**Data Set for Assessment 2**

**Refer to Assessment 2 in your unit information.**

**Your lecture notes will explain some of the theories and predictions based on arousal regulation theory. Your lecturer will assist you with some of the more technical components of the experiment such as statistical analysis approaches.**

**Experimental Design**

Twenty male participants who are physically active were randomly assigned to two groups. Each consisted of 10 per group. Group one was tested on the HUMAC-NORM muscle evaluation system for torque, work and power using leg extension and flexion. Refer to figure 1.



**Figure 1.** HUMAC-NORM muscle evaluation system testing for torque, work and power using leg extension and flexion.

**Experimental Intervention**

**Group 1**. Were pretested for torque, work and power using leg extension and flexion and then played cards for 30 minutes, then each participant was retested for torque, work and power using leg extension and flexion. All participants were directed to try their best on the HUMAC-Norm.

**Group 2**. Were pretested for torque, work and power using leg extension and flexion and then were directed to psych-up mentally to promote an intention of performing better for 30 minutes, then each participant was retested for torque, work and power using leg extension and flexion. All participants were directed to try their best on the HUMAC-Norm.

**Results**

Table 1. Presents the table of results for each group at the pretest and retest stages. The units of each measurement are included in the table.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Participants** | **Pretest**  **Torque**  **(N.m)** | **Pretest**  **Work**  **(J)** | **Pretest**  **Power**  **(W)** | **Retest**  **Torque**  **(N.m)** | **Retest**  **Work**  **(J)** | **Retest**  **Power**  **(W)** |
| **Group 1** |  |  |  |  |  |  |
| 1 | 160 | 200 | 300 | 150 | 190 | 301 |
| 2 | 170 | 215 | 315 | 160 | 210 | 312 |
| 3 | 175 | 200 | 315 | 180 | 205 | 317 |
| 4 | 165 | 212 | 295 | 160 | 210 | 291 |
| 5 | 200 | 195 | 295 | 190 | 190 | 296 |
| 6 | 210 | 230 | 300 | 200 | 220 | 305 |
| 7 | 195 | 220 | 310 | 190 | 210 | 308 |
| 8 | 140 | 165 | 280 | 140 | 170 | 285 |
| 9 | 135 | 165 | 285 | 140 | 165 | 285 |
| 10 | 145 | 175 | 290 | 145 | 170 | 286 |
| **Group 2** |  |  |  |  |  |  |
| 1 | 162 | 205 | 305 | 170 | 215 | 325 |
| 2 | 168 | 205 | 310 | 175 | 219 | 320 |
| 3 | 170 | 210 | 315 | 204 | 215 | 325 |
| 4 | 170 | 215 | 290 | 185 | 225 | 299 |
| 5 | 195 | 195 | 299 | 199 | 199 | 299 |
| 6 | 215 | 235 | 305 | 222 | 245 | 315 |
| 7 | 200 | 215 | 300 | 205 | 225 | 315 |
| 8 | 142 | 170 | 280 | 155 | 185 | 290 |
| 9 | 135 | 165 | 295 | 155 | 185 | 301 |
| 10 | 150 | 180 | 290 | 159 | 189 | 305 |

**Additional Notes**

You will need to prepare all the information as if you were to write the report yourself. I have crunched the data and analysed it (also included on Learnline), you will need a hypothesis, to have read (and cited) at least three primary references which you can write up in a reference list APA style, that you have all the information on the methodology used, an understanding of the statistics you use, the results and the meaning of these and then what conclusions you can draw from the data and how this relates back to the literature you have reviewed.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Participants** | **Pretest**  **Torque**  **(N.m)** | **Pretest**  **Work**  **(J)** | **Pretest**  **Power**  **(W)** | **Retest**  **Torque**  **(N.m)** | **Retest**  **Work**  **(J)** | **Retest**  **Power**  **(W)** |
| **Group 1** |  |  |  |  |  |  |
| 1 | 160 | 200 | 300 | 150 | 190 | 301 |
| 2 | 170 | 215 | 315 | 160 | 210 | 312 |
| 3 | 175 | 200 | 315 | 180 | 205 | 317 |
| 4 | 165 | 212 | 295 | 160 | 210 | 291 |
| 5 | 200 | 195 | 295 | 190 | 190 | 296 |
| 6 | 210 | 230 | 300 | 200 | 220 | 305 |
| 7 | 195 | 220 | 310 | 190 | 210 | 308 |
| 8 | 140 | 165 | 280 | 140 | 170 | 285 |
| 9 | 135 | 165 | 285 | 140 | 165 | 285 |
| 10 | 145 | 175 | 290 | 145 | 170 | 286 |
| **Group 2** |  |  |  |  |  |  |
| 1 | 162 | 205 | 305 | 170 | 215 | 325 |
| 2 | 168 | 205 | 310 | 175 | 219 | 320 |
| 3 | 170 | 210 | 315 | 204 | 215 | 325 |
| 4 | 170 | 215 | 290 | 185 | 225 | 299 |
| 5 | 195 | 195 | 299 | 199 | 199 | 299 |
| 6 | 215 | 235 | 305 | 222 | 245 | 315 |
| 7 | 200 | 215 | 300 | 205 | 225 | 315 |
| 8 | 142 | 170 | 280 | 155 | 185 | 290 |
| 9 | 135 | 165 | 295 | 155 | 185 | 301 |
| 10 | 150 | 180 | 290 | 159 | 189 | 305 |