52.7	0.61
2.0	0.76	0.44	5.88	54.4	0.67
2.1	0.76	0.61	6.22	56.1	0.73
2.2	0.82	0.78	6.56	57.8	0.78
2.3	0.86	0.95	6.90	59.5	0.83
2.4	0.86	1.12	7.24	61.2	0.87
2.5	0.90	1.29	7.58	62.9	0.90
2.6	0.94	1.46	7.92	64.6	0.93
2.7	0.94	1.63	8.26	66.3	0.95
2.8	0.96	1.80	8.60	68.0	0.96
2.9	0.97	1.97	8.94	69.7	0.98
3.0	1.00	2.14	9.00	71.4	0.98

$fmi14_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-3.33	1.00	16.67	0.00
0.1	0.00	-3.14	1.00	18.61	0.00
0.2	0.00	-2.94	1.00	20.56	0.00
0.3	0.01	-2.75	1.00	22.50	0.00
0.4	0.02	-2.55	1.00	24.45	0.01
0.5	0.02	-2.36	1.00	26.40	0.01
0.6	0.03	-2.17	1.00	28.34	0.02
0.7	0.03	-1.97	1.06	30.29	0.02
0.8	0.05	-1.78	1.45	32.23	0.04
0.9	0.05	-1.58	1.84	34.18	0.06
1.0	0.08	-1.39	2.23	36.13	0.08
1.1	0.12	-1.19	2.61	38.07	0.12
1.2	0.15	-1.00	3.00	40.02	0.16
1.3	0.19	-0.80	3.39	41.96	0.21
1.4	0.23	-0.61	3.78	43.91	0.27
1.5	0.33	-0.41	4.17	45.86	0.34
1.6	0.39	-0.22	4.56	47.80	0.41
1.7	0.46	-0.03	4.95	49.75	0.49
1.8	0.59	0.17	5.34	51.69	0.57
1.9	0.65	0.36	5.73	53.64	0.64
2.0	0.77	0.56	6.12	55.58	0.71
2.1	0.81	0.75	6.51	57.53	0.77
2.2	0.84	0.95	6.90	59.48	0.83
2.3	0.90	1.14	7.28	61.42	0.87
2.4	0.91	1.34	7.67	63.37	0.91
2.5	0.94	1.53	8.06	65.31	0.94
2.6	0.96	1.73	8.45	67.26	0.96
2.7	0.96	1.92	8.84	69.21	0.97
2.8	0.98	2.12	9.00	71.15	0.98
2.9	0.98	2.31	9.00	73.10	0.99
3.0	1.00	2.50	9.00	75.04	0.99

Group: female $fmi13_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-3.39	1.00	16.10	0.00
0.1	0.00	-3.19	1.00	18.08	0.00
0.2	0.00	-2.99	1.00	20.06	0.00
0.3	0.00	-2.80	1.00	22.03	0.00
0.4	0.00	-2.60	1.00	24.01	0.00
0.5	0.01	-2.40	1.00	25.99	0.01
0.6	0.01	-2.20	1.00	27.96	0.01
0.7	0.02	-2.01	1.00	29.94	0.02
0.8	0.04	-1.81	1.38	31.92	0.04
0.9	0.06	-1.61	1.78	33.89	0.05
1.0	0.10	-1.41	2.17	35.87	0.08
1.1	0.13	-1.22	2.57	37.85	0.11
1.2	0.15	-1.02	2.97	39.83	0.15
1.3	0.23	-0.82	3.36	41.80	0.21

score	perc_rank	z	stanine	T	perc_normal
1.4	0.28	-0.62	3.76	43.78	0.27
1.5	0.35	-0.42	4.15	45.76	0.34
1.6	0.40	-0.23	4.55	47.73	0.41
1.7	0.44	-0.03	4.94	49.71	0.49
1.8	0.57	0.17	5.34	51.69	0.57
1.9	0.62	0.37	5.73	53.66	0.64
2.0	0.75	0.56	6.13	55.64	0.71
2.1	0.79	0.76	6.52	57.62	0.78
2.2	0.83	0.96	6.92	59.59	0.83
2.3	0.88	1.16	7.31	61.57	0.88
2.4	0.90	1.35	7.71	63.55	0.91
2.5	0.95	1.55	8.10	65.52	0.94
2.6	0.97	1.75	8.50	67.50	0.96
2.7	0.97	1.95	8.90	69.48	0.97
2.8	1.00	2.15	9.00	71.45	0.98
2.9	1.00	2.34	9.00	73.43	0.99
3.0	1.00	2.54	9.00	75.41	0.99

$presence_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-2.95	1.00	20.46	0.00
0.1	0.00	-2.78	1.00	22.18	0.00
0.2	0.01	-2.61	1.00	23.89	0.00
0.3	0.01	-2.44	1.00	25.61	0.01
0.4	0.01	-2.27	1.00	27.32	0.01
0.5	0.03	-2.10	1.00	29.04	0.02
0.6	0.03	-1.92	1.15	30.75	0.03
0.7	0.06	-1.75	1.49	32.47	0.04
0.8	0.06	-1.58	1.84	34.19	0.06
0.9	0.09	-1.41	2.18	35.90	0.08
1.0	0.14	-1.24	2.52	37.62	0.11
1.1	0.14	-1.07	2.87	39.33	0.14
1.2	0.20	-0.90	3.21	41.05	0.19
1.3	0.20	-0.72	3.55	42.77	0.23
1.4	0.29	-0.55	3.90	44.48	0.29
1.5	0.39	-0.38	4.24	46.20	0.35
1.6	0.39	-0.21	4.58	47.91	0.42
1.7	0.50	-0.04	4.93	49.63	0.49
1.8	0.50	0.13	5.27	51.34	0.55
1.9	0.63	0.31	5.61	53.06	0.62
2.0	0.76	0.48	5.96	54.78	0.68
2.1	0.76	0.65	6.30	56.49	0.74
2.2	0.82	0.82	6.64	58.21	0.79
2.3	0.82	0.99	6.98	59.92	0.84
2.4	0.88	1.16	7.33	61.64	0.88
2.5	0.93	1.34	7.67	63.35	0.91
2.6	0.93	1.51	8.01	65.07	0.93
2.7	0.95	1.68	8.36	66.79	0.95
2.8	0.95	1.85	8.70	68.50	0.97
2.9	0.98	2.02	9.00	70.22	0.98

score	perc_rank	z	stanine	T	perc_normal
3.0	1.00	2.19	9.00	71.93	0.99

$acceptance13_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-3.02	1.00	19.77	0.00
0.1	0.00	-2.85	1.00	21.52	0.00
0.2	0.00	-2.67	1.00	23.27	0.00
0.3	0.01	-2.50	1.00	25.02	0.01
0.4	0.01	-2.32	1.00	26.77	0.01
0.5	0.02	-2.15	1.00	28.53	0.02
0.6	0.03	-1.97	1.06	30.28	0.02
0.7	0.03	-1.80	1.41	32.03	0.04
0.8	0.05	-1.62	1.76	33.78	0.05
0.9	0.09	-1.45	2.11	35.53	0.07
1.0	0.14	-1.27	2.46	37.28	0.10
1.1	0.14	-1.10	2.81	39.03	0.14
1.2	0.18	-0.92	3.16	40.78	0.18
1.3	0.26	-0.75	3.51	42.53	0.23
1.4	0.26	-0.57	3.86	44.28	0.28
1.5	0.34	-0.40	4.21	46.03	0.35
1.6	0.42	-0.22	4.56	47.78	0.41
1.7	0.42	-0.05	4.91	49.53	0.48
1.8	0.51	0.13	5.26	51.28	0.55
1.9	0.63	0.30	5.61	53.03	0.62
2.0	0.75	0.48	5.96	54.78	0.68
2.1	0.75	0.65	6.31	56.53	0.74
2.2	0.83	0.83	6.66	58.28	0.80
2.3	0.87	1.00	7.01	60.03	0.84
2.4	0.87	1.18	7.36	61.79	0.88
2.5	0.90	1.35	7.71	63.54	0.91
2.6	0.93	1.53	8.06	65.29	0.94
2.7	0.93	1.70	8.41	67.04	0.96
2.8	0.97	1.88	8.76	68.79	0.97
2.9	0.98	2.05	9.00	70.54	0.98
3.0	1.00	2.23	9.00	72.29	0.99

$fmi14_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-3.39	1.00	16.10	0.00
0.1	0.00	-3.19	1.00	18.08	0.00
0.2	0.00	-2.99	1.00	20.06	0.00
0.3	0.00	-2.80	1.00	22.03	0.00
0.4	0.00	-2.60	1.00	24.01	0.00
0.5	0.01	-2.40	1.00	25.99	0.01
0.6	0.01	-2.20	1.00	27.96	0.01
0.7	0.02	-2.01	1.00	29.94	0.02
0.8	0.04	-1.81	1.38	31.92	0.04

score	perc_rank	z	stanine	T	perc_normal
0.9	0.06	-1.61	1.78	33.89	0.05
1.0	0.10	-1.41	2.17	35.87	0.08
1.1	0.13	-1.22	2.57	37.85	0.11
1.2	0.15	-1.02	2.97	39.83	0.15
1.3	0.23	-0.82	3.36	41.80	0.21
1.4	0.28	-0.62	3.76	43.78	0.27
1.5	0.35	-0.42	4.15	45.76	0.34
1.6	0.40	-0.23	4.55	47.73	0.41
1.7	0.44	-0.03	4.94	49.71	0.49
1.8	0.57	0.17	5.34	51.69	0.57
1.9	0.62	0.37	5.73	53.66	0.64
2.0	0.75	0.56	6.13	55.64	0.71
2.1	0.79	0.76	6.52	57.62	0.78
2.2	0.83	0.96	6.92	59.59	0.83
2.3	0.88	1.16	7.31	61.57	0.88
2.4	0.90	1.35	7.71	63.55	0.91
2.5	0.95	1.55	8.10	65.52	0.94
2.6	0.97	1.75	8.50	67.50	0.96
2.7	0.97	1.95	8.90	69.48	0.97
2.8	1.00	2.15	9.00	71.45	0.98
2.9	1.00	2.34	9.00	73.43	0.99
3.0	1.00	2.54	9.00	75.41	0.99

Group: other $fmi13_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.0	-7.42	1.00	-24.25	0.00
0.1	0.0	-6.93	1.00	-19.30	0.00
0.2	0.0	-6.43	1.00	-14.35	0.00
0.3	0.0	-5.94	1.00	-9.40	0.00
0.4	0.0	-5.44	1.00	-4.45	0.00
0.5	0.0	-4.95	1.00	0.50	0.00
0.6	0.0	-4.45	1.00	5.45	0.00
0.7	0.0	-3.96	1.00	10.40	0.00
0.8	0.0	-3.46	1.00	15.35	0.00
0.9	0.0	-2.97	1.00	20.30	0.00
1.0	0.0	-2.47	1.00	25.25	0.01
1.1	0.0	-1.98	1.04	30.20	0.02
1.2	0.0	-1.48	2.03	35.15	0.07
1.3	0.0	-0.99	3.02	40.10	0.16
1.4	0.5	-0.49	4.01	45.05	0.31
1.5	0.5	0.00	5.00	50.00	0.50
1.6	0.5	0.49	5.99	54.95	0.69
1.7	1.0	0.99	6.98	59.90	0.84
1.8	1.0	1.48	7.97	64.85	0.93
1.9	1.0	1.98	8.96	69.80	0.98
2.0	1.0	2.47	9.00	74.75	0.99
2.1	1.0	2.97	9.00	79.70	1.00
2.2	1.0	3.46	9.00	84.65	1.00
2.3	1.0	3.96	9.00	89.60	1.00
2.4	1.0	4.45	9.00	94.55	1.00

score	perc_rank	z	stanine	T	perc_normal
2.5	1.0	4.95	9.00	99.50	1.00
2.6	1.0	5.44	9.00	104.45	1.00
2.7	1.0	5.94	9.00	109.40	1.00
2.8	1.0	6.43	9.00	114.35	1.00
2.9	1.0	6.93	9.00	119.30	1.00
3.0	1.0	7.42	9.00	124.25	1.00

$presence_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0	-Inf	1	-Inf	0
0.1	0	-Inf	1	-Inf	0
0.2	0	-Inf	1	-Inf	0
0.3	0	-Inf	1	-Inf	0
0.4	0	-Inf	1	-Inf	0
0.5	0	-Inf	1	-Inf	0
0.6	0	-Inf	1	-Inf	0
0.7	0	-Inf	1	-Inf	0
0.8	0	-Inf	1	-Inf	0
0.9	0	-Inf	1	-Inf	0
1.0	0	-Inf	1	-Inf	0
1.1	0	-Inf	1	-Inf	0
1.2	0	-Inf	1	-Inf	0
1.3	0	-Inf	1	-Inf	0
1.4	1	Inf	9	Inf	1
1.5	1	Inf	9	Inf	1
1.6	1	Inf	9	Inf	1
1.7	1	Inf	9	Inf	1
1.8	1	Inf	9	Inf	1
1.9	1	Inf	9	Inf	1
2.0	1	Inf	9	Inf	1
2.1	1	Inf	9	Inf	1
2.2	1	Inf	9	Inf	1
2.3	1	Inf	9	Inf	1
2.4	1	Inf	9	Inf	1
2.5	1	Inf	9	Inf	1
2.6	1	Inf	9	Inf	1
2.7	1	Inf	9	Inf	1
2.8	1	Inf	9	Inf	1
2.9	1	Inf	9	Inf	1
3.0	1	Inf	9	Inf	1

$acceptance13_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.0	-3.54	1.00	14.64	0.00
0.1	0.0	-3.34	1.00	16.62	0.00
0.2	0.0	-3.14	1.00	18.60	0.00
0.3	0.0	-2.94	1.00	20.58	0.00

score	perc_rank	z	stanine	T	perc_normal
0.4	0.0	-2.74	1.00	22.56	0.00
0.5	0.0	-2.55	1.00	24.54	0.01
0.6	0.0	-2.35	1.00	26.52	0.01
0.7	0.0	-2.15	1.00	28.50	0.02
0.8	0.0	-1.95	1.10	30.48	0.03
0.9	0.0	-1.75	1.49	32.46	0.04
1.0	0.0	-1.56	1.89	34.44	0.06
1.1	0.0	-1.36	2.28	36.42	0.09
1.2	0.0	-1.16	2.68	38.40	0.12
1.3	0.0	-0.96	3.08	40.38	0.17
1.4	0.0	-0.76	3.47	42.36	0.22
1.5	0.5	-0.57	3.87	44.34	0.29
1.6	0.5	-0.37	4.26	46.32	0.36
1.7	0.5	-0.17	4.66	48.30	0.43
1.8	0.5	0.03	5.06	50.28	0.51
1.9	0.5	0.23	5.45	52.26	0.59
2.0	0.5	0.42	5.85	54.24	0.66
2.1	0.5	0.62	6.24	56.22	0.73
2.2	1.0	0.82	6.64	58.20	0.79
2.3	1.0	1.02	7.04	60.18	0.85
2.4	1.0	1.22	7.43	62.16	0.89
2.5	1.0	1.41	7.83	64.14	0.92
2.6	1.0	1.61	8.22	66.12	0.95
2.7	1.0	1.81	8.62	68.10	0.96
2.8	1.0	2.01	9.00	70.08	0.98
2.9	1.0	2.21	9.00	72.06	0.99
3.0	1.0	2.40	9.00	74.04	0.99

$fmi14_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.0	-7.42	1.00	-24.25	0.00
0.1	0.0	-6.93	1.00	-19.30	0.00
0.2	0.0	-6.43	1.00	-14.35	0.00
0.3	0.0	-5.94	1.00	-9.40	0.00
0.4	0.0	-5.44	1.00	-4.45	0.00
0.5	0.0	-4.95	1.00	0.50	0.00
0.6	0.0	-4.45	1.00	5.45	0.00
0.7	0.0	-3.96	1.00	10.40	0.00
0.8	0.0	-3.46	1.00	15.35	0.00
0.9	0.0	-2.97	1.00	20.30	0.00
1.0	0.0	-2.47	1.00	25.25	0.01
1.1	0.0	-1.98	1.04	30.20	0.02
1.2	0.0	-1.48	2.03	35.15	0.07
1.3	0.0	-0.99	3.02	40.10	0.16
1.4	0.5	-0.49	4.01	45.05	0.31
1.5	0.5	0.00	5.00	50.00	0.50
1.6	0.5	0.49	5.99	54.95	0.69
1.7	1.0	0.99	6.98	59.90	0.84
1.8	1.0	1.48	7.97	64.85	0.93
1.9	1.0	1.98	8.96	69.80	0.98

score	perc_rank	z	stanine	T	perc_normal
2.0	1.0	2.47	9.00	74.75	0.99
2.1	1.0	2.97	9.00	79.70	1.00
2.2	1.0	3.46	9.00	84.65	1.00
2.3	1.0	3.96	9.00	89.60	1.00
2.4	1.0	4.45	9.00	94.55	1.00
2.5	1.0	4.95	9.00	99.50	1.00
2.6	1.0	5.44	9.00	104.45	1.00
2.7	1.0	5.94	9.00	109.40	1.00
2.8	1.0	6.43	9.00	114.35	1.00
2.9	1.0	6.93	9.00	119.30	1.00
3.0	1.0	7.42	9.00	124.25	1.00

7.2 Split by continuous mindfulness training

7.2.1 Stats

```
describe_fmi_stats(data = d_w_items,
                   var = Achts_regel)
```

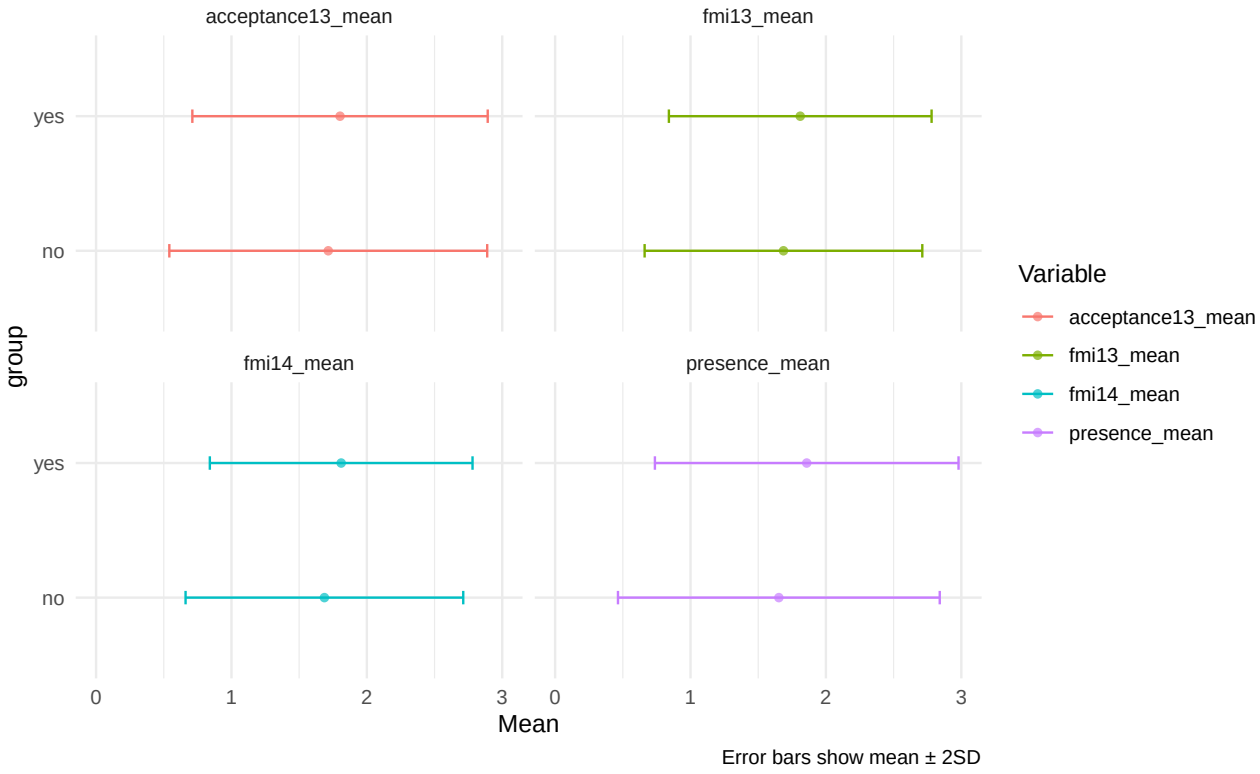
Table 24: Achts_regel=no

Variable	Mean	Mean_01	SD	Range	Quartiles	Skewness	Kurtosis	n	n_Missing
acceptance13_mean	1.72	0.57	0.59	(0.00, 3.00)	1.29, 2.00	-0.21	0.18	792	0
fmi13_mean	1.69	0.56	0.51	(0.21, 3.00)	1.36, 2.00	-0.16	0.05	792	0
fmi14_mean	1.69	0.56	0.51	(0.21, 3.00)	1.36, 2.00	-0.16	0.05	792	0
presence_mean	1.65	0.55	0.59	(0.00, 3.00)	1.33, 2.00	-0.23	0.13	792	0

Table 25: Achts_regel=yes

Variable	Mean	Mean_01	SD	Range	Quartiles	Skewness	Kurtosis	n	n_Missing
acceptance13_mean	1.80	0.60	0.55	(0.00, 3.00)	1.43, 2.14	-0.19	0.64	220	0
fmi13_mean	1.81	0.60	0.49	(0.21, 3.00)	1.50, 2.07	-0.02	0.52	220	0
fmi14_mean	1.81	0.60	0.49	(0.21, 3.00)	1.50, 2.07	-0.02	0.52	220	0
presence_mean	1.86	0.62	0.56	(0.00, 3.00)	1.50, 2.17	-0.20	0.45	220	0

```
plot_fmi_descriptives(data = d_w_items,
                      var = Achts_regel)
```



7.2.2 Norms

```
for (i in unique(d_w_items$Achts_regel)) {
  cat("Group: ", i, "\n")
  d_w_items %>%
    filter(Achts_regel == i) %>%
    select(ends_with("_mean")) %>%
    map(~ knitr::kable(compute_all_norms(., min_score = 0, max_score = 3, by = .1),
                       digits = 2)) %>% print()
}
```

Group: no $fmi13_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-3.29	1.00	17.11	0.00
0.1	0.00	-3.09	1.00	19.06	0.00
0.2	0.00	-2.90	1.00	21.01	0.00
0.3	0.01	-2.70	1.00	22.96	0.00
0.4	0.01	-2.51	1.00	24.91	0.01
0.5	0.02	-2.31	1.00	26.86	0.01
0.6	0.03	-2.12	1.00	28.81	0.02
0.7	0.03	-1.92	1.15	30.76	0.03
0.8	0.05	-1.73	1.54	32.71	0.04
0.9	0.06	-1.53	1.93	34.66	0.06
1.0	0.10	-1.34	2.32	36.61	0.09
1.1	0.13	-1.14	2.71	38.56	0.13

score	perc_rank	z	stanine	T	perc_normal
1.2	0.17	-0.95	3.10	40.51	0.17
1.3	0.23	-0.75	3.49	42.46	0.23
1.4	0.27	-0.56	3.88	44.41	0.29
1.5	0.36	-0.36	4.27	46.36	0.36
1.6	0.42	-0.17	4.66	48.31	0.43
1.7	0.48	0.03	5.05	50.26	0.51
1.8	0.60	0.22	5.44	52.21	0.59
1.9	0.65	0.42	5.83	54.16	0.66
2.0	0.78	0.61	6.22	56.11	0.73
2.1	0.81	0.81	6.61	58.06	0.79
2.2	0.84	1.00	7.00	60.01	0.84
2.3	0.90	1.20	7.39	61.97	0.88
2.4	0.91	1.39	7.78	63.92	0.92
2.5	0.95	1.59	8.17	65.87	0.94
2.6	0.97	1.78	8.56	67.82	0.96
2.7	0.97	1.98	8.95	69.77	0.98
2.8	0.99	2.17	9.00	71.72	0.99
2.9	0.99	2.37	9.00	73.67	0.99
3.0	1.00	2.56	9.00	75.62	0.99

$presence_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.01	-2.78	1.00	22.18	0.00
0.1	0.01	-2.61	1.00	23.87	0.00
0.2	0.02	-2.44	1.00	25.55	0.01
0.3	0.02	-2.28	1.00	27.23	0.01
0.4	0.03	-2.11	1.00	28.92	0.02
0.5	0.05	-1.94	1.12	30.60	0.03
0.6	0.05	-1.77	1.46	32.28	0.04
0.7	0.07	-1.60	1.79	33.97	0.05
0.8	0.07	-1.44	2.13	35.65	0.08
0.9	0.10	-1.27	2.47	37.33	0.10
1.0	0.16	-1.10	2.80	39.02	0.14
1.1	0.16	-0.93	3.14	40.70	0.18
1.2	0.23	-0.76	3.48	42.38	0.22
1.3	0.23	-0.59	3.81	44.07	0.28
1.4	0.32	-0.43	4.15	45.75	0.34
1.5	0.43	-0.26	4.49	47.43	0.40
1.6	0.43	-0.09	4.82	49.12	0.46
1.7	0.55	0.08	5.16	50.80	0.53
1.8	0.55	0.25	5.50	52.48	0.60
1.9	0.67	0.42	5.83	54.16	0.66
2.0	0.79	0.58	6.17	55.85	0.72
2.1	0.79	0.75	6.51	57.53	0.77
2.2	0.85	0.92	6.84	59.21	0.82
2.3	0.85	1.09	7.18	60.90	0.86
2.4	0.90	1.26	7.52	62.58	0.90
2.5	0.94	1.43	7.85	64.26	0.92
2.6	0.94	1.59	8.19	65.95	0.94
2.7	0.97	1.76	8.53	67.63	0.96

score	perc_rank	z	stanine	T	perc_normal
2.8	0.97	1.93	8.86	69.31	0.97
2.9	0.98	2.10	9.00	71.00	0.98
3.0	1.00	2.27	9.00	72.68	0.99

$acceptance13_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.01	-2.92	1.00	20.78	0.00
0.1	0.01	-2.75	1.00	22.49	0.00
0.2	0.01	-2.58	1.00	24.19	0.00
0.3	0.02	-2.41	1.00	25.89	0.01
0.4	0.02	-2.24	1.00	27.60	0.01
0.5	0.03	-2.07	1.00	29.30	0.02
0.6	0.04	-1.90	1.20	31.00	0.03
0.7	0.04	-1.73	1.54	32.71	0.04
0.8	0.06	-1.56	1.88	34.41	0.06
0.9	0.09	-1.39	2.22	36.12	0.08
1.0	0.14	-1.22	2.56	37.82	0.11
1.1	0.14	-1.05	2.90	39.52	0.15
1.2	0.18	-0.88	3.25	41.23	0.19
1.3	0.26	-0.71	3.59	42.93	0.24
1.4	0.26	-0.54	3.93	44.63	0.30
1.5	0.34	-0.37	4.27	46.34	0.36
1.6	0.43	-0.20	4.61	48.04	0.42
1.7	0.43	-0.03	4.95	49.74	0.49
1.8	0.53	0.14	5.29	51.45	0.56
1.9	0.64	0.32	5.63	53.15	0.62
2.0	0.76	0.49	5.97	54.86	0.69
2.1	0.76	0.66	6.31	56.56	0.74
2.2	0.82	0.83	6.65	58.26	0.80
2.3	0.87	1.00	6.99	59.97	0.84
2.4	0.87	1.17	7.33	61.67	0.88
2.5	0.90	1.34	7.67	63.37	0.91
2.6	0.94	1.51	8.02	65.08	0.93
2.7	0.94	1.68	8.36	66.78	0.95
2.8	0.96	1.85	8.70	68.48	0.97
2.9	0.98	2.02	9.00	70.19	0.98
3.0	1.00	2.19	9.00	71.89	0.99

$fmi14_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-3.29	1.00	17.11	0.00
0.1	0.00	-3.09	1.00	19.06	0.00
0.2	0.00	-2.90	1.00	21.01	0.00
0.3	0.01	-2.70	1.00	22.96	0.00
0.4	0.01	-2.51	1.00	24.91	0.01
0.5	0.02	-2.31	1.00	26.86	0.01
0.6	0.03	-2.12	1.00	28.81	0.02

score	perc_rank	z	stanine	T	perc_normal
0.7	0.03	-1.92	1.15	30.76	0.03
0.8	0.05	-1.73	1.54	32.71	0.04
0.9	0.06	-1.53	1.93	34.66	0.06
1.0	0.10	-1.34	2.32	36.61	0.09
1.1	0.13	-1.14	2.71	38.56	0.13
1.2	0.17	-0.95	3.10	40.51	0.17
1.3	0.23	-0.75	3.49	42.46	0.23
1.4	0.27	-0.56	3.88	44.41	0.29
1.5	0.36	-0.36	4.27	46.36	0.36
1.6	0.42	-0.17	4.66	48.31	0.43
1.7	0.48	0.03	5.05	50.26	0.51
1.8	0.60	0.22	5.44	52.21	0.59
1.9	0.65	0.42	5.83	54.16	0.66
2.0	0.78	0.61	6.22	56.11	0.73
2.1	0.81	0.81	6.61	58.06	0.79
2.2	0.84	1.00	7.00	60.01	0.84
2.3	0.90	1.20	7.39	61.97	0.88
2.4	0.91	1.39	7.78	63.92	0.92
2.5	0.95	1.59	8.17	65.87	0.94
2.6	0.97	1.78	8.56	67.82	0.96
2.7	0.97	1.98	8.95	69.77	0.98
2.8	0.99	2.17	9.00	71.72	0.99
2.9	0.99	2.37	9.00	73.67	0.99
3.0	1.00	2.56	9.00	75.62	0.99

Group: yes $fmi13_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-3.73	1.00	12.68	0.00
0.1	0.00	-3.53	1.00	14.74	0.00
0.2	0.00	-3.32	1.00	16.80	0.00
0.3	0.01	-3.11	1.00	18.86	0.00
0.4	0.01	-2.91	1.00	20.92	0.00
0.5	0.01	-2.70	1.00	22.99	0.00
0.6	0.01	-2.50	1.00	25.05	0.01
0.7	0.01	-2.29	1.00	27.11	0.01
0.8	0.02	-2.08	1.00	29.17	0.02
0.9	0.02	-1.88	1.25	31.23	0.03
1.0	0.06	-1.67	1.66	33.29	0.05
1.1	0.08	-1.46	2.07	35.35	0.07
1.2	0.09	-1.26	2.48	37.42	0.10
1.3	0.14	-1.05	2.90	39.48	0.15
1.4	0.19	-0.85	3.31	41.54	0.20
1.5	0.27	-0.64	3.72	43.60	0.26
1.6	0.32	-0.43	4.13	45.66	0.33
1.7	0.37	-0.23	4.54	47.72	0.41
1.8	0.51	-0.02	4.96	49.79	0.49
1.9	0.57	0.18	5.37	51.85	0.57
2.0	0.70	0.39	5.78	53.91	0.65
2.1	0.77	0.60	6.19	55.97	0.72
2.2	0.81	0.80	6.61	58.03	0.79

score	perc_rank	z	stanine	T	perc_normal
2.3	0.87	1.01	7.02	60.09	0.84
2.4	0.90	1.22	7.43	62.16	0.89
2.5	0.92	1.42	7.84	64.22	0.92
2.6	0.94	1.63	8.26	66.28	0.95
2.7	0.95	1.83	8.67	68.34	0.97
2.8	0.97	2.04	9.00	70.40	0.98
2.9	0.98	2.25	9.00	72.46	0.99
3.0	1.00	2.45	9.00	74.52	0.99

$presence_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.01	-3.31	1.00	16.85	0.00
0.1	0.01	-3.14	1.00	18.64	0.00
0.2	0.01	-2.96	1.00	20.42	0.00
0.3	0.01	-2.78	1.00	22.20	0.00
0.4	0.01	-2.60	1.00	23.99	0.00
0.5	0.01	-2.42	1.00	25.77	0.01
0.6	0.01	-2.24	1.00	27.56	0.01
0.7	0.02	-2.07	1.00	29.34	0.02
0.8	0.02	-1.89	1.22	31.12	0.03
0.9	0.05	-1.71	1.58	32.91	0.04
1.0	0.09	-1.53	1.94	34.69	0.06
1.1	0.09	-1.35	2.29	36.47	0.09
1.2	0.12	-1.17	2.65	38.26	0.12
1.3	0.12	-1.00	3.01	40.04	0.16
1.4	0.20	-0.82	3.36	41.82	0.21
1.5	0.29	-0.64	3.72	43.61	0.26
1.6	0.29	-0.46	4.08	45.39	0.32
1.7	0.40	-0.28	4.44	47.18	0.39
1.8	0.40	-0.10	4.79	48.96	0.46
1.9	0.53	0.07	5.15	50.74	0.53
2.0	0.69	0.25	5.51	52.53	0.60
2.1	0.69	0.43	5.86	54.31	0.67
2.2	0.79	0.61	6.22	56.09	0.73
2.3	0.79	0.79	6.58	57.88	0.78
2.4	0.85	0.97	6.93	59.66	0.83
2.5	0.90	1.14	7.29	61.45	0.87
2.6	0.90	1.32	7.65	63.23	0.91
2.7	0.92	1.50	8.00	65.01	0.93
2.8	0.92	1.68	8.36	66.80	0.95
2.9	0.96	1.86	8.72	68.58	0.97
3.0	1.00	2.04	9.00	70.36	0.98

$acceptance13_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-3.30	1.00	16.96	0.00
0.1	0.00	-3.12	1.00	18.80	0.00

score	perc_rank	z	stanine	T	perc_normal
0.2	0.01	-2.94	1.00	20.63	0.00
0.3	0.01	-2.75	1.00	22.46	0.00
0.4	0.01	-2.57	1.00	24.30	0.01
0.5	0.02	-2.39	1.00	26.13	0.01
0.6	0.02	-2.20	1.00	27.96	0.01
0.7	0.02	-2.02	1.00	29.80	0.02
0.8	0.03	-1.84	1.33	31.63	0.03
0.9	0.05	-1.65	1.69	33.46	0.05
1.0	0.09	-1.47	2.06	35.30	0.07
1.1	0.09	-1.29	2.43	37.13	0.10
1.2	0.12	-1.10	2.79	38.96	0.13
1.3	0.18	-0.92	3.16	40.80	0.18
1.4	0.18	-0.74	3.53	42.63	0.23
1.5	0.27	-0.55	3.89	44.46	0.29
1.6	0.38	-0.37	4.26	46.30	0.36
1.7	0.38	-0.19	4.63	48.13	0.43
1.8	0.45	0.00	4.99	49.96	0.50
1.9	0.59	0.18	5.36	51.80	0.57
2.0	0.73	0.36	5.73	53.63	0.64
2.1	0.73	0.55	6.09	55.46	0.71
2.2	0.83	0.73	6.46	57.30	0.77
2.3	0.86	0.91	6.83	59.13	0.82
2.4	0.86	1.10	7.19	60.97	0.86
2.5	0.90	1.28	7.56	62.80	0.90
2.6	0.92	1.46	7.93	64.63	0.93
2.7	0.92	1.65	8.29	66.47	0.95
2.8	0.95	1.83	8.66	68.30	0.97
2.9	0.97	2.01	9.00	70.13	0.98
3.0	1.00	2.20	9.00	71.97	0.99

$fmi14_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-3.73	1.00	12.68	0.00
0.1	0.00	-3.53	1.00	14.74	0.00
0.2	0.00	-3.32	1.00	16.80	0.00
0.3	0.01	-3.11	1.00	18.86	0.00
0.4	0.01	-2.91	1.00	20.92	0.00
0.5	0.01	-2.70	1.00	22.99	0.00
0.6	0.01	-2.50	1.00	25.05	0.01
0.7	0.01	-2.29	1.00	27.11	0.01
0.8	0.02	-2.08	1.00	29.17	0.02
0.9	0.02	-1.88	1.25	31.23	0.03
1.0	0.06	-1.67	1.66	33.29	0.05
1.1	0.08	-1.46	2.07	35.35	0.07
1.2	0.09	-1.26	2.48	37.42	0.10
1.3	0.14	-1.05	2.90	39.48	0.15
1.4	0.19	-0.85	3.31	41.54	0.20
1.5	0.27	-0.64	3.72	43.60	0.26
1.6	0.32	-0.43	4.13	45.66	0.33
1.7	0.37	-0.23	4.54	47.72	0.41

score	perc_rank	z	stanine	T	perc_normal
1.8	0.51	-0.02	4.96	49.79	0.49
1.9	0.57	0.18	5.37	51.85	0.57
2.0	0.70	0.39	5.78	53.91	0.65
2.1	0.77	0.60	6.19	55.97	0.72
2.2	0.81	0.80	6.61	58.03	0.79
2.3	0.87	1.01	7.02	60.09	0.84
2.4	0.90	1.22	7.43	62.16	0.89
2.5	0.92	1.42	7.84	64.22	0.92
2.6	0.94	1.63	8.26	66.28	0.95
2.7	0.95	1.83	8.67	68.34	0.97
2.8	0.97	2.04	9.00	70.40	0.98
2.9	0.98	2.25	9.00	72.46	0.99
3.0	1.00	2.45	9.00	74.52	0.99

7.3 Split by retreats

7.3.1 Stats

```
describe_fmi_stats(data = d_w_items,
                   var = Retreats)
```

Table 34: Retreats=Multiple retreats per year

Variable	Mean	Mean_01	SD	Range	Quartiles	Skewness	Kurtosis	n	n_Missing
acceptance13_mean	1.81	0.60	0.48	(0.71, 3.00)	1.57, 2.04	-0.03	-0.06	116	0
fmi13_mean	1.82	0.61	0.43	(0.71, 3.00)	1.57, 2.00	0.03	0.32	116	0
fmi14_mean	1.82	0.61	0.43	(0.71, 3.00)	1.57, 2.00	0.03	0.32	116	0
presence_mean	1.84	0.61	0.50	(0.33, 3.00)	1.50, 2.04	-0.15	0.28	116	0

Table 35: Retreats=Never

Variable	Mean	Mean_01	SD	Range	Quartiles	Skewness	Kurtosis	n	n_Missing
acceptance13_mean	1.70	0.57	0.60	(0.00, 3.00)	1.29, 2.00	-0.27	0.21	673	0
fmi13_mean	1.68	0.56	0.52	(0.21, 3.00)	1.36, 2.00	-0.18	0.10	673	0
fmi14_mean	1.68	0.56	0.52	(0.21, 3.00)	1.36, 2.00	-0.18	0.10	673	0
presence_mean	1.64	0.55	0.59	(0.00, 3.00)	1.33, 2.00	-0.28	0.20	673	0

Table 36: Retreats=Once a year

Variable	Mean	Mean_01	SD	Range	Quartiles	Skewness	Kurtosis	n	n_Missing
acceptance13_mean	1.73	0.58	0.50	(0.71, 3.00)	1.43, 2.00	0.59	0.46	58	0
fmi13_mean	1.71	0.57	0.45	(0.57, 2.93)	1.43, 1.98	0.30	0.36	58	0
fmi14_mean	1.71	0.57	0.45	(0.57, 2.93)	1.43, 1.98	0.30	0.36	58	0
presence_mean	1.68	0.56	0.55	(0.17, 3.00)	1.33, 2.00	0.04	0.25	58	0

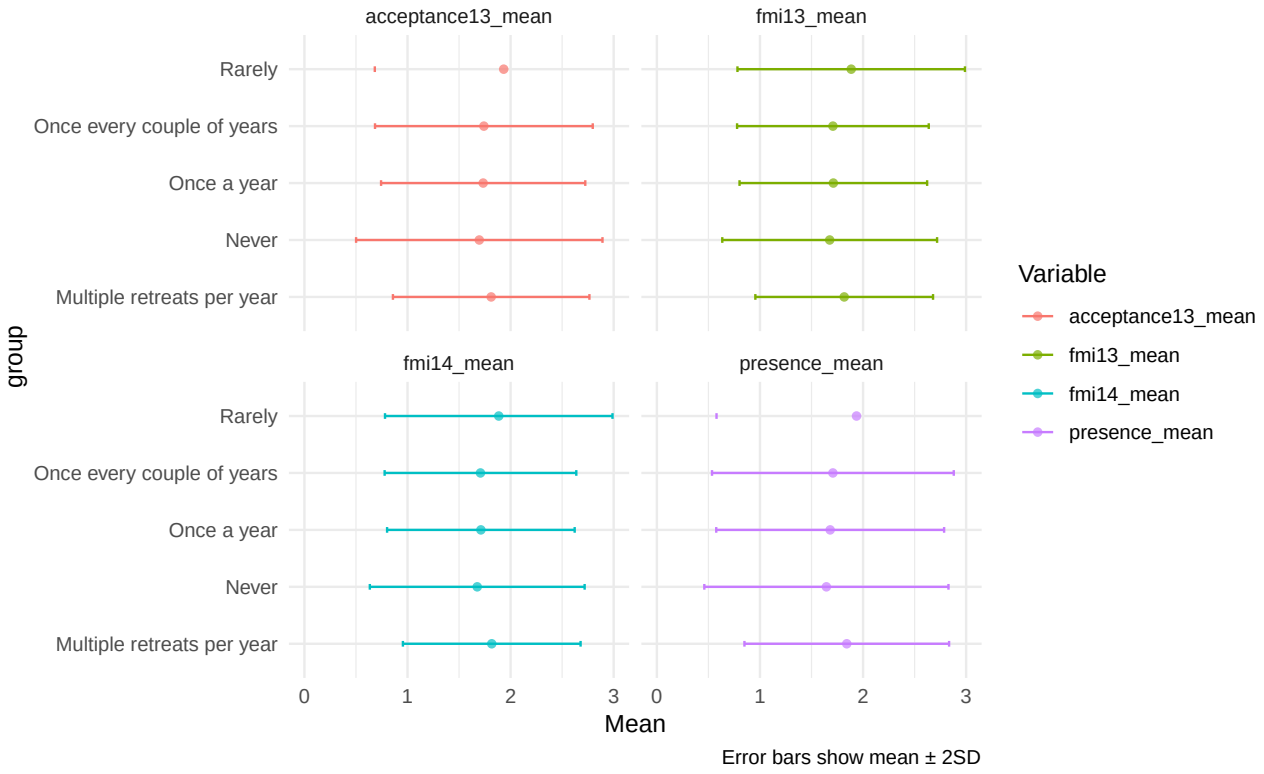
Table 37: Retreats=Once every couple of years

Variable	Mean	Mean_01	SD	Range	Quartiles	Skewness	Kurtosis	n	n_Missing
acceptance13_mean	1.74	0.58	0.53	(0.29, 3.00)	1.43, 2.11	0.14	0.12	86	0
fmi13_mean	1.71	0.57	0.46	(0.93, 2.93)	1.36, 2.07	0.38	-0.32	86	0
fmi14_mean	1.71	0.57	0.46	(0.93, 2.93)	1.36, 2.07	0.38	-0.32	86	0
presence_mean	1.71	0.57	0.59	(0.67, 3.00)	1.33, 2.17	0.20	-0.44	86	0

Table 38: Retreats=Rarely

Variable	Mean	Mean_01	SD	Range	Quartiles	Skewness	Kurtosis	n	n_Missing
acceptance13_mean	1.93	0.64	0.63	(0.14, 3.00)	1.57, 2.29	-0.38	0.35	79	0
fmi13_mean	1.89	0.63	0.55	(0.29, 2.79)	1.57, 2.29	-0.51	0.60	79	0
fmi14_mean	1.89	0.63	0.55	(0.29, 2.79)	1.57, 2.29	-0.51	0.60	79	0
presence_mean	1.94	0.65	0.68	(0.00, 3.00)	1.50, 2.33	-0.60	0.63	79	0

```
plot_fmi_descriptives(data = d_w_items,
                      var = Retreats)
```



7.3.2 Norms

```
for (i in unique(d_w_items$Retreats)) {
  cat("Group: ", i, "\n")
```

```
  d_w_items %>%
    filter(Retreats == i) %>%
    select(ends_with("_mean")) %>%
    map(~ knitr::kable(compute_all_norms(., min_score = 0, max_score = 3, by = .1),
                       digits = 2)) %>%
    print()
}
```

Group: Never $fmi13_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-3.22	1.00	17.82	0.00
0.1	0.00	-3.03	1.00	19.74	0.00
0.2	0.00	-2.83	1.00	21.66	0.00
0.3	0.01	-2.64	1.00	23.58	0.00
0.4	0.01	-2.45	1.00	25.50	0.01
0.5	0.02	-2.26	1.00	27.42	0.01
0.6	0.03	-2.07	1.00	29.34	0.02
0.7	0.04	-1.87	1.25	31.26	0.03
0.8	0.06	-1.68	1.64	33.18	0.05
0.9	0.07	-1.49	2.02	35.10	0.07
1.0	0.11	-1.30	2.40	37.02	0.10
1.1	0.14	-1.11	2.79	38.94	0.13
1.2	0.17	-0.91	3.17	40.86	0.18
1.3	0.24	-0.72	3.56	42.78	0.24
1.4	0.29	-0.53	3.94	44.70	0.30
1.5	0.36	-0.34	4.32	46.62	0.37
1.6	0.41	-0.15	4.71	48.54	0.44
1.7	0.47	0.05	5.09	50.46	0.52
1.8	0.60	0.24	5.47	52.37	0.59
1.9	0.66	0.43	5.86	54.29	0.67
2.0	0.77	0.62	6.24	56.21	0.73
2.1	0.81	0.81	6.63	58.13	0.79
2.2	0.85	1.01	7.01	60.05	0.84
2.3	0.90	1.20	7.39	61.97	0.88
2.4	0.92	1.39	7.78	63.89	0.92
2.5	0.95	1.58	8.16	65.81	0.94
2.6	0.97	1.77	8.55	67.73	0.96
2.7	0.97	1.97	8.93	69.65	0.98
2.8	0.99	2.16	9.00	71.57	0.98
2.9	0.99	2.35	9.00	73.49	0.99
3.0	1.00	2.54	9.00	75.41	0.99

$presence_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.01	-2.78	1.00	22.23	0.00
0.1	0.01	-2.61	1.00	23.91	0.00
0.2	0.02	-2.44	1.00	25.60	0.01
0.3	0.02	-2.27	1.00	27.29	0.01
0.4	0.03	-2.10	1.00	28.98	0.02

score	perc_rank	z	stanine	T	perc_normal
0.5	0.05	-1.93	1.13	30.67	0.03
0.6	0.05	-1.76	1.47	32.36	0.04
0.7	0.08	-1.60	1.81	34.05	0.06
0.8	0.08	-1.43	2.15	35.74	0.08
0.9	0.11	-1.26	2.49	37.43	0.10
1.0	0.16	-1.09	2.82	39.12	0.14
1.1	0.16	-0.92	3.16	40.81	0.18
1.2	0.23	-0.75	3.50	42.49	0.23
1.3	0.23	-0.58	3.84	44.18	0.28
1.4	0.32	-0.41	4.17	45.87	0.34
1.5	0.42	-0.24	4.51	47.56	0.40
1.6	0.42	-0.07	4.85	49.25	0.47
1.7	0.55	0.09	5.19	50.94	0.54
1.8	0.55	0.26	5.53	52.63	0.60
1.9	0.68	0.43	5.86	54.32	0.67
2.0	0.80	0.60	6.20	56.01	0.73
2.1	0.80	0.77	6.54	57.70	0.78
2.2	0.86	0.94	6.88	59.38	0.83
2.3	0.86	1.11	7.21	61.07	0.87
2.4	0.91	1.28	7.55	62.76	0.90
2.5	0.95	1.45	7.89	64.45	0.93
2.6	0.95	1.61	8.23	66.14	0.95
2.7	0.97	1.78	8.57	67.83	0.96
2.8	0.97	1.95	8.90	69.52	0.97
2.9	0.98	2.12	9.00	71.21	0.98
3.0	1.00	2.29	9.00	72.90	0.99

$acceptance13_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.01	-2.84	1.00	21.61	0.00
0.1	0.01	-2.67	1.00	23.29	0.00
0.2	0.02	-2.50	1.00	24.96	0.01
0.3	0.02	-2.34	1.00	26.63	0.01
0.4	0.02	-2.17	1.00	28.31	0.02
0.5	0.03	-2.00	1.00	29.98	0.02
0.6	0.05	-1.83	1.33	31.65	0.03
0.7	0.05	-1.67	1.67	33.33	0.05
0.8	0.07	-1.50	2.00	35.00	0.07
0.9	0.10	-1.33	2.33	36.67	0.09
1.0	0.15	-1.17	2.67	38.35	0.12
1.1	0.15	-1.00	3.00	40.02	0.16
1.2	0.20	-0.83	3.34	41.69	0.20
1.3	0.27	-0.66	3.67	43.37	0.25
1.4	0.27	-0.50	4.01	45.04	0.31
1.5	0.35	-0.33	4.34	46.72	0.37
1.6	0.43	-0.16	4.68	48.39	0.44
1.7	0.43	0.01	5.01	50.06	0.50
1.8	0.53	0.17	5.35	51.74	0.57
1.9	0.64	0.34	5.68	53.41	0.63
2.0	0.76	0.51	6.02	55.08	0.69

score	perc_rank	z	stanine	T	perc_normal
2.1	0.76	0.68	6.35	56.76	0.75
2.2	0.83	0.84	6.69	58.43	0.80
2.3	0.87	1.01	7.02	60.10	0.84
2.4	0.87	1.18	7.36	61.78	0.88
2.5	0.91	1.35	7.69	63.45	0.91
2.6	0.95	1.51	8.03	65.13	0.93
2.7	0.95	1.68	8.36	66.80	0.95
2.8	0.96	1.85	8.69	68.47	0.97
2.9	0.98	2.01	9.00	70.15	0.98
3.0	1.00	2.18	9.00	71.82	0.99

$fmi14_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-3.22	1.00	17.82	0.00
0.1	0.00	-3.03	1.00	19.74	0.00
0.2	0.00	-2.83	1.00	21.66	0.00
0.3	0.01	-2.64	1.00	23.58	0.00
0.4	0.01	-2.45	1.00	25.50	0.01
0.5	0.02	-2.26	1.00	27.42	0.01
0.6	0.03	-2.07	1.00	29.34	0.02
0.7	0.04	-1.87	1.25	31.26	0.03
0.8	0.06	-1.68	1.64	33.18	0.05
0.9	0.07	-1.49	2.02	35.10	0.07
1.0	0.11	-1.30	2.40	37.02	0.10
1.1	0.14	-1.11	2.79	38.94	0.13
1.2	0.17	-0.91	3.17	40.86	0.18
1.3	0.24	-0.72	3.56	42.78	0.24
1.4	0.29	-0.53	3.94	44.70	0.30
1.5	0.36	-0.34	4.32	46.62	0.37
1.6	0.41	-0.15	4.71	48.54	0.44
1.7	0.47	0.05	5.09	50.46	0.52
1.8	0.60	0.24	5.47	52.37	0.59
1.9	0.66	0.43	5.86	54.29	0.67
2.0	0.77	0.62	6.24	56.21	0.73
2.1	0.81	0.81	6.63	58.13	0.79
2.2	0.85	1.01	7.01	60.05	0.84
2.3	0.90	1.20	7.39	61.97	0.88
2.4	0.92	1.39	7.78	63.89	0.92
2.5	0.95	1.58	8.16	65.81	0.94
2.6	0.97	1.77	8.55	67.73	0.96
2.7	0.97	1.97	8.93	69.65	0.98
2.8	0.99	2.16	9.00	71.57	0.98
2.9	0.99	2.35	9.00	73.49	0.99
3.0	1.00	2.54	9.00	75.41	0.99

Group: Once every couple of years $fmi13_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-3.67	1.00	13.26	0.00
0.1	0.00	-3.46	1.00	15.41	0.00
0.2	0.00	-3.24	1.00	17.56	0.00
0.3	0.00	-3.03	1.00	19.72	0.00
0.4	0.00	-2.81	1.00	21.87	0.00
0.5	0.00	-2.60	1.00	24.02	0.00
0.6	0.00	-2.38	1.00	26.17	0.01
0.7	0.00	-2.17	1.00	28.32	0.02
0.8	0.00	-1.95	1.09	30.47	0.03
0.9	0.00	-1.74	1.52	32.62	0.04
1.0	0.07	-1.52	1.96	34.78	0.06
1.1	0.09	-1.31	2.39	36.93	0.10
1.2	0.14	-1.09	2.82	39.08	0.14
1.3	0.23	-0.88	3.25	41.23	0.19
1.4	0.28	-0.66	3.68	43.38	0.25
1.5	0.37	-0.45	4.11	45.53	0.33
1.6	0.48	-0.23	4.54	47.68	0.41
1.7	0.51	-0.02	4.97	49.84	0.49
1.8	0.60	0.20	5.40	51.99	0.58
1.9	0.63	0.41	5.83	54.14	0.66
2.0	0.73	0.63	6.26	56.29	0.74
2.1	0.80	0.84	6.69	58.44	0.80
2.2	0.87	1.06	7.12	60.59	0.86
2.3	0.92	1.27	7.55	62.74	0.90
2.4	0.92	1.49	7.98	64.90	0.93
2.5	0.95	1.70	8.41	67.05	0.96
2.6	0.97	1.92	8.84	69.20	0.97
2.7	0.97	2.14	9.00	71.35	0.98
2.8	0.99	2.35	9.00	73.50	0.99
2.9	0.99	2.57	9.00	75.65	0.99
3.0	1.00	2.78	9.00	77.80	1.00

$presence_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-2.91	1.00	20.88	0.00
0.1	0.00	-2.74	1.00	22.58	0.00
0.2	0.00	-2.57	1.00	24.29	0.01
0.3	0.00	-2.40	1.00	26.00	0.01
0.4	0.00	-2.23	1.00	27.70	0.01
0.5	0.00	-2.06	1.00	29.41	0.02
0.6	0.00	-1.89	1.22	31.11	0.03
0.7	0.05	-1.72	1.56	32.82	0.04
0.8	0.05	-1.55	1.90	34.52	0.06
0.9	0.10	-1.38	2.25	36.23	0.08
1.0	0.17	-1.21	2.59	37.94	0.11
1.1	0.17	-1.04	2.93	39.64	0.15
1.2	0.22	-0.87	3.27	41.35	0.19
1.3	0.22	-0.69	3.61	43.05	0.24
1.4	0.29	-0.52	3.95	44.76	0.30
1.5	0.45	-0.35	4.29	46.46	0.36

score	perc_rank	z	stanine	T	perc_normal
1.6	0.45	-0.18	4.63	48.17	0.43
1.7	0.56	-0.01	4.97	49.87	0.49
1.8	0.56	0.16	5.32	51.58	0.56
1.9	0.63	0.33	5.66	53.29	0.63
2.0	0.72	0.50	6.00	54.99	0.69
2.1	0.72	0.67	6.34	56.70	0.75
2.2	0.81	0.84	6.68	58.40	0.80
2.3	0.81	1.01	7.02	60.11	0.84
2.4	0.92	1.18	7.36	61.81	0.88
2.5	0.93	1.35	7.70	63.52	0.91
2.6	0.93	1.52	8.04	65.22	0.94
2.7	0.93	1.69	8.39	66.93	0.95
2.8	0.93	1.86	8.73	68.64	0.97
2.9	0.97	2.03	9.00	70.34	0.98
3.0	1.00	2.20	9.00	72.05	0.99

$acceptance13_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-3.30	1.00	17.03	0.00
0.1	0.00	-3.11	1.00	18.92	0.00
0.2	0.00	-2.92	1.00	20.82	0.00
0.3	0.01	-2.73	1.00	22.71	0.00
0.4	0.01	-2.54	1.00	24.60	0.01
0.5	0.01	-2.35	1.00	26.50	0.01
0.6	0.01	-2.16	1.00	28.39	0.02
0.7	0.01	-1.97	1.06	30.29	0.02
0.8	0.01	-1.78	1.44	32.18	0.04
0.9	0.05	-1.59	1.81	34.07	0.06
1.0	0.12	-1.40	2.19	35.97	0.08
1.1	0.12	-1.21	2.57	37.86	0.11
1.2	0.15	-1.02	2.95	39.76	0.15
1.3	0.21	-0.84	3.33	41.65	0.20
1.4	0.21	-0.65	3.71	43.54	0.26
1.5	0.35	-0.46	4.09	45.44	0.32
1.6	0.45	-0.27	4.47	47.33	0.39
1.7	0.45	-0.08	4.85	49.23	0.47
1.8	0.55	0.11	5.22	51.12	0.54
1.9	0.63	0.30	5.60	53.01	0.62
2.0	0.74	0.49	5.98	54.91	0.69
2.1	0.74	0.68	6.36	56.80	0.75
2.2	0.84	0.87	6.74	58.70	0.81
2.3	0.87	1.06	7.12	60.59	0.86
2.4	0.87	1.25	7.50	62.48	0.89
2.5	0.93	1.44	7.88	64.38	0.92
2.6	0.95	1.63	8.25	66.27	0.95
2.7	0.95	1.82	8.63	68.17	0.97
2.8	0.97	2.01	9.00	70.06	0.98
2.9	0.97	2.20	9.00	71.95	0.99
3.0	1.00	2.38	9.00	73.85	0.99

$fmi14_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-3.67	1.00	13.26	0.00
0.1	0.00	-3.46	1.00	15.41	0.00
0.2	0.00	-3.24	1.00	17.56	0.00
0.3	0.00	-3.03	1.00	19.72	0.00
0.4	0.00	-2.81	1.00	21.87	0.00
0.5	0.00	-2.60	1.00	24.02	0.00
0.6	0.00	-2.38	1.00	26.17	0.01
0.7	0.00	-2.17	1.00	28.32	0.02
0.8	0.00	-1.95	1.09	30.47	0.03
0.9	0.00	-1.74	1.52	32.62	0.04
1.0	0.07	-1.52	1.96	34.78	0.06
1.1	0.09	-1.31	2.39	36.93	0.10
1.2	0.14	-1.09	2.82	39.08	0.14
1.3	0.23	-0.88	3.25	41.23	0.19
1.4	0.28	-0.66	3.68	43.38	0.25
1.5	0.37	-0.45	4.11	45.53	0.33
1.6	0.48	-0.23	4.54	47.68	0.41
1.7	0.51	-0.02	4.97	49.84	0.49
1.8	0.60	0.20	5.40	51.99	0.58
1.9	0.63	0.41	5.83	54.14	0.66
2.0	0.73	0.63	6.26	56.29	0.74
2.1	0.80	0.84	6.69	58.44	0.80
2.2	0.87	1.06	7.12	60.59	0.86
2.3	0.92	1.27	7.55	62.74	0.90
2.4	0.92	1.49	7.98	64.90	0.93
2.5	0.95	1.70	8.41	67.05	0.96
2.6	0.97	1.92	8.84	69.20	0.97
2.7	0.97	2.14	9.00	71.35	0.98
2.8	0.99	2.35	9.00	73.50	0.99
2.9	0.99	2.57	9.00	75.65	0.99
3.0	1.00	2.78	9.00	77.80	1.00

Group: Multiple retreats per year $fmi13_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-4.22	1.00	7.83	0.00
0.1	0.00	-3.99	1.00	10.15	0.00
0.2	0.00	-3.75	1.00	12.47	0.00
0.3	0.00	-3.52	1.00	14.79	0.00
0.4	0.00	-3.29	1.00	17.11	0.00
0.5	0.00	-3.06	1.00	19.43	0.00
0.6	0.00	-2.82	1.00	21.75	0.00
0.7	0.00	-2.59	1.00	24.07	0.00
0.8	0.02	-2.36	1.00	26.39	0.01
0.9	0.02	-2.13	1.00	28.71	0.02
1.0	0.03	-1.90	1.21	31.04	0.03
1.1	0.07	-1.66	1.67	33.36	0.05
1.2	0.09	-1.43	2.14	35.68	0.08
1.3	0.13	-1.20	2.60	38.00	0.12

score	perc_rank	z	stanine	T	perc_normal
1.4	0.16	-0.97	3.06	40.32	0.17
1.5	0.22	-0.74	3.53	42.64	0.23
1.6	0.28	-0.50	3.99	44.96	0.31
1.7	0.34	-0.27	4.46	47.28	0.39
1.8	0.51	-0.04	4.92	49.60	0.48
1.9	0.59	0.19	5.38	51.92	0.58
2.0	0.76	0.42	5.85	54.24	0.66
2.1	0.78	0.66	6.31	56.57	0.74
2.2	0.80	0.89	6.78	58.89	0.81
2.3	0.90	1.12	7.24	61.21	0.87
2.4	0.91	1.35	7.71	63.53	0.91
2.5	0.93	1.58	8.17	65.85	0.94
2.6	0.95	1.82	8.63	68.17	0.97
2.7	0.97	2.05	9.00	70.49	0.98
2.8	0.99	2.28	9.00	72.81	0.99
2.9	0.99	2.51	9.00	75.13	0.99
3.0	1.00	2.75	9.00	77.45	1.00

$presence_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-3.71	1.00	12.89	0.00
0.1	0.00	-3.51	1.00	14.90	0.00
0.2	0.00	-3.31	1.00	16.92	0.00
0.3	0.00	-3.11	1.00	18.93	0.00
0.4	0.01	-2.91	1.00	20.95	0.00
0.5	0.01	-2.70	1.00	22.96	0.00
0.6	0.01	-2.50	1.00	24.98	0.01
0.7	0.02	-2.30	1.00	26.99	0.01
0.8	0.02	-2.10	1.00	29.01	0.02
0.9	0.03	-1.90	1.20	31.02	0.03
1.0	0.08	-1.70	1.61	33.03	0.04
1.1	0.08	-1.50	2.01	35.05	0.07
1.2	0.12	-1.29	2.41	37.06	0.10
1.3	0.12	-1.09	2.82	39.08	0.14
1.4	0.18	-0.89	3.22	41.09	0.19
1.5	0.28	-0.69	3.62	43.11	0.25
1.6	0.28	-0.49	4.02	45.12	0.31
1.7	0.39	-0.29	4.43	47.14	0.39
1.8	0.39	-0.08	4.83	49.15	0.47
1.9	0.52	0.12	5.23	51.17	0.55
2.0	0.75	0.32	5.64	53.18	0.62
2.1	0.75	0.52	6.04	55.20	0.70
2.2	0.84	0.72	6.44	57.21	0.76
2.3	0.84	0.92	6.85	59.23	0.82
2.4	0.86	1.12	7.25	61.24	0.87
2.5	0.92	1.33	7.65	63.26	0.91
2.6	0.92	1.53	8.05	65.27	0.94
2.7	0.97	1.73	8.46	67.29	0.96
2.8	0.97	1.93	8.86	69.30	0.97
2.9	0.98	2.13	9.00	71.32	0.98

score	perc_rank	z	stanine	T	perc_normal
3.0	1.00	2.33	9.00	73.33	0.99

$acceptance13_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-3.80	1.00	11.98	0.00
0.1	0.00	-3.59	1.00	14.08	0.00
0.2	0.00	-3.38	1.00	16.18	0.00
0.3	0.00	-3.17	1.00	18.27	0.00
0.4	0.00	-2.96	1.00	20.37	0.00
0.5	0.00	-2.75	1.00	22.47	0.00
0.6	0.00	-2.54	1.00	24.57	0.01
0.7	0.00	-2.33	1.00	26.67	0.01
0.8	0.02	-2.12	1.00	28.77	0.02
0.9	0.03	-1.91	1.17	30.87	0.03
1.0	0.09	-1.70	1.59	32.97	0.04
1.1	0.09	-1.49	2.01	35.07	0.07
1.2	0.11	-1.28	2.43	37.16	0.10
1.3	0.18	-1.07	2.85	39.26	0.14
1.4	0.18	-0.86	3.27	41.36	0.19
1.5	0.23	-0.65	3.69	43.46	0.26
1.6	0.33	-0.44	4.11	45.56	0.33
1.7	0.33	-0.23	4.53	47.66	0.41
1.8	0.43	-0.02	4.95	49.76	0.49
1.9	0.60	0.19	5.37	51.86	0.57
2.0	0.75	0.40	5.79	53.95	0.65
2.1	0.75	0.61	6.21	56.05	0.73
2.2	0.84	0.82	6.63	58.15	0.79
2.3	0.88	1.03	7.05	60.25	0.85
2.4	0.88	1.24	7.47	62.35	0.89
2.5	0.91	1.44	7.89	64.45	0.93
2.6	0.93	1.65	8.31	66.55	0.95
2.7	0.93	1.86	8.73	68.65	0.97
2.8	0.99	2.07	9.00	70.75	0.98
2.9	0.99	2.28	9.00	72.84	0.99
3.0	1.00	2.49	9.00	74.94	0.99

$fmi14_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-4.22	1.00	7.83	0.00
0.1	0.00	-3.99	1.00	10.15	0.00
0.2	0.00	-3.75	1.00	12.47	0.00
0.3	0.00	-3.52	1.00	14.79	0.00
0.4	0.00	-3.29	1.00	17.11	0.00
0.5	0.00	-3.06	1.00	19.43	0.00
0.6	0.00	-2.82	1.00	21.75	0.00
0.7	0.00	-2.59	1.00	24.07	0.00
0.8	0.02	-2.36	1.00	26.39	0.01

score	perc_rank	z	stanine	T	perc_normal
0.9	0.02	-2.13	1.00	28.71	0.02
1.0	0.03	-1.90	1.21	31.04	0.03
1.1	0.07	-1.66	1.67	33.36	0.05
1.2	0.09	-1.43	2.14	35.68	0.08
1.3	0.13	-1.20	2.60	38.00	0.12
1.4	0.16	-0.97	3.06	40.32	0.17
1.5	0.22	-0.74	3.53	42.64	0.23
1.6	0.28	-0.50	3.99	44.96	0.31
1.7	0.34	-0.27	4.46	47.28	0.39
1.8	0.51	-0.04	4.92	49.60	0.48
1.9	0.59	0.19	5.38	51.92	0.58
2.0	0.76	0.42	5.85	54.24	0.66
2.1	0.78	0.66	6.31	56.57	0.74
2.2	0.80	0.89	6.78	58.89	0.81
2.3	0.90	1.12	7.24	61.21	0.87
2.4	0.91	1.35	7.71	63.53	0.91
2.5	0.93	1.58	8.17	65.85	0.94
2.6	0.95	1.82	8.63	68.17	0.97
2.7	0.97	2.05	9.00	70.49	0.98
2.8	0.99	2.28	9.00	72.81	0.99
2.9	0.99	2.51	9.00	75.13	0.99
3.0	1.00	2.75	9.00	77.45	1.00

Group: Rarely $fmi13_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-3.42	1.00	15.83	0.00
0.1	0.00	-3.24	1.00	17.64	0.00
0.2	0.00	-3.05	1.00	19.45	0.00
0.3	0.01	-2.87	1.00	21.27	0.00
0.4	0.01	-2.69	1.00	23.08	0.00
0.5	0.04	-2.51	1.00	24.89	0.01
0.6	0.04	-2.33	1.00	26.70	0.01
0.7	0.04	-2.15	1.00	28.52	0.02
0.8	0.05	-1.97	1.07	30.33	0.02
0.9	0.05	-1.79	1.43	32.14	0.04
1.0	0.05	-1.60	1.79	33.95	0.05
1.1	0.08	-1.42	2.15	35.77	0.08
1.2	0.08	-1.24	2.52	37.58	0.11
1.3	0.09	-1.06	2.88	39.39	0.14
1.4	0.13	-0.88	3.24	41.21	0.19
1.5	0.24	-0.70	3.60	43.02	0.24
1.6	0.30	-0.52	3.97	44.83	0.30
1.7	0.35	-0.34	4.33	46.64	0.37
1.8	0.44	-0.15	4.69	48.46	0.44
1.9	0.49	0.03	5.05	50.27	0.51
2.0	0.63	0.21	5.42	52.08	0.58
2.1	0.68	0.39	5.78	53.89	0.65
2.2	0.71	0.57	6.14	55.71	0.72
2.3	0.77	0.75	6.50	57.52	0.77
2.4	0.80	0.93	6.87	59.33	0.82

score	perc_rank	z	stanine	T	perc_normal
2.5	0.89	1.11	7.23	61.14	0.87
2.6	0.90	1.30	7.59	62.96	0.90
2.7	0.90	1.48	7.95	64.77	0.93
2.8	1.00	1.66	8.32	66.58	0.95
2.9	1.00	1.84	8.68	68.40	0.97
3.0	1.00	2.02	9.00	70.21	0.98

$presence_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.03	-2.85	1.00	21.48	0.00
0.1	0.03	-2.71	1.00	22.95	0.00
0.2	0.04	-2.56	1.00	24.42	0.01
0.3	0.04	-2.41	1.00	25.90	0.01
0.4	0.04	-2.26	1.00	27.37	0.01
0.5	0.04	-2.12	1.00	28.84	0.02
0.6	0.04	-1.97	1.06	30.31	0.02
0.7	0.05	-1.82	1.36	31.79	0.03
0.8	0.05	-1.67	1.65	33.26	0.05
0.9	0.05	-1.53	1.95	34.73	0.06
1.0	0.08	-1.38	2.24	36.20	0.08
1.1	0.08	-1.23	2.54	37.68	0.11
1.2	0.15	-1.08	2.83	39.15	0.14
1.3	0.15	-0.94	3.12	40.62	0.17
1.4	0.19	-0.79	3.42	42.10	0.21
1.5	0.28	-0.64	3.71	43.57	0.26
1.6	0.28	-0.50	4.01	45.04	0.31
1.7	0.35	-0.35	4.30	46.51	0.36
1.8	0.35	-0.20	4.60	47.99	0.42
1.9	0.46	-0.05	4.89	49.46	0.48
2.0	0.58	0.09	5.19	50.93	0.54
2.1	0.58	0.24	5.48	52.40	0.60
2.2	0.68	0.39	5.78	53.88	0.65
2.3	0.68	0.54	6.07	55.35	0.70
2.4	0.76	0.68	6.36	56.82	0.75
2.5	0.82	0.83	6.66	58.30	0.80
2.6	0.82	0.98	6.95	59.77	0.84
2.7	0.87	1.12	7.25	61.24	0.87
2.8	0.87	1.27	7.54	62.71	0.90
2.9	0.91	1.42	7.84	64.19	0.92
3.0	1.00	1.57	8.13	65.66	0.94

$acceptance13_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-3.09	1.00	19.08	0.00
0.1	0.00	-2.93	1.00	20.68	0.00
0.2	0.01	-2.77	1.00	22.28	0.00
0.3	0.03	-2.61	1.00	23.88	0.00

score	perc_rank	z	stanine	T	perc_normal
0.4	0.03	-2.45	1.00	25.48	0.01
0.5	0.03	-2.29	1.00	27.08	0.01
0.6	0.05	-2.13	1.00	28.68	0.02
0.7	0.05	-1.97	1.06	30.28	0.02
0.8	0.05	-1.81	1.37	31.87	0.03
0.9	0.05	-1.65	1.69	33.47	0.05
1.0	0.05	-1.49	2.01	35.07	0.07
1.1	0.05	-1.33	2.33	36.67	0.09
1.2	0.09	-1.17	2.65	38.27	0.12
1.3	0.15	-1.01	2.97	39.87	0.16
1.4	0.15	-0.85	3.29	41.47	0.20
1.5	0.24	-0.69	3.61	43.07	0.24
1.6	0.29	-0.53	3.93	44.67	0.30
1.7	0.29	-0.37	4.25	46.27	0.35
1.8	0.41	-0.21	4.57	47.87	0.42
1.9	0.47	-0.05	4.89	49.47	0.48
2.0	0.63	0.11	5.21	51.07	0.54
2.1	0.63	0.27	5.53	52.67	0.61
2.2	0.70	0.43	5.85	54.27	0.67
2.3	0.76	0.59	6.17	55.87	0.72
2.4	0.76	0.75	6.49	57.47	0.77
2.5	0.78	0.91	6.81	59.07	0.82
2.6	0.85	1.07	7.13	60.67	0.86
2.7	0.85	1.23	7.45	62.27	0.89
2.8	0.90	1.39	7.77	63.87	0.92
2.9	0.94	1.55	8.09	65.47	0.94
3.0	1.00	1.71	8.41	67.07	0.96

$fmi14_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-3.42	1.00	15.83	0.00
0.1	0.00	-3.24	1.00	17.64	0.00
0.2	0.00	-3.05	1.00	19.45	0.00
0.3	0.01	-2.87	1.00	21.27	0.00
0.4	0.01	-2.69	1.00	23.08	0.00
0.5	0.04	-2.51	1.00	24.89	0.01
0.6	0.04	-2.33	1.00	26.70	0.01
0.7	0.04	-2.15	1.00	28.52	0.02
0.8	0.05	-1.97	1.07	30.33	0.02
0.9	0.05	-1.79	1.43	32.14	0.04
1.0	0.05	-1.60	1.79	33.95	0.05
1.1	0.08	-1.42	2.15	35.77	0.08
1.2	0.08	-1.24	2.52	37.58	0.11
1.3	0.09	-1.06	2.88	39.39	0.14
1.4	0.13	-0.88	3.24	41.21	0.19
1.5	0.24	-0.70	3.60	43.02	0.24
1.6	0.30	-0.52	3.97	44.83	0.30
1.7	0.35	-0.34	4.33	46.64	0.37
1.8	0.44	-0.15	4.69	48.46	0.44
1.9	0.49	0.03	5.05	50.27	0.51

score	perc_rank	z	stanine	T	perc_normal
2.0	0.63	0.21	5.42	52.08	0.58
2.1	0.68	0.39	5.78	53.89	0.65
2.2	0.71	0.57	6.14	55.71	0.72
2.3	0.77	0.75	6.50	57.52	0.77
2.4	0.80	0.93	6.87	59.33	0.82
2.5	0.89	1.11	7.23	61.14	0.87
2.6	0.90	1.30	7.59	62.96	0.90
2.7	0.90	1.48	7.95	64.77	0.93
2.8	1.00	1.66	8.32	66.58	0.95
2.9	1.00	1.84	8.68	68.40	0.97
3.0	1.00	2.02	9.00	70.21	0.98

Group: Once a year $fmi13_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-3.76	1.00	12.37	0.00
0.1	0.00	-3.54	1.00	14.57	0.00
0.2	0.00	-3.32	1.00	16.77	0.00
0.3	0.00	-3.10	1.00	18.96	0.00
0.4	0.00	-2.88	1.00	21.16	0.00
0.5	0.00	-2.66	1.00	23.36	0.00
0.6	0.02	-2.44	1.00	25.56	0.01
0.7	0.02	-2.22	1.00	27.76	0.01
0.8	0.02	-2.00	1.00	29.96	0.02
0.9	0.02	-1.78	1.43	32.15	0.04
1.0	0.07	-1.56	1.87	34.35	0.06
1.1	0.07	-1.34	2.31	36.55	0.09
1.2	0.10	-1.13	2.75	38.75	0.13
1.3	0.14	-0.91	3.19	40.95	0.18
1.4	0.21	-0.69	3.63	43.15	0.25
1.5	0.38	-0.47	4.07	45.34	0.32
1.6	0.45	-0.25	4.51	47.54	0.40
1.7	0.52	-0.03	4.95	49.74	0.49
1.8	0.66	0.19	5.39	51.94	0.58
1.9	0.67	0.41	5.83	54.14	0.66
2.0	0.79	0.63	6.27	56.33	0.74
2.1	0.83	0.85	6.71	58.53	0.80
2.2	0.83	1.07	7.15	60.73	0.86
2.3	0.90	1.29	7.59	62.93	0.90
2.4	0.91	1.51	8.03	65.13	0.93
2.5	0.95	1.73	8.47	67.33	0.96
2.6	0.97	1.95	8.90	69.52	0.97
2.7	0.98	2.17	9.00	71.72	0.99
2.8	0.98	2.39	9.00	73.92	0.99
2.9	0.98	2.61	9.00	76.12	1.00
3.0	1.00	2.83	9.00	78.32	1.00

$presence_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-3.04	1.00	19.58	0.00
0.1	0.00	-2.86	1.00	21.39	0.00
0.2	0.02	-2.68	1.00	23.20	0.00
0.3	0.02	-2.50	1.00	25.01	0.01
0.4	0.02	-2.32	1.00	26.82	0.01
0.5	0.02	-2.14	1.00	28.63	0.02
0.6	0.02	-1.96	1.09	30.44	0.03
0.7	0.03	-1.78	1.45	32.25	0.04
0.8	0.03	-1.59	1.81	34.06	0.06
0.9	0.05	-1.41	2.17	35.87	0.08
1.0	0.14	-1.23	2.54	37.68	0.11
1.1	0.14	-1.05	2.90	39.49	0.15
1.2	0.21	-0.87	3.26	41.29	0.19
1.3	0.21	-0.69	3.62	43.10	0.25
1.4	0.33	-0.51	3.98	44.91	0.31
1.5	0.43	-0.33	4.34	46.72	0.37
1.6	0.43	-0.15	4.71	48.53	0.44
1.7	0.57	0.03	5.07	50.34	0.51
1.8	0.57	0.22	5.43	52.15	0.59
1.9	0.67	0.40	5.79	53.96	0.65
2.0	0.79	0.58	6.15	55.77	0.72
2.1	0.79	0.76	6.52	57.58	0.78
2.2	0.86	0.94	6.88	59.39	0.83
2.3	0.86	1.12	7.24	61.20	0.87
2.4	0.88	1.30	7.60	63.01	0.90
2.5	0.95	1.48	7.96	64.82	0.93
2.6	0.95	1.66	8.33	66.63	0.95
2.7	0.97	1.84	8.69	68.44	0.97
2.8	0.97	2.02	9.00	70.25	0.98
2.9	0.98	2.21	9.00	72.06	0.99
3.0	1.00	2.39	9.00	73.87	0.99

$acceptance13_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-3.50	1.00	14.98	0.00
0.1	0.00	-3.30	1.00	17.00	0.00
0.2	0.00	-3.10	1.00	19.02	0.00
0.3	0.00	-2.90	1.00	21.04	0.00
0.4	0.00	-2.69	1.00	23.06	0.00
0.5	0.00	-2.49	1.00	25.08	0.01
0.6	0.00	-2.29	1.00	27.10	0.01
0.7	0.00	-2.09	1.00	29.12	0.02
0.8	0.02	-1.89	1.23	31.14	0.03
0.9	0.03	-1.68	1.63	33.16	0.05
1.0	0.09	-1.48	2.04	35.18	0.07
1.1	0.09	-1.28	2.44	37.20	0.10
1.2	0.10	-1.08	2.84	39.22	0.14
1.3	0.19	-0.88	3.25	41.24	0.19
1.4	0.19	-0.67	3.65	43.26	0.25
1.5	0.31	-0.47	4.05	45.27	0.32

score	perc_rank	z	stanine	T	perc_normal
1.6	0.53	-0.27	4.46	47.29	0.39
1.7	0.53	-0.07	4.86	49.31	0.47
1.8	0.57	0.13	5.27	51.33	0.55
1.9	0.69	0.34	5.67	53.35	0.63
2.0	0.79	0.54	6.07	55.37	0.70
2.1	0.79	0.74	6.48	57.39	0.77
2.2	0.86	0.94	6.88	59.41	0.83
2.3	0.91	1.14	7.29	61.43	0.87
2.4	0.91	1.34	7.69	63.45	0.91
2.5	0.91	1.55	8.09	65.47	0.94
2.6	0.93	1.75	8.50	67.49	0.96
2.7	0.93	1.95	8.90	69.51	0.97
2.8	0.93	2.15	9.00	71.53	0.98
2.9	0.98	2.35	9.00	73.55	0.99
3.0	1.00	2.56	9.00	75.57	0.99

$fmi14_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-3.76	1.00	12.37	0.00
0.1	0.00	-3.54	1.00	14.57	0.00
0.2	0.00	-3.32	1.00	16.77	0.00
0.3	0.00	-3.10	1.00	18.96	0.00
0.4	0.00	-2.88	1.00	21.16	0.00
0.5	0.00	-2.66	1.00	23.36	0.00
0.6	0.02	-2.44	1.00	25.56	0.01
0.7	0.02	-2.22	1.00	27.76	0.01
0.8	0.02	-2.00	1.00	29.96	0.02
0.9	0.02	-1.78	1.43	32.15	0.04
1.0	0.07	-1.56	1.87	34.35	0.06
1.1	0.07	-1.34	2.31	36.55	0.09
1.2	0.10	-1.13	2.75	38.75	0.13
1.3	0.14	-0.91	3.19	40.95	0.18
1.4	0.21	-0.69	3.63	43.15	0.25
1.5	0.38	-0.47	4.07	45.34	0.32
1.6	0.45	-0.25	4.51	47.54	0.40
1.7	0.52	-0.03	4.95	49.74	0.49
1.8	0.66	0.19	5.39	51.94	0.58
1.9	0.67	0.41	5.83	54.14	0.66
2.0	0.79	0.63	6.27	56.33	0.74
2.1	0.83	0.85	6.71	58.53	0.80
2.2	0.83	1.07	7.15	60.73	0.86
2.3	0.90	1.29	7.59	62.93	0.90
2.4	0.91	1.51	8.03	65.13	0.93
2.5	0.95	1.73	8.47	67.33	0.96
2.6	0.97	1.95	8.90	69.52	0.97
2.7	0.98	2.17	9.00	71.72	0.99
2.8	0.98	2.39	9.00	73.92	0.99
2.9	0.98	2.61	9.00	76.12	1.00
3.0	1.00	2.83	9.00	78.32	1.00

7.4 Split by Vipassana continuously

7.4.1 Stats

```
describe_fmi_stats(data = d_w_items,
                   var = Vip_regel)
```

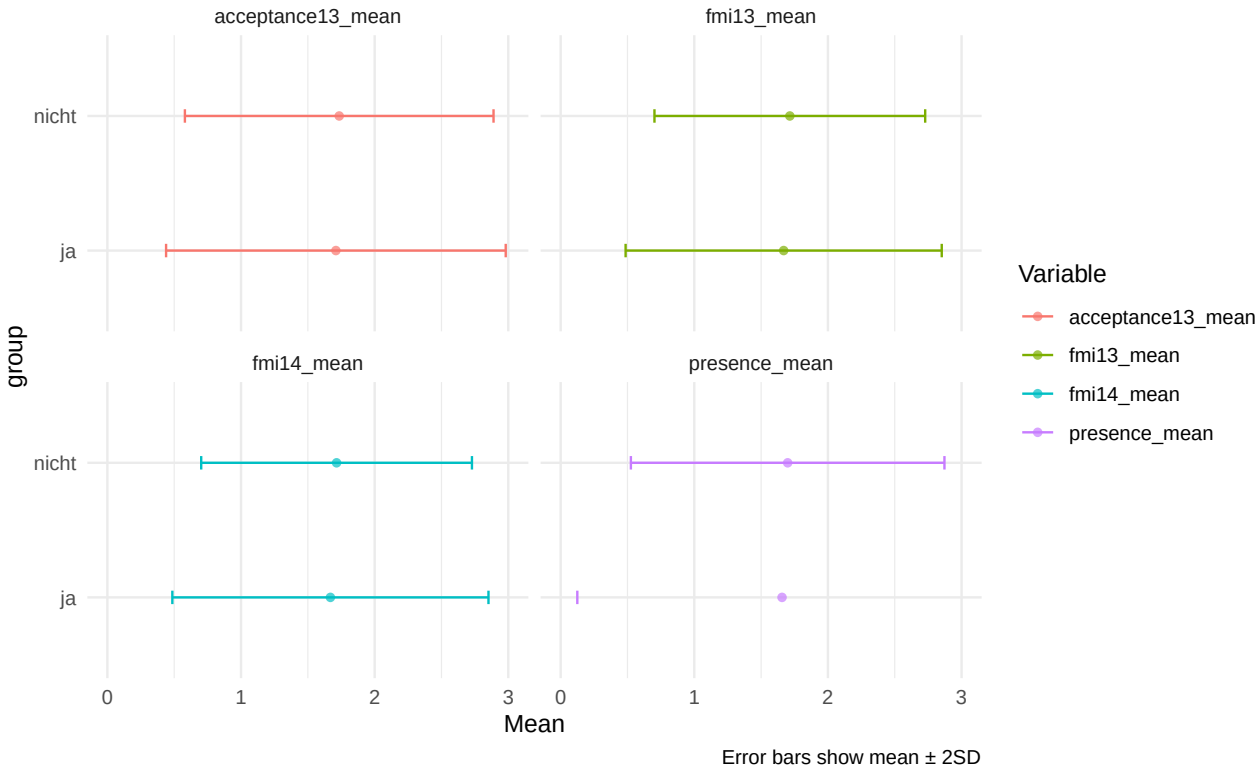
Table 59: Vip_regel=ja

Variable	Mean	Mean_01	SD	Range	Quartiles	Skewness	Kurtosis	n	n_Missing
acceptance13_mean	1.71	0.57	0.64	(0.29, 3.00)	1.43, 2.14	-0.02	0.04	33	0
fmi13_mean	1.67	0.56	0.59	(0.43, 2.79)	1.36, 2.14	-0.21	0.02	33	0
fmi14_mean	1.67	0.56	0.59	(0.43, 2.79)	1.36, 2.14	-0.21	0.02	33	0
presence_mean	1.66	0.55	0.77	(0.00, 3.00)	1.33, 2.17	-0.37	-0.18	33	0

Table 60: Vip_regel=nicht

Variable	Mean	Mean_01	SD	Range	Quartiles	Skewness	Kurtosis	n	n_Missing
acceptance13_mean	1.73	0.58	0.58	(0.00, 3.00)	1.43, 2.00	-0.22	0.28	979	0
fmi13_mean	1.71	0.57	0.51	(0.21, 3.00)	1.36, 2.00	-0.14	0.16	979	0
fmi14_mean	1.71	0.57	0.51	(0.21, 3.00)	1.36, 2.00	-0.14	0.16	979	0
presence_mean	1.70	0.57	0.59	(0.00, 3.00)	1.33, 2.00	-0.22	0.19	979	0

```
plot_fmi_descriptives(data = d_w_items,
                      var = Vip_regel)
```



7.4.2 Norms

```
for (i in unique(d_w_items$Vip_regel)) {
  cat("Group: ", i, "\n")
  d_w_items %>%
    filter(Vip_regel == i) %>%
    select(ends_with("_mean")) %>%
    map(~ knitr::kable(compute_all_norms(., min_score = 0, max_score = 3, by = .1),
                       digits = 2)) %>%
    print()
}
```

Group: nicht $fmi13_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-3.39	1.00	16.14	0.00
0.1	0.00	-3.19	1.00	18.11	0.00
0.2	0.00	-2.99	1.00	20.09	0.00
0.3	0.01	-2.79	1.00	22.06	0.00
0.4	0.01	-2.60	1.00	24.04	0.00
0.5	0.01	-2.40	1.00	26.01	0.01
0.6	0.02	-2.20	1.00	27.99	0.01
0.7	0.03	-2.00	1.00	29.96	0.02
0.8	0.04	-1.81	1.39	31.93	0.04
0.9	0.05	-1.61	1.78	33.91	0.05
1.0	0.09	-1.41	2.18	35.88	0.08
1.1	0.12	-1.21	2.57	37.86	0.11
1.2	0.15	-1.02	2.97	39.83	0.15
1.3	0.21	-0.82	3.36	41.81	0.21
1.4	0.25	-0.62	3.76	43.78	0.27
1.5	0.34	-0.42	4.15	45.76	0.34
1.6	0.39	-0.23	4.55	47.73	0.41
1.7	0.45	-0.03	4.94	49.70	0.49
1.8	0.58	0.17	5.34	51.68	0.57
1.9	0.63	0.37	5.73	53.65	0.64
2.0	0.76	0.56	6.13	55.63	0.71
2.1	0.80	0.76	6.52	57.60	0.78
2.2	0.83	0.96	6.92	59.58	0.83
2.3	0.89	1.16	7.31	61.55	0.88
2.4	0.91	1.35	7.71	63.53	0.91
2.5	0.95	1.55	8.10	65.50	0.94
2.6	0.96	1.75	8.50	67.48	0.96
2.7	0.97	1.94	8.89	69.45	0.97
2.8	0.99	2.14	9.00	71.42	0.98
2.9	0.99	2.34	9.00	73.40	0.99
3.0	1.00	2.54	9.00	75.37	0.99

$presence_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.01	-2.90	1.00	21.04	0.00
0.1	0.01	-2.73	1.00	22.75	0.00
0.2	0.01	-2.55	1.00	24.45	0.01
0.3	0.01	-2.38	1.00	26.16	0.01
0.4	0.02	-2.21	1.00	27.86	0.01
0.5	0.04	-2.04	1.00	29.56	0.02
0.6	0.04	-1.87	1.25	31.27	0.03
0.7	0.06	-1.70	1.59	32.97	0.04
0.8	0.06	-1.53	1.94	34.68	0.06
0.9	0.09	-1.36	2.28	36.38	0.09
1.0	0.14	-1.19	2.62	38.09	0.12
1.1	0.14	-1.02	2.96	39.79	0.15
1.2	0.21	-0.85	3.30	41.50	0.20
1.3	0.21	-0.68	3.64	43.20	0.25
1.4	0.29	-0.51	3.98	44.91	0.31
1.5	0.40	-0.34	4.32	46.61	0.37
1.6	0.40	-0.17	4.66	48.32	0.43
1.7	0.51	0.00	5.00	50.02	0.50
1.8	0.51	0.17	5.35	51.73	0.57
1.9	0.64	0.34	5.69	53.43	0.63
2.0	0.77	0.51	6.03	55.14	0.70
2.1	0.77	0.68	6.37	56.84	0.75
2.2	0.84	0.85	6.71	58.55	0.80
2.3	0.84	1.03	7.05	60.25	0.85
2.4	0.89	1.20	7.39	61.96	0.88
2.5	0.94	1.37	7.73	63.66	0.91
2.6	0.94	1.54	8.07	65.37	0.94
2.7	0.96	1.71	8.41	67.07	0.96
2.8	0.96	1.88	8.76	68.78	0.97
2.9	0.98	2.05	9.00	70.48	0.98
3.0	1.00	2.22	9.00	72.19	0.99

$acceptance13_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.01	-3.00	1.00	19.96	0.00
0.1	0.01	-2.83	1.00	21.69	0.00
0.2	0.01	-2.66	1.00	23.42	0.00
0.3	0.02	-2.48	1.00	25.15	0.01
0.4	0.02	-2.31	1.00	26.88	0.01
0.5	0.03	-2.14	1.00	28.62	0.02
0.6	0.03	-1.97	1.07	30.35	0.02
0.7	0.03	-1.79	1.42	32.08	0.04
0.8	0.05	-1.62	1.76	33.81	0.05
0.9	0.08	-1.45	2.11	35.54	0.07
1.0	0.13	-1.27	2.46	37.28	0.10
1.1	0.13	-1.10	2.80	39.01	0.14
1.2	0.17	-0.93	3.15	40.74	0.18
1.3	0.24	-0.75	3.49	42.47	0.23
1.4	0.24	-0.58	3.84	44.20	0.28
1.5	0.33	-0.41	4.19	45.93	0.34

score	perc_rank	z	stanine	T	perc_normal
1.6	0.42	-0.23	4.53	47.67	0.41
1.7	0.42	-0.06	4.88	49.40	0.48
1.8	0.51	0.11	5.23	51.13	0.55
1.9	0.63	0.29	5.57	52.86	0.61
2.0	0.75	0.46	5.92	54.59	0.68
2.1	0.75	0.63	6.27	56.33	0.74
2.2	0.82	0.81	6.61	58.06	0.79
2.3	0.87	0.98	6.96	59.79	0.84
2.4	0.87	1.15	7.30	61.52	0.88
2.5	0.90	1.33	7.65	63.25	0.91
2.6	0.94	1.50	8.00	64.99	0.93
2.7	0.94	1.67	8.34	66.72	0.95
2.8	0.96	1.85	8.69	68.45	0.97
2.9	0.98	2.02	9.00	70.18	0.98
3.0	1.00	2.19	9.00	71.91	0.99

$fmi14_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-3.39	1.00	16.14	0.00
0.1	0.00	-3.19	1.00	18.11	0.00
0.2	0.00	-2.99	1.00	20.09	0.00
0.3	0.01	-2.79	1.00	22.06	0.00
0.4	0.01	-2.60	1.00	24.04	0.00
0.5	0.01	-2.40	1.00	26.01	0.01
0.6	0.02	-2.20	1.00	27.99	0.01
0.7	0.03	-2.00	1.00	29.96	0.02
0.8	0.04	-1.81	1.39	31.93	0.04
0.9	0.05	-1.61	1.78	33.91	0.05
1.0	0.09	-1.41	2.18	35.88	0.08
1.1	0.12	-1.21	2.57	37.86	0.11
1.2	0.15	-1.02	2.97	39.83	0.15
1.3	0.21	-0.82	3.36	41.81	0.21
1.4	0.25	-0.62	3.76	43.78	0.27
1.5	0.34	-0.42	4.15	45.76	0.34
1.6	0.39	-0.23	4.55	47.73	0.41
1.7	0.45	-0.03	4.94	49.70	0.49
1.8	0.58	0.17	5.34	51.68	0.57
1.9	0.63	0.37	5.73	53.65	0.64
2.0	0.76	0.56	6.13	55.63	0.71
2.1	0.80	0.76	6.52	57.60	0.78
2.2	0.83	0.96	6.92	59.58	0.83
2.3	0.89	1.16	7.31	61.55	0.88
2.4	0.91	1.35	7.71	63.53	0.91
2.5	0.95	1.55	8.10	65.50	0.94
2.6	0.96	1.75	8.50	67.48	0.96
2.7	0.97	1.94	8.89	69.45	0.97
2.8	0.99	2.14	9.00	71.42	0.98
2.9	0.99	2.34	9.00	73.40	0.99
3.0	1.00	2.54	9.00	75.37	0.99

Group: ja $fmi13_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-2.82	1.00	21.78	0.00
0.1	0.00	-2.65	1.00	23.47	0.00
0.2	0.00	-2.48	1.00	25.16	0.01
0.3	0.00	-2.31	1.00	26.85	0.01
0.4	0.00	-2.15	1.00	28.55	0.02
0.5	0.06	-1.98	1.05	30.24	0.02
0.6	0.09	-1.81	1.39	31.93	0.04
0.7	0.09	-1.64	1.72	33.62	0.05
0.8	0.09	-1.47	2.06	35.31	0.07
0.9	0.09	-1.30	2.40	37.00	0.10
1.0	0.12	-1.13	2.74	38.69	0.13
1.1	0.12	-0.96	3.08	40.38	0.17
1.2	0.12	-0.79	3.41	42.07	0.21
1.3	0.21	-0.62	3.75	43.76	0.27
1.4	0.27	-0.45	4.09	45.45	0.32
1.5	0.39	-0.29	4.43	47.15	0.39
1.6	0.52	-0.12	4.77	48.84	0.45
1.7	0.52	0.05	5.11	50.53	0.52
1.8	0.70	0.22	5.44	52.22	0.59
1.9	0.73	0.39	5.78	53.91	0.65
2.0	0.73	0.56	6.12	55.60	0.71
2.1	0.73	0.73	6.46	57.29	0.77
2.2	0.79	0.90	6.80	58.98	0.82
2.3	0.85	1.07	7.13	60.67	0.86
2.4	0.88	1.24	7.47	62.36	0.89
2.5	0.94	1.41	7.81	64.05	0.92
2.6	0.94	1.57	8.15	65.75	0.94
2.7	0.94	1.74	8.49	67.44	0.96
2.8	1.00	1.91	8.83	69.13	0.97
2.9	1.00	2.08	9.00	70.82	0.98
3.0	1.00	2.25	9.00	72.51	0.99

$presence_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.03	-2.16	1.00	28.37	0.02
0.1	0.03	-2.03	1.00	29.68	0.02
0.2	0.09	-1.90	1.20	30.98	0.03
0.3	0.09	-1.77	1.46	32.29	0.04
0.4	0.09	-1.64	1.72	33.59	0.05
0.5	0.09	-1.51	1.98	34.90	0.07
0.6	0.09	-1.38	2.24	36.21	0.08
0.7	0.12	-1.25	2.50	37.51	0.11
0.8	0.12	-1.12	2.76	38.82	0.13
0.9	0.15	-0.99	3.02	40.12	0.16
1.0	0.21	-0.86	3.29	41.43	0.20
1.1	0.21	-0.73	3.55	42.73	0.23
1.2	0.24	-0.60	3.81	44.04	0.28
1.3	0.24	-0.47	4.07	45.34	0.32

score	perc_rank	z	stanine	T	perc_normal
1.4	0.30	-0.33	4.33	46.65	0.37
1.5	0.45	-0.20	4.59	47.96	0.42
1.6	0.45	-0.07	4.85	49.26	0.47
1.7	0.58	0.06	5.11	50.57	0.52
1.8	0.58	0.19	5.37	51.87	0.57
1.9	0.67	0.32	5.64	53.18	0.62
2.0	0.67	0.45	5.90	54.48	0.67
2.1	0.67	0.58	6.16	55.79	0.72
2.2	0.76	0.71	6.42	57.09	0.76
2.3	0.76	0.84	6.68	58.40	0.80
2.4	0.82	0.97	6.94	59.71	0.83
2.5	0.91	1.10	7.20	61.01	0.86
2.6	0.91	1.23	7.46	62.32	0.89
2.7	0.91	1.36	7.72	63.62	0.91
2.8	0.91	1.49	7.99	64.93	0.93
2.9	0.97	1.62	8.25	66.23	0.95
3.0	1.00	1.75	8.51	67.54	0.96

$acceptance13_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-2.69	1.00	23.09	0.00
0.1	0.00	-2.53	1.00	24.66	0.01
0.2	0.00	-2.38	1.00	26.23	0.01
0.3	0.03	-2.22	1.00	27.81	0.01
0.4	0.03	-2.06	1.00	29.38	0.02
0.5	0.03	-1.90	1.19	30.96	0.03
0.6	0.06	-1.75	1.51	32.53	0.04
0.7	0.06	-1.59	1.82	34.10	0.06
0.8	0.09	-1.43	2.14	35.68	0.08
0.9	0.12	-1.27	2.45	37.25	0.10
1.0	0.12	-1.12	2.77	38.83	0.13
1.1	0.12	-0.96	3.08	40.40	0.17
1.2	0.18	-0.80	3.39	41.97	0.21
1.3	0.24	-0.65	3.71	43.55	0.26
1.4	0.24	-0.49	4.02	45.12	0.31
1.5	0.33	-0.33	4.34	46.70	0.37
1.6	0.45	-0.17	4.65	48.27	0.43
1.7	0.45	-0.02	4.97	49.84	0.49
1.8	0.64	0.14	5.28	51.42	0.56
1.9	0.67	0.30	5.60	52.99	0.62
2.0	0.73	0.46	5.91	54.57	0.68
2.1	0.73	0.61	6.23	56.14	0.73
2.2	0.82	0.77	6.54	57.71	0.78
2.3	0.85	0.93	6.86	59.29	0.82
2.4	0.85	1.09	7.17	60.86	0.86
2.5	0.85	1.24	7.49	62.43	0.89
2.6	0.91	1.40	7.80	64.01	0.92
2.7	0.91	1.56	8.12	65.58	0.94
2.8	0.94	1.72	8.43	67.16	0.96
2.9	0.97	1.87	8.75	68.73	0.97

score	perc_rank	z	stanine	T	perc_normal
3.0	1.00	2.03	9.00	70.30	0.98

$fmi14_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-2.82	1.00	21.78	0.00
0.1	0.00	-2.65	1.00	23.47	0.00
0.2	0.00	-2.48	1.00	25.16	0.01
0.3	0.00	-2.31	1.00	26.85	0.01
0.4	0.00	-2.15	1.00	28.55	0.02
0.5	0.06	-1.98	1.05	30.24	0.02
0.6	0.09	-1.81	1.39	31.93	0.04
0.7	0.09	-1.64	1.72	33.62	0.05
0.8	0.09	-1.47	2.06	35.31	0.07
0.9	0.09	-1.30	2.40	37.00	0.10
1.0	0.12	-1.13	2.74	38.69	0.13
1.1	0.12	-0.96	3.08	40.38	0.17
1.2	0.12	-0.79	3.41	42.07	0.21
1.3	0.21	-0.62	3.75	43.76	0.27
1.4	0.27	-0.45	4.09	45.45	0.32
1.5	0.39	-0.29	4.43	47.15	0.39
1.6	0.52	-0.12	4.77	48.84	0.45
1.7	0.52	0.05	5.11	50.53	0.52
1.8	0.70	0.22	5.44	52.22	0.59
1.9	0.73	0.39	5.78	53.91	0.65
2.0	0.73	0.56	6.12	55.60	0.71
2.1	0.73	0.73	6.46	57.29	0.77
2.2	0.79	0.90	6.80	58.98	0.82
2.3	0.85	1.07	7.13	60.67	0.86
2.4	0.88	1.24	7.47	62.36	0.89
2.5	0.94	1.41	7.81	64.05	0.92
2.6	0.94	1.57	8.15	65.75	0.94
2.7	0.94	1.74	8.49	67.44	0.96
2.8	1.00	1.91	8.83	69.13	0.97
2.9	1.00	2.08	9.00	70.82	0.98
3.0	1.00	2.25	9.00	72.51	0.99

7.5 Split by Age

7.5.1 Stats

Median age in sample?

```
d_w_items$Alter %>% median()
```

```
## [1] 49
```

```
d_w_items <-
  d_w_items %>%
  mutate(age_below_md = if_else(Alter < median(Alter), "young", "old"))
```

```
describe_fmi_stats(data = d_w_items,
                   var = age_below_md)
```

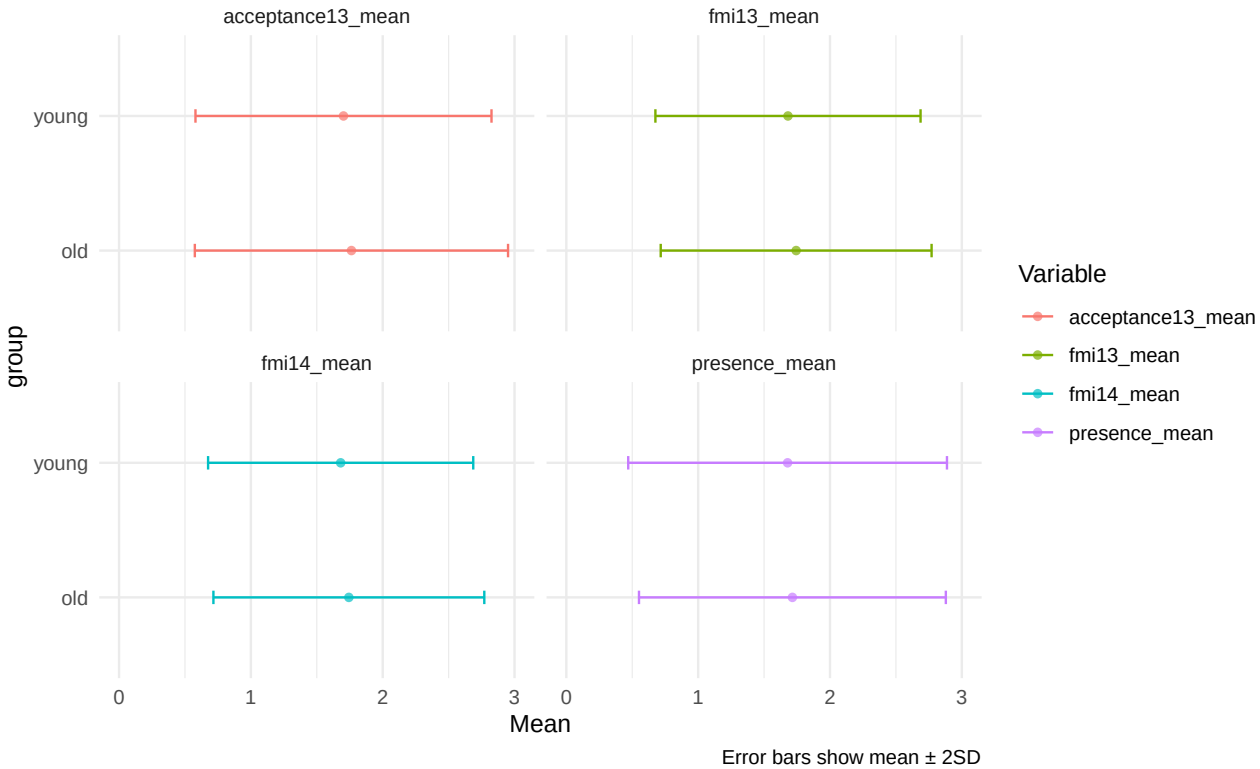
Table 69: age_below_md=old

Variable	Mean	Mean_01	SD	Range	Quartiles	Skewness	Kurtosis	n	n_Missing
acceptance13_mean	1.76	0.59	0.59	(0.00, 3.00)	1.43, 2.14	-0.38	0.41	526	0
fmi13_mean	1.74	0.58	0.51	(0.21, 3.00)	1.43, 2.07	-0.29	0.25	526	0
fmi14_mean	1.74	0.58	0.51	(0.21, 3.00)	1.43, 2.07	-0.29	0.25	526	0
presence_mean	1.71	0.57	0.58	(0.00, 3.00)	1.33, 2.00	-0.38	0.39	526	0

Table 70: age_below_md=young

Variable	Mean	Mean_01	SD	Range	Quartiles	Skewness	Kurtosis	n	n_Missing
acceptance13_mean	1.70	0.57	0.56	(0.00, 3.00)	1.29, 2.00	-0.03	0.17	486	0
fmi13_mean	1.68	0.56	0.50	(0.21, 3.00)	1.36, 2.00	0.01	0.14	486	0
fmi14_mean	1.68	0.56	0.50	(0.21, 3.00)	1.36, 2.00	0.01	0.14	486	0
presence_mean	1.68	0.56	0.60	(0.00, 3.00)	1.33, 2.00	-0.09	0.05	486	0

```
plot_fmi_descriptives(data = d_w_items,
                      var = age_below_md)
```



7.5.2 Norms

```
for (i in unique(d_w_items$age_below_md)) {
  cat("Group: ", i, "\n")
  d_w_items %>%
    filter(age_below_md == i) %>%
    select(ends_with("_mean")) %>%
    map(~ knitr::kable(compute_all_norms(., min_score = 0, max_score = 3, by = .1),
                       digits = 2)) %>%
    print()
}
```

Group: young $fmi13_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-3.34	1.00	16.56	0.00
0.1	0.00	-3.14	1.00	18.55	0.00
0.2	0.00	-2.95	1.00	20.54	0.00
0.3	0.01	-2.75	1.00	22.53	0.00
0.4	0.01	-2.55	1.00	24.52	0.01
0.5	0.01	-2.35	1.00	26.51	0.01
0.6	0.02	-2.15	1.00	28.50	0.02
0.7	0.02	-1.95	1.10	30.49	0.03
0.8	0.04	-1.75	1.49	32.47	0.04
0.9	0.06	-1.55	1.89	34.46	0.06
1.0	0.09	-1.35	2.29	36.45	0.09
1.1	0.12	-1.16	2.69	38.44	0.12
1.2	0.16	-0.96	3.09	40.43	0.17
1.3	0.22	-0.76	3.48	42.42	0.22
1.4	0.27	-0.56	3.88	44.41	0.29
1.5	0.39	-0.36	4.28	46.40	0.36
1.6	0.45	-0.16	4.68	48.38	0.44
1.7	0.50	0.04	5.07	50.37	0.51
1.8	0.62	0.24	5.47	52.36	0.59
1.9	0.66	0.44	5.87	54.35	0.67
2.0	0.78	0.63	6.27	56.34	0.74
2.1	0.83	0.83	6.67	58.33	0.80
2.2	0.86	1.03	7.06	60.32	0.85
2.3	0.90	1.23	7.46	62.31	0.89
2.4	0.91	1.43	7.86	64.29	0.92
2.5	0.95	1.63	8.26	66.28	0.95
2.6	0.96	1.83	8.65	68.27	0.97
2.7	0.96	2.03	9.00	70.26	0.98
2.8	0.99	2.22	9.00	72.25	0.99
2.9	0.99	2.42	9.00	74.24	0.99
3.0	1.00	2.62	9.00	76.23	1.00

$presence_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.01	-2.78	1.00	22.23	0.00
0.1	0.01	-2.61	1.00	23.89	0.00
0.2	0.02	-2.45	1.00	25.54	0.01
0.3	0.02	-2.28	1.00	27.20	0.01
0.4	0.02	-2.11	1.00	28.85	0.02
0.5	0.03	-1.95	1.10	30.51	0.03
0.6	0.03	-1.78	1.43	32.16	0.04
0.7	0.07	-1.62	1.76	33.82	0.05
0.8	0.07	-1.45	2.09	35.47	0.07
0.9	0.10	-1.29	2.42	37.12	0.10
1.0	0.15	-1.12	2.76	38.78	0.13
1.1	0.15	-0.96	3.09	40.43	0.17
1.2	0.23	-0.79	3.42	42.09	0.21
1.3	0.23	-0.63	3.75	43.74	0.27
1.4	0.31	-0.46	4.08	45.40	0.32
1.5	0.43	-0.30	4.41	47.05	0.38
1.6	0.43	-0.13	4.74	48.70	0.45
1.7	0.56	0.04	5.07	50.36	0.51
1.8	0.56	0.20	5.40	52.01	0.58
1.9	0.66	0.37	5.73	53.67	0.64
2.0	0.77	0.53	6.06	55.32	0.70
2.1	0.77	0.70	6.40	56.98	0.76
2.2	0.84	0.86	6.73	58.63	0.81
2.3	0.84	1.03	7.06	60.28	0.85
2.4	0.88	1.19	7.39	61.94	0.88
2.5	0.92	1.36	7.72	63.59	0.91
2.6	0.92	1.52	8.05	65.25	0.94
2.7	0.95	1.69	8.38	66.90	0.95
2.8	0.95	1.86	8.71	68.56	0.97
2.9	0.97	2.02	9.00	70.21	0.98
3.0	1.00	2.19	9.00	71.86	0.99

$acceptance13_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-3.03	1.00	19.67	0.00
0.1	0.00	-2.85	1.00	21.45	0.00
0.2	0.01	-2.68	1.00	23.23	0.00
0.3	0.01	-2.50	1.00	25.02	0.01
0.4	0.01	-2.32	1.00	26.80	0.01
0.5	0.02	-2.14	1.00	28.58	0.02
0.6	0.03	-1.96	1.07	30.36	0.02
0.7	0.03	-1.79	1.43	32.14	0.04
0.8	0.04	-1.61	1.78	33.92	0.05
0.9	0.08	-1.43	2.14	35.70	0.08
1.0	0.13	-1.25	2.50	37.49	0.11
1.1	0.13	-1.07	2.85	39.27	0.14
1.2	0.18	-0.90	3.21	41.05	0.19
1.3	0.26	-0.72	3.57	42.83	0.24
1.4	0.26	-0.54	3.92	44.61	0.29
1.5	0.35	-0.36	4.28	46.39	0.36

score	perc_rank	z	stanine	T	perc_normal
1.6	0.46	-0.18	4.63	48.17	0.43
1.7	0.46	0.00	4.99	49.95	0.50
1.8	0.55	0.17	5.35	51.74	0.57
1.9	0.66	0.35	5.70	53.52	0.64
2.0	0.78	0.53	6.06	55.30	0.70
2.1	0.78	0.71	6.42	57.08	0.76
2.2	0.84	0.89	6.77	58.86	0.81
2.3	0.89	1.06	7.13	60.64	0.86
2.4	0.89	1.24	7.48	62.42	0.89
2.5	0.91	1.42	7.84	64.21	0.92
2.6	0.94	1.60	8.20	65.99	0.95
2.7	0.94	1.78	8.55	67.77	0.96
2.8	0.96	1.96	8.91	69.55	0.97
2.9	0.98	2.13	9.00	71.33	0.98
3.0	1.00	2.31	9.00	73.11	0.99

$fmi14_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-3.34	1.00	16.56	0.00
0.1	0.00	-3.14	1.00	18.55	0.00
0.2	0.00	-2.95	1.00	20.54	0.00
0.3	0.01	-2.75	1.00	22.53	0.00
0.4	0.01	-2.55	1.00	24.52	0.01
0.5	0.01	-2.35	1.00	26.51	0.01
0.6	0.02	-2.15	1.00	28.50	0.02
0.7	0.02	-1.95	1.10	30.49	0.03
0.8	0.04	-1.75	1.49	32.47	0.04
0.9	0.06	-1.55	1.89	34.46	0.06
1.0	0.09	-1.35	2.29	36.45	0.09
1.1	0.12	-1.16	2.69	38.44	0.12
1.2	0.16	-0.96	3.09	40.43	0.17
1.3	0.22	-0.76	3.48	42.42	0.22
1.4	0.27	-0.56	3.88	44.41	0.29
1.5	0.39	-0.36	4.28	46.40	0.36
1.6	0.45	-0.16	4.68	48.38	0.44
1.7	0.50	0.04	5.07	50.37	0.51
1.8	0.62	0.24	5.47	52.36	0.59
1.9	0.66	0.44	5.87	54.35	0.67
2.0	0.78	0.63	6.27	56.34	0.74
2.1	0.83	0.83	6.67	58.33	0.80
2.2	0.86	1.03	7.06	60.32	0.85
2.3	0.90	1.23	7.46	62.31	0.89
2.4	0.91	1.43	7.86	64.29	0.92
2.5	0.95	1.63	8.26	66.28	0.95
2.6	0.96	1.83	8.65	68.27	0.97
2.7	0.96	2.03	9.00	70.26	0.98
2.8	0.99	2.22	9.00	72.25	0.99
2.9	0.99	2.42	9.00	74.24	0.99
3.0	1.00	2.62	9.00	76.23	1.00

Group: old $fmi13_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-3.39	1.00	16.06	0.00
0.1	0.00	-3.20	1.00	18.01	0.00
0.2	0.00	-3.00	1.00	19.96	0.00
0.3	0.01	-2.81	1.00	21.90	0.00
0.4	0.01	-2.61	1.00	23.85	0.00
0.5	0.02	-2.42	1.00	25.80	0.01
0.6	0.03	-2.23	1.00	27.74	0.01
0.7	0.03	-2.03	1.00	29.69	0.02
0.8	0.05	-1.84	1.33	31.64	0.03
0.9	0.05	-1.64	1.72	33.58	0.05
1.0	0.09	-1.45	2.11	35.53	0.07
1.1	0.12	-1.25	2.50	37.48	0.11
1.2	0.14	-1.06	2.88	39.42	0.15
1.3	0.20	-0.86	3.27	41.37	0.19
1.4	0.23	-0.67	3.66	43.32	0.25
1.5	0.29	-0.47	4.05	45.27	0.32
1.6	0.34	-0.28	4.44	47.21	0.39
1.7	0.41	-0.08	4.83	49.16	0.47
1.8	0.54	0.11	5.22	51.11	0.54
1.9	0.61	0.31	5.61	53.05	0.62
2.0	0.74	0.50	6.00	55.00	0.69
2.1	0.77	0.69	6.39	56.95	0.76
2.2	0.81	0.89	6.78	58.89	0.81
2.3	0.89	1.08	7.17	60.84	0.86
2.4	0.90	1.28	7.56	62.79	0.90
2.5	0.94	1.47	7.95	64.73	0.93
2.6	0.96	1.67	8.34	66.68	0.95
2.7	0.97	1.86	8.73	68.63	0.97
2.8	0.99	2.06	9.00	70.57	0.98
2.9	0.99	2.25	9.00	72.52	0.99
3.0	1.00	2.45	9.00	74.47	0.99

$presence_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.01	-2.95	1.00	20.53	0.00
0.1	0.01	-2.78	1.00	22.25	0.00
0.2	0.01	-2.60	1.00	23.97	0.00
0.3	0.01	-2.43	1.00	25.69	0.01
0.4	0.03	-2.26	1.00	27.41	0.01
0.5	0.05	-2.09	1.00	29.12	0.02
0.6	0.05	-1.92	1.17	30.84	0.03
0.7	0.06	-1.74	1.51	32.56	0.04
0.8	0.06	-1.57	1.86	34.28	0.06
0.9	0.09	-1.40	2.20	36.00	0.08
1.0	0.14	-1.23	2.54	37.72	0.11
1.1	0.14	-1.06	2.89	39.43	0.15
1.2	0.19	-0.88	3.23	41.15	0.19
1.3	0.19	-0.71	3.57	42.87	0.24

score	perc_rank	z	stanine	T	perc_normal
1.4	0.28	-0.54	3.92	44.59	0.29
1.5	0.37	-0.37	4.26	46.31	0.36
1.6	0.37	-0.20	4.61	48.03	0.42
1.7	0.48	-0.03	4.95	49.75	0.49
1.8	0.48	0.15	5.29	51.46	0.56
1.9	0.61	0.32	5.64	53.18	0.62
2.0	0.77	0.49	5.98	54.90	0.69
2.1	0.77	0.66	6.32	56.62	0.75
2.2	0.84	0.83	6.67	58.34	0.80
2.3	0.84	1.01	7.01	60.06	0.84
2.4	0.90	1.18	7.35	61.77	0.88
2.5	0.94	1.35	7.70	63.49	0.91
2.6	0.94	1.52	8.04	65.21	0.94
2.7	0.96	1.69	8.39	66.93	0.95
2.8	0.96	1.86	8.73	68.65	0.97
2.9	0.98	2.04	9.00	70.37	0.98
3.0	1.00	2.21	9.00	72.09	0.99

$acceptance13_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.01	-2.97	1.00	20.32	0.00
0.1	0.01	-2.80	1.00	22.00	0.00
0.2	0.02	-2.63	1.00	23.69	0.00
0.3	0.02	-2.46	1.00	25.37	0.01
0.4	0.02	-2.29	1.00	27.05	0.01
0.5	0.03	-2.13	1.00	28.74	0.02
0.6	0.04	-1.96	1.08	30.42	0.03
0.7	0.04	-1.79	1.42	32.11	0.04
0.8	0.06	-1.62	1.76	33.79	0.05
0.9	0.08	-1.45	2.09	35.47	0.07
1.0	0.12	-1.28	2.43	37.16	0.10
1.1	0.12	-1.12	2.77	38.84	0.13
1.2	0.16	-0.95	3.10	40.52	0.17
1.3	0.23	-0.78	3.44	42.21	0.22
1.4	0.23	-0.61	3.78	43.89	0.27
1.5	0.30	-0.44	4.11	45.57	0.33
1.6	0.37	-0.27	4.45	47.26	0.39
1.7	0.37	-0.11	4.79	48.94	0.46
1.8	0.48	0.06	5.12	50.62	0.52
1.9	0.60	0.23	5.46	52.31	0.59
2.0	0.73	0.40	5.80	53.99	0.66
2.1	0.73	0.57	6.14	55.68	0.71
2.2	0.81	0.74	6.47	57.36	0.77
2.3	0.85	0.90	6.81	59.04	0.82
2.4	0.85	1.07	7.15	60.73	0.86
2.5	0.89	1.24	7.48	62.41	0.89
2.6	0.94	1.41	7.82	64.09	0.92
2.7	0.94	1.58	8.16	65.78	0.94
2.8	0.96	1.75	8.49	67.46	0.96
2.9	0.97	1.91	8.83	69.14	0.97

score	perc_rank	z	stanine	T	perc_normal
3.0	1.00	2.08	9.00	70.83	0.98

$fmi14_mean

score	perc_rank	z	stanine	T	perc_normal
0.0	0.00	-3.39	1.00	16.06	0.00
0.1	0.00	-3.20	1.00	18.01	0.00
0.2	0.00	-3.00	1.00	19.96	0.00
0.3	0.01	-2.81	1.00	21.90	0.00
0.4	0.01	-2.61	1.00	23.85	0.00
0.5	0.02	-2.42	1.00	25.80	0.01
0.6	0.03	-2.23	1.00	27.74	0.01
0.7	0.03	-2.03	1.00	29.69	0.02
0.8	0.05	-1.84	1.33	31.64	0.03
0.9	0.05	-1.64	1.72	33.58	0.05
1.0	0.09	-1.45	2.11	35.53	0.07
1.1	0.12	-1.25	2.50	37.48	0.11
1.2	0.14	-1.06	2.88	39.42	0.15
1.3	0.20	-0.86	3.27	41.37	0.19
1.4	0.23	-0.67	3.66	43.32	0.25
1.5	0.29	-0.47	4.05	45.27	0.32
1.6	0.34	-0.28	4.44	47.21	0.39
1.7	0.41	-0.08	4.83	49.16	0.47
1.8	0.54	0.11	5.22	51.11	0.54
1.9	0.61	0.31	5.61	53.05	0.62
2.0	0.74	0.50	6.00	55.00	0.69
2.1	0.77	0.69	6.39	56.95	0.76
2.2	0.81	0.89	6.78	58.89	0.81
2.3	0.89	1.08	7.17	60.84	0.86
2.4	0.90	1.28	7.56	62.79	0.90
2.5	0.94	1.47	7.95	64.73	0.93
2.6	0.96	1.67	8.34	66.68	0.95
2.7	0.97	1.86	8.73	68.63	0.97
2.8	0.99	2.06	9.00	70.57	0.98
2.9	0.99	2.25	9.00	72.52	0.99
3.0	1.00	2.45	9.00	74.47	0.99

8 Overview on descriptive statistics per subgroup

```
subgroup_stats <- list()

for (i in seq_along(subgroup_vars)){

subgroup_stats[[i]] <-
  d_w_items %>%
  select(ends_with("mean"),
         any_of(subgroup_vars)[i]) %>%
  group_by(across(any_of(subgroup_vars[i]))) %>%
```

```
    describe_distribution() %>%
  select(Variable, Mean, SD, IQR, Min, Max, n, .group)

subgroup_stats[[i]][["subgroup_var"]] <- subgroup_vars[i]
}

subgroup_stats_df <- do.call(rbind, subgroup_stats)

subgroup_stats_df <-
  subgroup_stats_df %>%
  mutate(group = str_remove(.group, "^.+=")) %>%
  select(-.group)

display(subgroup_stats_df)
```

Variable	Mean	SD	IQR	Range	n	subgroup_var	group
fmi13_mean	1.71	0.51	0.71	(0.21, 3.00)	515	Geschlecht	female
presence_mean	1.72	0.58	0.67	(0.00, 3.00)	515	Geschlecht	female
acceptance13_mean	1.73	0.57	0.86	(0.00, 3.00)	515	Geschlecht	female
fmi14_mean	1.71	0.51	0.71	(0.21, 3.00)	515	Geschlecht	female
fmi13_mean	1.71	0.51	0.57	(0.21, 3.00)	495	Geschlecht	male
presence_mean	1.67	0.60	0.67	(0.00, 3.00)	495	Geschlecht	male
acceptance13_mean	1.74	0.59	0.57	(0.00, 3.00)	495	Geschlecht	male
fmi14_mean	1.71	0.51	0.57	(0.21, 3.00)	495	Geschlecht	male
fmi13_mean	1.50	0.20	0.29	(1.36, 1.64)	2	Geschlecht	other
presence_mean	1.33	0.00	0.00	(1.33, 1.33)	2	Geschlecht	other
acceptance13_mean	1.79	0.51	0.71	(1.43, 2.14)	2	Geschlecht	other
fmi14_mean	1.50	0.20	0.29	(1.36, 1.64)	2	Geschlecht	other
fmi13_mean	1.69	0.51	0.64	(0.21, 3.00)	792	Achts_regel	no
presence_mean	1.65	0.59	0.67	(0.00, 3.00)	792	Achts_regel	no
acceptance13_mean	1.72	0.59	0.71	(0.00, 3.00)	792	Achts_regel	no
fmi14_mean	1.69	0.51	0.64	(0.21, 3.00)	792	Achts_regel	no
fmi13_mean	1.81	0.49	0.57	(0.21, 3.00)	220	Achts_regel	yes
presence_mean	1.86	0.56	0.67	(0.00, 3.00)	220	Achts_regel	yes
acceptance13_mean	1.80	0.55	0.71	(0.00, 3.00)	220	Achts_regel	yes
fmi14_mean	1.81	0.49	0.57	(0.21, 3.00)	220	Achts_regel	yes
fmi13_mean	1.82	0.43	0.43	(0.71, 3.00)	116	Retreats	Multiple retreats per year
presence_mean	1.84	0.50	0.62	(0.33, 3.00)	116	Retreats	Multiple retreats per year
acceptance13_mean	1.81	0.48	0.54	(0.71, 3.00)	116	Retreats	Multiple retreats per year
fmi14_mean	1.82	0.43	0.43	(0.71, 3.00)	116	Retreats	Multiple retreats per year
fmi13_mean	1.68	0.52	0.64	(0.21, 3.00)	673	Retreats	Never
presence_mean	1.64	0.59	0.67	(0.00, 3.00)	673	Retreats	Never
acceptance13_mean	1.70	0.60	0.71	(0.00, 3.00)	673	Retreats	Never
fmi14_mean	1.68	0.52	0.64	(0.21, 3.00)	673	Retreats	Never
fmi13_mean	1.71	0.45	0.57	(0.57, 2.93)	58	Retreats	Once a year
presence_mean	1.68	0.55	0.67	(0.17, 3.00)	58	Retreats	Once a year
acceptance13_mean	1.73	0.50	0.57	(0.71, 3.00)	58	Retreats	Once a year
fmi14_mean	1.71	0.45	0.57	(0.57, 2.93)	58	Retreats	Once a year

Variable	Mean	SD	IQR	Range	n	subgroup_var	group
fmi13_mean	1.71	0.46	0.71	(0.93, 2.93)	86	Retreats	Once every couple of years
presence_mean	1.71	0.59	0.83	(0.67, 3.00)	86	Retreats	Once every couple of years
acceptance13_mean	1.74	0.53	0.71	(0.29, 3.00)	86	Retreats	Once every couple of years
fmi14_mean	1.71	0.46	0.71	(0.93, 2.93)	86	Retreats	Once every couple of years
fmi13_mean	1.89	0.55	0.71	(0.29, 2.79)	79	Retreats	Rarely
presence_mean	1.94	0.68	0.83	(0.00, 3.00)	79	Retreats	Rarely
acceptance13_mean	1.93	0.63	0.71	(0.14, 3.00)	79	Retreats	Rarely
fmi14_mean	1.89	0.55	0.71	(0.29, 2.79)	79	Retreats	Rarely
fmi13_mean	1.67	0.59	0.79	(0.43, 2.79)	33	Vip_regel	ja
presence_mean	1.66	0.77	1.00	(0.00, 3.00)	33	Vip_regel	ja
acceptance13_mean	1.71	0.64	0.79	(0.29, 3.00)	33	Vip_regel	ja
fmi14_mean	1.67	0.59	0.79	(0.43, 2.79)	33	Vip_regel	ja
fmi13_mean	1.71	0.51	0.64	(0.21, 3.00)	979	Vip_regel	nicht
presence_mean	1.70	0.59	0.67	(0.00, 3.00)	979	Vip_regel	nicht
acceptance13_mean	1.73	0.58	0.57	(0.00, 3.00)	979	Vip_regel	nicht
fmi14_mean	1.71	0.51	0.64	(0.21, 3.00)	979	Vip_regel	nicht
fmi13_mean	1.74	0.51	0.64	(0.21, 3.00)	526	age_below_md	old
presence_mean	1.71	0.58	0.67	(0.00, 3.00)	526	age_below_md	old
acceptance13_mean	1.76	0.59	0.71	(0.00, 3.00)	526	age_below_md	old
fmi14_mean	1.74	0.51	0.64	(0.21, 3.00)	526	age_below_md	old
fmi13_mean	1.68	0.50	0.64	(0.21, 3.00)	486	age_below_md	young
presence_mean	1.68	0.60	0.67	(0.00, 3.00)	486	age_below_md	young
acceptance13_mean	1.70	0.56	0.71	(0.00, 3.00)	486	age_below_md	young
fmi14_mean	1.68	0.50	0.64	(0.21, 3.00)	486	age_below_md	young

```
subgroup_stats_long <-
subgroup_stats_df %>%
  select(Variable, Mean, SD, group, subgroup_var) %>%
  mutate(Subscale = str_remove(Variable, "_mean")) %>%
  pivot_longer(-c(Variable, group, Mean, Subscale, subgroup_var),
               values_to = "SD")

display(subgroup_stats_long)
```

Variable	Mean	group	subgroup_var	Subscale	name	SD
fmi13_mean	1.71	female	Geschlecht	fmi13	SD	0.51
presence_mean	1.72	female	Geschlecht	presence	SD	0.58
acceptance13_mean	1.73	female	Geschlecht	acceptance13	SD	0.57
fmi14_mean	1.71	female	Geschlecht	fmi14	SD	0.51
fmi13_mean	1.71	male	Geschlecht	fmi13	SD	0.51
presence_mean	1.67	male	Geschlecht	presence	SD	0.60
acceptance13_mean	1.74	male	Geschlecht	acceptance13	SD	0.59
fmi14_mean	1.71	male	Geschlecht	fmi14	SD	0.51
fmi13_mean	1.50	other	Geschlecht	fmi13	SD	0.20
presence_mean	1.33	other	Geschlecht	presence	SD	0.00
acceptance13_mean	1.79	other	Geschlecht	acceptance13	SD	0.51

Variable	Mean	group	subgroup_var	Subscale	name	SD
fmi14_mean	1.50	other	Geschlecht	fmi14	SD	0.20
fmi13_mean	1.69	no	Achts_regel	fmi13	SD	0.51
presence_mean	1.65	no	Achts_regel	presence	SD	0.59
acceptance13_mean	1.72	no	Achts_regel	acceptance13	SD	0.59
fmi14_mean	1.69	no	Achts_regel	fmi14	SD	0.51
fmi13_mean	1.81	yes	Achts_regel	fmi13	SD	0.49
presence_mean	1.86	yes	Achts_regel	presence	SD	0.56
acceptance13_mean	1.80	yes	Achts_regel	acceptance13	SD	0.55
fmi14_mean	1.81	yes	Achts_regel	fmi14	SD	0.49
fmi13_mean	1.82	Multiple retreats per year	Retreats	fmi13	SD	0.43
presence_mean	1.84	Multiple retreats per year	Retreats	presence	SD	0.50
acceptance13_mean	1.81	Multiple retreats per year	Retreats	acceptance13	SD	0.48
fmi14_mean	1.82	Multiple retreats per year	Retreats	fmi14	SD	0.43
fmi13_mean	1.68	Never	Retreats	fmi13	SD	0.52
presence_mean	1.64	Never	Retreats	presence	SD	0.59
acceptance13_mean	1.70	Never	Retreats	acceptance13	SD	0.60
fmi14_mean	1.68	Never	Retreats	fmi14	SD	0.52
fmi13_mean	1.71	Once a year	Retreats	fmi13	SD	0.45
presence_mean	1.68	Once a year	Retreats	presence	SD	0.55
acceptance13_mean	1.73	Once a year	Retreats	acceptance13	SD	0.50
fmi14_mean	1.71	Once a year	Retreats	fmi14	SD	0.45
fmi13_mean	1.71	Once every couple of years	Retreats	fmi13	SD	0.46
presence_mean	1.71	Once every couple of years	Retreats	presence	SD	0.59
acceptance13_mean	1.74	Once every couple of years	Retreats	acceptance13	SD	0.53
fmi14_mean	1.71	Once every couple of years	Retreats	fmi14	SD	0.46
fmi13_mean	1.89	Rarely	Retreats	fmi13	SD	0.55
presence_mean	1.94	Rarely	Retreats	presence	SD	0.68
acceptance13_mean	1.93	Rarely	Retreats	acceptance13	SD	0.63
fmi14_mean	1.89	Rarely	Retreats	fmi14	SD	0.55
fmi13_mean	1.67	ja	Vip_regel	fmi13	SD	0.59
presence_mean	1.66	ja	Vip_regel	presence	SD	0.77
acceptance13_mean	1.71	ja	Vip_regel	acceptance13	SD	0.64
fmi14_mean	1.67	ja	Vip_regel	fmi14	SD	0.59
fmi13_mean	1.71	nicht	Vip_regel	fmi13	SD	0.51
presence_mean	1.70	nicht	Vip_regel	presence	SD	0.59
acceptance13_mean	1.73	nicht	Vip_regel	acceptance13	SD	0.58
fmi14_mean	1.71	nicht	Vip_regel	fmi14	SD	0.51
fmi13_mean	1.74	old	age_below_md	fmi13	SD	0.51
presence_mean	1.71	old	age_below_md	presence	SD	0.58
acceptance13_mean	1.76	old	age_below_md	acceptance13	SD	0.59
fmi14_mean	1.74	old	age_below_md	fmi14	SD	0.51
fmi13_mean	1.68	young	age_below_md	fmi13	SD	0.50
presence_mean	1.68	young	age_below_md	presence	SD	0.60
acceptance13_mean	1.70	young	age_below_md	acceptance13	SD	0.56
fmi14_mean	1.68	young	age_below_md	fmi14	SD	0.50

```
# subgroup_stats_long %>%
#   ggplot(aes(x = Variable, color = group)) +
#   geom_errorbar(aes(ymin = Mean-SD, ymax = Mean+SD), position = "dodge") +
#   geom_point2(aes(y = Mean), alpha = .7, size = 2) +
#   facet_wrap(subgroup_vars ~ Variable, scales = "free")
```

8.1 Regression models

8.1.1 m1

```
m1 <- lm(phq_sum ~ presence_mean + acceptance13_mean, data = d_w_items)
parameters(m1) %>% display()

performance(m1) %>% display
summary(m1)
```

Standardized data:

```
parameters(m1, standardize = "refit") %>% display
```

9 Session info

```
sessionInfo()
```

```
## R version 4.4.1 (2024-06-14)
## Platform: x86_64-apple-darwin20
## Running under: macOS 15.4.1
##
## Matrix products: default
## BLAS:   /Library/Frameworks/R.framework/Versions/4.4-x86_64/Resources/lib/libRblas.0.dylib
## LAPACK: /Library/Frameworks/R.framework/Versions/4.4-x86_64/Resources/lib/libRlapack.dylib;  LAPACK v
##
## locale:
## [1] de_DE.UTF-8/de_DE.UTF-8/de_DE.UTF-8/C/de_DE.UTF-8/en_US.UTF-8
##
## time zone: Europe/Berlin
## tzcode source: internal
##
## attached base packages:
## [1] stats     graphics  grDevices utils     datasets  methods   base
##
## other attached packages:
##  [1] janitor_2.2.0      semPlot_1.1.6      lavaan_0.6-19      magrittr_2.0.3
##  [5] gt_0.11.1          knitr_1.49         DataExplorer_0.8.3 lubridate_1.9.3
##  [9] forcats_1.0.0      stringr_1.5.1      dplyr_1.1.4        purrr_1.0.2
## [13] readr_2.1.5        tidyr_1.3.1        tibble_3.2.1       ggplot2_3.5.1
## [17] tidyverse_2.0.0    here_1.0.1         see_0.10.0         report_0.6.1
## [21] parameters_0.24.1  performance_0.13.0 modelbased_0.9.0   insight_1.0.2
## [25] effectsize_1.0.0   datawizard_1.0.0   correlation_0.8.6  bayestestR_0.15.2
## [29] easystats_0.7.4
##
## loaded via a namespace (and not attached):
##  [1] mnormt_2.1.1       pbapply_1.7-2      gridExtra_2.3      fdrtool_1.2.18
##  [5] rlang_1.1.4        snakecase_0.11.1   rockchalk_1.8.157  compiler_4.4.1
##  [9] reshape2_1.4.4     png_0.1-8          vctrs_0.6.5        OpenMx_2.21.13
```

```
## [13] quadprog_1.5-8     pkgconfig_2.0.3    fastmap_1.2.0      backports_1.5.0
## [17] arm_1.14-4         pbivnorm_0.6.0     rmarkdown_2.28     tzdb_0.4.0
## [21] nloptr_2.1.1       tinytex_0.53       xfun_0.49          kutils_1.73
## [25] psych_2.4.12       jpeg_0.1-10        cluster_2.1.6      parallel_4.4.1
## [29] R6_2.5.1           stringi_1.8.4      rpart_4.1.23       boot_1.3-30
## [33] estimability_1.5.1 Rcpp_1.0.14        base64enc_0.1-3    nnet_7.3-19
## [37] Matrix_1.7-0       splines_4.4.1      igraph_2.0.3       timechange_0.3.0
## [41] tidyselect_1.2.1   rstudioapi_0.17.1  abind_1.4-8        yaml_2.3.10
## [45] codetools_0.2-20   qgraph_1.9.8       lattice_0.22-6     plyr_1.8.9
## [49] withr_3.0.2        coda_0.19-4.1      evaluate_1.0.3     foreign_0.8-86
## [53] RcppParallel_5.1.9 zip_2.3.1          xml2_1.3.6         pillar_1.10.1
## [57] carData_3.0-5      checkmate_2.3.2    stats4_4.4.1       generics_0.1.3
## [61] rprojroot_2.0.4    hms_1.1.3          munsell_0.5.1      scales_1.3.0
## [65] minqa_1.2.8        gtools_3.9.5       xtable_1.8-4       glue_1.8.0
## [69] mi_1.1             emmeans_1.10.6     Hmisc_5.2-3        tools_4.4.1
## [73] data.table_1.16.4  lme4_1.1-35.5      openxlsx_4.2.8     mvtnorm_1.3-1
## [77] XML_3.99-0.18      grid_4.4.1         sem_3.1-16         colorspace_2.1-1
## [81] nlme_3.1-164       networkD3_0.4      htmlTable_2.4.3    Formula_1.2-5
## [85] cli_3.6.3          glasso_1.11        corpcor_1.6.10     gtable_0.3.5
## [89] digest_0.6.37      htmlwidgets_1.6.4  htmltools_0.5.8.1  lifecycle_1.0.4
## [93] lisrelToR_0.3      MASS_7.3-60.2
```