

Morningness-Eveningness Questionnaire were used to assess the other personal characteristics.

**Results:** Four-hundred and nine students (M = 93; F = 132, Other = 5, Mage =  $22 \pm 4.49$  y) participated in the study. The 39% of them ( $n = 167$ ) reported having had at least one SP episode. The most recurrent somatic sensation reported during sleep paralysis is the inability to speak or ask for help (80%), followed by feeling numb (77%), and the inability to open the eyes (69%) consistent with REM muscle atonia. Regarding cognitive sensations, the most recurrent is the feeling that someone is in the room (61%) followed by the fear of dying (58%) and feelings of being outside the body (55%). Participants who reported SP had higher scores on anxiety ( $p = 0.005$ ), reported worse quality of sleep ( $p = 0.002$ ), and reported higher depressive symptomatology ( $p = 0.038$ ) compared to non-SP participants. Participants with SP were more commonly associated with evening types and less with morning types ( $p = 0.030$ ).

**Conclusions:** Results show that SP are generally widespread in the student population, in line with the prevalence reported for the general population, and tend to have higher levels of anxiety and depression, and worse sleep quality than those who have never experienced sleep paralysis.

**Disclosure:** Nothing to disclose.

#### P478 | Neuropsychological and behavioral profile of patients with sleep-related hypermotor epilepsy (SHE) and patients with disorders of arousal (DOA)

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**Objectives/Introduction:** We aimed to compare the neuropsychological and behavioral profile of patients with sleep-related hypermotor epilepsy (SHE) and disorders of arousal (DOA), together with sleep macrostructure features. SHE and DOA are two distinct disease that share in common increased sleep instability and decreased sleep quality.

**Methods:** A total of 11 subjects with DOA (3 males, mean age  $32.3 \pm 10.9$  years) and 12 subjects with SHE (6 males,  $33.5 \pm 15.2$  years) were enrolled at the Sleep Center and the Epilepsy Center of the University of Cagliari. SHE and DOA diagnosis was made according to standard diagnostic criteria. All subjects were not taking any medications. All participants underwent a video-polysomnographic (vPSG) recording at sleep lab, according to standard procedures. Subjective sleep quality was assessed by means of Pittsburgh Sleep Quality Index (PSQI). All subjects underwent a comprehensive neuropsychological and behavioral assessment, including evaluation of global cognitive functions, long-term

verbal memory, visuo-constructional abilities, cognitive flexibility and non-verbal reasoning, selective attention, inhibition and processing speed, visuo-spatial abilities, abstract reasoning. Behavioral evaluation included assessment of depression and anxiety.

**Results:** SHE and DOA diagnosis was confirmed by vPSG according to current diagnostic criteria. No significant differences were found between the two groups in terms of education, age and gender distribution. SHE patients reported a significant worse subjective sleep quality ( $p = 0.001$ ) and objective sleep efficiency ( $p = 0.004$ ) compared to DOA patients. SHE patients were significantly more depressed than patients with DOA ( $p = 0.01$ ). Concerning cognitive functions, patient with SHE performed significantly worse in short-term verbal memory ( $p = 0.003$ ) and verbal learning ( $p = 0.002$ ) compared to patients with DOA.

**Conclusions:** SHE patients showed significantly worse cognitive performances, namely in short-term verbal memory and verbal learning, and depressive symptoms compared to DOA patients. Moreover, SHE patients reported worse subjective and objective sleep quality compared to DOA patients. Thus, SHE is associated with more significant sleep disruption that might be associated with increased risk of depression and cognitive dysfunction, compared to DOA.

**Disclosure:** Nothing to disclose.

#### P479 | REM sleep without atonia in patients with idiopathic REM sleep behavior disorder and Parkinson disease patients with and without REM sleep behavior disorder

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**Objectives/Introduction:** Rapid eye movement sleep behavior disorder (RBD) may be present in the setting of a clinically manifest synucleinopathy such as Parkinson disease (PD), Lewy body dementia or multiple system atrophy, or is considered to be idiopathic (iRBD) in absence of any of these conditions. There is a limited number of studies comparing disruption of atonia during REM sleep (RWA) in iRBD and PD patients with RBD (PD-RBD+).

**Methods:** We assessed 31 iRBD (mean age  $63.2 (\pm SD 9.6)$  years), 13 newly diagnosed PD-RBD+ (mean age  $60.3 (\pm 10.8)$  years) and 21 PD without RBD (PD-RBD-) (mean age  $52.5 (\pm 11.8)$  years) patients regarding a broad spectrum of clinical and polysomnographic parameters. ICSD-3 was used to diagnose RBD. Both AASM scoring manual and SINBAR criteria were used to assess the presence and characteristics of EMG activity during REM sleep. Only patients with  $AHI < 15$  and  $PLMI < 30$  were included.

**Results:** iRBD patients scored higher in RBD-SQ (9.5) than PD-RBD+ patients (5.5),  $p = 0.00002$ . Assessed according to the AASM rules,