Included Analyses

Key Blue - not significant

Pink - significant

- Two-Tailed Wilcoxon Signed Rank Test between DAS_Q13_pre_ordinal and DAS_Q13_post_ordinal
- Two-Tailed Wilcoxon Signed Rank Test between DAS_Q14_pre_ordinal and DAS_Q14_post_ordinal
- Two-Tailed Wilcoxon Signed Rank Test between DAS_Q15_pre_ordinal and DAS_Q15_post_ordinal
- Two-Tailed Wilcoxon Signed Rank Test between DAS_Q16_pre_ordinal and DAS_Q16_post_ordinal
- Two-Tailed Wilcoxon Signed Rank Test between DAS_Q17_pre_ordinal and DAS_Q17_post_ordinal
- Two-Tailed Wilcoxon Signed Rank Test between DAS_Q18_pre_ordinal and DAS_Q18_post_ordinal
- Two-Tailed Wilcoxon Signed Rank Test between DAS_Q19_pre_ordinal and DAS_Q19_post_ordinal
- Two-Tailed Wilcoxon Signed Rank Test between DAS_Q20_pre_ordinal and DAS_Q20_post_ordinal
- Two-Tailed Wilcoxon Signed Rank Test between DAS_Q20_pre_ordinal and DAS_Q20_post_ordinal
- Two-Tailed Wilcoxon Signed Rank Test between CODES_Q1_pre_ordinal and CODES_post_ordinal_Q1
- Two-Tailed Wilcoxon Signed Rank Test between CODES_Q2_pre_ordinal and CODES_post_ordinal_Q2
- Two-Tailed Wilcoxon Signed Rank Test between CODES_Q3_pre_ordinal and CODES_post_ordinal_Q3
- Two-Tailed Wilcoxon Signed Rank Test between CODES_Q4_pre_ordinal and CODES_post_ordinal_Q4
- Two-Tailed Wilcoxon Signed Rank Test between DAS_Q5_pre_ordinal and CODES_post_ordinal_Q5
- Two-Tailed Wilcoxon Signed Rank Test between CODES_Q6_pre_ordinal and CODES_post_ordinal_Q6
- Two-Tailed Wilcoxon Signed Rank Test between CODES_Q7_pre_ordinal and CODES_post_ordinal_Q7
- Two-Tailed Wilcoxon Signed Rank Test between CODES_Q8_pre_ordinal and CODES_post_ordinal_Q8
- Two-Tailed Wilcoxon Signed Rank Test between CODES_Q9_pre_ordinal and CODES_post_ordinal_Q9
- Two-Tailed Wilcoxon Signed Rank Test between CODES_Cum_Pre_ordinal and CODES_post_Cum_ordinal
- Two-Tailed Wilcoxon Signed Rank Test between DAS_Cum_Score_pre_ordinal and DAS_Cum_Post_ordinal

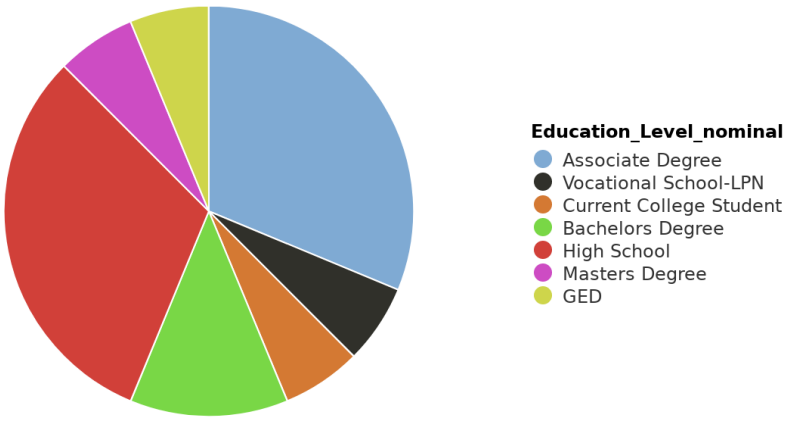
- Pie Chart of Education_Level_nominal
- Histogram of Age_scale
- Pie Chart of Position_Title_nominal

Results

Figure 1

This is cool

Pie Chart of Education_Level_nominal



Descriptive Statistics

Introduction

Summary statistics were calculated for each interval and ratio variable. Frequencies and percentages were calculated for each nominal variable.

Frequencies and Percentages

The most frequently observed category of Ethnicity_nominal was African American (*n* = 7, 43.75%). The most frequently observed category of Position_Title_nominal was CNA (*n* = 5, 31.25%). The most frequently observed category of Employment_Status_nominal was Fulltime

(*n* = 15, 93.75%). The most frequently observed category of Gender_nominal was Female (*n* = 16, 100.00%). The most frequently observed categories of Education_Level_nominal were Associate Degree and High School, each with an observed frequency of 5 (31.25%). Frequencies and percentages are presented in Table 1.

Good table make sure APA

Table 1

Frequency Table for Nominal Variables

Variable	*n*	*%*
Ethnicity_nominal		
African American	7	43.75
Caucasian	6	37.50
Chinese	1	6.25
Hispanic	2	12.50
Missing	0	0.00
Position_Title_nominal		
CNA	5	31.25
Nurse Manager	1	6.25
Resident Care Coordinator	1	6.25
Charge Nurse	1	6.25
Social Service Coordinator	1	6.25
Healthcare Coordinator	1	6.25
DON	1	6.25
Med Tech	1	6.25
HCC Cordinator	1	6.25
Activity Coordinator	1	6.25
LPN	1	6.25
Home Health Nurse Manager	1	6.25
Missing	0	0.00
Employment_Status_nominal		
Fulltime	15	93.75
Part Time	1	6.25
Missing	0	0.00
Gender_nominal		
Female	16	100.00
Missing	0	0.00

Education_Level_nominal		
Associate Degree	5	31.25
Vocational School-LPN	1	6.25
Current College Student	1	6.25
Bachelors Degree	2	12.50
High School	5	31.25
Masters Degree	1	6.25
GED	1	6.25
Missing	0	0.00

Note. Due to rounding errors, percentages may not equal 100%.

Summary Statistics

The observations for Age_scale had an average of 44.00 (*SD* = 14.13, SE_M = 3.53, Min = 24.00, Max = 67.00, Skewness = 0.02, Kurtosis = -1.24). The observations for Years_in_healthcare_scale had an average of 17.50 (*SD* = 11.53, SE_M = 2.88, Min = 2.00, Max = 38.00, Skewness = 0.37, Kurtosis = -1.23). The observations for Years_in_current_study_facility_scale had an average of 5.96 (*SD* = 6.56, SE_M = 1.64, Min = 0.25, Max = 23.00, Skewness = 1.36, Kurtosis = 0.91). When the skewness is greater than 2 in absolute value, the variable is considered to be asymmetrical about its mean. When the kurtosis is greater than or equal to 3, then the variable's distribution is markedly different than a normal distribution in its tendency to produce outliers (Westfall & Henning, 2013). The summary statistics can be found in Table 2.

Notable averages make sure APA

Table 2

Summary Statistics Table for Interval and Ratio Variables

Variable	*M*	*SD*	*n*	SE_M	Min	Max	Skewness	Kurtosis
Age_scale	44.00	14.13	16	3.53	24.00	67.00	0.02	-1.24
Years_in_healthcare_scale	17.50	11.53	16	2.88	2.00	38.00	0.37	-1.23
Years_in_current_study_facility_scale	5.96	6.56	16	1.64	0.25	23.00	1.36	0.91

Note. '-' indicates the statistic is undefined due to constant data or an insufficient sample size.

Two-Tailed Wilcoxon Signed Rank Test

Introduction

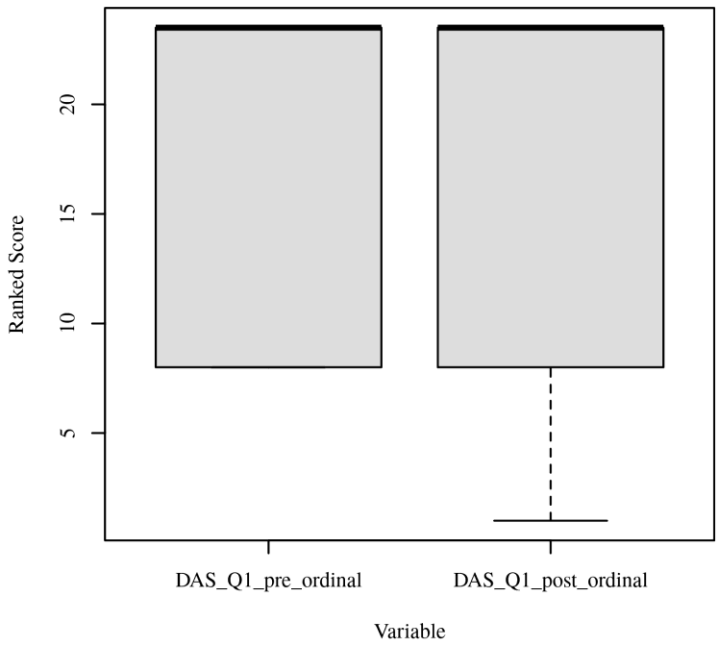
A two-tailed Wilcoxon signed rank test was conducted to examine whether there was a significant difference between DAS_Q1_pre_ordinal and DAS_Q1_post_ordinal. The two-tailed Wilcoxon signed rank test is a non-parametric alternative to the paired samples *t*-test and does not share its distributional assumptions (Conover & Iman, 1981).

Results

The results of the two-tailed Wilcoxon signed rank test were not significant based on an alpha value of .05, $V = 10.00$, $z = -0.71$, $p = .480$. This indicates that the differences between DAS_Q1_pre_ordinal ($Mdn = 7.00$) and DAS_Q1_post_ordinal ($Mdn = 7.00$) are explainable by random variation. Figure 2 presents a boxplot of the ranked values of DAS_Q1_pre_ordinal and DAS_Q1_post_ordinal.

Figure 2

Ranked values of DAS_Q1_pre_ordinal and DAS_Q1_post_ordinal



DAS descriptives – probably not needed for anything

Descriptive Statistics

Introduction

Frequencies and percentages were calculated for DAS_Q1_pre_ordinal, DAS_Q1_post_ordinal, DAS_Q2_pre_ordinal, DAS_Q2_post_ordinal, DAS_Q3_pre_ordinal, DAS_Q3_post_ordinal, DAS_Q4_pre_ordinal, DAS_Q4_post_ordinal, DAS_Q5_pre_ordinal, and DAS_Q5_post_ordinal.

Frequencies and Percentages

The most frequently observed category of DAS_Q1_pre_ordinal was 7 Strongly agree (*n* = 9, 56.25%). The most frequently observed category of DAS_Q1_post_ordinal was 7 Strongly agree (*n* = 9, 56.25%). The most frequently observed category of DAS_Q2_pre_ordinal was 1

Strongly Agree (*n* = 11, 68.75%). The most frequently observed category of DAS_Q2_post_ordinal was 1 Strongly Agree (*n* = 13, 81.25%). The most frequently observed category of DAS_Q3_pre_ordinal was 6 Agree (*n* = 7, 43.75%). The most frequently observed category of DAS_Q3_post_ordinal was 7 Strongly agree (*n* = 8, 50.00%). The most frequently observed category of DAS_Q4_pre_ordinal was 6 Agree (*n* = 6, 37.50%). The most frequently observed category of DAS_Q4_post_ordinal was 7 Strongly agree (*n* = 10, 62.50%). The most frequently observed category of DAS_Q5_pre_ordinal was 6 Agree (*n* = 7, 43.75%). The most frequently observed category of DAS_Q5_post_ordinal was 7 Strongly agree (*n* = 10, 62.50%). Frequencies and percentages are presented in Table 3.

Table 3

Frequency Table for Ordinal Variables

Variable	*n*	*%*
DAS_Q1_pre_ordinal		
1 Strongly disagree	0	0.00
2 Disagree	0	0.00
3 Slightly disagree	0	0.00
4 Neutral	0	0.00
5 Slightly agree	0	0.00
6 Agree	7	43.75
7 Strongly agree	9	56.25
Missing	0	0.00
DAS_Q1_post_ordinal		
1 Strongly disagree	0	0.00
2 Disagree	0	0.00
3 Slightly disagree	0	0.00
4 Neutral	1	6.25
5 Slightly agree	0	0.00
6 Agree	6	37.50
7 Strongly agree	9	56.25
Missing	0	0.00
DAS_Q2_pre_ordinal		
1 Strongly Agree	11	68.75
2 Agree	0	0.00
3 Slightly agree	0	0.00

4 Neutral	4	25.00
5 Slightly disagree	1	6.25
6 Disagree	0	0.00
7 Strongly disagree	0	0.00
Missing	0	0.00
DAS_Q2_post_ordinal		
1 Strongly Agree	13	81.25
2 Agree	2	12.50
3 Slightly agree	0	0.00
4 Neutral	0	0.00
5 Slightly disagree	1	6.25
6 Disagree	0	0.00
7 Strongly disagree	0	0.00
Missing	0	0.00
DAS_Q3_pre_ordinal		
1 Strongly disagree	0	0.00
2 Disagree	0	0.00
3 Slightly disagree	0	0.00
4 Neutral	2	12.50
5 Slightly agree	2	12.50
6 Agree	7	43.75
7 Strongly agree	5	31.25
Missing	0	0.00
DAS_Q3_post_ordinal		
1 Strongly disagree	0	0.00
2 Disagree	0	0.00
3 Slightly disagree	0	0.00
4 Neutral	0	0.00
5 Slightly agree	2	12.50
6 Agree	6	37.50
7 Strongly agree	8	50.00
Missing	0	0.00
DAS_Q4_pre_ordinal		
1 Strongly disagree	0	0.00
2 Disagree	0	0.00
3 Slightly disagree	0	0.00
4 Neutral	3	18.75
5 Slightly agree	3	18.75

6 Agree	6	37.50
7 Strongly agree	4	25.00
Missing	0	0.00
DAS_Q4_post_ordinal		
1 Strongly disagree	0	0.00
2 Disagree	0	0.00
3 Slightly disagree	0	0.00
4 Neutral	0	0.00
5 Slightly agree	1	6.25
6 Agree	5	31.25
7 Strongly agree	10	62.50
Missing	0	0.00
DAS_Q5_pre_ordinal		
1 Strongly disagree	1	6.25
2 Disagree	0	0.00
3 Slightly disagree	0	0.00
4 Neutral	1	6.25
5 Slightly agree	3	18.75
6 Agree	7	43.75
7 Strongly agree	4	25.00
Missing	0	0.00
DAS_Q5_post_ordinal		
1 Strongly disagree	1	6.25
2 Disagree	0	0.00
3 Slightly disagree	0	0.00
4 Neutral	0	0.00
5 Slightly agree	0	0.00
6 Agree	5	31.25
7 Strongly agree	10	62.50
Missing	0	0.00

Note. Due to rounding errors, percentages may not equal 100%.

Descriptive Statistics

Introduction

Frequencies and percentages were calculated for DAS_Q6_pre_ordinal, DAS_Q6_post_ordinal, DAS_Q7_pre_ordinal, DAS_Q7_post_ordinal, DAS_Q8_pre_ordinal,

DAS_Q8_post_ordinal, DAS_Q9_pre_ordinal, DAS_Q9_post_ordinal, DAS_Q10_pre_ordinal, and DAS_Q10_post_ordinal.

Frequencies and Percentages

The most frequently observed category of DAS_Q6_pre_ordinal was 1 Strongly Agree (*n* = 8, 50.00%). The most frequently observed category of DAS_Q6_post_ordinal was 1 Strongly Agree (*n* = 9, 56.25%). The most frequently observed category of DAS_Q7_pre_ordinal was 7 Strongly agree (*n* = 11, 68.75%). The most frequently observed category of DAS_Q7_post_ordinal was 7 Strongly agree (*n* = 8, 50.00%). The most frequently observed category of DAS_Q8_pre_ordinal was 1 Strongly Agree (*n* = 6, 37.50%). The most frequently observed category of DAS_Q8_post_ordinal was 1 Strongly Agree (*n* = 10, 62.50%). The most frequently observed category of DAS_Q9_pre_ordinal was 2 Agree (*n* = 4, 25.00%). The most frequently observed categories of DAS_Q9_post_ordinal were 1 Strongly Agree and 2 Agree, each with an observed frequency of 6 (37.50%). The most frequently observed category of DAS_Q10_pre_ordinal was 7 Strongly agree (*n* = 6, 37.50%). The most frequently observed category of DAS_Q10_post_ordinal was 7 Strongly agree (*n* = 10, 62.50%). Frequencies and percentages are presented in Table 4.

Table 4

Frequency Table for Ordinal Variables

Variable	*n*	*%*
DAS_Q6_pre_ordinal		
1 Strongly Agree	8	50.00
2 Agree	3	18.75
3 Slightly agree	0	0.00
4 Neutral	0	0.00
5 Slightly disagree	2	12.50
6 Disagree	1	6.25
7 Strongly disagree	2	12.50
Missing	0	0.00
DAS_Q6_post_ordinal		
1 Strongly Agree	9	56.25

2 Agree	3	18.75
3 Slightly agree	1	6.25
4 Neutral	0	0.00
5 Slightly disagree	0	0.00
6 Disagree	1	6.25
7 Strongly disagree	2	12.50
Missing	0	0.00
DAS_Q7_pre_ordinal		
1 Strongly disagree	0	0.00
2 Disagree	0	0.00
3 Slightly disagree	0	0.00
4 Neutral	0	0.00
5 Slightly agree	1	6.25
6 Agree	4	25.00
7 Strongly agree	11	68.75
Missing	0	0.00
DAS_Q7_post_ordinal		
1 Strongly disagree	1	6.25
2 Disagree	0	0.00
3 Slightly disagree	0	0.00
4 Neutral	1	6.25
5 Slightly agree	0	0.00
6 Agree	6	37.50
7 Strongly agree	8	50.00
Missing	0	0.00
DAS_Q8_pre_ordinal		
1 Strongly Agree	6	37.50
2 Agree	4	25.00
3 Slightly agree	0	0.00
4 Neutral	3	18.75
5 Slightly disagree	0	0.00
6 Disagree	2	12.50
7 Strongly disagree	1	6.25
Missing	0	0.00
DAS_Q8_post_ordinal		
1 Strongly Agree	10	62.50
2 Agree	5	31.25
3 Slightly agree	1	6.25

4 Neutral	0	0.00
5 Slightly disagree	0	0.00
6 Disagree	0	0.00
7 Strongly disagree	0	0.00
Missing	0	0.00
DAS_Q9_pre_ordinal		
1 Strongly Agree	3	18.75
2 Agree	4	25.00
3 Slightly agree	2	12.50
4 Neutral	2	12.50
5 Slightly disagree	3	18.75
6 Disagree	1	6.25
7 Strongly disagree	1	6.25
Missing	0	0.00
DAS_Q9_post_ordinal		
1 Strongly Agree	6	37.50
2 Agree	6	37.50
3 Slightly agree	1	6.25
4 Neutral	1	6.25
5 Slightly disagree	0	0.00
6 Disagree	0	0.00
7 Strongly disagree	2	12.50
Missing	0	0.00
DAS_Q10_pre_ordinal		
1 Strongly disagree	0	0.00
2 Disagree	0	0.00
3 Slightly disagree	0	0.00
4 Neutral	1	6.25
5 Slightly agree	4	25.00
6 Agree	5	31.25
7 Strongly agree	6	37.50
Missing	0	0.00
DAS_Q10_post_ordinal		
1 Strongly disagree	0	0.00
2 Disagree	1	6.25
3 Slightly disagree	0	0.00
4 Neutral	0	0.00
5 Slightly agree	0	0.00

6 Agree	5	31.25
7 Strongly agree	10	62.50
Missing	0	0.00

Note. Due to rounding errors, percentages may not equal 100%.

Descriptive Statistics

Introduction

Frequencies and percentages were calculated for DAS_Q11_pre_ordinal, DAS_Q11_post_ordinal, DAS_Q_12_pre_ordinal, DAS_Q_12_post_ordinal, DAS_Q13_pre_ordinal, DAS_Q13_post_ordinal, DAS_Q14_pre_ordinal, DAS_Q14_post_ordinal, DAS_Q15_pre_ordinal, and DAS_Q15_post_ordinal.

Frequencies and Percentages

The most frequently observed category of DAS_Q11_pre_ordinal was 6 Agree (*n* = 8, 50.00%). The most frequently observed category of DAS_Q11_post_ordinal was 7 Strongly agree (*n* = 12, 75.00%). The most frequently observed category of DAS_Q_12_pre_ordinal was 7 Strongly agree (*n* = 9, 56.25%). The most frequently observed category of DAS_Q_12_post_ordinal was 7 Strongly agree (*n* = 10, 62.50%). The most frequently observed category of DAS_Q13_pre_ordinal was 7 Strongly agree (*n* = 5, 31.25%). The most frequently observed category of DAS_Q13_post_ordinal was 7 Strongly agree (*n* = 8, 50.00%). The most frequently observed categories of DAS_Q14_pre_ordinal were 6 Agree and 7 Strongly agree, each with an observed frequency of 7 (43.75%). The most frequently observed category of DAS_Q14_post_ordinal was 7 Strongly agree (*n* = 10, 62.50%). The most frequently observed category of DAS_Q15_pre_ordinal was 7 Strongly agree (*n* = 7, 43.75%). The most frequently observed category of DAS_Q15_post_ordinal was 7 Strongly agree (*n* = 11, 68.75%). Frequencies and percentages are presented in Table 5.

Table 5

Frequency Table for Ordinal Variables

Variable	*n*	*%*
DAS_Q11_pre_ordinal		
1 Strongly disagree	0	0.00
2 Disagree	0	0.00
3 Slightly disagree	0	0.00
4 Neutral	1	6.25
5 Slightly agree	0	0.00
6 Agree	8	50.00
7 Strongly agree	7	43.75
Missing	0	0.00
DAS_Q11_post_ordinal		
1 Strongly disagree	0	0.00
2 Disagree	0	0.00
3 Slightly disagree	0	0.00
4 Neutral	0	0.00
5 Slightly agree	0	0.00
6 Agree	4	25.00
7 Strongly agree	12	75.00
Missing	0	0.00
DAS_Q_12_pre_ordinal		
1 Strongly disagree	0	0.00
2 Disagree	0	0.00
3 Slightly disagree	1	6.25
4 Neutral	0	0.00
5 Slightly agree	1	6.25
6 Agree	5	31.25
7 Strongly agree	9	56.25
Missing	0	0.00
DAS_Q_12_post_ordinal		
1 Strongly disagree	0	0.00
2 Disagree	0	0.00
3 Slightly disagree	0	0.00
4 Neutral	0	0.00
5 Slightly agree	0	0.00
6 Agree	6	37.50
7 Strongly agree	10	62.50
Missing	0	0.00
DAS_Q13_pre_ordinal		

1 Strongly disagree	0	0.00
2 Disagree	0	0.00
3 Slightly disagree	2	12.50
4 Neutral	1	6.25
5 Slightly agree	4	25.00
6 Agree	4	25.00
7 Strongly agree	5	31.25
Missing	0	0.00
DAS_Q13_post_ordinal		
1 Strongly disagree	0	0.00
2 Disagree	0	0.00
3 Slightly disagree	1	6.25
4 Neutral	1	6.25
5 Slightly agree	0	0.00
6 Agree	6	37.50
7 Strongly agree	8	50.00
Missing	0	0.00
DAS_Q14_pre_ordinal		
1 Strongly disagree	0	0.00
2 Disagree	0	0.00
3 Slightly disagree	0	0.00
4 Neutral	1	6.25
5 Slightly agree	1	6.25
6 Agree	7	43.75
7 Strongly agree	7	43.75
Missing	0	0.00
DAS_Q14_post_ordinal		
1 Strongly disagree	0	0.00
2 Disagree	0	0.00
3 Slightly disagree	0	0.00
4 Neutral	0	0.00
5 Slightly agree	2	12.50
6 Agree	4	25.00
7 Strongly agree	10	62.50
Missing	0	0.00
DAS_Q15_pre_ordinal		
1 Strongly disagree	0	0.00
2 Disagree	0	0.00

3 Slightly disagree	0	0.00
4 Neutral	1	6.25
5 Slightly agree	3	18.75
6 Agree	5	31.25
7 Strongly agree	7	43.75
Missing	0	0.00
DAS_Q15_post_ordinal		
1 Strongly disagree	0	0.00
2 Disagree	0	0.00
3 Slightly disagree	0	0.00
4 Neutral	0	0.00
5 Slightly agree	0	0.00
6 Agree	5	31.25
7 Strongly agree	11	68.75
Missing	0	0.00

Note. Due to rounding errors, percentages may not equal 100%.

Descriptive Statistics

Introduction

Frequencies and percentages were calculated for DAS_Q16_pre_ordinal, DAS_Q16_post_ordinal, DAS_Q17_pre_ordinal, DAS_Q17_post_ordinal, DAS_Q18_pre_ordinal, DAS_Q18_post_ordinal, DAS_Q19_pre_ordinal, DAS_Q19_post_ordinal, DAS_Q20_pre_ordinal, and DAS_Q20_post_ordinal.

Frequencies and Percentages

The most frequently observed category of DAS_Q16_pre_ordinal was 1 Strongly Agree (*n* = 7, 43.75%). The most frequently observed category of DAS_Q16_post_ordinal was 1 Strongly Agree (*n* = 11, 68.75%). The most frequently observed category of DAS_Q17_pre_ordinal was 1 Strongly Agree (*n* = 12, 75.00%). The most frequently observed category of DAS_Q17_post_ordinal was 1 Strongly Agree (*n* = 12, 75.00%). The most frequently observed category of DAS_Q18_pre_ordinal was 6 Agree (*n* = 7, 43.75%). The most frequently observed category of DAS_Q18_post_ordinal was 7 Strongly agree (*n* = 7, 43.75%).

The most frequently observed category of DAS_Q19_pre_ordinal was 7 Strongly agree (*n* = 7, 43.75%). The most frequently observed category of DAS_Q19_post_ordinal was 7 Strongly agree (*n* = 11, 68.75%). The most frequently observed category of DAS_Q20_pre_ordinal was 7 Strongly agree (*n* = 7, 43.75%). The most frequently observed category of DAS_Q20_post_ordinal was 6 Agree (*n* = 9, 56.25%). Frequencies and percentages are presented in Table 6.

Table 6

Frequency Table for Ordinal Variables

Variable	*n*	*%*
DAS_Q16_pre_ordinal		
1 Strongly Agree	7	43.75
2 Agree	5	31.25
3 Slightly agree	0	0.00
4 Neutral	0	0.00
5 Slightly disagree	3	18.75
6 Disagree	1	6.25
7 Strongly disagree	0	0.00
Missing	0	0.00
DAS_Q16_post_ordinal		
1 Strongly Agree	11	68.75
2 Agree	3	18.75
3 Slightly agree	0	0.00
4 Neutral	2	12.50
5 Slightly disagree	0	0.00
6 Disagree	0	0.00
7 Strongly disagree	0	0.00
Missing	0	0.00
DAS_Q17_pre_ordinal		
1 Strongly Agree	12	75.00
2 Agree	2	12.50
3 Slightly agree	0	0.00
4 Neutral	0	0.00
5 Slightly disagree	2	12.50
6 Disagree	0	0.00
7 Strongly disagree	0	0.00

Missing	0	0.00
DAS_Q17_post_ordinal		
1 Strongly Agree	12	75.00
2 Agree	4	25.00
3 Slightly agree	0	0.00
4 Neutral	0	0.00
5 Slightly disagree	0	0.00
6 Disagree	0	0.00
7 Strongly disagree	0	0.00
Missing	0	0.00
DAS_Q18_pre_ordinal		
1 Strongly disagree	0	0.00
2 Disagree	0	0.00
3 Slightly disagree	0	0.00
4 Neutral	3	18.75
5 Slightly agree	2	12.50
6 Agree	7	43.75
7 Strongly agree	4	25.00
Missing	0	0.00
DAS_Q18_post_ordinal		
1 Strongly disagree	0	0.00
2 Disagree	0	0.00
3 Slightly disagree	0	0.00
4 Neutral	3	18.75
5 Slightly agree	1	6.25
6 Agree	5	31.25
7 Strongly agree	7	43.75
Missing	0	0.00
DAS_Q19_pre_ordinal		
1 Strongly disagree	0	0.00
2 Disagree	0	0.00
3 Slightly disagree	0	0.00
4 Neutral	3	18.75
5 Slightly agree	1	6.25
6 Agree	5	31.25
7 Strongly agree	7	43.75
Missing	0	0.00
DAS_Q19_post_ordinal		

1 Strongly disagree	0	0.00
2 Disagree	0	0.00
3 Slightly disagree	0	0.00
4 Neutral	0	0.00
5 Slightly agree	1	6.25
6 Agree	4	25.00
7 Strongly agree	11	68.75
Missing	0	0.00
DAS_Q20_pre_ordinal		
1 Strongly disagree	0	0.00
2 Disagree	0	0.00
3 Slightly disagree	0	0.00
4 Neutral	0	0.00
5 Slightly agree	3	18.75
6 Agree	6	37.50
7 Strongly agree	7	43.75
Missing	0	0.00
DAS_Q20_post_ordinal		
1 Strongly disagree	0	0.00
2 Disagree	0	0.00
3 Slightly disagree	0	0.00
4 Neutral	0	0.00
5 Slightly agree	1	6.25
6 Agree	9	56.25
7 Strongly agree	6	37.50
Missing	0	0.00

Note. Due to rounding errors, percentages may not equal 100%.

Two-Tailed Wilcoxon Signed Rank Test

Introduction

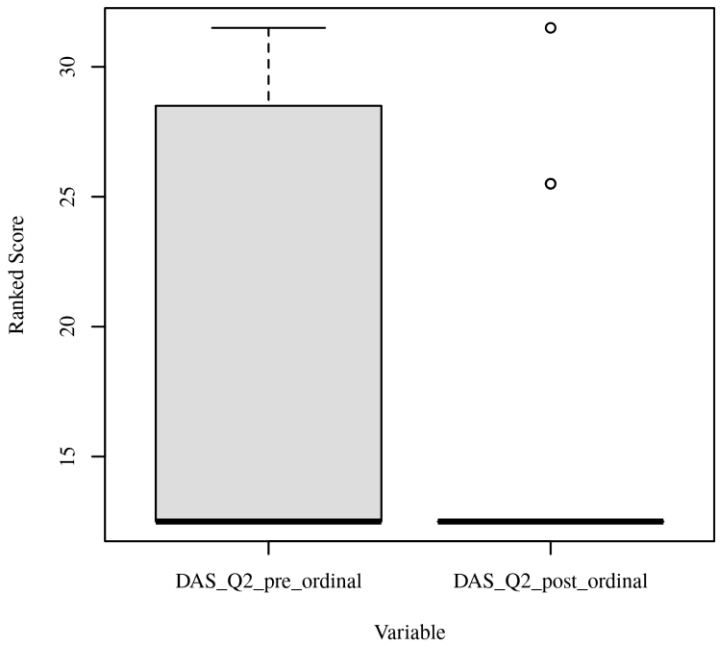
A two-tailed Wilcoxon signed rank test was conducted to examine whether there was a significant difference between DAS_Q2_pre_ordinal and DAS_Q2_post_ordinal. The two-tailed Wilcoxon signed rank test is a non-parametric alternative to the paired samples *t*-test and does not share its distributional assumptions (Conover & Iman, 1981).

Results

The results of the two-tailed Wilcoxon signed rank test were not significant based on an alpha value of .05, $V = 10.00$, $z = -1.86$, $p = .063$. This indicates that the differences between DAS_Q2_pre_ordinal (*Mdn* = 1.00) and DAS_Q2_post_ordinal (*Mdn* = 1.00) are explainable by random variation. Figure 3 presents a boxplot of the ranked values of DAS_Q2_pre_ordinal and DAS_Q2_post_ordinal.

Figure 3

Ranked values of DAS_Q2_pre_ordinal and DAS_Q2_post_ordinal



Two-Tailed Wilcoxon Signed Rank Test

Introduction

A two-tailed Wilcoxon signed rank test was conducted to examine whether there was a significant difference between DAS_Q3_pre_ordinal and DAS_Q3_post_ordinal. The two-tailed

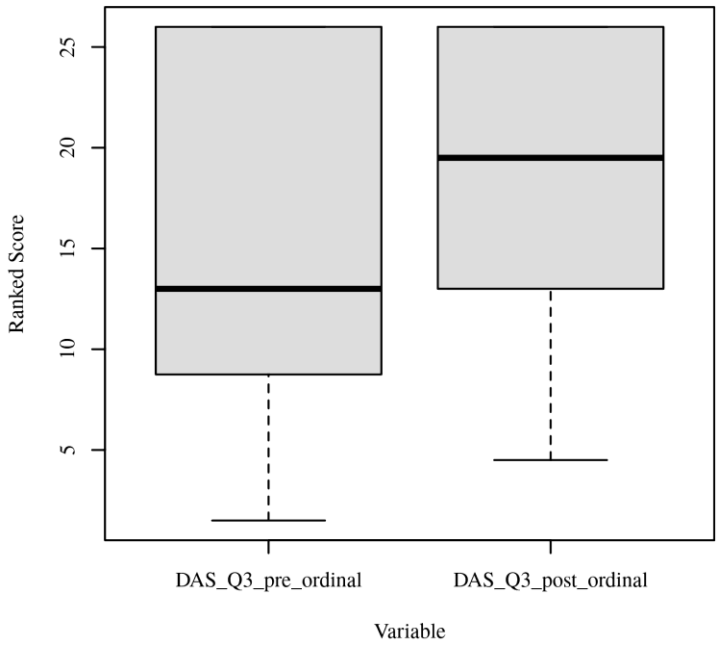
Wilcoxon signed rank test is a non-parametric alternative to the paired samples *t*-test and does not share its distributional assumptions (Conover & Iman, 1981).

Results

The results of the two-tailed Wilcoxon signed rank test were significant based on an alpha value of .05, $V = 0.00$, $z = -2.65$, $p = .008$. This indicates that the differences between DAS_Q3_pre_ordinal and DAS_Q3_post_ordinal are not likely due to random variation. The median of DAS_Q3_pre_ordinal (*Mdn* = 6.00) was significantly lower than the median of DAS_Q3_post_ordinal (*Mdn* = 6.50). Figure 4 presents a boxplot of the ranked values of DAS_Q3_pre_ordinal and DAS_Q3_post_ordinal.

Figure 4

Ranked values of DAS_Q3_pre_ordinal and DAS_Q3_post_ordinal



This is the feasibility

Descriptive Statistics

Introduction

Frequencies and percentages were calculated for Feasibility_Q1_ordinal, Feasibility_Q2_ordinal, Feasibility_Q3_ordinal, Feasibility_Q4_ordinal, and Feasibility_Q5_ordinal.

Frequencies and Percentages

The most frequently observed category of Feasibility_Q1_ordinal was 4 Strongly agree (*n* = 15, 93.75%). The most frequently observed category of Feasibility_Q2_ordinal was 4 Strongly agree (*n* = 11, 68.75%). The most frequently observed category of Feasibility_Q3_ordinal was 4 Strongly agree (*n* = 12, 75.00%). The most frequently observed category of Feasibility_Q4_ordinal was 4 Strongly agree (*n* = 13, 81.25%). The most frequently observed category of Feasibility_Q5_ordinal was 4 Strongly agree (*n* = 15, 93.75%). Frequencies and percentages are presented in Table 7.

Table 7

Frequency Table for Ordinal Variables

Variable	*n*	*%*
Feasibility_Q1_ordinal		
0 Strongly disagree	0	0.00
1 Disagree	0	0.00
2 Neutral	0	0.00
3 Agree	1	6.25
4 Strongly agree	15	93.75
Missing	0	0.00
Feasibility_Q2_ordinal		
0 Strongly disagree	0	0.00
1 Disagree	0	0.00
2 Neutral	1	6.25
3 Agree	4	25.00
4 Strongly agree	11	68.75
Missing	0	0.00

Feasibility_Q3_ordinal		
0 Strongly disagree	0	0.00
1 Disagree	0	0.00
2 Neutral	1	6.25
3 Agree	3	18.75
4 Strongly agree	12	75.00
Missing	0	0.00
Feasibility_Q4_ordinal		
0 Strongly disagree	0	0.00
1 Disagree	0	0.00
2 Neutral	0	0.00
3 Agree	3	18.75
4 Strongly agree	13	81.25
Missing	0	0.00
Feasibility_Q5_ordinal		
0 Strongly disagree	0	0.00
1 Disagree	0	0.00
2 Neutral	0	0.00
3 Agree	1	6.25
4 Strongly agree	15	93.75
Missing	0	0.00

Note. Due to rounding errors, percentages may not equal 100%.

Descriptive Statistics

Introduction

Summary statistics were calculated for each interval and ratio variable. Frequencies and percentages were calculated for each nominal and ordinal variable.

Frequencies and Percentages

The most frequently observed category of Feasibility_Q6_ordinal was 4 Strongly agree (*n* = 13, 81.25%). The most frequently observed category of Feasibility_Q7_ordinal was 4 Strongly agree (*n* = 13, 81.25%). The most frequently observed category of Feasibility_Q8_ordinal was 4 Strongly agree (*n* = 15, 93.75%). The most frequently observed

category of Feasibility_Q9_ordinal was 4 Strongly agree (*n* = 15, 93.75%). The most frequently observed category of Feasibility_Q10_ordinal was 4 Strongly agree (*n* = 14, 87.50%). The most frequently observed category of Feasibility_Q11_ordinal was 4 Strongly agree (*n* = 14, 87.50%). Frequencies and percentages are presented in Table 8.

Table 8

Frequency Table for Nominal and Ordinal Variables

Variable	*n*	*%*
Feasibility_Q6_ordinal		
0 Strongly disagree	0	0.00
1 Disagree	0	0.00
2 Neutral	0	0.00
3 Agree	3	18.75
4 Strongly agree	13	81.25
Missing	0	0.00
Feasibility_Q7_ordinal		
0 Strongly disagree	0	0.00
1 Disagree	0	0.00
2 Neutral	0	0.00
3 Agree	3	18.75
4 Strongly agree	13	81.25
Missing	0	0.00
Feasibility_Q8_ordinal		
0 Strongly disagree	0	0.00
1 Disagree	0	0.00
2 Neutral	0	0.00
3 Agree	1	6.25
4 Strongly agree	15	93.75
Missing	0	0.00
Feasibility_Q9_ordinal		
0 Strongly disagree	0	0.00
1 Disagree	0	0.00
2 Neutral	0	0.00
3 Agree	1	6.25
4 Strongly agree	15	93.75
Missing	0	0.00
Feasibility_Q10_ordinal		

0 Strongly disagree	0	0.00
1 Disagree	0	0.00
2 Neutral	0	0.00
3 Agree	2	12.50
4 Strongly agree	14	87.50
Missing	0	0.00
Feasibility_Q11_ordinal		
0 Strongly disagree	0	0.00
1 Disagree	0	0.00
2 Neutral	0	0.00
3 Agree	2	12.50
4 Strongly agree	14	87.50
Missing	0	0.00

Note. Due to rounding errors, percentages may not equal 100%.

Summary Statistics

The observations for Feasibility_Cum_ordinal had an average of 42.19 (*SD* = 2.86, SE_M = 0.71, Min = 33.00, Max = 44.00, Skewness = -2.21, Kurtosis = 4.75). When the skewness is greater than 2 in absolute value, the variable is considered to be asymmetrical about its mean. When the kurtosis is greater than or equal to 3, then the variable's distribution is markedly different than a normal distribution in its tendency to produce outliers (Westfall & Henning, 2013). The summary statistics can be found in Table 9.

Include this table but make APA

Table 9

Summary Statistics Table for Interval and Ratio Variables

Variable	*M*	*SD*	*n*	SE_M	Min	Max	Skewness	Kurtosis
Feasibility_Cum_ordinal	42.19	2.86	16	0.71	33.00	44.00	-2.21	4.75

Note. '-' indicates the statistic is undefined due to constant data or an insufficient sample size.

Two-Tailed Wilcoxon Signed Rank Test

Introduction

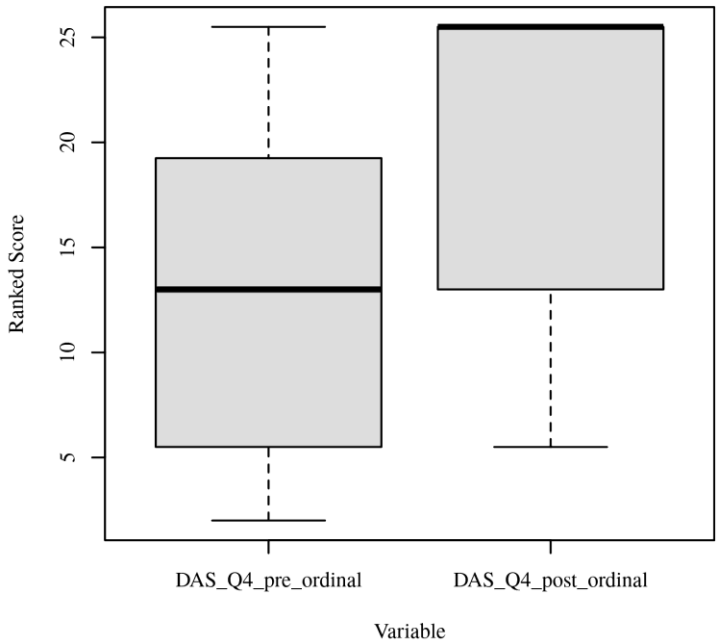
A two-tailed Wilcoxon signed rank test was conducted to examine whether there was a significant difference between DAS_Q4_pre_ordinal and DAS_Q4_post_ordinal. The two-tailed Wilcoxon signed rank test is a non-parametric alternative to the paired samples *t*-test and does not share its distributional assumptions (Conover & Iman, 1981).

Results

The results of the two-tailed Wilcoxon signed rank test were significant based on an alpha value of .05, $V = 0.00$, $z = -3.07$, $p = .002$. This indicates that the differences between DAS_Q4_pre_ordinal and DAS_Q4_post_ordinal are not likely due to random variation. The median of DAS_Q4_pre_ordinal (*Mdn* = 6.00) was significantly lower than the median of DAS_Q4_post_ordinal (*Mdn* = 7.00). Figure 5 presents a boxplot of the ranked values of DAS_Q4_pre_ordinal and DAS_Q4_post_ordinal.

Figure 5

Ranked values of DAS_Q4_pre_ordinal and DAS_Q4_post_ordinal



Two-Tailed Wilcoxon Signed Rank Test

Introduction

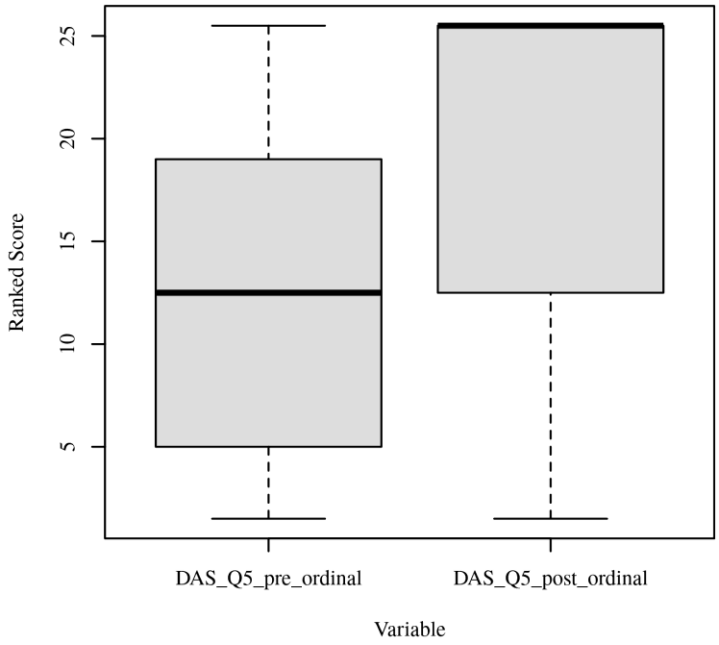
A two-tailed Wilcoxon signed rank test was conducted to examine whether there was a significant difference between DAS_Q5_pre_ordinal and DAS_Q5_post_ordinal. The two-tailed Wilcoxon signed rank test is a non-parametric alternative to the paired samples *t*-test and does not share its distributional assumptions (Conover & Iman, 1981).

Results

The results of the two-tailed Wilcoxon signed rank test were significant based on an alpha value of .05, $V = 10.50$, $z = -2.06$, $p = .039$. This indicates that the differences between DAS_Q5_pre_ordinal and DAS_Q5_post_ordinal are not likely due to random variation. The median of DAS_Q5_pre_ordinal ($Mdn = 6.00$) was significantly lower than the median of DAS_Q5_post_ordinal ($Mdn = 7.00$). Figure 6 presents a boxplot of the ranked values of DAS_Q5_pre_ordinal and DAS_Q5_post_ordinal.

Figure 6

Ranked values of DAS_Q5_pre_ordinal and DAS_Q5_post_ordinal



Two-Tailed Wilcoxon Signed Rank Test

Introduction

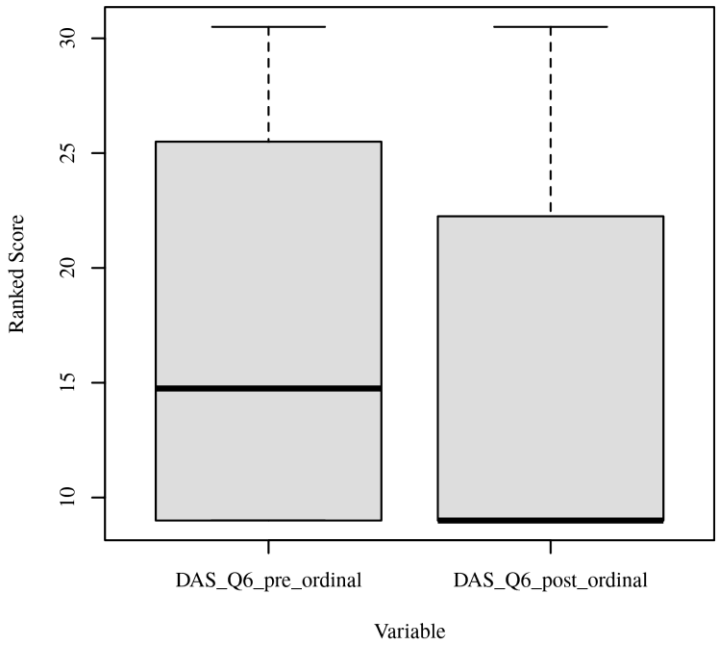
A two-tailed Wilcoxon signed rank test was conducted to examine whether there was a significant difference between DAS_Q6_pre_ordinal and DAS_Q6_post_ordinal. The two-tailed Wilcoxon signed rank test is a non-parametric alternative to the paired samples *t*-test and does not share its distributional assumptions (Conover & Iman, 1981).

Results

The results of the two-tailed Wilcoxon signed rank test were not significant based on an alpha value of .05, $V = 10.50$, $z = -0.81$, $p = .416$. This indicates that the differences between DAS_Q6_pre_ordinal (*Mdn* = 1.50) and DAS_Q6_post_ordinal (*Mdn* = 1.00) are explainable by random variation. Figure 7 presents a boxplot of the ranked values of DAS_Q6_pre_ordinal and DAS_Q6_post_ordinal.

Figure 7

Ranked values of DAS_Q6_pre_ordinal and DAS_Q6_post_ordinal



Two-Tailed Wilcoxon Signed Rank Test

Introduction

A two-tailed Wilcoxon signed rank test was conducted to examine whether there was a significant difference between DAS_Q7_pre_ordinal and DAS_Q7_post_ordinal. The two-tailed Wilcoxon signed rank test is a non-parametric alternative to the paired samples *t*-test and does not share its distributional assumptions (Conover & Iman, 1981).

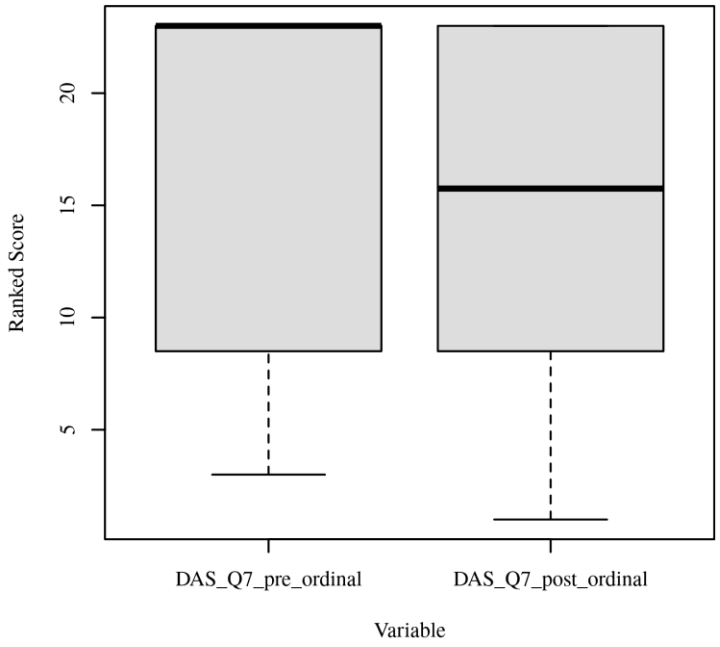
Results

The results of the two-tailed Wilcoxon signed rank test were not significant based on an alpha value of .05, $V = 25.50$, $z = -1.10$, $p = .272$. This indicates that the differences between DAS_Q7_pre_ordinal ($Mdn = 7.00$) and DAS_Q7_post_ordinal ($Mdn = 6.50$) are explainable by

random variation. Figure 8 presents a boxplot of the ranked values of DAS_Q7_pre_ordinal and DAS_Q7_post_ordinal.

Figure 8

Ranked values of DAS_Q7_pre_ordinal and DAS_Q7_post_ordinal



Two-Tailed Wilcoxon Signed Rank Test

Introduction

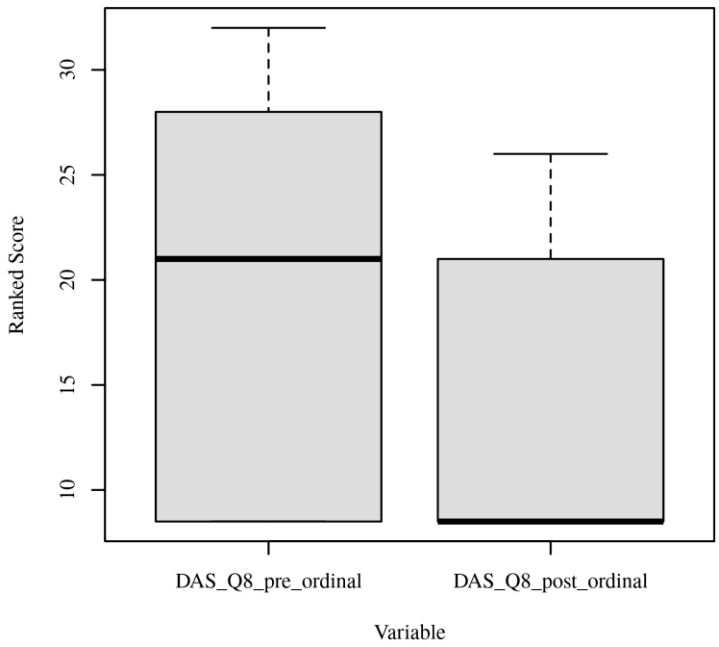
A two-tailed Wilcoxon signed rank test was conducted to examine whether there was a significant difference between DAS_Q8_pre_ordinal and DAS_Q8_post_ordinal. The two-tailed Wilcoxon signed rank test is a non-parametric alternative to the paired samples *t*-test and does not share its distributional assumptions (Conover & Iman, 1981).

Results

The results of the two-tailed Wilcoxon signed rank test were significant based on an alpha value of .05, $V = 33.50$, $z = -2.18$, $p = .030$. This indicates that the differences between DAS_Q8_pre_ordinal and DAS_Q8_post_ordinal are not likely due to random variation. The median of DAS_Q8_pre_ordinal (*Mdn* = 2.00) was significantly larger than the median of DAS_Q8_post_ordinal (*Mdn* = 1.00). Figure 9 presents a boxplot of the ranked values of DAS_Q8_pre_ordinal and DAS_Q8_post_ordinal.

Figure 9

Ranked values of DAS_Q8_pre_ordinal and DAS_Q8_post_ordinal



Two-Tailed Wilcoxon Signed Rank Test

Introduction

A two-tailed Wilcoxon signed rank test was conducted to examine whether there was a significant difference between DAS_Q9_pre_ordinal and DAS_Q9_post_ordinal. The two-tailed

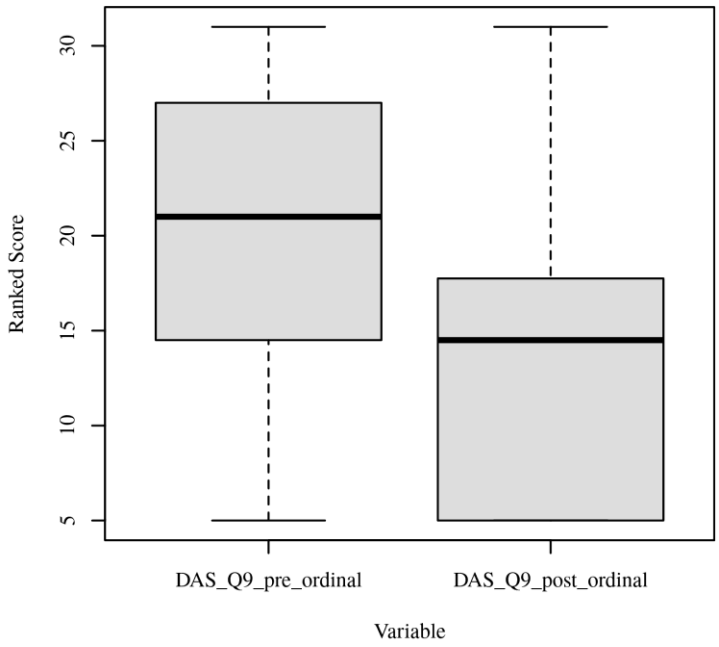
Wilcoxon signed rank test is a non-parametric alternative to the paired samples *t*-test and does not share its distributional assumptions (Conover & Iman, 1981).

Results

The results of the two-tailed Wilcoxon signed rank test were significant based on an alpha value of .05, $V = 47.50$, $z = -2.09$, $p = .037$. This indicates that the differences between DAS_Q9_pre_ordinal and DAS_Q9_post_ordinal are not likely due to random variation. The median of DAS_Q9_pre_ordinal (*Mdn* = 3.00) was significantly larger than the median of DAS_Q9_post_ordinal (*Mdn* = 2.00). Figure 10 presents a boxplot of the ranked values of DAS_Q9_pre_ordinal and DAS_Q9_post_ordinal.

Figure 10

Ranked values of DAS_Q9_pre_ordinal and DAS_Q9_post_ordinal



Two-Tailed Wilcoxon Signed Rank Test

Introduction

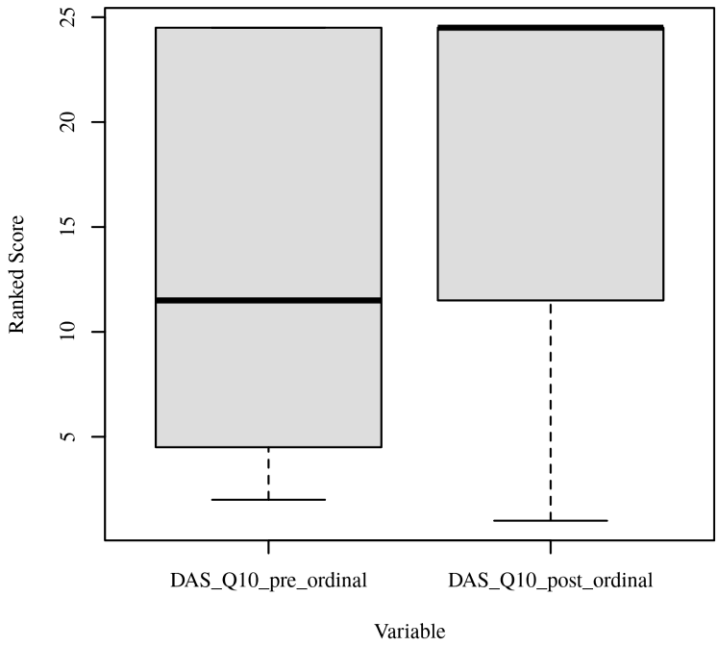
A two-tailed Wilcoxon signed rank test was conducted to examine whether there was a significant difference between DAS_Q10_pre_ordinal and DAS_Q10_post_ordinal. The two-tailed Wilcoxon signed rank test is a non-parametric alternative to the paired samples *t*-test and does not share its distributional assumptions (Conover & Iman, 1981).

Results

The results of the two-tailed Wilcoxon signed rank test were not significant based on an alpha value of .05, $V = 10.00$, $z = -1.14$, $p = .254$. This indicates that the differences between DAS_Q10_pre_ordinal ($Mdn = 6.00$) and DAS_Q10_post_ordinal ($Mdn = 7.00$) are explainable by random variation. Figure 11 presents a boxplot of the ranked values of DAS_Q10_pre_ordinal and DAS_Q10_post_ordinal.

Figure 11

Ranked values of DAS_Q10_pre_ordinal and DAS_Q10_post_ordinal



Two-Tailed Wilcoxon Signed Rank Test

Introduction

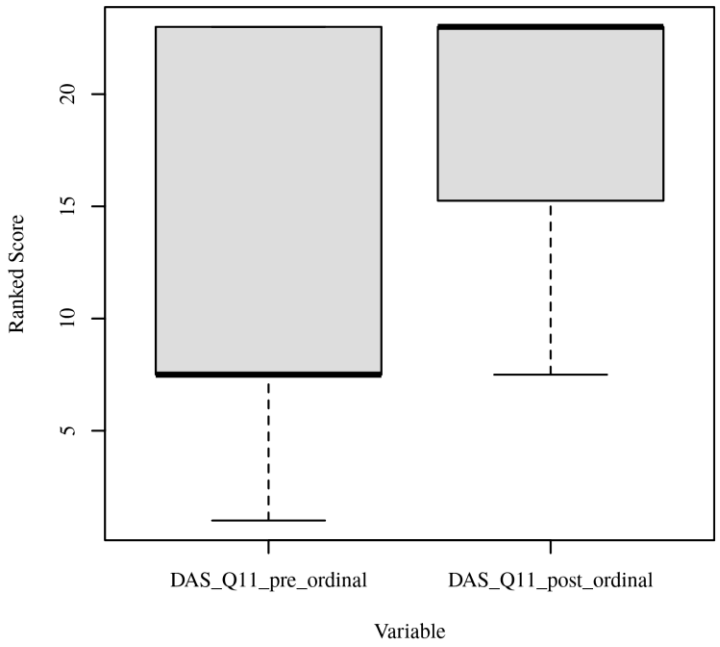
A two-tailed Wilcoxon signed rank test was conducted to examine whether there was a significant difference between DAS_Q11_pre_ordinal and DAS_Q11_post_ordinal. The two-tailed Wilcoxon signed rank test is a non-parametric alternative to the paired samples *t*-test and does not share its distributional assumptions (Conover & Iman, 1981).

Results

The results of the two-tailed Wilcoxon signed rank test were not significant based on an alpha value of .05, $V = 3.50$, $z = -1.90$, $p = .058$. This indicates that the differences between DAS_Q11_pre_ordinal (*Mdn* = 6.00) and DAS_Q11_post_ordinal (*Mdn* = 7.00) are explainable by random variation. Figure 12 presents a boxplot of the ranked values of DAS_Q11_pre_ordinal and DAS_Q11_post_ordinal.

Figure 12

Ranked values of DAS_Q11_pre_ordinal and DAS_Q11_post_ordinal



Two-Tailed Wilcoxon Signed Rank Test

Introduction

A two-tailed Wilcoxon signed rank test was conducted to examine whether there was a significant difference between DAS_Q_12_pre_ordinal and DAS_Q_12_post_ordinal. The two-tailed Wilcoxon signed rank test is a non-parametric alternative to the paired samples *t*-test and does not share its distributional assumptions (Conover & Iman, 1981).

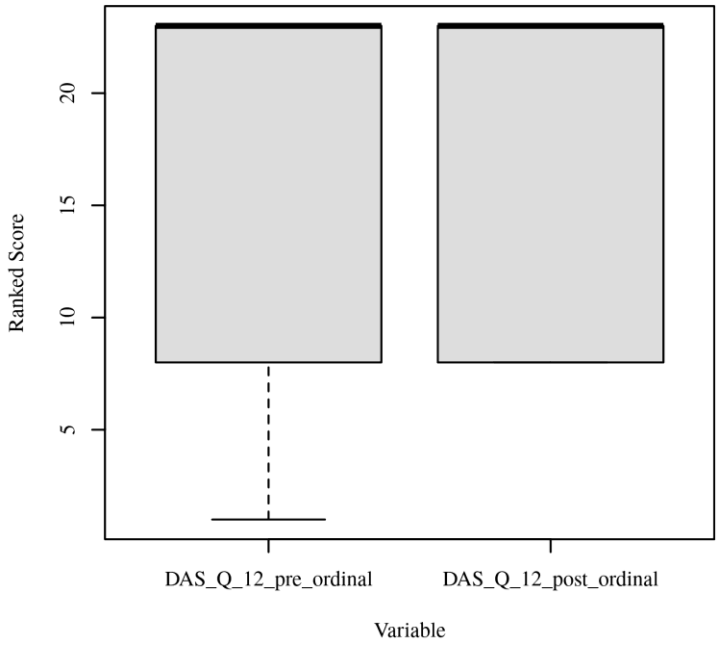
Results

The results of the two-tailed Wilcoxon signed rank test were not significant based on an alpha value of .05, $V = 1.50$, $z = -1.29$, $p = .197$. This indicates that the differences between DAS_Q_12_pre_ordinal (*Mdn* = 7.00) and DAS_Q_12_post_ordinal (*Mdn* = 7.00) are

explainable by random variation. Figure 13 presents a boxplot of the ranked values of DAS_Q_12_pre_ordinal and DAS_Q_12_post_ordinal.

Figure 13

Ranked values of DAS_Q_12_pre_ordinal and DAS_Q_12_post_ordinal



Two-Tailed Wilcoxon Signed Rank Test

Introduction

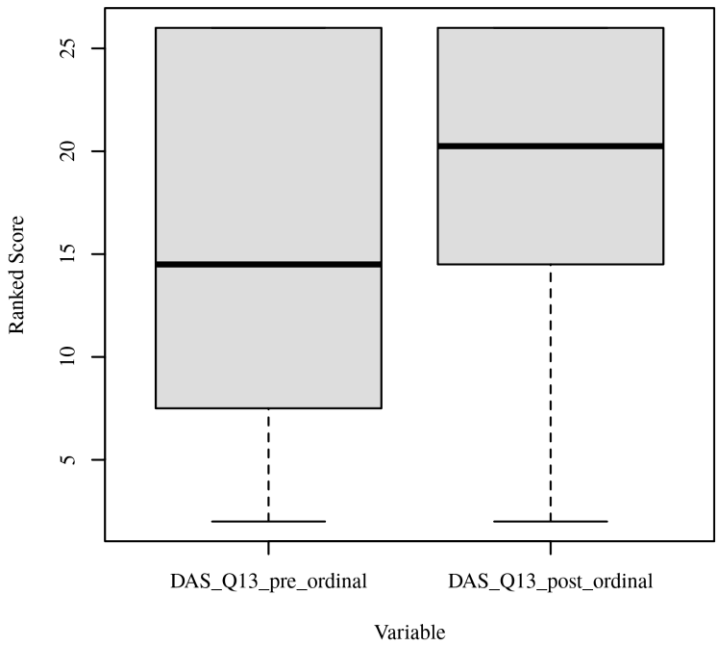
A two-tailed Wilcoxon signed rank test was conducted to examine whether there was a significant difference between DAS_Q13_pre_ordinal and DAS_Q13_post_ordinal. The two-tailed Wilcoxon signed rank test is a non-parametric alternative to the paired samples *t*-test and does not share its distributional assumptions (Conover & Iman, 1981).

Results

The results of the two-tailed Wilcoxon signed rank test were not significant based on an alpha value of .05, $V = 11.00$, $z = -1.72$, $p = .085$. This indicates that the differences between DAS_Q13_pre_ordinal (*Mdn* = 6.00) and DAS_Q13_post_ordinal (*Mdn* = 6.50) are explainable by random variation. Figure 14 presents a boxplot of the ranked values of DAS_Q13_pre_ordinal and DAS_Q13_post_ordinal.

Figure 14

Ranked values of DAS_Q13_pre_ordinal and DAS_Q13_post_ordinal



Two-Tailed Wilcoxon Signed Rank Test

Introduction

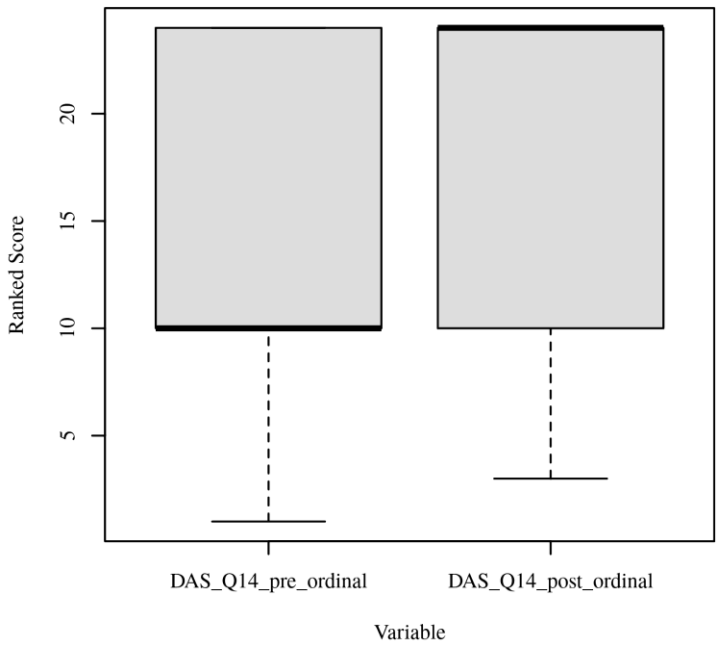
A two-tailed Wilcoxon signed rank test was conducted to examine whether there was a significant difference between DAS_Q14_pre_ordinal and DAS_Q14_post_ordinal. The two-tailed Wilcoxon signed rank test is a non-parametric alternative to the paired samples *t*-test and does not share its distributional assumptions (Conover & Iman, 1981).

Results

The results of the two-tailed Wilcoxon signed rank test were not significant based on an alpha value of .05, $V = 3.50$, $z = -1.63$, $p = .102$. This indicates that the differences between DAS_Q14_pre_ordinal (*Mdn* = 6.00) and DAS_Q14_post_ordinal (*Mdn* = 7.00) are explainable by random variation. Figure 15 presents a boxplot of the ranked values of DAS_Q14_pre_ordinal and DAS_Q14_post_ordinal.

Figure 15

Ranked values of DAS_Q14_pre_ordinal and DAS_Q14_post_ordinal



Two-Tailed Wilcoxon Signed Rank Test

Introduction

A two-tailed Wilcoxon signed rank test was conducted to examine whether there was a significant difference between DAS_Q15_pre_ordinal and DAS_Q15_post_ordinal. The two-

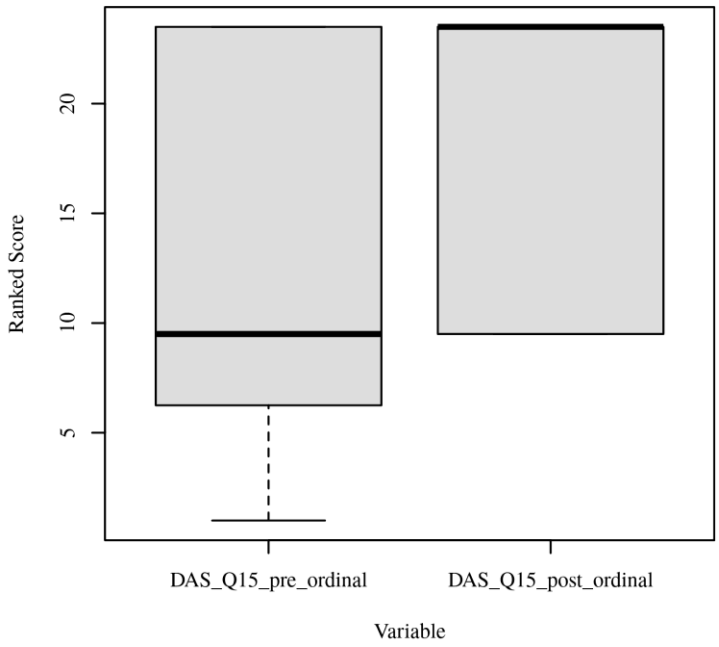
tailed Wilcoxon signed rank test is a non-parametric alternative to the paired samples *t*-test and does not share its distributional assumptions (Conover & Iman, 1981).

Results

The results of the two-tailed Wilcoxon signed rank test were significant based on an alpha value of .05, $V = 2.50$, $z = -1.98$, $p = .047$. This indicates that the differences between DAS_Q15_pre_ordinal and DAS_Q15_post_ordinal are not likely due to random variation. The median of DAS_Q15_pre_ordinal (*Mdn* = 6.00) was significantly lower than the median of DAS_Q15_post_ordinal (*Mdn* = 7.00). Figure 16 presents a boxplot of the ranked values of DAS_Q15_pre_ordinal and DAS_Q15_post_ordinal.

Figure 16

Ranked values of DAS_Q15_pre_ordinal and DAS_Q15_post_ordinal



Two-Tailed Wilcoxon Signed Rank Test

Introduction

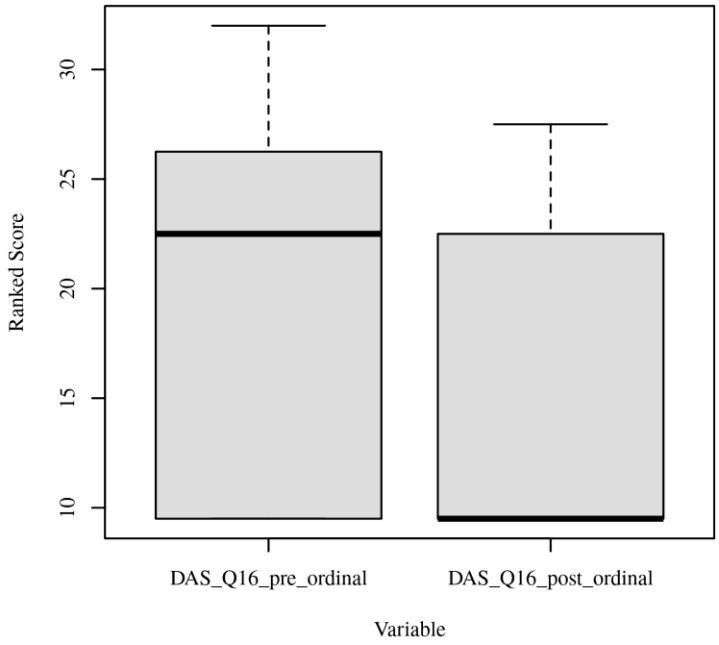
A two-tailed Wilcoxon signed rank test was conducted to examine whether there was a significant difference between DAS_Q16_pre_ordinal and DAS_Q16_post_ordinal. The two-tailed Wilcoxon signed rank test is a non-parametric alternative to the paired samples *t*-test and does not share its distributional assumptions (Conover & Iman, 1981).

Results

The results of the two-tailed Wilcoxon signed rank test were not significant based on an alpha value of .05, $V = 44.00$, $z = -1.72$, $p = .085$. This indicates that the differences between DAS_Q16_pre_ordinal ($Mdn = 2.00$) and DAS_Q16_post_ordinal ($Mdn = 1.00$) are explainable by random variation. Figure 17 presents a boxplot of the ranked values of DAS_Q16_pre_ordinal and DAS_Q16_post_ordinal.

Figure 17

Ranked values of DAS_Q16_pre_ordinal and DAS_Q16_post_ordinal



Two-Tailed Wilcoxon Signed Rank Test

Introduction

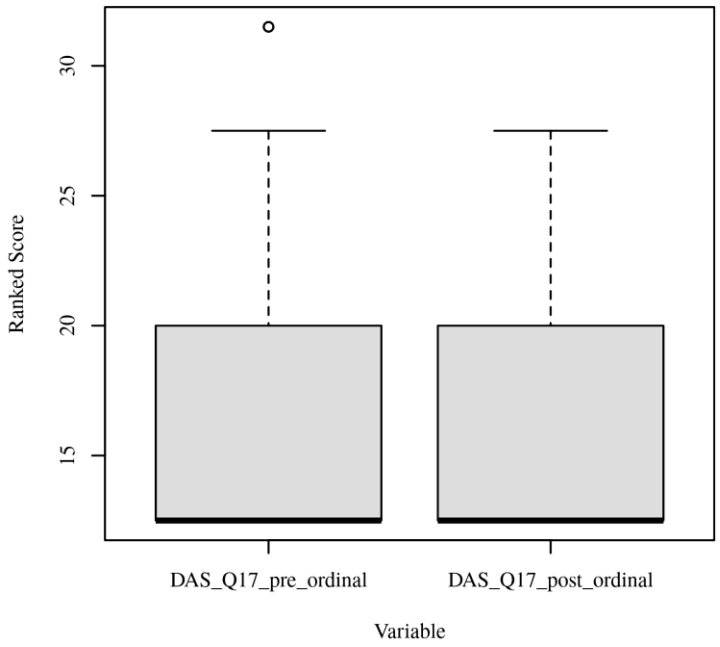
A two-tailed Wilcoxon signed rank test was conducted to examine whether there was a significant difference between DAS_Q17_pre_ordinal and DAS_Q17_post_ordinal. The two-tailed Wilcoxon signed rank test is a non-parametric alternative to the paired samples *t*-test and does not share its distributional assumptions (Conover & Iman, 1981).

Results

The results of the two-tailed Wilcoxon signed rank test were not significant based on an alpha value of .05, $V = 11.00$, $z = -0.96$, $p = .336$. This indicates that the differences between DAS_Q17_pre_ordinal ($Mdn = 1.00$) and DAS_Q17_post_ordinal ($Mdn = 1.00$) are explainable by random variation. Figure 18 presents a boxplot of the ranked values of DAS_Q17_pre_ordinal and DAS_Q17_post_ordinal.

Figure 18

Ranked values of DAS_Q17_pre_ordinal and DAS_Q17_post_ordinal



Two-Tailed Wilcoxon Signed Rank Test

Introduction

A two-tailed Wilcoxon signed rank test was conducted to examine whether there was a significant difference between DAS_Q18_pre_ordinal and DAS_Q18_post_ordinal. The two-tailed Wilcoxon signed rank test is a non-parametric alternative to the paired samples *t*-test and does not share its distributional assumptions (Conover & Iman, 1981).

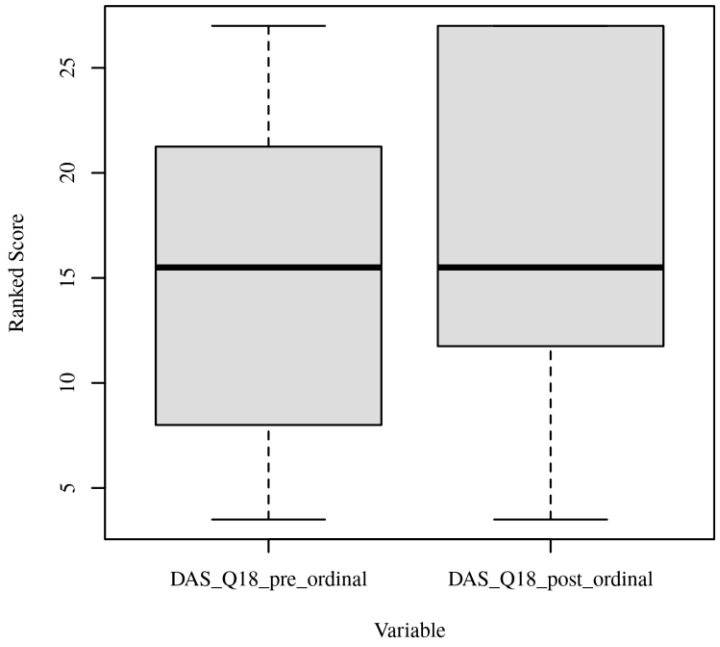
Results

The results of the two-tailed Wilcoxon signed rank test were not significant based on an alpha value of .05, $V = 11.00$, $z = -1.03$, $p = .305$. This indicates that the differences between DAS_Q18_pre_ordinal (*Mdn* = 6.00) and DAS_Q18_post_ordinal (*Mdn* = 6.00) are explainable

by random variation. Figure 19 presents a boxplot of the ranked values of DAS_Q18_pre_ordinal and DAS_Q18_post_ordinal.

Figure 19

Ranked values of DAS_Q18_pre_ordinal and DAS_Q18_post_ordinal



Two-Tailed Wilcoxon Signed Rank Test

Introduction

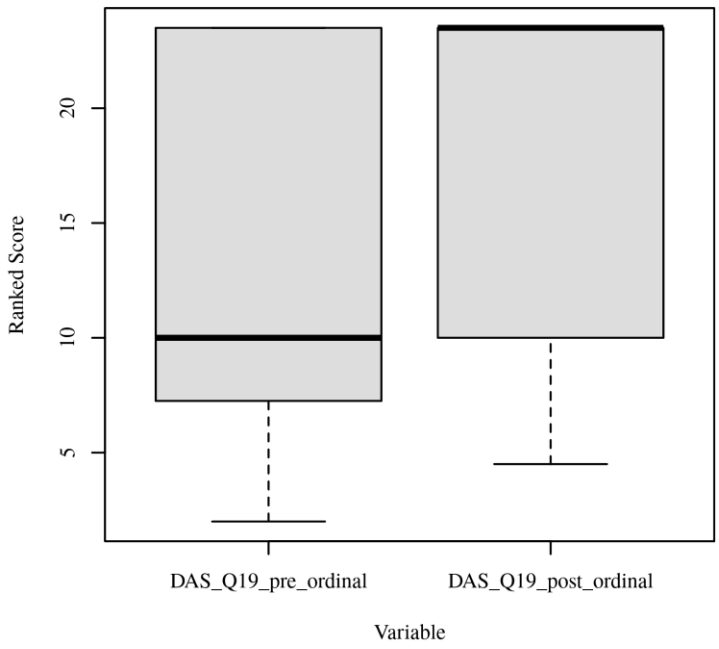
A two-tailed Wilcoxon signed rank test was conducted to examine whether there was a significant difference between DAS_Q19_pre_ordinal and DAS_Q19_post_ordinal. The two-tailed Wilcoxon signed rank test is a non-parametric alternative to the paired samples *t*-test and does not share its distributional assumptions (Conover & Iman, 1981).

Results

The results of the two-tailed Wilcoxon signed rank test were significant based on an alpha value of .05, $V = 0.00$, $z = -2.27$, $p = .023$. This indicates that the differences between DAS_Q19_pre_ordinal and DAS_Q19_post_ordinal are not likely due to random variation. The median of DAS_Q19_pre_ordinal (*Mdn* = 6.00) was significantly lower than the median of DAS_Q19_post_ordinal (*Mdn* = 7.00). Figure 20 presents a boxplot of the ranked values of DAS_Q19_pre_ordinal and DAS_Q19_post_ordinal.

Figure 20

Ranked values of DAS_Q19_pre_ordinal and DAS_Q19_post_ordinal



Two-Tailed Wilcoxon Signed Rank Test

Introduction

A two-tailed Wilcoxon signed rank test was conducted to examine whether there was a significant difference between DAS_Q20_pre_ordinal and DAS_Q20_post_ordinal. The two-

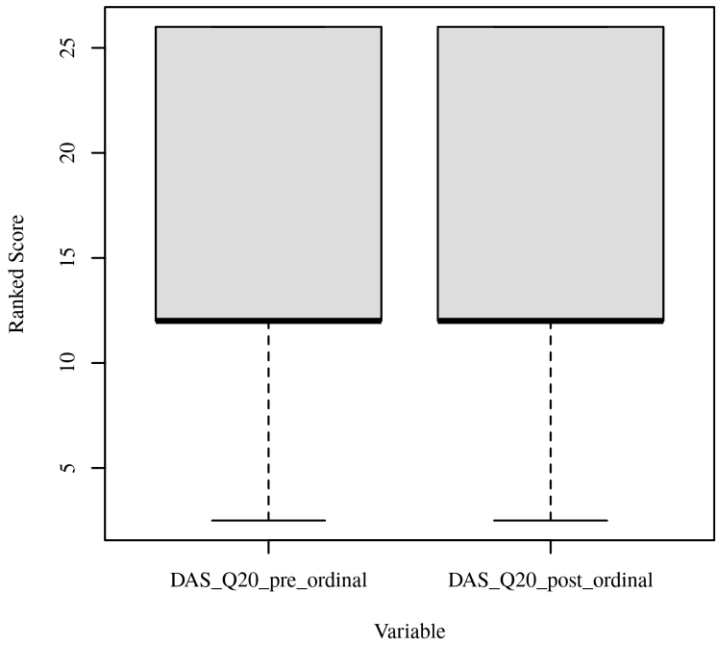
tailed Wilcoxon signed rank test is a non-parametric alternative to the paired samples *t*-test and does not share its distributional assumptions (Conover & Iman, 1981).

Results

The results of the two-tailed Wilcoxon signed rank test were not significant based on an alpha value of .05, $V = 16.00$, $z = -0.30$, $p = .763$. This indicates that the differences between DAS_Q20_pre_ordinal (*Mdn* = 6.00) and DAS_Q20_post_ordinal (*Mdn* = 6.00) are explainable by random variation. Figure 21 presents a boxplot of the ranked values of DAS_Q20_pre_ordinal and DAS_Q20_post_ordinal.

Figure 21

Ranked values of DAS_Q20_pre_ordinal and DAS_Q20_post_ordinal



Two-Tailed Wilcoxon Signed Rank Test

Introduction

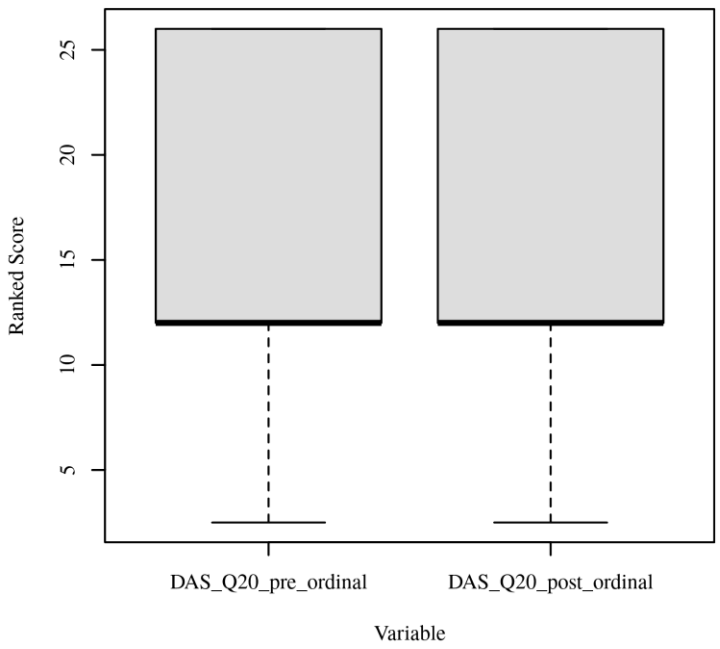
A two-tailed Wilcoxon signed rank test was conducted to examine whether there was a significant difference between DAS_Q20_pre_ordinal and DAS_Q20_post_ordinal. The two-tailed Wilcoxon signed rank test is a non-parametric alternative to the paired samples *t*-test and does not share its distributional assumptions (Conover & Iman, 1981).

Results

The results of the two-tailed Wilcoxon signed rank test were not significant based on an alpha value of .05, $V = 16.00$, $z = -0.30$, $p = .763$. This indicates that the differences between DAS_Q20_pre_ordinal (*Mdn* = 6.00) and DAS_Q20_post_ordinal (*Mdn* = 6.00) are explainable by random variation. Figure 22 presents a boxplot of the ranked values of DAS_Q20_pre_ordinal and DAS_Q20_post_ordinal.

Figure 22

Ranked values of DAS_Q20_pre_ordinal and DAS_Q20_post_ordinal



Two-Tailed Wilcoxon Signed Rank Test

Introduction

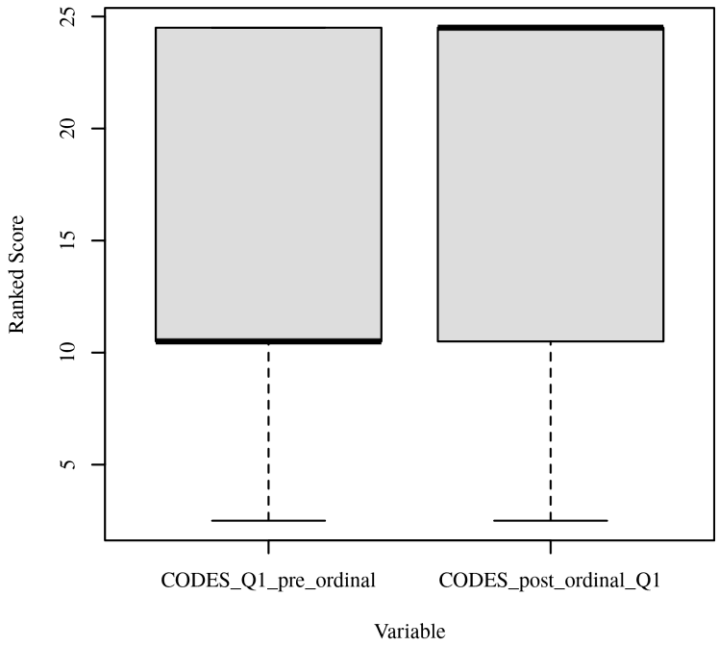
A two-tailed Wilcoxon signed rank test was conducted to examine whether there was a significant difference between CODES_Q1_pre_ordinal and CODES_post_ordinal_Q1. The two-tailed Wilcoxon signed rank test is a non-parametric alternative to the paired samples *t*-test and does not share its distributional assumptions (Conover & Iman, 1981).

Results

The results of the two-tailed Wilcoxon signed rank test were not significant based on an alpha value of .05, $V = 7.00$, $z = -1.61$, $p = .107$. This indicates that the differences between CODES_Q1_pre_ordinal (*Mdn* = 4.00) and CODES_post_ordinal_Q1 (*Mdn* = 5.00) are explainable by random variation. Figure 23 presents a boxplot of the ranked values of CODES_Q1_pre_ordinal and CODES_post_ordinal_Q1.

Figure 23

Ranked values of CODES_Q1_pre_ordinal and CODES_post_ordinal_Q1



Two-Tailed Wilcoxon Signed Rank Test

Introduction

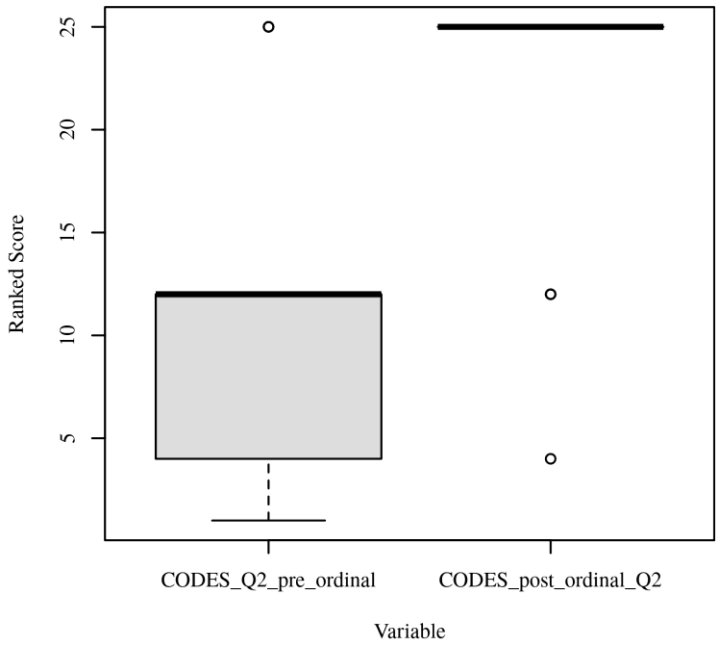
A two-tailed Wilcoxon signed rank test was conducted to examine whether there was a significant difference between CODES_Q2_pre_ordinal and CODES_post_ordinal_Q2. The two-tailed Wilcoxon signed rank test is a non-parametric alternative to the paired samples *t*-test and does not share its distributional assumptions (Conover & Iman, 1981).

Results

The results of the two-tailed Wilcoxon signed rank test were significant based on an alpha value of .05, $V = 0.00$, $z = -3.03$, $p = .002$. This indicates that the differences between CODES_Q2_pre_ordinal and CODES_post_ordinal_Q2 are not likely due to random variation. The median of CODES_Q2_pre_ordinal ($Mdn = 4.00$) was significantly lower than the median of CODES_post_ordinal_Q2 ($Mdn = 5.00$). Figure 24 presents a boxplot of the ranked values of CODES_Q2_pre_ordinal and CODES_post_ordinal_Q2.

Figure 24

Ranked values of CODES_Q2_pre_ordinal and CODES_post_ordinal_Q2



Two-Tailed Wilcoxon Signed Rank Test

Introduction

A two-tailed Wilcoxon signed rank test was conducted to examine whether there was a significant difference between CODES_Q3_pre_ordinal and CODES_post_ordinal_Q3. The two-tailed Wilcoxon signed rank test is a non-parametric alternative to the paired samples *t*-test and does not share its distributional assumptions (Conover & Iman, 1981).

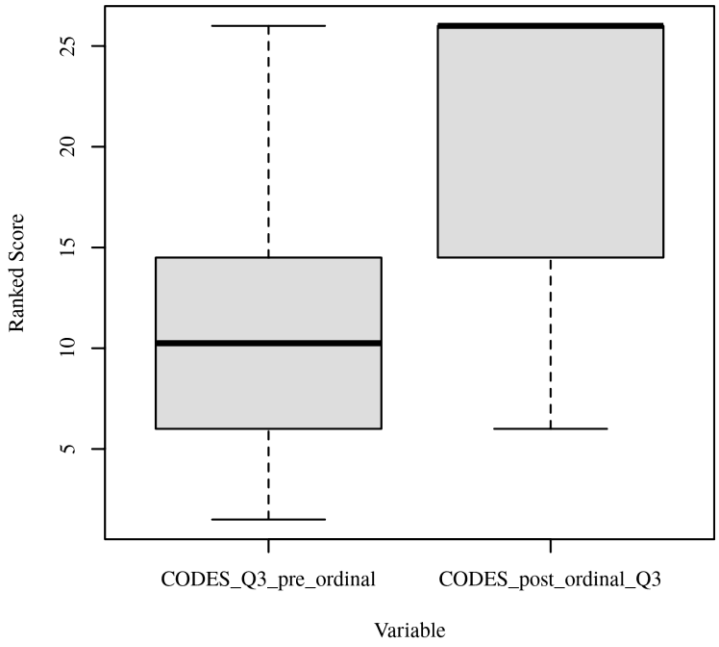
Results

The results of the two-tailed Wilcoxon signed rank test were significant based on an alpha value of .05, $V = 10.50$, $z = -2.72$, $p = .007$. This indicates that the differences between CODES_Q3_pre_ordinal and CODES_post_ordinal_Q3 are not likely due to random variation.

The median of CODES_Q3_pre_ordinal (*Mdn* = 3.50) was significantly lower than the median of CODES_post_ordinal_Q3 (*Mdn* = 5.00). Figure 25 presents a boxplot of the ranked values of CODES_Q3_pre_ordinal and CODES_post_ordinal_Q3.

Figure 25

Ranked values of CODES_Q3_pre_ordinal and CODES_post_ordinal_Q3



Two-Tailed Wilcoxon Signed Rank Test

Introduction

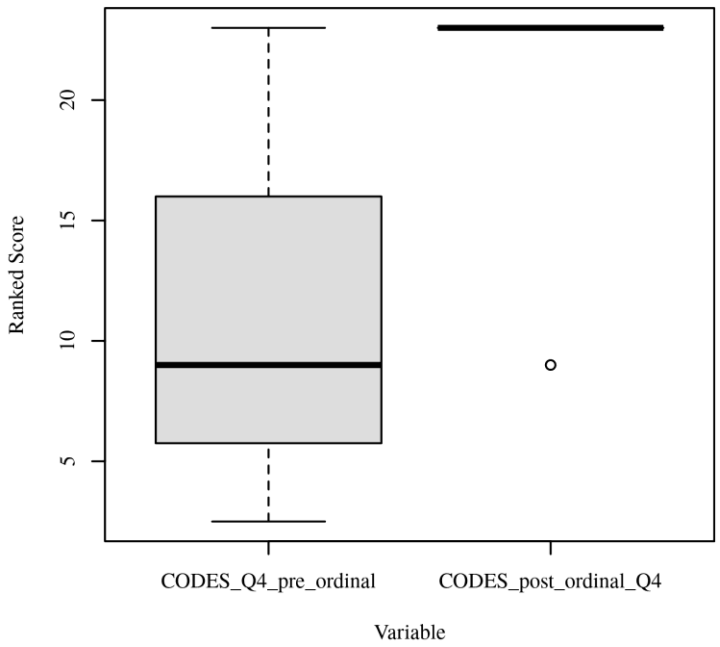
A two-tailed Wilcoxon signed rank test was conducted to examine whether there was a significant difference between CODES_Q4_pre_ordinal and CODES_post_ordinal_Q4. The two-tailed Wilcoxon signed rank test is a non-parametric alternative to the paired samples *t*-test and does not share its distributional assumptions (Conover & Iman, 1981).

Results

The results of the two-tailed Wilcoxon signed rank test were significant based on an alpha value of .05, $V = 0.00$, $z = -3.03$, $p = .002$. This indicates that the differences between CODES_Q4_pre_ordinal and CODES_post_ordinal_Q4 are not likely due to random variation. The median of CODES_Q4_pre_ordinal (*Mdn* = 4.00) was significantly lower than the median of CODES_post_ordinal_Q4 (*Mdn* = 5.00). Figure 26 presents a boxplot of the ranked values of CODES_Q4_pre_ordinal and CODES_post_ordinal_Q4.

Figure 26

Ranked values of CODES_Q4_pre_ordinal and CODES_post_ordinal_Q4



Two-Tailed Wilcoxon Signed Rank Test

Introduction

A two-tailed Wilcoxon signed rank test was conducted to examine whether there was a significant difference between DAS_Q5_pre_ordinal and CODES_post_ordinal_Q5. The two-

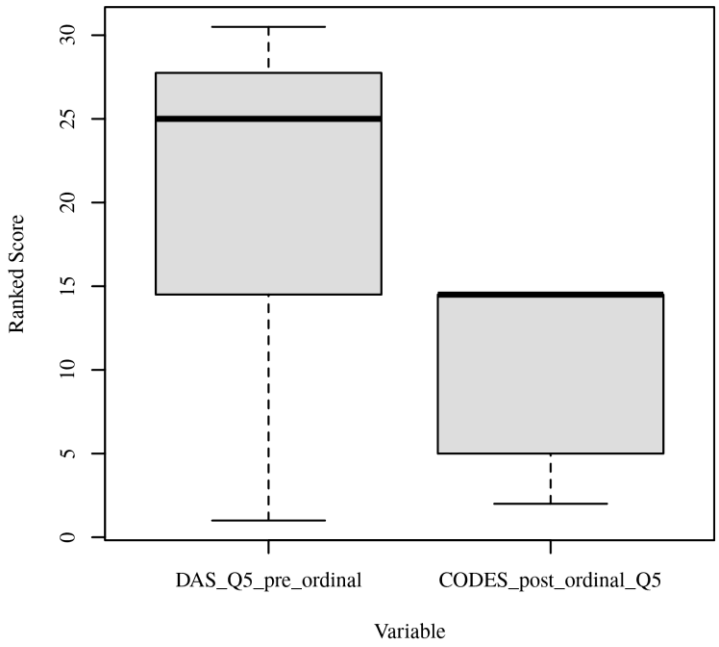
tailed Wilcoxon signed rank test is a non-parametric alternative to the paired samples *t*-test and does not share its distributional assumptions (Conover & Iman, 1981).

Results

The results of the two-tailed Wilcoxon signed rank test were significant based on an alpha value of .05, $V = 91.50$, $z = -2.51$, $p = .012$. This indicates that the differences between DAS_Q5_pre_ordinal and CODES_post_ordinal_Q5 are not likely due to random variation. The median of DAS_Q5_pre_ordinal (*Mdn* = 6.00) was significantly larger than the median of CODES_post_ordinal_Q5 (*Mdn* = 5.00). Figure 27 presents a boxplot of the ranked values of DAS_Q5_pre_ordinal and CODES_post_ordinal_Q5.

Figure 27

Ranked values of DAS_Q5_pre_ordinal and CODES_post_ordinal_Q5



Two-Tailed Wilcoxon Signed Rank Test

Introduction

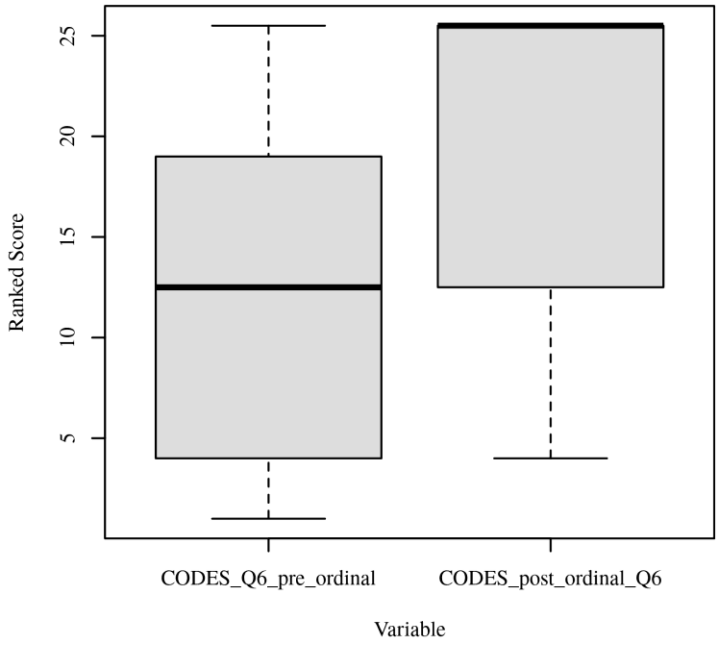
A two-tailed Wilcoxon signed rank test was conducted to examine whether there was a significant difference between CODES_Q6_pre_ordinal and CODES_post_ordinal_Q6. The two-tailed Wilcoxon signed rank test is a non-parametric alternative to the paired samples *t*-test and does not share its distributional assumptions (Conover & Iman, 1981).

Results

The results of the two-tailed Wilcoxon signed rank test were significant based on an alpha value of .05, $V = 4.00$, $z = -2.49$, $p = .013$. This indicates that the differences between CODES_Q6_pre_ordinal and CODES_post_ordinal_Q6 are not likely due to random variation. The median of CODES_Q6_pre_ordinal ($Mdn = 4.00$) was significantly lower than the median of CODES_post_ordinal_Q6 ($Mdn = 5.00$). Figure 28 presents a boxplot of the ranked values of CODES_Q6_pre_ordinal and CODES_post_ordinal_Q6.

Figure 28

Ranked values of CODES_Q6_pre_ordinal and CODES_post_ordinal_Q6



Two-Tailed Wilcoxon Signed Rank Test

Introduction

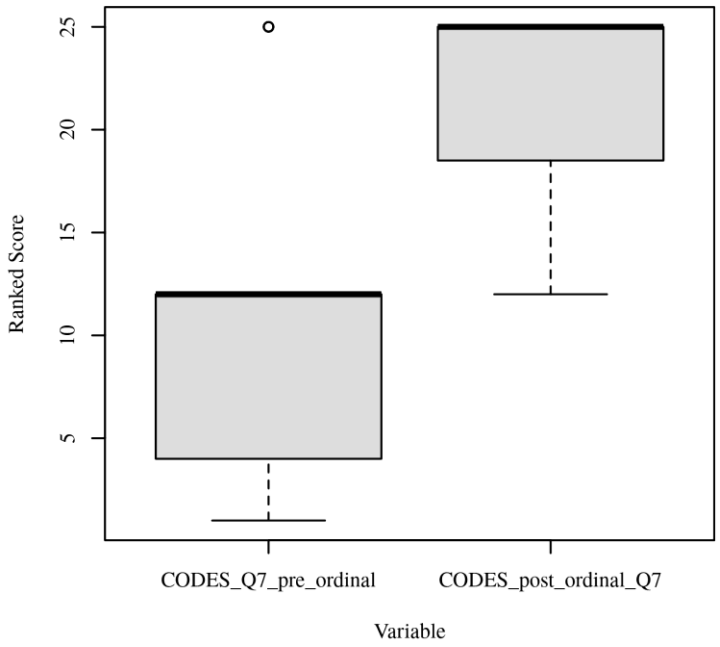
A two-tailed Wilcoxon signed rank test was conducted to examine whether there was a significant difference between CODES_Q7_pre_ordinal and CODES_post_ordinal_Q7. The two-tailed Wilcoxon signed rank test is a non-parametric alternative to the paired samples *t*-test and does not share its distributional assumptions (Conover & Iman, 1981).

Results

The results of the two-tailed Wilcoxon signed rank test were significant based on an alpha value of .05, $V = 5.00$, $z = -2.94$, $p = .003$. This indicates that the differences between CODES_Q7_pre_ordinal and CODES_post_ordinal_Q7 are not likely due to random variation. The median of CODES_Q7_pre_ordinal (*Mdn* = 4.00) was significantly lower than the median of CODES_post_ordinal_Q7 (*Mdn* = 5.00). Figure 29 presents a boxplot of the ranked values of CODES_Q7_pre_ordinal and CODES_post_ordinal_Q7.

Figure 29

Ranked values of CODES_Q7_pre_ordinal and CODES_post_ordinal_Q7



Two-Tailed Wilcoxon Signed Rank Test

Introduction

A two-tailed Wilcoxon signed rank test was conducted to examine whether there was a significant difference between CODES_Q8_pre_ordinal and CODES_post_ordinal_Q8. The two-tailed Wilcoxon signed rank test is a non-parametric alternative to the paired samples *t*-test and does not share its distributional assumptions (Conover & Iman, 1981).

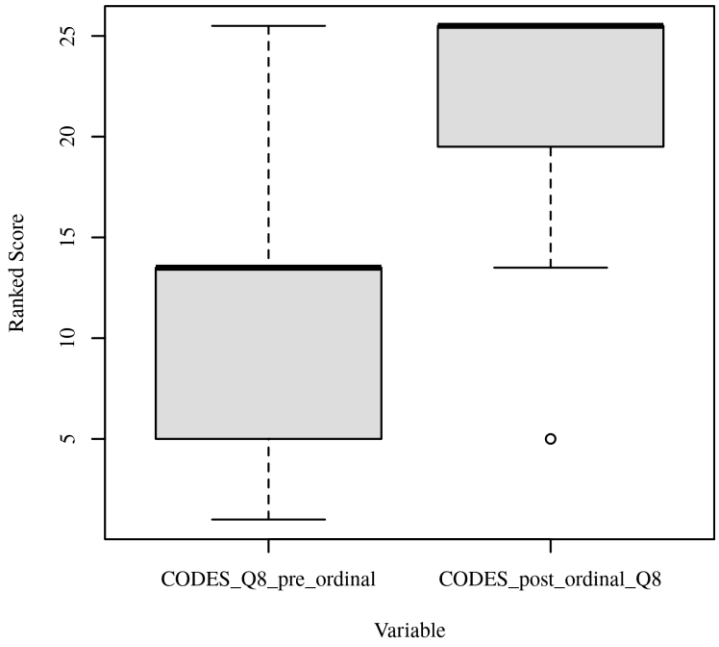
Results

The results of the two-tailed Wilcoxon signed rank test were significant based on an alpha value of .05, $V = 0.00$, $z = -3.17$, $p = .002$. This indicates that the differences between CODES_Q8_pre_ordinal and CODES_post_ordinal_Q8 are not likely due to random variation.

The median of CODES_Q8_pre_ordinal (*Mdn* = 4.00) was significantly lower than the median of CODES_post_ordinal_Q8 (*Mdn* = 5.00). Figure 30 presents a boxplot of the ranked values of CODES_Q8_pre_ordinal and CODES_post_ordinal_Q8.

Figure 30

Ranked values of CODES_Q8_pre_ordinal and CODES_post_ordinal_Q8



Two-Tailed Wilcoxon Signed Rank Test

Introduction

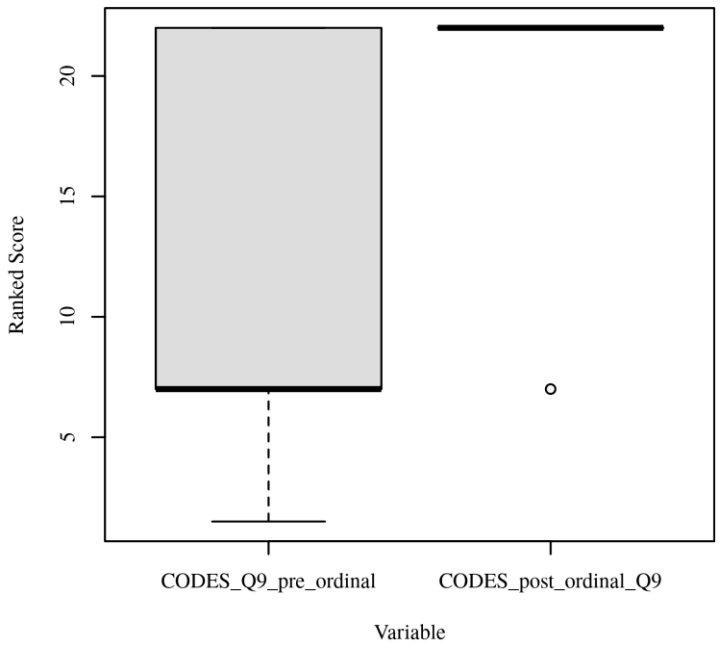
A two-tailed Wilcoxon signed rank test was conducted to examine whether there was a significant difference between CODES_Q9_pre_ordinal and CODES_post_ordinal_Q9. The two-tailed Wilcoxon signed rank test is a non-parametric alternative to the paired samples *t*-test and does not share its distributional assumptions (Conover & Iman, 1981).

Results

The results of the two-tailed Wilcoxon signed rank test were significant based on an alpha value of .05, $V = 0.00$, $z = -2.81$, $p = .005$. This indicates that the differences between CODES_Q9_pre_ordinal and CODES_post_ordinal_Q9 are not likely due to random variation. The median of CODES_Q9_pre_ordinal (*Mdn* = 4.00) was significantly lower than the median of CODES_post_ordinal_Q9 (*Mdn* = 5.00). Figure 31 presents a boxplot of the ranked values of CODES_Q9_pre_ordinal and CODES_post_ordinal_Q9.

Figure 31

Ranked values of CODES_Q9_pre_ordinal and CODES_post_ordinal_Q9



Two-Tailed Wilcoxon Signed Rank Test

Introduction

A two-tailed Wilcoxon signed rank test was conducted to examine whether there was a significant difference between CODES_Cum_Pre_ordinal and CODES_post_Cum_ordinal. The

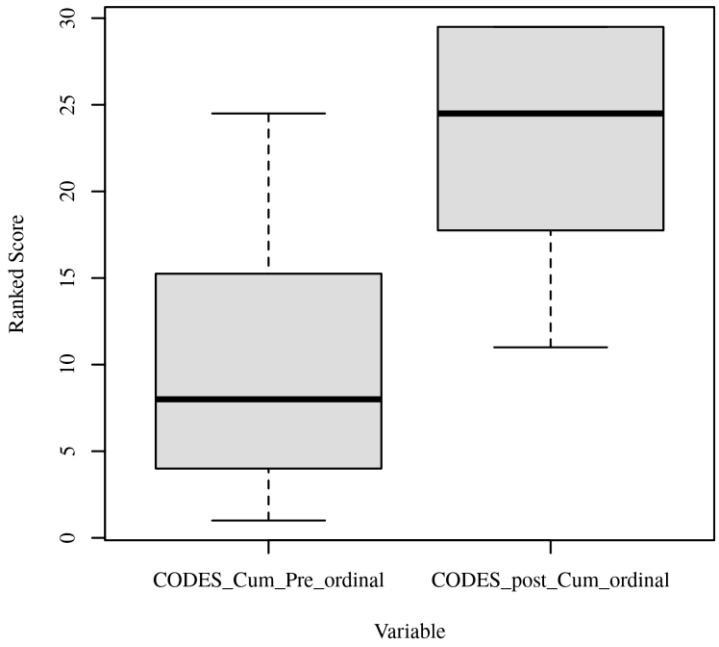
two-tailed Wilcoxon signed rank test is a non-parametric alternative to the paired samples *t*-test and does not share its distributional assumptions (Conover & Iman, 1981).

Results

The results of the two-tailed Wilcoxon signed rank test were significant based on an alpha value of .05, $V = 2.00$, $z = -3.17$, $p = .001$. This indicates that the differences between CODES_Cum_Pre_ordinal and CODES_post_Cum_ordinal are not likely due to random variation. The median of CODES_Cum_Pre_ordinal (*Mdn* = 34.50) was significantly lower than the median of CODES_post_Cum_ordinal (*Mdn* = 44.00). Figure 32 presents a boxplot of the ranked values of CODES_Cum_Pre_ordinal and CODES_post_Cum_ordinal.

Figure 32

Ranked values of CODES_Cum_Pre_ordinal and CODES_post_Cum_ordinal



Two-Tailed Wilcoxon Signed Rank Test

Introduction

A two-tailed Wilcoxon signed rank test was conducted to examine whether there was a significant difference between DAS_Cum_Score_pre_ordinal and DAS_Cum_Post_ordinal. The two-tailed Wilcoxon signed rank test is a non-parametric alternative to the paired samples *t*-test and does not share its distributional assumptions (Conover & Iman, 1981).

Results

The results of the two-tailed Wilcoxon signed rank test were not significant based on an alpha value of .05, $V = 37.00$, $z = -0.16$, $p = .875$. This indicates that the differences between DAS_Cum_Score_pre_ordinal (*Mdn* = 100.00) and DAS_Cum_Post_ordinal (*Mdn* = 101.00) are explainable by random variation. Figure 33 presents a boxplot of the ranked values of DAS_Cum_Score_pre_ordinal and DAS_Cum_Post_ordinal.

Figure 33

Ranked values of DAS_Cum_Score_pre_ordinal and DAS_Cum_Post_ordinal

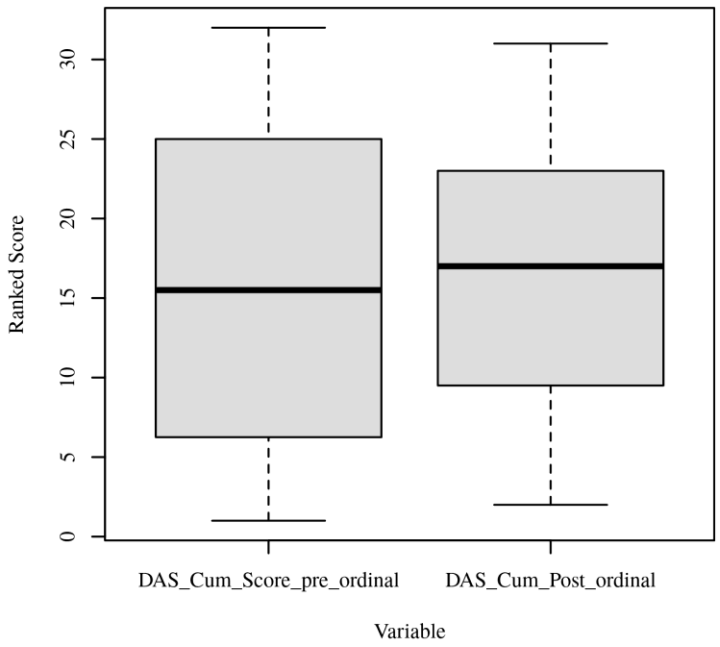


Figure 34

Pie Chart of Education_Level_nominal

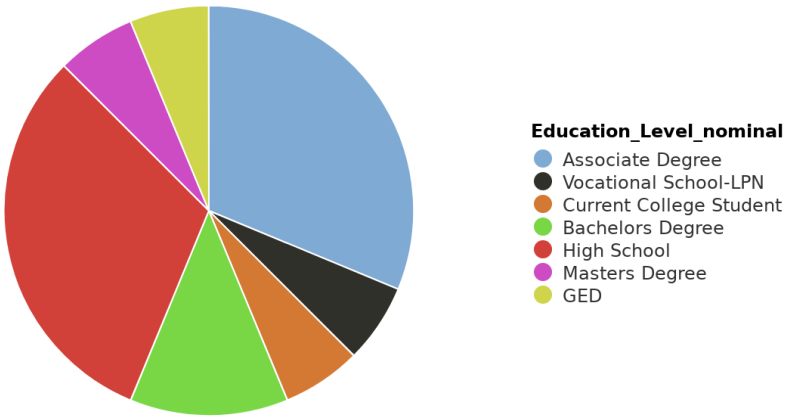


Figure 35

Histogram of Age_scale

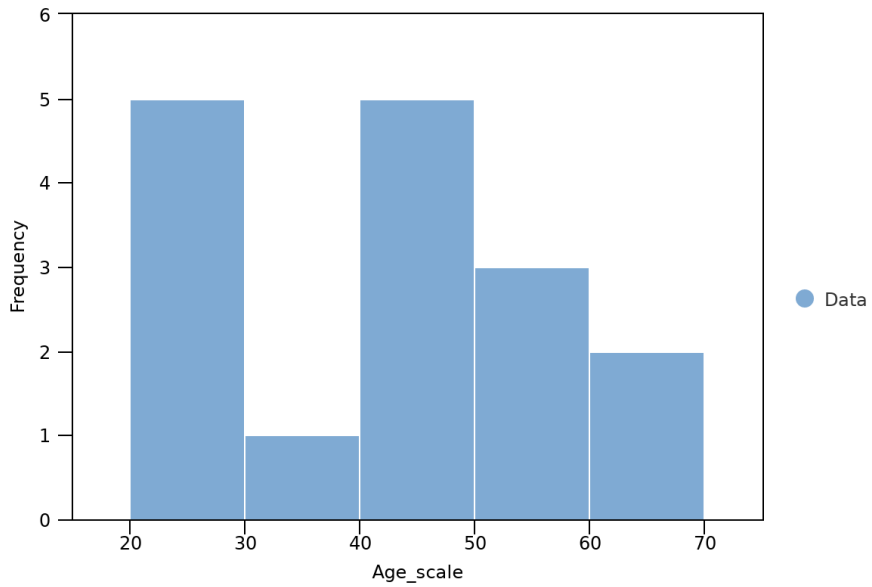
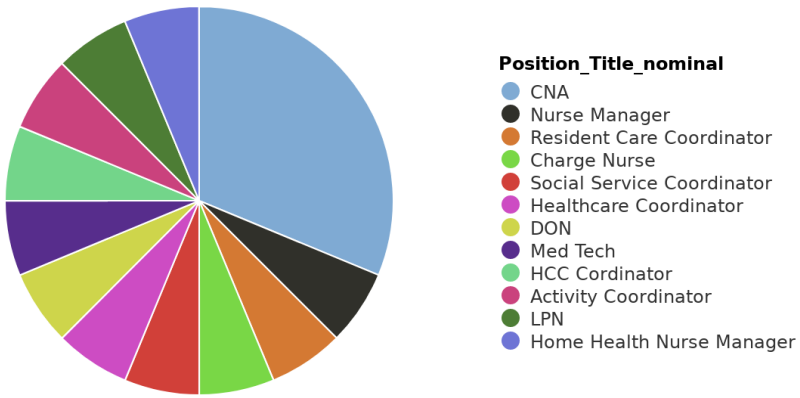


Figure 36

Pie Chart of Position_Title_nominal



References

Conover, W. J., & Iman, R. L. (1981). Rank transformations as a bridge between parametric and nonparametric statistics. *The American Statistician, 35*(3), 124-129. https://doi.org/10.1080/00031305.1981.10479327

Intellectus Statistics [Online computer software]. (2023). Intellectus Statistics. https://statistics.intellectus360.com

Westfall, P. H., & Henning, K. S. S. (2013). *Texts in statistical science: Understanding advanced statistical methods.* Taylor & Francis.

Glossaries

Descriptive Statistics

Descriptive statistics are typically used to describe or summarize the data. It is used as an exploratory method to examine the variables of interest, potentially before conducting inferential statistics on them. They provide summaries of the data and are used to answer descriptive research questions.

Fun Fact! *A GPA is actually a descriptive statistic. It does not tell you how well you performed in a single class, only your average performance across multiple classes.*

Kurtosis: The measure of the tail behavior of a distribution. Positive kurtosis signifies a distribution is more prone to outliers, and negative kurtosis implies a distribution is less prone to outliers.

Mean (*M*): The average value of a scale variable.

Percentage (*%*): The percentage of the frequency or count of a nominal or ordinal category.

Sample Minimum (Min): The smallest numeric value in a given sample.

Sample Maximum (Max): The largest numeric value in a given sample.

Sample Size (*n*): The frequency or count of a nominal or ordinal category.

Skewness: The measure of asymmetry in the distribution of a variable. Positive skewness indicates a long right tail, while negative skewness indicates a long left tail.

Standard Deviation (*SD*): The spread of the data around the mean of a scale variable.

Standard Error of the Mean (SE_M): The estimate of how far the sample mean is likely to differ from the actual population mean.

Wilcoxon Signed Rank

The Wilcoxon Signed Rank test is a non-parametric test used to assess for significant differences between two scale or ordinal variables that can be matched. Typically, the variables are matched

by time (such as pretest vs. posttest), but the data can also be matched by other characteristics (such as husband vs. wife). This test ranks the pairs of scores by the magnitude of the differences between each matched pair, then sums the signed ranks to compute the *V* statistic. The *V* statistic is then used to compute *z*, which in turn is used to compute the *p*-value (i.e., significance level). A significant result for this test suggests that the two matched variables are reliably different from each other (e.g., pretest scores are significantly different from posttest scores). The Wilcoxon Signed Rank test assumes that the variables under investigation are scale or ordinal level.

Fun Fact! *The Wilcoxon Signed Rank test is named after Frank Wilcoxon, a chemist who published more than 70 papers over the course of his career.*

Non-Parametric Test: A type of statistical test that does not require the data to follow a particular distribution; typically used when assumptions of a parametric test are violated or when the data do not fit the level of measurement required by a parametric test.

***p*-value:** The probability of obtaining the observed results if the null hypothesis (no relationship between the independent variable(s) and dependent variable) is true; in most social science research, a result is considered statistically significant if this value is ≤ .05.

***V*-Test Statistic (*V*):** Represents the sum of the signed ranks; used to compute the *z*.

***z*-Test Statistic (*z*):** Used to compute the *p* value.

Raw Output

Descriptives

```
Included Variables:
Ethnicity_nominal, Position_Title_nominal, Age_scale, Years_in_healthcare_scale,
Employment_Status_nominal, Gender_nominal, Years_in_current_study_facility_scale, and
Education_Level_nominal

Sample Size (Complete Cases):
N = 16

Summary Statistics: Frequency Table for Nominal Variables
```

Variable	n	%
Ethnicity_nominal		
African American	7	43.750
Caucasian	6	37.500
Chinese	1	6.250
Hispanic	2	12.500
Missing	0	0.00000
Position_Title_nominal		
CNA	5	31.250
Nurse Manager	1	6.250
Resident Care Coordinator	1	6.250
Charge Nurse	1	6.250
Social Service Coordinator	1	6.250
Healthcare Coordinator	1	6.250
DON	1	6.250

Med Tech	1	6.250
HCC Cordinator	1	6.250
Activity Coordinator	1	6.250
LPN	1	6.250
Home Health Nurse Manager	1	6.250
Missing	0	0.00000
Employment_Status_nominal		
Fulltime	15	93.750
Part Time	1	6.250
Missing	0	0.00000
Gender_nominal		
Female	16	100.000
Missing	0	0.00000
Education_Level_nominal		
Associate Degree	5	31.250
Vocational School-LPN	1	6.250
Current College Student	1	6.250
Bachelors Degree	2	12.500
High School	5	31.250
Masters Degree	1	6.250
GED	1	6.250
Missing	0	0.00000

Summary Statistics: Scale

Variable	M	SD	n	95% CI	SE_M	Min	Max	Skewness	Kurtosis
Age_scale	44.000	14.133	16	[36.469, 51.531]	3.533	24.000	67.000	0.0160	-1.245
Years_in_healthcare_scale	17.500	11.530	16	[11.356, 23.644]	2.882	2.000	38.000	0.370	-1.226
Years_in_current_study_facility_scale	5.964	6.561	16	[2.468, 9.460]	1.640	0.250	23.000	1.356	0.913

Quantiles:

	Age_scale	Years_in_healthcare_scale	Years_in_current_study_facility_scale
10%	27.000	5.500	0.585
20%	28.000	7.000	1.000
25%	28.750	7.750	1.750
30%	32.000	9.000	2.000
40%	45.000	10.000	2.000
50%	46.000	15.000	3.000
60%	49.000	20.000	5.000
70%	50.500	24.500	7.500

75%	53.000	27.000	8.000
80%	56.000	30.000	8.000
90%	62.000	32.500	15.000

Two-Tailed Wilcoxon Signed Rank Test for DAS_Q1_pre_ordinal and DAS_Q1_post_ordinal

Included Variables:
DAS_Q1_pre_ordinal and DAS_Q1_post_ordinal

Sample Size (Complete Cases):
N = 16

Results:
V = 10.000, z = -0.707, p = 0.480

Medians:
DAS_Q1_pre_ordinal = 7.000 and DAS_Q1_post_ordinal = 7.000

Descriptives

Included Variables:
DAS_Q1_pre_ordinal, DAS_Q1_post_ordinal, DAS_Q2_pre_ordinal, DAS_Q2_post_ordinal, DAS_Q3_pre_ordinal, DAS_Q3_post_ordinal, DAS_Q4_pre_ordinal, DAS_Q4_post_ordinal, DAS_Q5_pre_ordinal, and DAS_Q5_post_ordinal

Sample Size (Complete Cases):
N = 16

Summary Statistics: Frequency Table for Ordinal Variables

Variable	n	%
DAS_Q1_pre_ordinal		
1 Strongly disagree	0	0.00000
2 Disagree	0	0.00000
3 Slightly disagree	0	0.00000
4 Neutral	0	0.00000
5 Slightly agree	0	0.00000
6 Agree	7	43.750
7 Strongly agree	9	56.250
Missing	0	0.00000
DAS_Q1_post_ordinal		
1 Strongly disagree	0	0.00000
2 Disagree	0	0.00000
3 Slightly disagree	0	0.00000
4 Neutral	1	6.250
5 Slightly agree	0	0.00000
6 Agree	6	37.500
7 Strongly agree	9	56.250
Missing	0	0.00000
DAS_Q2_pre_ordinal		
1 Strongly Agree	11	68.750
2 Agree	0	0.00000
3 Slightly agree	0	0.00000

4 Neutral	4	25.000
5 Slightly disagree	1	6.250
6 Disagree	0	0.00000
7 Strongly disagree	0	0.00000
Missing	0	0.00000
DAS_Q2_post_ordinal		
1 Strongly Agree	13	81.250
2 Agree	2	12.500
3 Slightly agree	0	0.00000
4 Neutral	0	0.00000
5 Slightly disagree	1	6.250
6 Disagree	0	0.00000
7 Strongly disagree	0	0.00000
Missing	0	0.00000
DAS_Q3_pre_ordinal		
1 Strongly disagree	0	0.00000
2 Disagree	0	0.00000
3 Slightly disagree	0	0.00000
4 Neutral	2	12.500
5 Slightly agree	2	12.500
6 Agree	7	43.750
7 Strongly agree	5	31.250
Missing	0	0.00000
DAS_Q3_post_ordinal		
1 Strongly disagree	0	0.00000
2 Disagree	0	0.00000
3 Slightly disagree	0	0.00000
4 Neutral	0	0.00000
5 Slightly agree	2	12.500
6 Agree	6	37.500
7 Strongly agree	8	50.000
Missing	0	0.00000
DAS_Q4_pre_ordinal		
1 Strongly disagree	0	0.00000
2 Disagree	0	0.00000
3 Slightly disagree	0	0.00000
4 Neutral	3	18.750
5 Slightly agree	3	18.750
6 Agree	6	37.500
7 Strongly agree	4	25.000
Missing	0	0.00000
DAS_Q4_post_ordinal		
1 Strongly disagree	0	0.00000
2 Disagree	0	0.00000
3 Slightly disagree	0	0.00000
4 Neutral	0	0.00000

5 Slightly agree	1	6.250
6 Agree	5	31.250
7 Strongly agree	10	62.500
Missing	0	0.00000
DAS_Q5_pre_ordinal		
1 Strongly disagree	1	6.250
2 Disagree	0	0.00000
3 Slightly disagree	0	0.00000
4 Neutral	1	6.250
5 Slightly agree	3	18.750
6 Agree	7	43.750
7 Strongly agree	4	25.000
Missing	0	0.00000
DAS_Q5_post_ordinal		
1 Strongly disagree	1	6.250
2 Disagree	0	0.00000
3 Slightly disagree	0	0.00000
4 Neutral	0	0.00000
5 Slightly agree	0	0.00000
6 Agree	5	31.250
7 Strongly agree	10	62.500
Missing	0	0.00000

Descriptives

Included Variables:
DAS_Q6_pre_ordinal, DAS_Q6_post_ordinal, DAS_Q7_pre_ordinal, DAS_Q7_post_ordinal, DAS_Q8_pre_ordinal, DAS_Q8_post_ordinal, DAS_Q9_pre_ordinal, DAS_Q9_post_ordinal, DAS_Q10_pre_ordinal, and DAS_Q10_post_ordinal

Sample Size (Complete Cases):
N = 16

Summary Statistics: Frequency Table for Ordinal Variables

Variable	n	%
DAS_Q6_pre_ordinal		
1 Strongly Agree	8	50.000
2 Agree	3	18.750
3 Slightly agree	0	0.00000
4 Neutral	0	0.00000
5 Slightly disagree	2	12.500
6 Disagree	1	6.250
7 Strongly disagree	2	12.500
Missing	0	0.00000
DAS_Q6_post_ordinal		
1 Strongly Agree	9	56.250
2 Agree	3	18.750
3 Slightly agree	1	6.250

4 Neutral	0	0.00000
5 Slightly disagree	0	0.00000
6 Disagree	1	6.250
7 Strongly disagree	2	12.500
Missing	0	0.00000
DAS_Q7_pre_ordinal		
1 Strongly disagree	0	0.00000
2 Disagree	0	0.00000
3 Slightly disagree	0	0.00000
4 Neutral	0	0.00000
5 Slightly agree	1	6.250
6 Agree	4	25.000
7 Strongly agree	11	68.750
Missing	0	0.00000
DAS_Q7_post_ordinal		
1 Strongly disagree	1	6.250
2 Disagree	0	0.00000
3 Slightly disagree	0	0.00000
4 Neutral	1	6.250
5 Slightly agree	0	0.00000
6 Agree	6	37.500
7 Strongly agree	8	50.000
Missing	0	0.00000
DAS_Q8_pre_ordinal		
1 Strongly Agree	6	37.500
2 Agree	4	25.000
3 Slightly agree	0	0.00000
4 Neutral	3	18.750
5 Slightly disagree	0	0.00000
6 Disagree	2	12.500
7 Strongly disagree	1	6.250
Missing	0	0.00000
DAS_Q8_post_ordinal		
1 Strongly Agree	10	62.500
2 Agree	5	31.250
3 Slightly agree	1	6.250
4 Neutral	0	0.00000
5 Slightly disagree	0	0.00000
6 Disagree	0	0.00000
7 Strongly disagree	0	0.00000
Missing	0	0.00000
DAS_Q9_pre_ordinal		
1 Strongly Agree	3	18.750
2 Agree	4	25.000
3 Slightly agree	2	12.500
4 Neutral	2	12.500

5 Slightly disagree	3	18.750
6 Disagree	1	6.250
7 Strongly disagree	1	6.250
Missing	0	0.00000
DAS_Q9_post_ordinal		
1 Strongly Agree	6	37.500
2 Agree	6	37.500
3 Slightly agree	1	6.250
4 Neutral	1	6.250
5 Slightly disagree	0	0.00000
6 Disagree	0	0.00000
7 Strongly disagree	2	12.500
Missing	0	0.00000
DAS_Q10_pre_ordinal		
1 Strongly disagree	0	0.00000
2 Disagree	0	0.00000
3 Slightly disagree	0	0.00000
4 Neutral	1	6.250
5 Slightly agree	4	25.000
6 Agree	5	31.250
7 Strongly agree	6	37.500
Missing	0	0.00000
DAS_Q10_post_ordinal		
1 Strongly disagree	0	0.00000
2 Disagree	1	6.250
3 Slightly disagree	0	0.00000
4 Neutral	0	0.00000
5 Slightly agree	0	0.00000
6 Agree	5	31.250
7 Strongly agree	10	62.500
Missing	0	0.00000

Descriptives

Included Variables:
DAS_Q11_pre_ordinal, DAS_Q11_post_ordinal, DAS_Q_12_pre_ordinal,
DAS_Q_12_post_ordinal, DAS_Q13_pre_ordinal, DAS_Q13_post_ordinal, DAS_Q14_pre_ordinal,
DAS_Q14_post_ordinal, DAS_Q15_pre_ordinal, and DAS_Q15_post_ordinal

Sample Size (Complete Cases):
N = 16

Summary Statistics: Frequency Table for Ordinal Variables

Variable	n	%
DAS_Q11_pre_ordinal		
1 Strongly disagree	0	0.00000
2 Disagree	0	0.00000
3 Slightly disagree	0	0.00000

4 Neutral	1	6.250
5 Slightly agree	0	0.00000
6 Agree	8	50.000
7 Strongly agree	7	43.750
Missing	0	0.00000
DAS_Q11_post_ordinal		
1 Strongly disagree	0	0.00000
2 Disagree	0	0.00000
3 Slightly disagree	0	0.00000
4 Neutral	0	0.00000
5 Slightly agree	0	0.00000
6 Agree	4	25.000
7 Strongly agree	12	75.000
Missing	0	0.00000
DAS_Q_12_pre_ordinal		
1 Strongly disagree	0	0.00000
2 Disagree	0	0.00000
3 Slightly disagree	1	6.250
4 Neutral	0	0.00000
5 Slightly agree	1	6.250
6 Agree	5	31.250
7 Strongly agree	9	56.250
Missing	0	0.00000
DAS_Q_12_post_ordinal		
1 Strongly disagree	0	0.00000
2 Disagree	0	0.00000
3 Slightly disagree	0	0.00000
4 Neutral	0	0.00000
5 Slightly agree	0	0.00000
6 Agree	6	37.500
7 Strongly agree	10	62.500
Missing	0	0.00000
DAS_Q13_pre_ordinal		
1 Strongly disagree	0	0.00000
2 Disagree	0	0.00000
3 Slightly disagree	2	12.500
4 Neutral	1	6.250
5 Slightly agree	4	25.000
6 Agree	4	25.000
7 Strongly agree	5	31.250
Missing	0	0.00000
DAS_Q13_post_ordinal		
1 Strongly disagree	0	0.00000
2 Disagree	0	0.00000
3 Slightly disagree	1	6.250
4 Neutral	1	6.250

5 Slightly agree	0	0.00000
6 Agree	6	37.500
7 Strongly agree	8	50.000
Missing	0	0.00000
DAS_Q14_pre_ordinal		
1 Strongly disagree	0	0.00000
2 Disagree	0	0.00000
3 Slightly disagree	0	0.00000
4 Neutral	1	6.250
5 Slightly agree	1	6.250
6 Agree	7	43.750
7 Strongly agree	7	43.750
Missing	0	0.00000
DAS_Q14_post_ordinal		
1 Strongly disagree	0	0.00000
2 Disagree	0	0.00000
3 Slightly disagree	0	0.00000
4 Neutral	0	0.00000
5 Slightly agree	2	12.500
6 Agree	4	25.000
7 Strongly agree	10	62.500
Missing	0	0.00000
DAS_Q15_pre_ordinal		
1 Strongly disagree	0	0.00000
2 Disagree	0	0.00000
3 Slightly disagree	0	0.00000
4 Neutral	1	6.250
5 Slightly agree	3	18.750
6 Agree	5	31.250
7 Strongly agree	7	43.750
Missing	0	0.00000
DAS_Q15_post_ordinal		
1 Strongly disagree	0	0.00000
2 Disagree	0	0.00000
3 Slightly disagree	0	0.00000
4 Neutral	0	0.00000
5 Slightly agree	0	0.00000
6 Agree	5	31.250
7 Strongly agree	11	68.750
Missing	0	0.00000

Descriptives

Included Variables:
DAS_Q16_pre_ordinal, DAS_Q16_post_ordinal, DAS_Q17_pre_ordinal, DAS_Q17_post_ordinal, DAS_Q18_pre_ordinal, DAS_Q18_post_ordinal, DAS_Q19_pre_ordinal, DAS_Q19_post_ordinal, DAS_Q20_pre_ordinal, and DAS_Q20_post_ordinal

Sample Size (Complete Cases):
N = 16

Summary Statistics: Frequency Table for Ordinal Variables

Variable	n	%
DAS_Q16_pre_ordinal		
1 Strongly Agree	7	43.750
2 Agree	5	31.250
3 Slightly agree	0	0.00000
4 Neutral	0	0.00000
5 Slightly disagree	3	18.750
6 Disagree	1	6.250
7 Strongly disagree	0	0.00000
Missing	0	0.00000
DAS_Q16_post_ordinal		
1 Strongly Agree	11	68.750
2 Agree	3	18.750
3 Slightly agree	0	0.00000
4 Neutral	2	12.500
5 Slightly disagree	0	0.00000
6 Disagree	0	0.00000
7 Strongly disagree	0	0.00000
Missing	0	0.00000
DAS_Q17_pre_ordinal		
1 Strongly Agree	12	75.000
2 Agree	2	12.500
3 Slightly agree	0	0.00000
4 Neutral	0	0.00000
5 Slightly disagree	2	12.500
6 Disagree	0	0.00000
7 Strongly disagree	0	0.00000
Missing	0	0.00000
DAS_Q17_post_ordinal		
1 Strongly Agree	12	75.000
2 Agree	4	25.000
3 Slightly agree	0	0.00000
4 Neutral	0	0.00000
5 Slightly disagree	0	0.00000
6 Disagree	0	0.00000
7 Strongly disagree	0	0.00000
Missing	0	0.00000
DAS_Q18_pre_ordinal		
1 Strongly disagree	0	0.00000
2 Disagree	0	0.00000
3 Slightly disagree	0	0.00000
4 Neutral	3	18.750
5 Slightly agree	2	12.500

6 Agree	7	43.750
7 Strongly agree	4	25.000
Missing	0	0.00000
DAS_Q18_post_ordinal		
1 Strongly disagree	0	0.00000
2 Disagree	0	0.00000
3 Slightly disagree	0	0.00000
4 Neutral	3	18.750
5 Slightly agree	1	6.250
6 Agree	5	31.250
7 Strongly agree	7	43.750
Missing	0	0.00000
DAS_Q19_pre_ordinal		
1 Strongly disagree	0	0.00000
2 Disagree	0	0.00000
3 Slightly disagree	0	0.00000
4 Neutral	3	18.750
5 Slightly agree	1	6.250
6 Agree	5	31.250
7 Strongly agree	7	43.750
Missing	0	0.00000
DAS_Q19_post_ordinal		
1 Strongly disagree	0	0.00000
2 Disagree	0	0.00000
3 Slightly disagree	0	0.00000
4 Neutral	0	0.00000
5 Slightly agree	1	6.250
6 Agree	4	25.000
7 Strongly agree	11	68.750
Missing	0	0.00000
DAS_Q20_pre_ordinal		
1 Strongly disagree	0	0.00000
2 Disagree	0	0.00000
3 Slightly disagree	0	0.00000
4 Neutral	0	0.00000
5 Slightly agree	3	18.750
6 Agree	6	37.500
7 Strongly agree	7	43.750
Missing	0	0.00000
DAS_Q20_post_ordinal		
1 Strongly disagree	0	0.00000
2 Disagree	0	0.00000
3 Slightly disagree	0	0.00000
4 Neutral	0	0.00000
5 Slightly agree	1	6.250
6 Agree	9	56.250

7 Strongly agree	6	37.500
Missing	0	0.00000

Two-Tailed Wilcoxon Signed Rank Test for DAS_Q2_pre_ordinal and DAS_Q2_post_ordinal

Included Variables:
DAS_Q2_pre_ordinal and DAS_Q2_post_ordinal

Sample Size (Complete Cases):
N = 16

Results:
V = 10.000, z = -1.857, p = 0.0633

Medians:
DAS_Q2_pre_ordinal = 1.000 and DAS_Q2_post_ordinal = 1.000

Two-Tailed Wilcoxon Signed Rank Test for DAS_Q3_pre_ordinal and DAS_Q3_post_ordinal

Included Variables:
DAS_Q3_pre_ordinal and DAS_Q3_post_ordinal

Sample Size (Complete Cases):
N = 16

Results:
V = 0.00000, z = -2.646, p = 0.00815

Medians:
DAS_Q3_pre_ordinal = 6.000 and DAS_Q3_post_ordinal = 6.500

Descriptives

Included Variables:
Feasibility_Q1_ordinal, Feasibility_Q2_ordinal, Feasibility_Q3_ordinal,
Feasibility_Q4_ordinal, and Feasibility_Q5_ordinal

Sample Size (Complete Cases):
N = 16

Summary Statistics: Frequency Table for Ordinal Variables

Variable	n	%
Feasibility_Q1_ordinal		
0 Strongly disagree	0	0.00000
1 Disagree	0	0.00000
2 Neutral	0	0.00000
3 Agree	1	6.250
4 Strongly agree	15	93.750
Missing	0	0.00000
Feasibility_Q2_ordinal		
0 Strongly disagree	0	0.00000
1 Disagree	0	0.00000
2 Neutral	1	6.250
3 Agree	4	25.000
4 Strongly agree	11	68.750

Missing	0	0.00000
Feasibility_Q3_ordinal		
0 Strongly disagree	0	0.00000
1 Disagree	0	0.00000
2 Neutral	1	6.250
3 Agree	3	18.750
4 Strongly agree	12	75.000
Missing	0	0.00000
Feasibility_Q4_ordinal		
0 Strongly disagree	0	0.00000
1 Disagree	0	0.00000
2 Neutral	0	0.00000
3 Agree	3	18.750
4 Strongly agree	13	81.250
Missing	0	0.00000
Feasibility_Q5_ordinal		
0 Strongly disagree	0	0.00000
1 Disagree	0	0.00000
2 Neutral	0	0.00000
3 Agree	1	6.250
4 Strongly agree	15	93.750
Missing	0	0.00000

Descriptives

Included Variables:
Feasibility_Q6_ordinal, Feasibility_Q7_ordinal, Feasibility_Q8_ordinal, Feasibility_Q9_ordinal, Feasibility_Q10_ordinal, Feasibility_Q11_ordinal, and Feasibility_Cum_ordinal

Sample Size (Complete Cases):
N = 16

Summary Statistics: Frequency Table for Nominal and Ordinal Variables

Variable	n	%
Feasibility_Q6_ordinal		
0 Strongly disagree	0	0.00000
1 Disagree	0	0.00000
2 Neutral	0	0.00000
3 Agree	3	18.750
4 Strongly agree	13	81.250
Missing	0	0.00000
Feasibility_Q7_ordinal		
0 Strongly disagree	0	0.00000
1 Disagree	0	0.00000
2 Neutral	0	0.00000
3 Agree	3	18.750
4 Strongly agree	13	81.250

Missing	0	0.00000
Feasibility_Q8_ordinal		
0 Strongly disagree	0	0.00000
1 Disagree	0	0.00000
2 Neutral	0	0.00000
3 Agree	1	6.250
4 Strongly agree	15	93.750
Missing	0	0.00000
Feasibility_Q9_ordinal		
0 Strongly disagree	0	0.00000
1 Disagree	0	0.00000
2 Neutral	0	0.00000
3 Agree	1	6.250
4 Strongly agree	15	93.750
Missing	0	0.00000
Feasibility_Q10_ordinal		
0 Strongly disagree	0	0.00000
1 Disagree	0	0.00000
2 Neutral	0	0.00000
3 Agree	2	12.500
4 Strongly agree	14	87.500
Missing	0	0.00000
Feasibility_Q11_ordinal		
0 Strongly disagree	0	0.00000
1 Disagree	0	0.00000
2 Neutral	0	0.00000
3 Agree	2	12.500
4 Strongly agree	14	87.500
Missing	0	0.00000

Summary Statistics: Scale

Variable	M	SD	n	95% CI	SE_M	Min	Max	Skewness	Kurtosis
Feasibility_Cum_ordinal	42.188	2.857	16	[40.665, 43.710]	0.714	33.000	44.000	-2.214	4.748

Quantiles:

	Feasibility_Cum_ordinal
10%	40.000
20%	41.000
25%	41.750
30%	42.000
40%	42.000
50%	43.500
60%	44.000

70%	44.000
75%	44.000
80%	44.000
90%	44.000

Two-Tailed Wilcoxon Signed Rank Test for DAS_Q4_pre_ordinal and DAS_Q4_post_ordinal

```
Included Variables:
DAS_Q4_pre_ordinal and DAS_Q4_post_ordinal

Sample Size (Complete Cases):
N = 16

Results:
V = 0.00000, z = -3.071, p = 0.00214

Medians:
DAS_Q4_pre_ordinal = 6.000 and DAS_Q4_post_ordinal = 7.000
```

Two-Tailed Wilcoxon Signed Rank Test for DAS_Q5_pre_ordinal and DAS_Q5_post_ordinal

```
Included Variables:
DAS_Q5_pre_ordinal and DAS_Q5_post_ordinal

Sample Size (Complete Cases):
N = 16

Results:
V = 10.500, z = -2.060, p = 0.0394

Medians:
DAS_Q5_pre_ordinal = 6.000 and DAS_Q5_post_ordinal = 7.000
```

Two-Tailed Wilcoxon Signed Rank Test for DAS_Q6_pre_ordinal and DAS_Q6_post_ordinal

```
Included Variables:
DAS_Q6_pre_ordinal and DAS_Q6_post_ordinal

Sample Size (Complete Cases):
N = 16

Results:
V = 10.500, z = -0.813, p = 0.416

Medians:
DAS_Q6_pre_ordinal = 1.500 and DAS_Q6_post_ordinal = 1.000
```

Two-Tailed Wilcoxon Signed Rank Test for DAS_Q7_pre_ordinal and DAS_Q7_post_ordinal

```
Included Variables:
DAS_Q7_pre_ordinal and DAS_Q7_post_ordinal

Sample Size (Complete Cases):
N = 16

Results:
V = 25.500, z = -1.098, p = 0.272

Medians:
DAS_Q7_pre_ordinal = 7.000 and DAS_Q7_post_ordinal = 6.500
```

Two-Tailed Wilcoxon Signed Rank Test for DAS_Q8_pre_ordinal and DAS_Q8_post_ordinal

```
Included Variables:
DAS_Q8_pre_ordinal and DAS_Q8_post_ordinal

Sample Size (Complete Cases):
N = 16

Results:
V = 33.500, z = -2.176, p = 0.0296

Medians:
DAS_Q8_pre_ordinal = 2.000 and DAS_Q8_post_ordinal = 1.000
```

Two-Tailed Wilcoxon Signed Rank Test for DAS_Q9_pre_ordinal and DAS_Q9_post_ordinal

```
Included Variables:
DAS_Q9_pre_ordinal and DAS_Q9_post_ordinal

Sample Size (Complete Cases):
N = 16

Results:
V = 47.500, z = -2.088, p = 0.0368

Medians:
DAS_Q9_pre_ordinal = 3.000 and DAS_Q9_post_ordinal = 2.000
```

Two-Tailed Wilcoxon Signed Rank Test for DAS_Q10_pre_ordinal and DAS_Q10_post_ordinal

```
Included Variables:
DAS_Q10_pre_ordinal and DAS_Q10_post_ordinal

Sample Size (Complete Cases):
N = 16

Results:
V = 10.000, z = -1.140, p = 0.254

Medians:
DAS_Q10_pre_ordinal = 6.000 and DAS_Q10_post_ordinal = 7.000
```

Two-Tailed Wilcoxon Signed Rank Test for DAS_Q11_pre_ordinal and DAS_Q11_post_ordinal

```
Included Variables:
DAS_Q11_pre_ordinal and DAS_Q11_post_ordinal

Sample Size (Complete Cases):
N = 16

Results:
V = 3.500, z = -1.897, p = 0.0578

Medians:
DAS_Q11_pre_ordinal = 6.000 and DAS_Q11_post_ordinal = 7.000
```

Two-Tailed Wilcoxon Signed Rank Test for DAS_Q_12_pre_ordinal and DAS_Q_12_post_ordinal

Included Variables:
DAS_Q_12_pre_ordinal and DAS_Q_12_post_ordinal

Sample Size (Complete Cases):
N = 16

Results:
V = 1.500, z = -1.289, p = 0.197

Medians:
DAS_Q_12_pre_ordinal = 7.000 and DAS_Q_12_post_ordinal = 7.000

Two-Tailed Wilcoxon Signed Rank Test for DAS_Q13_pre_ordinal and DAS_Q13_post_ordinal

Included Variables:
DAS_Q13_pre_ordinal and DAS_Q13_post_ordinal

Sample Size (Complete Cases):
N = 16

Results:
V = 11.000, z = -1.724, p = 0.0848

Medians:
DAS_Q13_pre_ordinal = 6.000 and DAS_Q13_post_ordinal = 6.500

Two-Tailed Wilcoxon Signed Rank Test for DAS_Q14_pre_ordinal and DAS_Q14_post_ordinal

Included Variables:
DAS_Q14_pre_ordinal and DAS_Q14_post_ordinal

Sample Size (Complete Cases):
N = 16

Results:
V = 3.500, z = -1.633, p = 0.102

Medians:
DAS_Q14_pre_ordinal = 6.000 and DAS_Q14_post_ordinal = 7.000

Two-Tailed Wilcoxon Signed Rank Test for DAS_Q15_pre_ordinal and DAS_Q15_post_ordinal

Included Variables:
DAS_Q15_pre_ordinal and DAS_Q15_post_ordinal

Sample Size (Complete Cases):
N = 16

Results:
V = 2.500, z = -1.983, p = 0.0473

Medians:
DAS_Q15_pre_ordinal = 6.000 and DAS_Q15_post_ordinal = 7.000

Two-Tailed Wilcoxon Signed Rank Test for DAS_Q16_pre_ordinal and DAS_Q16_post_ordinal

Included Variables:
DAS_Q16_pre_ordinal and DAS_Q16_post_ordinal

Sample Size (Complete Cases):
N = 16

```
Results:
V = 44.000, z = -1.723, p = 0.0850

Medians:
DAS_Q16_pre_ordinal = 2.000 and DAS_Q16_post_ordinal = 1.000
```

Two-Tailed Wilcoxon Signed Rank Test for DAS_Q17_pre_ordinal and DAS_Q17_post_ordinal

```
Included Variables:
DAS_Q17_pre_ordinal and DAS_Q17_post_ordinal

Sample Size (Complete Cases):
N = 16

Results:
V = 11.000, z = -0.962, p = 0.336

Medians:
DAS_Q17_pre_ordinal = 1.000 and DAS_Q17_post_ordinal = 1.000
```

Two-Tailed Wilcoxon Signed Rank Test for DAS_Q18_pre_ordinal and DAS_Q18_post_ordinal

```
Included Variables:
DAS_Q18_pre_ordinal and DAS_Q18_post_ordinal

Sample Size (Complete Cases):
N = 16

Results:
V = 11.000, z = -1.027, p = 0.305

Medians:
DAS_Q18_pre_ordinal = 6.000 and DAS_Q18_post_ordinal = 6.000
```

Two-Tailed Wilcoxon Signed Rank Test for DAS_Q19_pre_ordinal and DAS_Q19_post_ordinal

```
Included Variables:
DAS_Q19_pre_ordinal and DAS_Q19_post_ordinal

Sample Size (Complete Cases):
N = 16

Results:
V = 0.00000, z = -2.271, p = 0.0231

Medians:
DAS_Q19_pre_ordinal = 6.000 and DAS_Q19_post_ordinal = 7.000
```

Two-Tailed Wilcoxon Signed Rank Test for DAS_Q20_pre_ordinal and DAS_Q20_post_ordinal

```
Included Variables:
DAS_Q20_pre_ordinal and DAS_Q20_post_ordinal

Sample Size (Complete Cases):
N = 16

Results:
V = 16.000, z = -0.302, p = 0.763

Medians:
DAS_Q20_pre_ordinal = 6.000 and DAS_Q20_post_ordinal = 6.000
```

Two-Tailed Wilcoxon Signed Rank Test for DAS_Q20_pre_ordinal and DAS_Q20_post_ordinal

```
Included Variables:
DAS_Q20_pre_ordinal and DAS_Q20_post_ordinal

Sample Size (Complete Cases):
N = 16

Results:
V = 16.000, z = -0.302, p = 0.763

Medians:
DAS_Q20_pre_ordinal = 6.000 and DAS_Q20_post_ordinal = 6.000
```

Two-Tailed Wilcoxon Signed Rank Test for CODES_Q1_pre_ordinal and CODES_post_ordinal_Q1

```
Included Variables:
CODES_Q1_pre_ordinal and CODES_post_ordinal_Q1

Sample Size (Complete Cases):
N = 16

Results:
V = 7.000, z = -1.613, p = 0.107

Medians:
CODES_Q1_pre_ordinal = 4.000 and CODES_post_ordinal_Q1 = 5.000
```

Two-Tailed Wilcoxon Signed Rank Test for CODES_Q2_pre_ordinal and CODES_post_ordinal_Q2

```
Included Variables:
CODES_Q2_pre_ordinal and CODES_post_ordinal_Q2

Sample Size (Complete Cases):
N = 16

Results:
V = 0.00000, z = -3.025, p = 0.00249

Medians:
CODES_Q2_pre_ordinal = 4.000 and CODES_post_ordinal_Q2 = 5.000
```

Two-Tailed Wilcoxon Signed Rank Test for CODES_Q3_pre_ordinal and CODES_post_ordinal_Q3

```
Included Variables:
CODES_Q3_pre_ordinal and CODES_post_ordinal_Q3

Sample Size (Complete Cases):
N = 16

Results:
V = 10.500, z = -2.717, p = 0.00658

Medians:
CODES_Q3_pre_ordinal = 3.500 and CODES_post_ordinal_Q3 = 5.000
```

Two-Tailed Wilcoxon Signed Rank Test for CODES_Q4_pre_ordinal and CODES_post_ordinal_Q4

```
Included Variables:
CODES_Q4_pre_ordinal and CODES_post_ordinal_Q4

Sample Size (Complete Cases):
N = 16

Results:
V = 0.00000, z = -3.035, p = 0.00241

Medians:
CODES_Q4_pre_ordinal = 4.000 and CODES_post_ordinal_Q4 = 5.000
```

Two-Tailed Wilcoxon Signed Rank Test for DAS_Q5_pre_ordinal and CODES_post_ordinal_Q5

```
Included Variables:
DAS_Q5_pre_ordinal and CODES_post_ordinal_Q5

Sample Size (Complete Cases):
N = 16

Results:
V = 91.500, z = -2.508, p = 0.0122

Medians:
DAS_Q5_pre_ordinal = 6.000 and CODES_post_ordinal_Q5 = 5.000
```

Two-Tailed Wilcoxon Signed Rank Test for CODES_Q6_pre_ordinal and CODES_post_ordinal_Q6

```
Included Variables:
CODES_Q6_pre_ordinal and CODES_post_ordinal_Q6

Sample Size (Complete Cases):
N = 16

Results:
V = 4.000, z = -2.495, p = 0.0126

Medians:
CODES_Q6_pre_ordinal = 4.000 and CODES_post_ordinal_Q6 = 5.000
```

Two-Tailed Wilcoxon Signed Rank Test for CODES_Q7_pre_ordinal and CODES_post_ordinal_Q7

```
Included Variables:
CODES_Q7_pre_ordinal and CODES_post_ordinal_Q7

Sample Size (Complete Cases):
N = 16

Results:
V = 5.000, z = -2.944, p = 0.00324

Medians:
CODES_Q7_pre_ordinal = 4.000 and CODES_post_ordinal_Q7 = 5.000
```

Two-Tailed Wilcoxon Signed Rank Test for CODES_Q8_pre_ordinal and CODES_post_ordinal_Q8

```
Included Variables:
CODES_Q8_pre_ordinal and CODES_post_ordinal_Q8

Sample Size (Complete Cases):
N = 16

Results:
V = 0.00000, z = -3.169, p = 0.00153

Medians:
CODES_Q8_pre_ordinal = 4.000 and CODES_post_ordinal_Q8 = 5.000
```

Two-Tailed Wilcoxon Signed Rank Test for CODES_Q9_pre_ordinal and CODES_post_ordinal_Q9

```
Included Variables:
CODES_Q9_pre_ordinal and CODES_post_ordinal_Q9

Sample Size (Complete Cases):
N = 16

Results:
V = 0.00000, z = -2.810, p = 0.00496

Medians:
CODES_Q9_pre_ordinal = 4.000 and CODES_post_ordinal_Q9 = 5.000
```

Two-Tailed Wilcoxon Signed Rank Test for CODES_Cum_Pre_ordinal and CODES_post_Cum_ordinal

```
Included Variables:
CODES_Cum_Pre_ordinal and CODES_post_Cum_ordinal

Sample Size (Complete Cases):
N = 16

Results:
V = 2.000, z = -3.175, p = 0.00150

Medians:
CODES_Cum_Pre_ordinal = 34.500 and CODES_post_Cum_ordinal = 44.000
```

Two-Tailed Wilcoxon Signed Rank Test for DAS_Cum_Score_pre_ordinal and DAS_Cum_Post_ordinal

```
Included Variables:
DAS_Cum_Score_pre_ordinal and DAS_Cum_Post_ordinal

Sample Size (Complete Cases):
N = 16

Results:
V = 37.000, z = -0.157, p = 0.875

Medians:
DAS_Cum_Score_pre_ordinal = 100.000 and DAS_Cum_Post_ordinal = 101.000
```