***Table S1.* Restless Legs Syndrome Severity, Frequency, and Occurrence in Adults With Restless Legs Syndrome and Multiple Sclerosis (N = 22)**

|  |  |  |
| --- | --- | --- |
|  | **Mean ± SD or no. (%)** | **Range** |
| **Overall RLS severity (IRLS total)** | 20.4 ± 6.1 | 9-31 |
|  |  |  |
| **RLS frequency (IRLS item 7; n (%))** |  |  |
| Never | 0 (0.0%) |  |
| 1 day a week | 0 (0.0%) |  |
| 2-3 days a week | 8 (36.4%) |  |
| 4-5 days a week | 5 (22.7%) |  |
| 6 to 7 days a week | 9 (40.9%) |  |
|  |  |  |
| **RLS occurrence** |  |  |
| At falling asleep (RLS-6 item 2) | 5.0 ± 2.4 | 0-8 |
| At night (RLS-6 item 3) | 4.5 ± 2.5 | 0-8 |
| During the day resting (RLS-6 item 4) | 4.6 ± 2.0 | 1-8 |
| During the day active (RLS-6 item 5) | 3.9 ± 2.7 | 0-10 |
|  |  |  |
| **Sleep satisfaction (RLS-6 item 1)** | 5.5 ± 2.3 | 0-9 |
| **Daytime sleepiness (RLS-6 item 6)** | 5.3 ± 2.2 | 0-9 |
| **Sleep composite score (RLS-6)** | 5.4 ± 1.9 | 0-8.5 |
| IRLS, International Restless Legs Syndrome Study Group Scale; RLS, restless legs syndrome; RLS-6, Restless Legs Syndrome-6 Scale. | | |

***Table S2*. Summary of Linear Regression Analyses for the Relationship Between Immediate Visuospatial Recall Scores, Restless Legs Syndrome, and Sleep Quality in Adults With Multiple Sclerosis (N = 22)**

|  |  |  |  |
| --- | --- | --- | --- |
| **BVMT-R (raw score)** | | | |
|  | **B** | **SE B** | **β** |
| Step 1\* |  |  |  |
| IRLS total | -.166 | .264 | -.166 |
| RLS-6 item 2 | -.997 | .523 | -.387 |
| RLS-6 item 5 | -.776 | .512 | -.343 |
| Step 2\* |  |  |  |
| IRLS total | -.162 | .273 | -.163 |
| RLS-6 item 2 | -1.040 | .650 | -.404 |
| RLS-6 item 5 | -.789 | .538 | -.349 |
| Sleep composite | .083 | .705 | .026 |
| *\** Model significant at *P* < .05; *R*2 = 0.507 for Step 1; *R*2 = 0.507 for Step 2 | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **BVMT-R (*z* score)** | | | |
|  | **B** | **SE B** | **β** |
| Step 1\* |  |  |  |
| IRLS total | -.032 | .059 | -.161 |
| RLS-6 item 2 | -.166 | .126 | -.328 |
| RLS-6 item 4 | .085 | .147 | .145 |
| RLS-6 item 5 | -.187 | .133 | -.422 |
| Step 2 |  |  |  |
| IRLS total | -.033 | .060 | -.170 |
| RLS-6 item 2 | -.125 | .143 | -.248 |
| RLS-6 item 4 | .125 | .163 | .214 |
| RLS-6 item 5 | -.190 | .135 | -.428 |
| Sleep composite | -.105 | .167 | -.169 |
| *\** Model significant at *P* < .05; *R*2 = 0.414 for Step 1; *R*2 = 0.428 for Step 2 | | | |

***Figure S1*. Scatterplots of Associations Between Cognitive Function Outcomes and Restless Legs Syndrome Symptoms in Adults with Multiple Sclerosis and Restless Legs Syndrome**

Chart, scatter chart

Description automatically generated