



Women have a stronger response to late night curtailed sleep than men - effects on sleep macro and micro architecture and the relation to age

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Conclusion

Women have more N3% and less N1% and a stronger REM reduction to late night sleep restriction than men, particularly in higher age groups.

Background

The purpose was to investigate whether late night curtailed sleep would show different PSG responses depending on gender and age.

Results

Late night restricted sleep showed the expected reduction of sleep parameters plus increased N3%, but also decreased REM density.

Among the main results were that late night sleep showed a stronger increase in N3% in the young compared to the old, and stronger reduction in REM% in women than in men.

Women had more N3% and less REM% than men

Older participants had more TST, less N3%, lower sleep efficiency, more N1%, longer N3 latency, and more awakenings.

Method

60 individuals (equal groups of gender and age (20-30 and 65-75 years) participated in an experiment with a full night's sleep and one night with sleep between ≈ 0400h and 0700h in a balanced design. Sleep was recorded through standard polysomnography (PSG) at home.

Figure 1

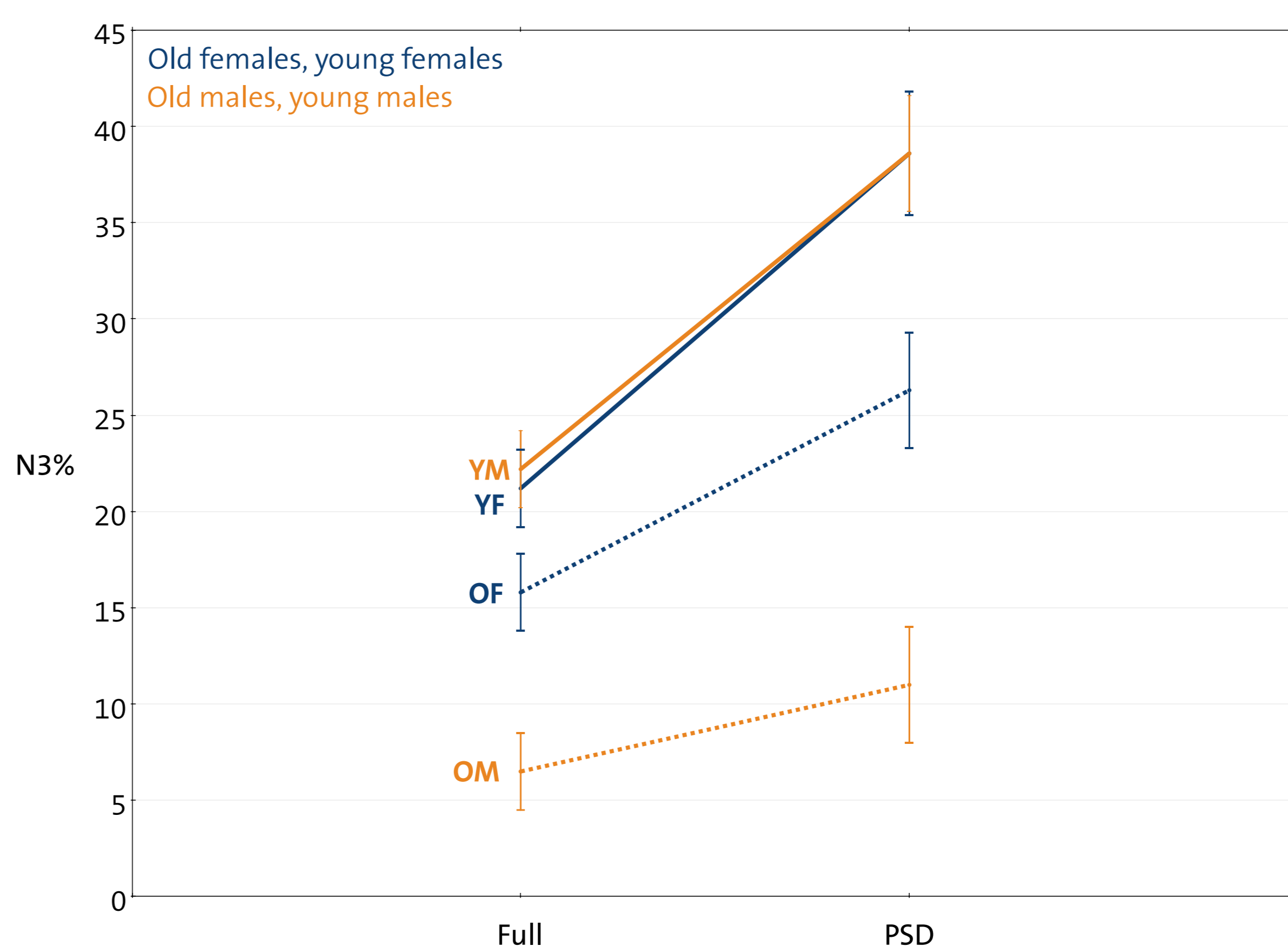


Figure 2

