Analysis Report

This report is structured as follows.

Contents

Analysis

The analysis used the Wilcoxon signed-rank test to test for pre vs post differences across all variables. The table below presents some descriptive statistics such as mean, median, standard deviation and range of each variable under study.

variable	mean	median	sd	range
PostAttenReg	25.375	25	6.209	17 - 34
PostBodyAware	32.625	33	7.818	18 - 43
PostBodyDiss	20.5	22	5.555	10 - 26
PostBodyListen	10.875	10.5	2.642	7 - 14
PostEmoAware	23.625	27	6.232	15 - 30
PostLEASTotal	26.125	26	2.167	23 - 29
PostNoDistract	19	20.5	6.676	8 - 28
PostNotWorry	19.75	20.5	2.188	17 - 23
PostNoticing	19.25	20	4.062	13 - 24
PostOther	21.75	21.5	2.915	17 - 26
PostSBCTotal	51.875	54.5	11.103	36 - 67
PostSelf	24	23.5	2.619	21 - 29
PostSelfReg	17.625	19	3.815	10 - 22
PostTotalMAIA	150.875	153	26.335	107 - 182
PostTrusting	13.875	14.5	2.295	11 - 17
PreAttenReg	26.375	27	5.069	19 - 35
PreBodyAware	29.875	31.5	6.266	20 - 36
PreBodyDiss	23.375	22.5	7.009	13 - 36
PreBodyListen	10.25	10.5	1.488	8 - 12
PreEmoAware	25.25	27	4.621	17 - 29
PreLEASTotal	22.75	22.5	4.301	16 - 30
PreNoDistract	19.875	22	4.704	13 - 24
PreNotWorry	19	18	3.703	13 - 24
PreNoticing	15.875	15	5.357	10 - 24
PreOther	17.125	18	3.182	12 - 21
PreSBCTotal	53.25	51.5	8.615	45 - 72
PreSelf	20.5	21	3.505	14 - 25
PreSelfReg	15.375	14.5	3.204	12 - 20
PreTotalMAIA	141.625	141.5	21.967	116 - 170
PreTrusting	12.5	14	3.338	7 - 16

The Wilcoxon signed-rank test is a non-parametric statistical test used to compare two related samples or repeated measurements on a single sample to assess whether their population mean ranks differ. It is an alternative to the paired t-test when the data cannot be assumed to be normally distributed. This test is particularly useful for ordinal data or interval data that do not meet the assumptions required for the t-test due to outliers or non-normality.

variable	V	p_value	effect_size
PreTotalMAIA	5	0.080	-0.644
PreNoticing	3.5	0.090	-0.718
PreNoDistract	12.5	0.752	-0.272
PreNotWorry	12.5	0.863	-0.272
PreAttenReg	22	0.623	0.198
PreEmoAware	14	0.525	-0.198
PreSelfReg	4	0.202	-0.693
PreBodyListen	11.5	0.388	-0.322
PreTrusting	4	0.207	-0.693
PreLEASTotal	3	0.076	-0.743
PreSelf	3	0.074	-0.743
PreOther	0	0.014	-0.891
PreSBCTotal	23.5	0.481	0.272
PreBodyAware	4	0.203	-0.693
PreBodyDiss	26	0.288	0.396

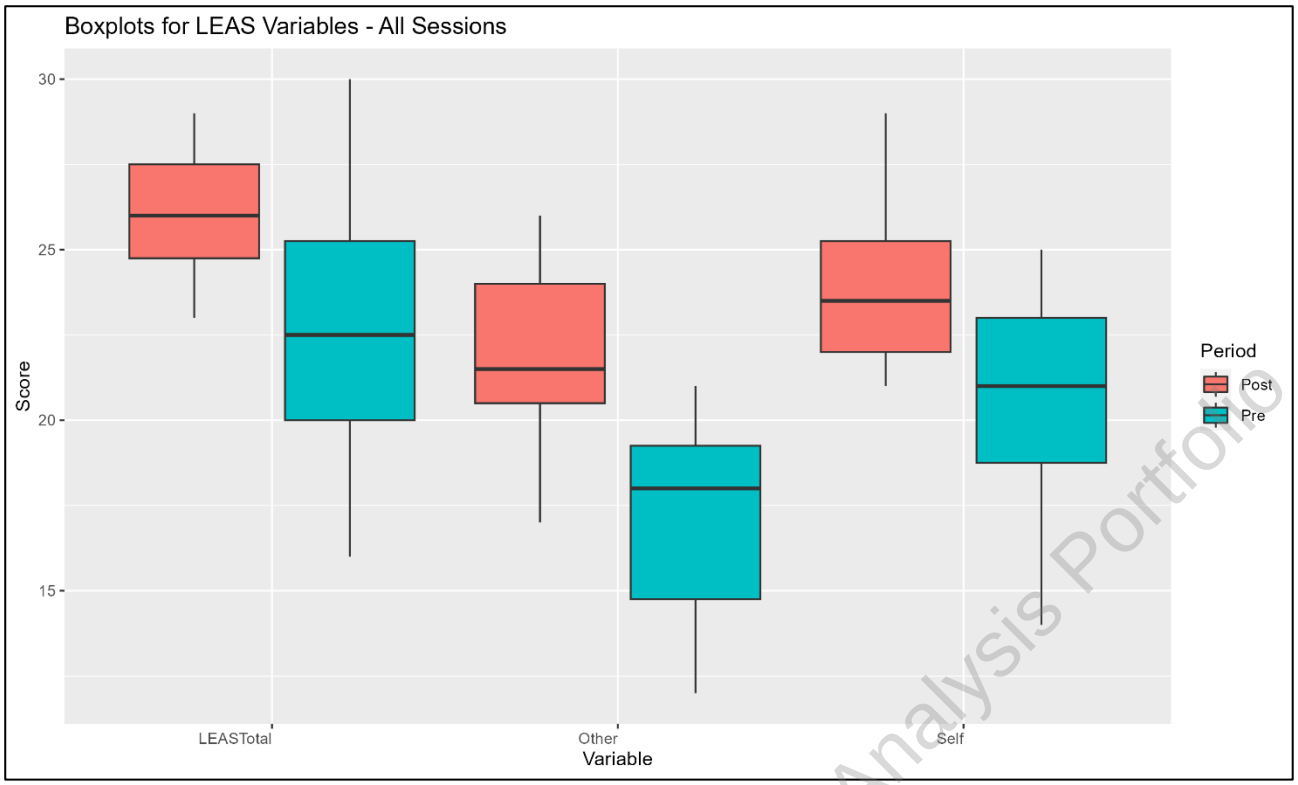
In evaluating the results from the Wilcoxon signed-rank test, it's evident that some variables showed significant or nearly significant changes from pre- to post-conditions. The Total MAIA and Noticing variables both approached significance, with medium to large negative effect sizes, suggesting meaningful declines in these measures following the intervention. Specifically, the Total MAIA scores decreased, indicating a moderate decline, while the Noticing scores also fell, marking a substantial reduction.

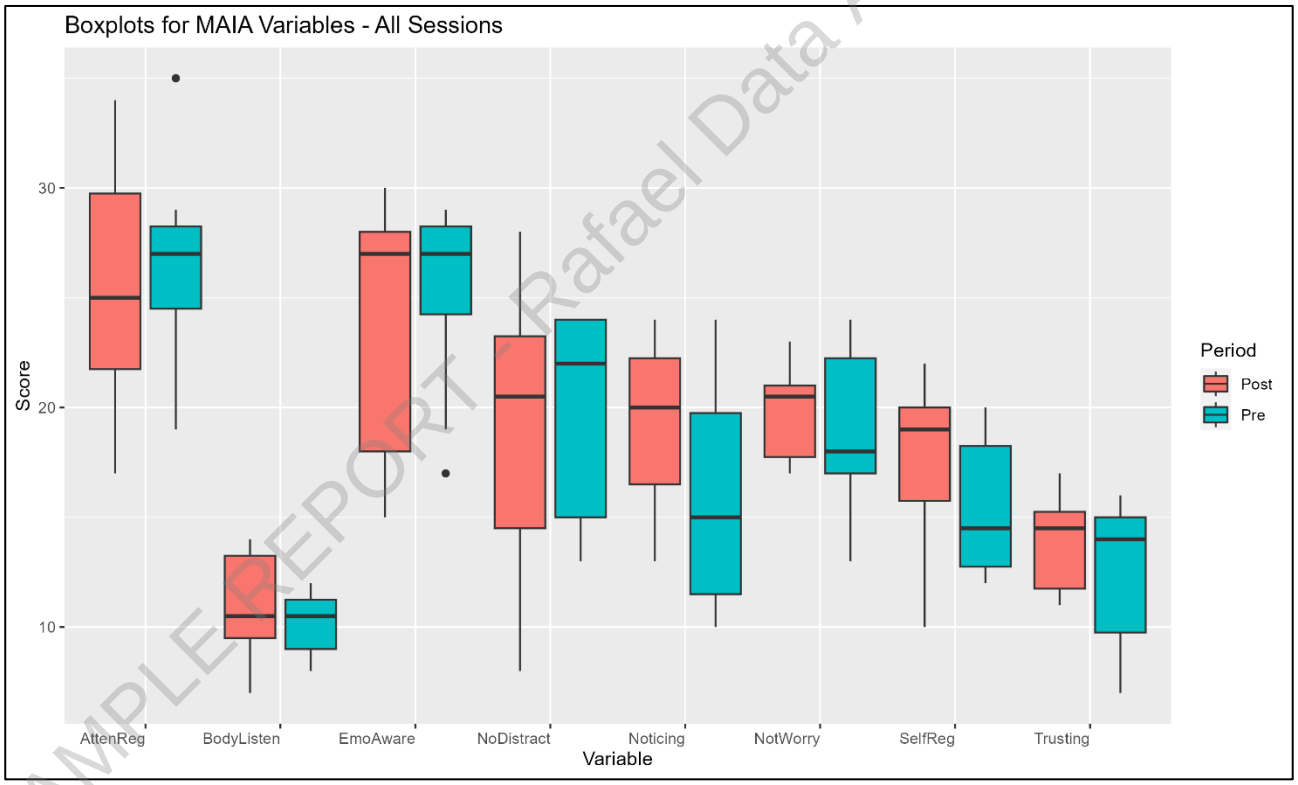
Additionally, LEAS Total and Self measures showed significant reductions with large negative effect sizes, indicating pronounced decreases in these attributes post-intervention. The Other variable also demonstrated a significant decrease, with a very large negative effect size, pointing to a major reduction.

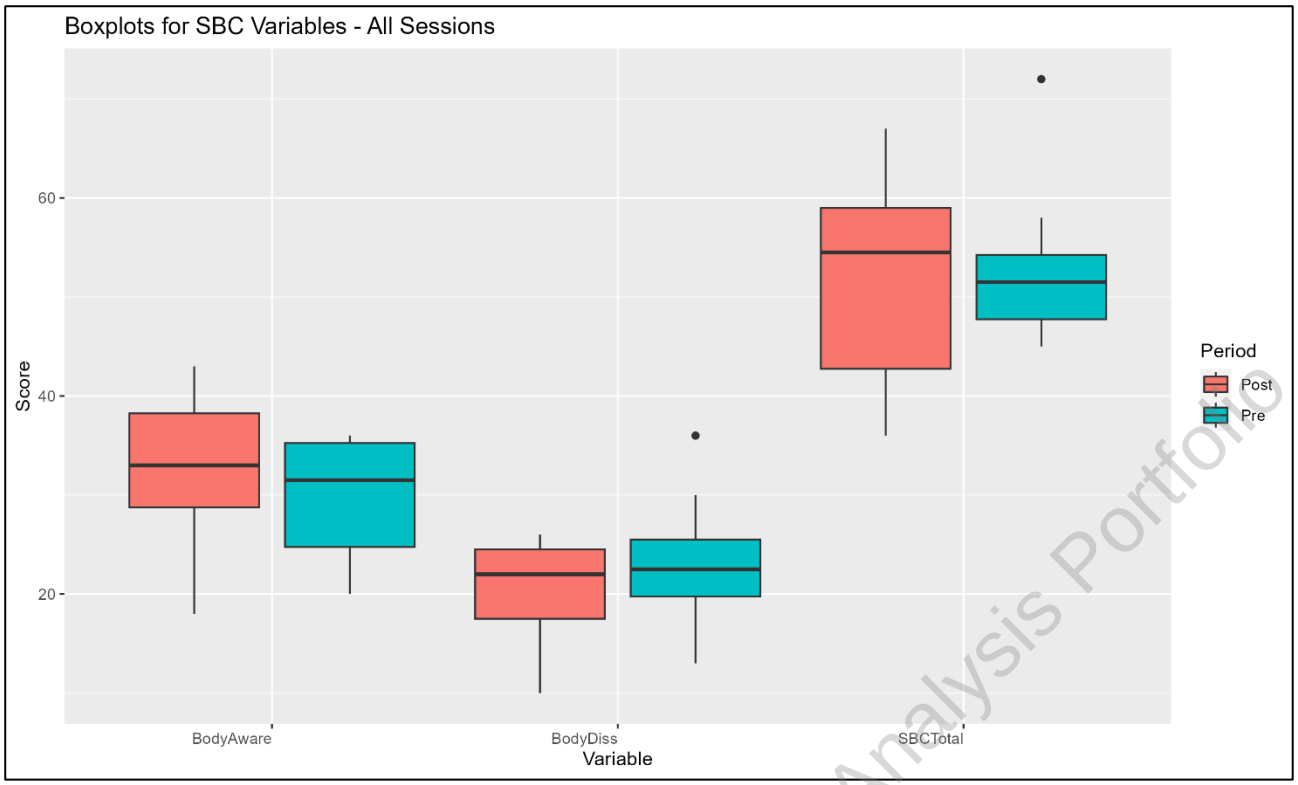
Conversely, variables such as NoDistract, NotWorry, and EmoAware did not show significant changes, with minimal effect sizes suggesting stability in these attributes after the intervention. The AttenReg and BodyDiss variables, despite non-significant p-values, exhibited small positive effect sizes, indicating slight increases that were not statistically significant.

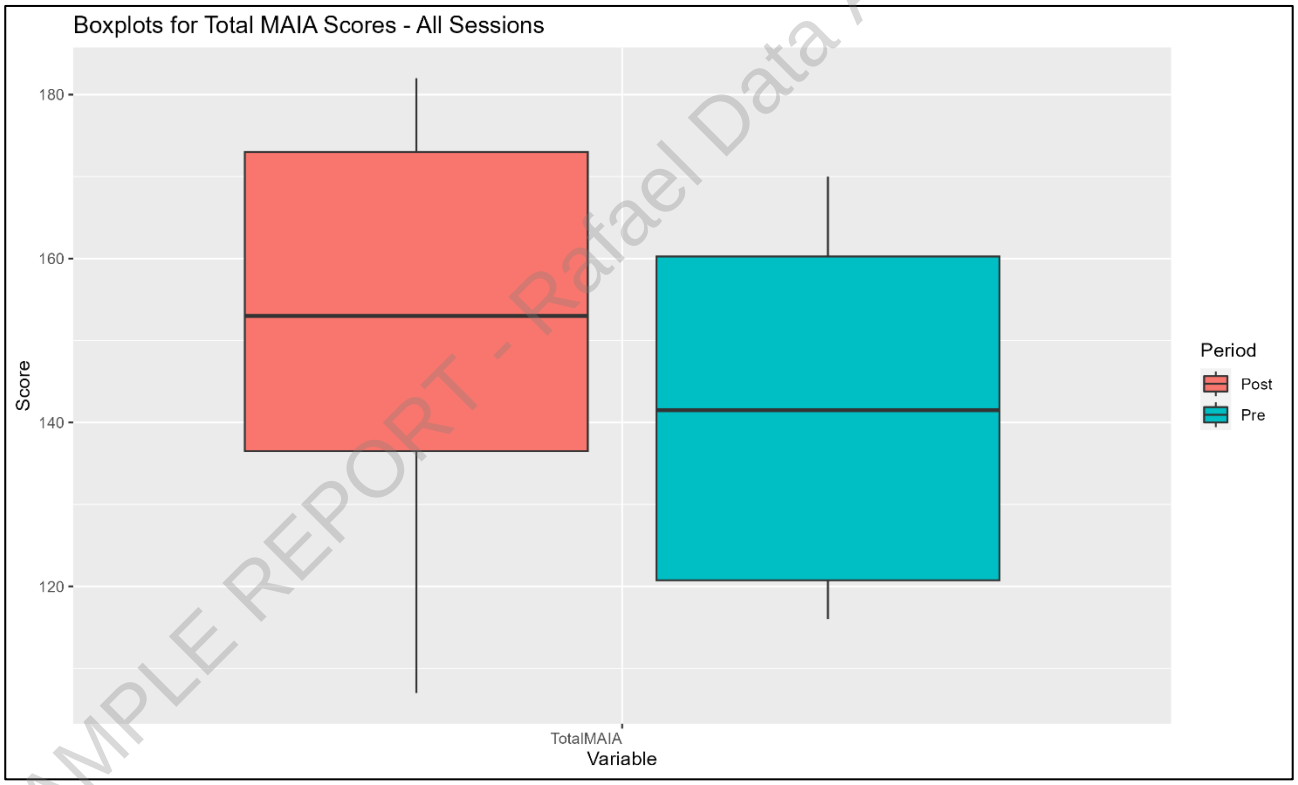
Effect sizes provide a nuanced understanding of the magnitude of changes observed. Typically, small effect sizes (around 0.1) suggest minor changes, medium effect sizes (around 0.3) indicate more noticeable impacts, and large effect sizes (around 0.5 or greater) denote substantial shifts in measured attributes. The observed effect sizes in this analysis ranged from medium to very large for those variables where changes were close to or reached statistical significance, emphasizing the practical implications of these findings.

The following figures show the distribution of pre and post scores for the variables.









Analysis – Only 3 Sessions

In analyzing the results for the "Only 3 Sessions" group using the Wilcoxon signed-rank test, the data reveal a mix of significant, near significant, and non-significant changes across various psychological and physical metrics. This test helps to understand if there are significant differences between paired pre- and post-condition measurements, without assuming a normal distribution for the data.

Among the variables measured, only a few approached or achieved significant changes:

- **Noticing** showed a near significant decrease in scores with a p-value of 0.058 and a very large negative effect size of -0.899, indicating a substantial decrease in noticing abilities post-intervention.
- **Trusting** also approached significance with a p-value of 0.100 and a similarly large negative effect size of -0.899, suggesting a significant drop in trusting perceptions.
- **Other** mirrored this trend with a p-value of 0.058 and a large negative effect size of -0.899, reflecting a major reduction in the attributes measured by this variable.

However, most other variables did not show significant changes. Variables like **NoDistract**, **NotWorry**, and **AttenReg** exhibited higher p-values, with **NoDistract** and **NotWorry** showing small negative effect sizes, indicating minor reductions that were not statistically significant. **AttenReg** had a negative effect size of -0.471, suggesting a moderate reduction despite its higher p-value of 0.295.

Interestingly, **NotWorry** demonstrated a small but positive effect size of 0.514, one of the few metrics showing a potential improvement post-intervention, though this change was not statistically significant (p=0.246).

The Total MAIA scores decreased slightly with a p-value of 0.142 and a negative effect size of -0.642, highlighting a moderate overall decline in the aggregated metric of MAIA scores, though this was not statistically significant.

variable	mean	median	sd	range
PostAttenReg	28	27	7.155	20 - 38
PostBodyAware	34.3333	34	8.335	23 - 47
PostBodyDiss	18.5	19.5	5.206	9 - 23
PostBodyListen	11.3333	11	3.502	7 - 17
PostEmoAware	22.8333	23	5.672	13 - 30
PostLEASTotal	25.6667	26	3.777	20 - 30
PostNoDistract	21.5	21	4.324	17 - 29
PostNotWorry	18	18.5	3.162	14 - 22
PostNoticing	19.5	19	3.017	16 - 24
PostOther	23	22.5	5.020	17 - 29
PostSBCTotal	52.8333	50	11.161	40 - 70
PostSelf	22.6667	23	3.266	18 - 27
PostSelfReg	17	17	4.733	11 - 23
PostTotalMAIA	151.833	152.5	24.227	117 - 188
PostTrusting	13.6667	13	3.724	9 - 18
PreAttenReg	21.3333	21.5	11.290	7 - 35
PreBodyAware	30.5	34.5	12.645	14 - 44
PreBodyDiss	19.3333	19.5	1.751	17 - 22
PreBodyListen	8	10.5	5.215	0 - 13
PreEmoAware	19.1667	25	10.553	2 - 27
PreLEASTotal	25.8333	27	2.229	23 - 28
PreNoDistract	19.3333	18.5	6.919	12 - 31
PreNotWorry	19.5	19.5	2.429	16 - 23
PreNoticing	14.8333	17	5.492	5 - 19
PreOther	19.3333	18.5	3.559	16 - 24
PreSBCTotal	49.8333	54	12.922	32 - 62
PreSelf	22.8333	22	3.125	19 - 27
PreSelfReg	11.8333	13	5.193	3 - 17
PreTotalMAIA	123.333	139	36.341	59 - 155
PreTrusting	9.33333	9	5.317	1 - 16

The following table shows the Wilcoxon results, followed by the boxplots.

variable	V	p_value	effect_size
TotalMAIA	3	0.142	-0.642
Noticing	0	0.058	-0.899
NoDistract	7	0.527	-0.300
NotWorry	16.5	0.246	0.514
AttenReg	5	0.295	-0.471
EmoAware	4	0.418	-0.556
SelfReg	3	0.141	-0.642
BodyListen	1.5	0.134	-0.770
Trusting	0	0.100	-0.899
LEASTotal	6	0.850	-0.385
Self	10	1.000	-0.043
Other	0	0.058	-0.899
SBCTotal	5.5	0.684	-0.428
BodyAware	6	0.400	-0.385
BodyDiss	9	0.784	-0.128