**ANALYSIS: PD vs. Controls**

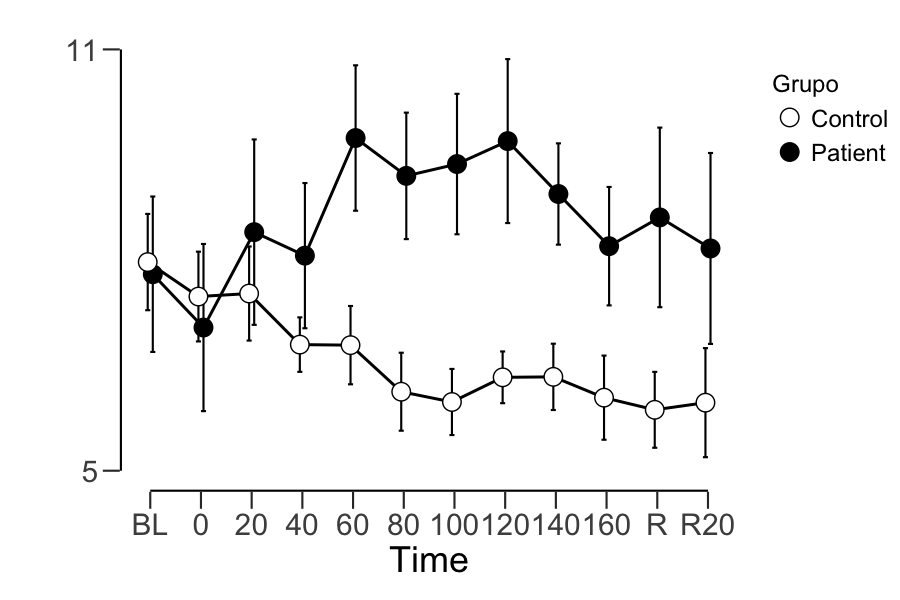
**MINUTE VOLUME**

| **Within Subjects Effects** | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **Sphericity Correction** | | **Sum of Squares** | | **df** | | **Mean Square** | | **F** | | **p** | |
| Time |  | Greenhouse-Geisser |  | 63.456 | ᵃ | 4.923 | ᵃ | 12.889 | ᵃ | 1.970 | ᵃ | 0.086 | ᵃ |
| Time ✻ Grupo |  | Greenhouse-Geisser |  | 188.754 | ᵃ | 4.923 | ᵃ | 38.339 | ᵃ | 5.860 | ᵃ | < .001 | ᵃ |
| Residual |  | Greenhouse-Geisser |  | 1223.951 |  | 187.085 |  | 6.542 |  |  |  |  |  |
|  | | | | | | | | | | | | | |
| Note.  Type III Sum of Squares | | | | | | | | | | | | | |
| ᵃ Mauchly's test of sphericity indicates that the assumption of sphericity is violated (p < .05). | | | | | | | | | | | | | |

| **Between Subjects Effects** | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **Sum of Squares** | | **df** | | **Mean Square** | | **F** | | **p** | |
| Grupo |  | 469.249 |  | 1 |  | 469.249 |  | 5.942 |  | 0.020 |  |
| Residual |  | 3000.876 |  | 38 |  | 78.970 |  |  |  |  |  |
|  | | | | | | | | | | | |
| Note.  Type III Sum of Squares | | | | | | | | | | | |

### Descriptives

#### Descriptives Plot (95% CI)



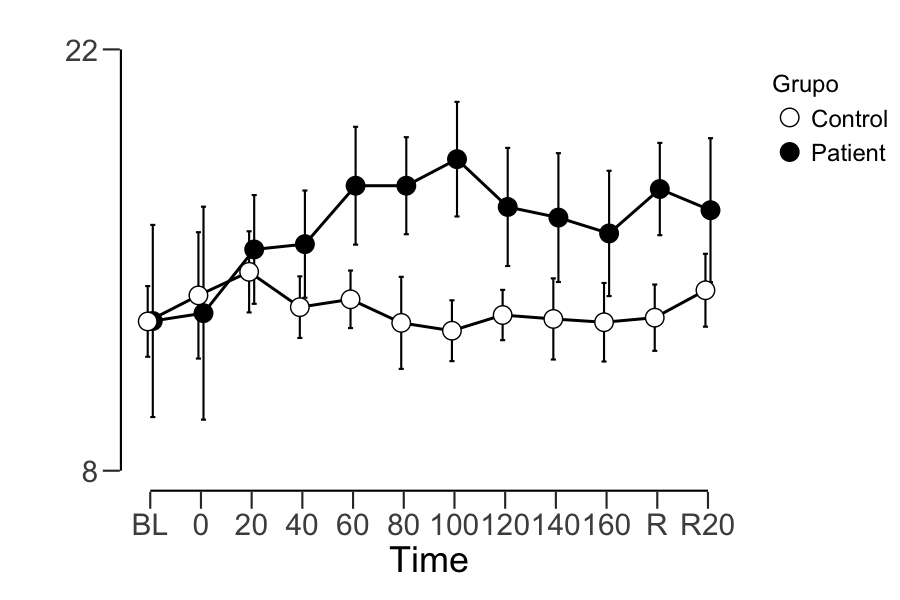
**RESPIRATORY RATE**

| **Within Subjects Effects** | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **Sphericity Correction** | | **Sum of Squares** | | **df** | | **Mean Square** | | **F** | | **p** | |
| Time |  | Greenhouse-Geisser |  | 272.253 | ᵃ | 5.185 | ᵃ | 52.506 | ᵃ | 1.891 | ᵃ | 0.095 | ᵃ |
| Time ✻ Grupo |  | Greenhouse-Geisser |  | 386.913 | ᵃ | 5.185 | ᵃ | 74.620 | ᵃ | 2.687 | ᵃ | 0.021 | ᵃ |
| Residual |  | Greenhouse-Geisser |  | 5471.339 |  | 197.035 |  | 27.768 |  |  |  |  |  |
|  | | | | | | | | | | | | | |
| Note.  Type III Sum of Squares | | | | | | | | | | | | | |
| ᵃ Mauchly's test of sphericity indicates that the assumption of sphericity is violated (p < .05). | | | | | | | | | | | | | |

| **Between Subjects Effects** | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **Sum of Squares** | | **df** | | **Mean Square** | | **F** | | **p** | |
| Grupo |  | 894.739 |  | 1 |  | 894.739 |  | 2.758 |  | 0.105 |  |
| Residual |  | 12328.589 |  | 38 |  | 324.437 |  |  |  |  |  |
|  | | | | | | | | | | | |
| Note.  Type III Sum of Squares | | | | | | | | | | | |

### Descriptives

#### Descriptives Plot (95% CI)



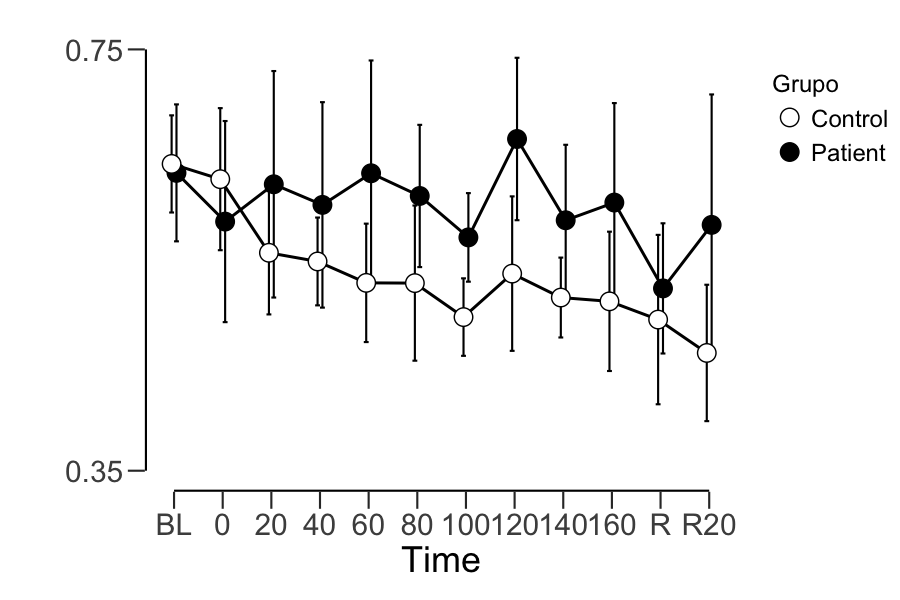
**TIDAL VOLUME**

| **Within Subjects Effects** | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **Sphericity Correction** | | **Sum of Squares** | | **df** | | **Mean Square** | | **F** | | **p** | |
| Time |  | Greenhouse-Geisser |  | 0.594 | ᵃ | 6.345 | ᵃ | 0.094 | ᵃ | 2.310 | ᵃ | 0.032 | ᵃ |
| Time ✻ Grupo |  | Greenhouse-Geisser |  | 0.272 | ᵃ | 6.345 | ᵃ | 0.043 | ᵃ | 1.059 | ᵃ | 0.389 | ᵃ |
| Residual |  | Greenhouse-Geisser |  | 9.774 |  | 241.111 |  | 0.041 |  |  |  |  |  |
|  | | | | | | | | | | | | | |
| Note.  Type III Sum of Squares | | | | | | | | | | | | | |
| ᵃ Mauchly's test of sphericity indicates that the assumption of sphericity is violated (p < .05). | | | | | | | | | | | | | |

| **Between Subjects Effects** | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **Sum of Squares** | | **df** | | **Mean Square** | | **F** | | **p** | |
| Grupo |  | 0.494 |  | 1 |  | 0.494 |  | 0.711 |  | 0.404 |  |
| Residual |  | 26.394 |  | 38 |  | 0.695 |  |  |  |  |  |
|  | | | | | | | | | | | |
| Note.  Type III Sum of Squares | | | | | | | | | | | |

### Descriptives

#### Descriptives Plot (95% CI)

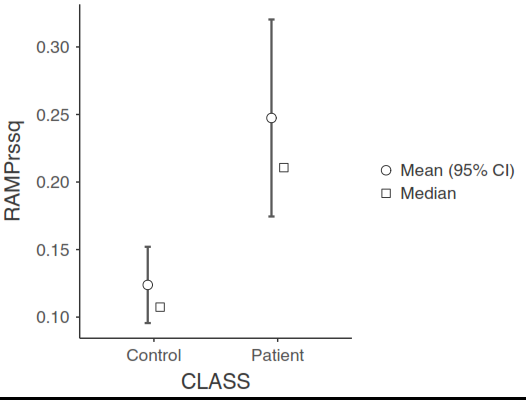


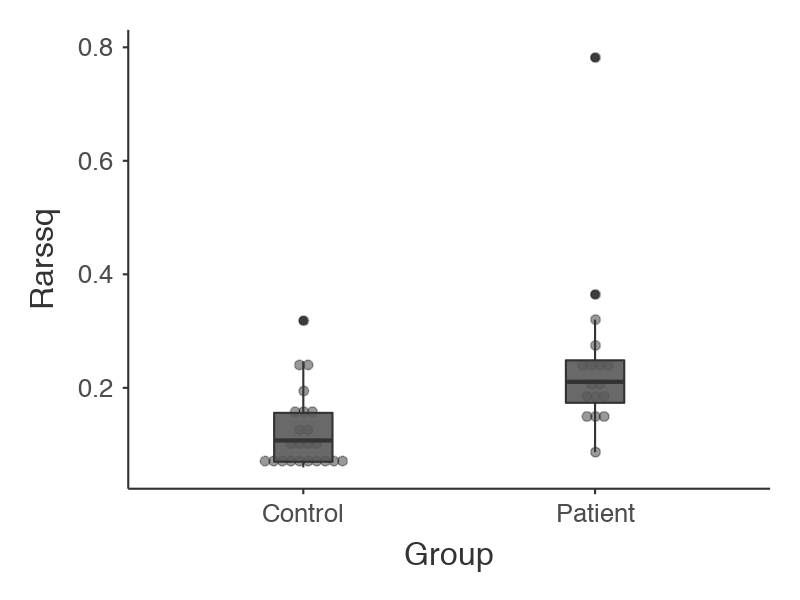
**RSSQ RESPIRATORY AMPLITUDE (RA) AND PERIOD (RP)**

| **Independent Samples T-Test** | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | **95% Confidence Interval** | | | |
|  | |  | | **statistic** | | **p** | | **Cohen's d** | | **Lower** | | **Upper** | |
| Rarssq |  | Mann-Whitney U |  | 59.0 |  | < .001 |  | -1.098 |  | -0.145 |  | -0.0620 |  |
| RPrssq |  | Mann-Whitney U |  | 98.0 |  | 0.007 |  | -0.568 |  | -0.775 |  | -0.1704 |  |
|  | | | | | | | | | | | | | |

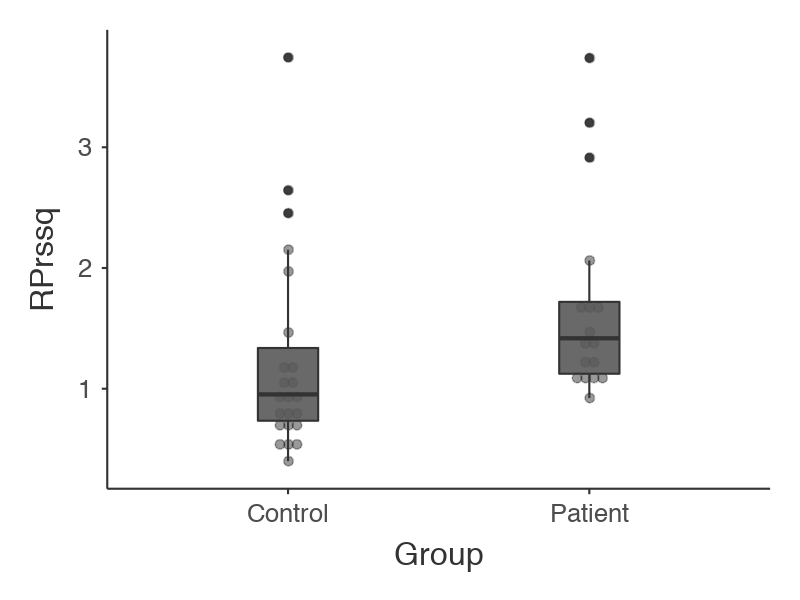
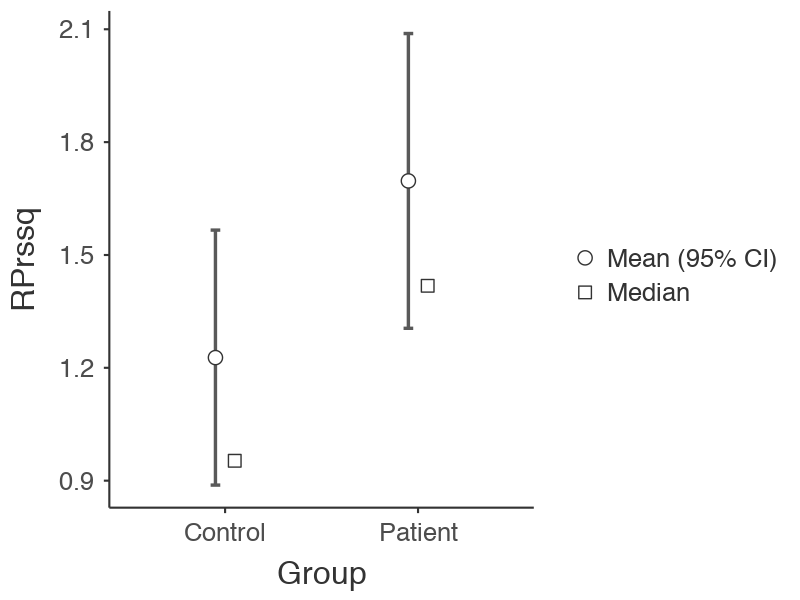
| **Group Descriptives** | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | | **Group** | | **N** | | **Mean** | | **Median** | | **SD** | | **SE** | |
| Rarssq |  | Control |  | 23 |  | 0.124 |  | 0.107 |  | 0.0691 |  | 0.0144 |  |
|  | | Patient |  | 17 |  | 0.247 |  | 0.211 |  | 0.153 |  | 0.0372 |  |
| RPrssq |  | Control |  | 23 |  | 1.227 |  | 0.953 |  | 0.8293 |  | 0.1729 |  |
|  | | Patient |  | 17 |  | 1.697 |  | 1.418 |  | 0.824 |  | 0.1999 |  |

**Respiratory amplitude RSSQ plot (95% CI)**





**Respiratory period RSSQ plot (95% CI)**



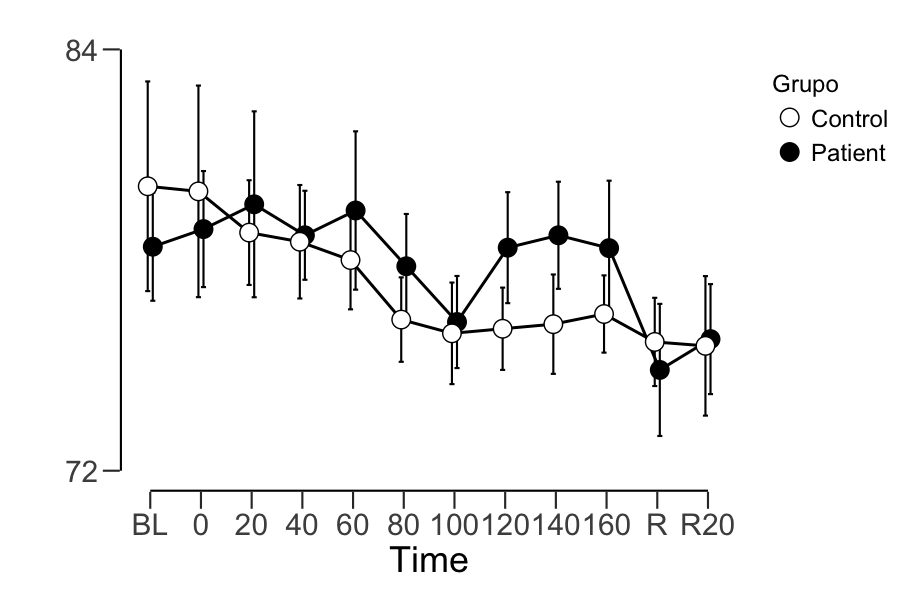
**HEART RATE**

| **Within Subjects Effects** | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **Sphericity Correction** | | **Sum of Squares** | | **df** | | **Mean Square** | | **F** | | **p** | |
| Time |  | Greenhouse-Geisser |  | 892.854 | ᵃ | 3.360 | ᵃ | 265.750 | ᵃ | 5.460 | ᵃ | < .001 | ᵃ |
| Time ✻ Grupo |  | Greenhouse-Geisser |  | 199.228 | ᵃ | 3.360 | ᵃ | 59.299 | ᵃ | 1.218 | ᵃ | 0.306 | ᵃ |
| Residual |  | Greenhouse-Geisser |  | 6214.280 |  | 127.670 |  | 48.674 |  |  |  |  |  |
|  | | | | | | | | | | | | | |
| Note.  Type III Sum of Squares | | | | | | | | | | | | | |
| ᵃ Mauchly's test of sphericity indicates that the assumption of sphericity is violated (p < .05). | | | | | | | | | | | | | |

| **Between Subjects Effects** | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **Sum of Squares** | | **df** | | **Mean Square** | | **F** | | **p** | |
| Grupo |  | 46.554 |  | 1 |  | 46.554 |  | 0.022 |  | 0.883 |  |
| Residual |  | 80477.470 |  | 38 |  | 2117.828 |  |  |  |  |  |
|  | | | | | | | | | | | |
| Note.  Type III Sum of Squares | | | | | | | | | | | |

### Descriptives

#### Descriptives Plot (95% CI)



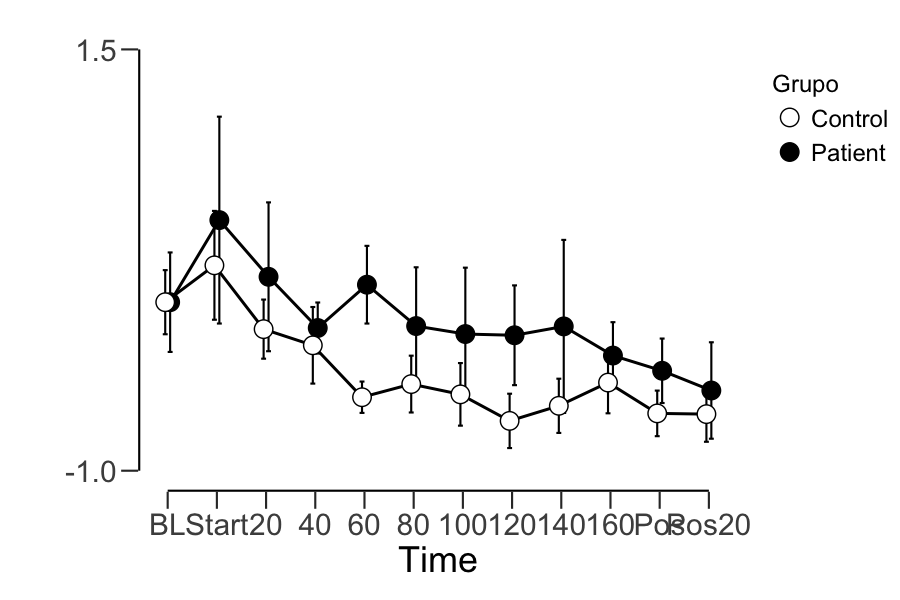
**ELECTRODERMAL RESPONSE MAGNITUDE (ERM)**

| **Within Subjects Effects** | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **Sphericity Correction** | | **Sum of Squares** | | **df** | | **Mean Square** | | **F** | | **p** | |
| Time |  | Greenhouse-Geisser |  | 30.600 | ᵃ | 4.273 | ᵃ | 7.162 | ᵃ | 8.934 | ᵃ | < .001 | ᵃ |
| Time ✻ Grupo |  | Greenhouse-Geisser |  | 3.817 | ᵃ | 4.273 | ᵃ | 0.893 | ᵃ | 1.115 | ᵃ | 0.353 | ᵃ |
| Residual |  | Greenhouse-Geisser |  | 130.159 |  | 162.361 |  | 0.802 |  |  |  |  |  |
|  | | | | | | | | | | | | | |
| *Note.*  Type III Sum of Squares | | | | | | | | | | | | | |
| ᵃ Mauchly's test of sphericity indicates that the assumption of sphericity is violated (p < .05). | | | | | | | | | | | | | |

| **Between Subjects Effects** | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **Sum of Squares** | | **df** | | **Mean Square** | | **F** | | **p** | |
| Grupo |  | 10.464 |  | 1 |  | 10.464 |  | 3.792 |  | 0.059 |  |
| Residual |  | 104.845 |  | 38 |  | 2.759 |  |  |  |  |  |
|  | | | | | | | | | | | |
| *Note.*  Type III Sum of Squares | | | | | | | | | | | |

**Descriptives**

**Descriptives Plot (95% CI)**



**SKIN CONDUCTANCE LEVEL (SCL)**

| **Within Subjects Effects** | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **Sphericity Correction** | | **Sum of Squares** | | **df** | | **Mean Square** | | **F** | | **p** | |
| Time |  | Greenhouse-Geisser |  | 1.582 | ᵃ | 1.727 | ᵃ | 0.916 | ᵃ | 32.094 | ᵃ | < .001 | ᵃ |
| Time ✻ Grupo |  | Greenhouse-Geisser |  | 0.094 | ᵃ | 1.727 | ᵃ | 0.054 | ᵃ | 1.907 | ᵃ | 0.162 | ᵃ |
| Residual |  | Greenhouse-Geisser |  | 1.873 |  | 65.612 |  | 0.029 |  |  |  |  |  |
|  | | | | | | | | | | | | | |
| *Note.*  Type III Sum of Squares | | | | | | | | | | | | | |
| ᵃ Mauchly's test of sphericity indicates that the assumption of sphericity is violated (p < .05). | | | | | | | | | | | | | |

| **Between Subjects Effects** | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **Sum of Squares** | | **df** | | **Mean Square** | | **F** | | **p** | |
| Grupo |  | 0.293 |  | 1 |  | 0.293 |  | 2.365 |  | 0.132 |  |
| Residual |  | 4.700 |  | 38 |  | 0.124 |  |  |  |  |  |
|  | | | | | | | | | | | |
| *Note.*  Type III Sum of Squares | | | | | | | | | | | |

**Assumption Checks**

| **Test of Sphericity** | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **Mauchly's W** | | **p** | | **Greenhouse-Geisser ε** | | **Huynh-Feldt ε** | |
| Time |  | 1.491e -12 |  | < .001 |  | 0.157 |  | 0.164 |  |
|  | | | | | | | | | |

**Descriptives**

**Descriptives Plot (95% CI)**

