## Item Statistics R Code & Output for "Examining Response Processes in the Measurement of Personality Functioning" SRP 2023 Poster

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## 1 Item Statistics and Response Distributions

Median, MAD, quartiles, skew, and kurtosis values per item

```
df_full %>%
    select(lpfs_1:lpfs_12) %>%
    describe_distribution(quartiles = T, centrality = "median")
```

	Variable	I	Median	I	MAD	I	IQR	I		Range	I	Quar	tiles	١	Skewness	Kur	tosis	I	n	n_Missi	ng
	lpfs_1		1	 	1.48	1	2		[0.00,	3.00]		0.00,	2.00		8.37e-03	 	-1.16	1	239		0
	lpfs_2	1	2	I	1.48	1			[0.00,						-0.36		-0.83	1	237		2
##	lpfs_3	1	2	I	1.48	1	1	1	[0.00,	3.00]	1	1.00,	2.00	1	-0.22		-0.72	1	236		3
##	lpfs_4	1	1		1.48	1	2	1	[0.00,	3.00]	-	0.00,	2.00	1	0.12	l	-1.12	1	237		2
##	lpfs_5	-	1		1.48	-	1		[0.00,	3.00]		1.00,	2.00	-	0.07		-0.95	1	236		3
##	lpfs_6		2		1.48		1		[0.00,	3.00]		1.00,	2.00	1	-0.25	l	-0.80	1	238		1
##	lpfs_7		1		1.48		2		[0.00,	3.00]		0.00,	2.00	1	0.55	l	-0.63	1	238		1
##	lpfs_8	1	1		1.48	1	2	1	[0.00,	3.00]		0.00,	2.00	1	0.48	l	-0.55	1	237		2
##	lpfs_9	-	1		1.48	-	2		[0.00,	3.00]		0.00,	2.00	-	0.32		-0.73	1	239		0
##	lpfs_10	-	1		1.48	-	2		[0.00,	3.00]		0.00,	1.50	-	0.78		-0.50	1	239 l		0
##	lpfs_11	1	2		1.48	1	1	1	[0.00,	3.00]		1.00,	2.00	1	-0.12	l	-1.00	1	238		1
##	lpfs 12	-	1	I	1.48	-	1	1	[0.00,	3.00]	1	0.00,	1.00	1	0.87	I	0.17	1	239 I		0

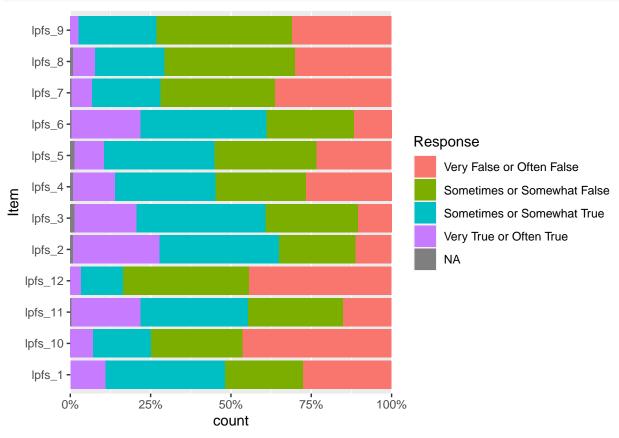
Means and SDs per item

```
df_full %>%
    select(lpfs_1:lpfs_12) %>%
    describe_distribution() %>%
    select(Variable, Mean, SD)
```

```
## Variable | Mean |
## lpfs_1
          | 1.31 | 0.99
          | 1.80 | 0.96
## lpfs_2
## lpfs_3
           | 1.69 | 0.90
## lpfs_4
           | 1.31 | 1.01
## lpfs_5
           | 1.30 | 0.93
## lpfs_6
           | 1.71 | 0.94
## lpfs_7
           | 0.97 | 0.91
## lpfs_8
           | 1.05 | 0.89
## lpfs_9
           | 0.98 | 0.81
## lpfs_10 | 0.86 | 0.96
## lpfs_11
           | 1.61 | 0.99
## lpfs_12 | 0.75 | 0.81
```

## Proportions and counts of item responses per item

```
# Plot
ggplot(df_likert, aes(x = Item)) +
    geom_bar(aes(fill = Response), position = "fill") +
    scale_y_continuous(expand= expansion(0), labels = scales::percent_format()) +
    coord_flip()
```



Variable	Value	N	Raw %	Valid %	Cumulative %
lpfs_1	0	66	27.62	27.62	27.62
lpfs_1	1	58	24.27	24.27	51.88
lpfs_1	2	89	37.24	37.24	89.12
lpfs_1	3	26	10.88	10.88	100.00
$_{ m lpfs}_{ m 1}$	NA	0	0.00	NA	NA
Variable	Value	N	Raw %	Valid %	Cumulative %
lpfs_2	0	27	11.30	11.39	11.39
lpfs_2	1	57	23.85	24.05	35.44
lpfs_2	2	89	37.24	37.55	73.00
lpfs_2	3	64	26.78	27.00	100.00
lpfs_2	NA	2	0.84	NA	NA
Variable	Value	N	Raw %	Valid %	Cumulative %
lpfs_3	0	25	10.46	10.59	10.59
lpfs_3	1	69	28.87	29.24	39.83
lpfs_3	2	96	40.17	40.68	80.51
lpfs_3	3	46	19.25	19.49	100.00
lpfs_3	NA	3	1.26	NA	NA
Variable	Value	N	Raw %	Valid %	Cumulative %
lpfs_4	0	64	26.78	27.00	27.00
lpfs_4	1	67	28.03	28.27	55.27
$lpfs\_4$	2	75	31.38	31.65	86.92
lpfs_4	3	31	12.97	13.08	100.00
lpfs_4	NA	2	0.84	NA	NA
Variable	Value	N	Raw %	Valid %	Cumulative %
lpfs_5	0	56	23.43	23.73	23.73
lpfs_5	1	76	31.80	32.20	55.93
lpfs_5	2	82	34.31	34.75	90.68
lpfs_5	3	22	9.21	9.32	100.00
lpfs_5	NA	3	1.26	NA	NA
Variable	Value	N	Raw %	Valid %	Cumulative %
lpfs_6	0	28	11.72	11.76	11.76
lpfs_6	1	65	27.20	27.31	39.08
lpfs_6	2	94	39.33	39.50	78.57
lpfs_6	3	51	21.34	21.43	100.00
lpfs_6	NA	1	0.42	NA	NA

Variable	Value	N	Raw %	Valid %	Cumulative %
lpfs_7	0	87	36.40	36.55	36.55
$_{ m lpfs}_{ m 7}$	1	85	35.56	35.71	72.27
$_{\rm lpfs\_7}$	2	51	21.34	21.43	93.70
lpfs_7	3	15	6.28	6.30	100.00
lpfs_7	NA	1	0.42	NA	NA
Variable	Value	N	Raw %	Valid %	Cumulative %
_lpfs8	0	72	30.13	30.38	30.38
lpfs_8	1	97	40.59	40.93	71.31
lpfs_8	2	52	21.76	21.94	93.25
lpfs_8	3	16	6.69	6.75	100.00
lpfs_8	NA	2	0.84	NA	NA
Variable	Value	N	Raw %	Valid %	Cumulative %
lpfs_9	0	74	30.96	30.96	30.96
lpfs_9	1	101	42.26	42.26	73.22
lpfs_9	2	58	24.27	24.27	97.49
lpfs_9	3	6	2.51	2.51	100.00
lpfs_9	NA	0	0.00	NA	NA
Variable	Value	N	Raw %	Valid %	Cumulative %
lpfs_10	0	111	46.44	46.44	46.44
lpfs_10	1	68	28.45	28.45	74.90
lpfs_10	2	43	17.99	17.99	92.89
lpfs_10	3	17	7.11	7.11	100.00
lpfs_10	NA	0	0.00	NA	NA
Variable	Value	N	Raw %	Valid %	Cumulative %
lpfs_11	0	36	15.06	15.13	15.13
lpfs_11	1	71	29.71	29.83	44.96
lpfs_11	2	80	33.47	33.61	78.57
lpfs_11	3	51	21.34	21.43	100.00
lpfs_11	NA	1	0.42	NA	NA
Variable	Value	N	Raw %	Valid %	Cumulative %
lpfs_12	0	106	44.35	44.35	44.35
lpfs_12	1	94	39.33	39.33	83.68
lpfs_12	2	31	12.97	12.97	96.65
lpfs_12	3	8	3.35	3.35	100.00
lpfs_12	NA	0	0.00	NA	NA
			-	ı	1