

GET

FILE='\\UM-FS0102.unimaas.nl\StudentData02\I6077792\My Documents\E252Data2.sav'.
DATASET NAME DataSet1 WINDOW=FRONT.

*Nonparametric Tests: Independent Samples.

NPTESTS

/INDEPENDENT TEST (FP_Conc FP_Retro) GROUP (Condition) MANN_WHITNEY

/MISSING SCOPE=ANALYSIS USERMISSING=EXCLUDE

/CRITERIA ALPHA=0.05 CILEVEL=95.

NPar Tests

[DataSet1] \\UM-FS0102.unimaas.nl\StudentData02\I6077792\My Documents\E252Data2.sav

Descriptive Statistics

| | N | Mean | Std. Deviation | Minimum | Maximum | Percentile |
|-----------|----|--------|----------------|---------|---------|------------|
| | | | | | | 25th |
| Conc | 66 | 1,7879 | 1,25900 | ,00 | 4,00 | 1,0000 |
| Condition | 66 | ,47 | ,503 | 0 | 1 | ,00 |

Descriptive Statistics

| | Percentiles | |
|-----------|---------------|--------|
| | 50th (Median) | 75th |
| Conc | 2,0000 | 3,0000 |
| Condition | ,00 | 1,00 |

Mann-Whitney Test

Ranks

| Condition | N | Mean Rank | Sum of Ranks |
|-------------------|----|-----------|--------------|
| Conc control | 35 | 34,67 | 1213,50 |
| Conc experimental | 31 | 32,18 | 997,50 |
| Total | 66 | | |

Test Statistics^a

| | Conc |
|------------------------|---------|
| Mann-Whitney U | 501,500 |
| Wilcoxon W | 997,500 |
| Z | -,541 |
| Asymp. Sig. (2-tailed) | ,589 |
| Exact Sig. (2-tailed) | ,587 |
| Exact Sig. (1-tailed) | ,294 |
| Point Probability | ,003 |

a. Grouping Variable: Condition

NPART TESTS

```

/M-W= Retro BY Condition(0 1)
/STATISTICS=DESCRIPTIVES QUANTILES
/MISSING ANALYSIS
/METHOD=EXACT TIMER(5).

```

NPar Tests

[DataSet1] \\UM-FS0102.unimaas.nl\StudentData02\I6077792\My Documents\E252 Data2.sav

Descriptive Statistics

| | N | Mean | Std. Deviation | Minimum | Maximum | Percentile |
|-----------|----|--------|----------------|---------|---------|------------|
| | | | | | | 25th |
| Retro | 66 | 2,5606 | 1,03966 | ,00 | 4,00 | 2,0000 |
| Condition | 66 | ,47 | ,503 | 0 | 1 | ,00 |

Descriptive Statistics

| | Percentiles | |
|-----------|---------------|--------|
| | 50th (Median) | 75th |
| Retro | 3,0000 | 3,0000 |
| Condition | ,00 | 1,00 |

Mann-Whitney Test

Ranks

| Condition | N | Mean Rank | Sum of Ranks |
|---------------|----|-----------|--------------|
| Retro control | 35 | 35,69 | 1249,00 |
| experimental | 31 | 31,03 | 962,00 |
| Total | 66 | | |

Test Statistics^a

| | Retro |
|------------------------|---------|
| Mann-Whitney U | 466,000 |
| Wilcoxon W | 962,000 |
| Z | -1,036 |
| Asymp. Sig. (2-tailed) | ,300 |
| Exact Sig. (2-tailed) | ,306 |
| Exact Sig. (1-tailed) | ,152 |
| Point Probability | ,003 |

a. Grouping Variable: Condition

NPAR TESTS

```
/M-W= FP_Conc BY Condition(0 1)  
/STATISTICS=DESCRIPTIVES QUANTILES  
/MISSING ANALYSIS  
/METHOD=EXACT TIMER(5).
```

NPar Tests

[DataSet1] \\UM-FS0102.unimaas.nl\StudentData02\I6077792\My Documents\E252
Data2.sav

Descriptive Statistics

| | N | Mean | Std. Deviation | Minimum | Maximum | Percentile |
|-----------|----|-------|----------------|---------|---------|------------|
| | | | | | | 25th |
| FP_Conc | 66 | ,0000 | ,00000 | ,00 | ,00 | ,0000 |
| Condition | 66 | ,47 | ,503 | 0 | 1 | ,00 |

Descriptive Statistics

| | Percentiles | |
|-----------|---------------|-------|
| | 50th (Median) | 75th |
| FP_Conc | ,0000 | ,0000 |
| Condition | ,00 | 1,00 |

Mann-Whitney Test

Ranks

| Condition | N | Mean Rank | Sum of Ranks |
|----------------------|----|-----------|--------------|
| FP_Conc control | 35 | 33,50 | 1172,50 |
| FP_Conc experimental | 31 | 33,50 | 1038,50 |
| Total | 66 | | |

Test Statistics^a

| | FP_Conc |
|------------------------|----------|
| Mann-Whitney U | 542,500 |
| Wilcoxon W | 1038,500 |
| Z | ,000 |
| Asymp. Sig. (2-tailed) | 1,000 |
| Exact Sig. (2-tailed) | 1,000 |
| Exact Sig. (1-tailed) | 1,000 |
| Point Probability | 1,000 |

a. Grouping Variable: Condition

NPAR TESTS

```
/M-W= FP_Retro BY Condition(0 1)  
/STATISTICS=DESCRIPTIVES QUANTILES
```

```

/MISSING ANALYSIS
/METHOD=EXACT TIMER(5).

```

NPar Tests

```

[DataSet1] \\UM-FS0102.unimaas.nl\StudentData02\I6077792\My Documents\E252
Data2.sav

```

Descriptive Statistics

| | N | Mean | Std. Deviation | Minimum | Maximum | Percentile |
|-----------|----|--------|----------------|---------|---------|------------|
| | | | | | | 25th |
| FP_Retro | 66 | 1,2727 | 2,03466 | ,00 | 11,00 | ,0000 |
| Condition | 66 | ,47 | ,503 | 0 | 1 | ,00 |

Descriptive Statistics

| | Percentiles | |
|-----------|---------------|--------|
| | 50th (Median) | 75th |
| FP_Retro | ,0000 | 2,0000 |
| Condition | ,00 | 1,00 |

Mann-Whitney Test

Ranks

| Condition | N | Mean Rank | Sum of Ranks |
|-----------------------|----|-----------|--------------|
| FP_Retro control | 35 | 34,01 | 1190,50 |
| FP_Retro experimental | 31 | 32,92 | 1020,50 |
| Total | 66 | | |

Test Statistics^a

| | FP_Retro |
|------------------------|----------|
| Mann-Whitney U | 524,500 |
| Wilcoxon W | 1020,500 |
| Z | -,250 |
| Asymp. Sig. (2-tailed) | ,802 |
| Exact Sig. (2-tailed) | ,806 |
| Exact Sig. (1-tailed) | ,403 |
| Point Probability | ,003 |

a. Grouping Variable: Condition

NPAR TESTS

```

/WILCOXON=Conc_Positive WITH Conc_Negative (PAIRED)
/SIGN=Conc_Positive WITH Conc_Negative (PAIRED)
/STATISTICS DESCRIPTIVES QUANTILES
/MISSING ANALYSIS
/METHOD=EXACT TIMER(5).

```

NPar Tests

[DataSet1] \\UM-FS0102.unimaas.nl\StudentData02\I6077792\My Documents\E252 Data2.sav

Descriptive Statistics

| | N | Mean | Std. Deviation | Minimum | Maximum | Percentile |
|---------------|----|--------|----------------|---------|---------|------------|
| | | | | | | 25th |
| Conc_Positive | 66 | ,7576 | ,76582 | ,00 | 2,00 | ,0000 |
| Conc_Negative | 66 | 1,0303 | ,80326 | ,00 | 2,00 | ,0000 |

Descriptive Statistics

| | Percentiles | |
|---------------|---------------|--------|
| | 50th (Median) | 75th |
| Conc_Positive | 1,0000 | 1,0000 |
| Conc_Negative | 1,0000 | 2,0000 |

Wilcoxon Signed Ranks Test

Ranks

| | | N | Mean Rank | Sum of Ranks |
|----------------------------------|----------------|-----------------|-----------|--------------|
| Conc_Negative - Conc_Positive | Negative Ranks | 12 ^a | 18,67 | 224,00 |
| | Positive Ranks | 26 ^b | 19,88 | 517,00 |
| | Ties | 28 ^c | | |
| | Total | 66 | | |

- a. Conc_Negative < Conc_Positive
- b. Conc_Negative > Conc_Positive
- c. Conc_Negative = Conc_Positive

Test Statistics^a

| | Conc_Negative - Conc_Positive |
|------------------------|----------------------------------|
| Z | -2,265 ^b |
| Asymp. Sig. (2-tailed) | ,023 |
| Exact Sig. (2-tailed) | ,027 |
| Exact Sig. (1-tailed) | ,013 |
| Point Probability | ,003 |

- a. Wilcoxon Signed Ranks Test
- b. Based on negative ranks.

Sign Test

Frequencies

| | | N |
|-----------------|-----------------------------------|----|
| Conc_Negative - | Negative Differences ^a | 12 |
| Conc_Positive | Positive Differences ^b | 26 |
| | Ties ^c | 28 |
| | Total | 66 |

- a. Conc_Negative < Conc_Positive
- b. Conc_Negative > Conc_Positive
- c. Conc_Negative = Conc_Positive

Test Statistics^a

| | Conc_Negative - Conc_Positive |
|------------------------|----------------------------------|
| Z | -2,109 |
| Asymp. Sig. (2-tailed) | ,035 |
| Exact Sig. (2-tailed) | ,034 |
| Exact Sig. (1-tailed) | ,017 |
| Point Probability | ,010 |

- a. Sign Test

NPART TESTS

```

/WILCOXON=Retro_Positive WITH Retro_Negative (PAIRED)
/SIGN=Retro_Positive WITH Retro_Negative (PAIRED)
/STATISTICS DESCRIPTIVES QUANTILES
/MISSING ANALYSIS
/METHOD=EXACT TIMER(5).
    
```

NPar Tests

[DataSet1] \\UM-FS0102.unimaas.nl\StudentData02\I6077792\My Documents\E252
Data2.sav

Descriptive Statistics

| | N | Mean | Std. Deviation | Minimum | Maximum | Percentile |
|----------------|----|--------|----------------|---------|---------|------------|
| | | | | | | 25th |
| Retro_Positive | 66 | 1,1970 | ,58756 | ,00 | 2,00 | 1,0000 |
| Retro_Negative | 66 | 1,3636 | ,77730 | ,00 | 2,00 | 1,0000 |

Descriptive Statistics

| | Percentiles | |
|----------------|---------------|--------|
| | 50th (Median) | 75th |
| Retro_Positive | 1,0000 | 2,0000 |
| Retro_Negative | 2,0000 | 2,0000 |

Wilcoxon Signed Ranks Test

Ranks

| | | N | Mean Rank | Sum of Ranks |
|------------------------------------|----------------|-----------------|-----------|--------------|
| Retro_Negative - Retro_Positive | Negative Ranks | 14 ^a | 22,29 | 312,00 |
| | Positive Ranks | 26 ^b | 19,54 | 508,00 |
| | Ties | 26 ^c | | |
| | Total | 66 | | |

a. Retro_Negative < Retro_Positive

b. Retro_Negative > Retro_Positive

c. Retro_Negative = Retro_Positive

Test Statistics^a

| | Retro_Negative - Retro_Positive |
|------------------------|------------------------------------|
| Z | -1,439 ^b |
| Asymp. Sig. (2-tailed) | ,150 |
| Exact Sig. (2-tailed) | ,177 |
| Exact Sig. (1-tailed) | ,089 |
| Point Probability | ,004 |

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

Sign Test

Frequencies

| | | N |
|------------------------------------|-----------------------------------|----|
| Retro_Negative - Retro_Positive | Negative Differences ^a | 14 |
| | Positive Differences ^b | 26 |
| | Ties ^c | 26 |
| | Total | 66 |

a. Retro_Negative < Retro_Positive

b. Retro_Negative > Retro_Positive

c. Retro_Negative = Retro_Positive

Test Statistics^a

| | Retro_Negative - Retro_Positive |
|------------------------|---------------------------------|
| Z | -1,739 |
| Asymp. Sig. (2-tailed) | ,082 |
| Exact Sig. (2-tailed) | ,081 |
| Exact Sig. (1-tailed) | ,040 |
| Point Probability | ,021 |

a. Sign Test

NPAR TESTS

```

/WILCOXON=block1_con WITH block2_con (PAIRED)
/SIGN=block1_con WITH block2_con (PAIRED)
/STATISTICS DESCRIPTIVES QUANTILES
/MISSING ANALYSIS
/METHOD=EXACT TIMER(5).

```

NPar Tests

[DataSet1] \\UM-FS0102.unimaas.nl\StudentData02\I6077792\My Documents\E252 Data2.sav

Descriptive Statistics

| | N | Mean | Std. Deviation | Minimum | Maximum | Percentile |
|------------|----|-------|----------------|---------|---------|------------|
| | | | | | | 25th |
| block1_con | 66 | ,8939 | ,70446 | ,00 | 2,00 | ,0000 |
| block2_con | 66 | ,8939 | ,74687 | ,00 | 2,00 | ,0000 |

Descriptive Statistics

| | Percentiles | |
|------------|---------------|--------|
| | 50th (Median) | 75th |
| block1_con | 1,0000 | 1,0000 |
| block2_con | 1,0000 | 1,0000 |

Wilcoxon Signed Ranks Test

Ranks

| | | N | Mean Rank | Sum of Ranks |
|-------------------------|----------------|-----------------|-----------|--------------|
| block2_con - block1_con | Negative Ranks | 16 ^a | 15,50 | 248,00 |
| | Positive Ranks | 15 ^b | 16,53 | 248,00 |
| | Ties | 35 ^c | | |
| | Total | 66 | | |

a. block2_con < block1_con

b. block2_con > block1_con

c. block2_con = block1_con

Test Statistics^a

| | block2_con - block1_con |
|------------------------|-------------------------|
| Z | ,000 ^b |
| Asymp. Sig. (2-tailed) | 1,000 |
| Exact Sig. (2-tailed) | 1,000 |
| Exact Sig. (1-tailed) | ,568 |
| Point Probability | ,135 |

a. Wilcoxon Signed Ranks Test

b. The sum of negative ranks equals the sum of positive ranks.

Sign Test

Frequencies

| | | N |
|-------------------------|-----------------------------------|----|
| block2_con - block1_con | Negative Differences ^a | 16 |
| | Positive Differences ^b | 15 |
| | Ties ^c | 35 |
| | Total | 66 |

a. block2_con < block1_con

b. block2_con > block1_con

c. block2_con = block1_con

Test Statistics^a

| | block2_con - block1_con |
|------------------------|----------------------------|
| Z | ,000 |
| Asymp. Sig. (2-tailed) | 1,000 |
| Exact Sig. (2-tailed) | 1,000 |
| Exact Sig. (1-tailed) | ,500 |
| Point Probability | ,140 |

a. Sign Test