**SPSS**

**Wilcoxon Signed Ranks Test (new1 - original)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Ranks** | | | | |
|  | | N | Mean Rank | Sum of Ranks |
| new1 - original | Negative Ranks | 20a | 30.80 | 616.00 |
| Positive Ranks | 60b | 43.73 | 2624.00 |
| Ties | 16c |  |  |
| Total | 96 |  |  |
| a. new1 < original | | | | |
| b. new1 > original | | | | |
| c. new1 = original | | | | |

|  |  |
| --- | --- |
| **Test Statistics**a | |
|  | new1 - original |
| Z | -4.917b |
| Asymp. Sig. (2-tailed) | <.001 |
| a. Wilcoxon Signed Ranks Test | |
| b. Based on negative ranks. | |
|  | |

**Wilcoxon Signed Ranks Test (new2 - original)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Ranks** | | | | |
|  | | N | Mean Rank | Sum of Ranks |
| new2 - original | Negative Ranks | 20a | 39.88 | 797.50 |
| Positive Ranks | 55b | 37.32 | 2052.50 |
| Ties | 21c |  |  |
| Total | 96 |  |  |
| a. new2 < original | | | | |
| b. new2 > original | | | | |
| c. new2 = original | | | | |

|  |  |
| --- | --- |
| **Test Statistics**a | |
|  | new2 - original |
| Z | -3.356b |
| Asymp. Sig. (2-tailed) | <.001 |
| a. Wilcoxon Signed Ranks Test | |
| b. Based on negative ranks. | |

**Wilcoxon Signed Ranks Test (new2 - new1)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Ranks** | | | | |
|  | | N | Mean Rank | Sum of Ranks |
| new2 - new1 | Negative Ranks | 43a | 40.44 | 1739.00 |
| Positive Ranks | 34b | 37.18 | 1264.00 |
| Ties | 19c |  |  |
| Total | 96 |  |  |
| a. new2 < new1 | | | | |
| b. new2 > new1 | | | | |
| c. new2 = new1 | | | | |

|  |  |
| --- | --- |
| **Test Statistics**a | |
|  | new2 - new1 |
| Z | -1.227b |
| Asymp. Sig. (2-tailed) | .220 |
| a. Wilcoxon Signed Ranks Test | |
| b. Based on positive ranks. | |