

**P083****AGE OF NAP CESSATION AND SHORT-TERM SOCIAL-EMOTIONAL FUNCTIONING IN EARLY CHILDHOOD***Loeffler A<sup>1</sup>, Rankin P<sup>1</sup>, Thorpe K<sup>1</sup>, Staton S<sup>1</sup>*<sup>1</sup>University of Queensland, Southport, Australia

**Background:** Daytime nap cessation, in which sleep transitions from biphasic to monophasic sleep, is a common feature of early childhood sleep patterns. Yet, to date, understanding of the meaning of this transition for children's development is not well understood. The aim of this study is to investigate the relationship between the age of nap cessation and behavioral and social functioning in young children.

**Methods:** Parent report data from the Effective Early Educational Experiences (E4Kids) study of N=1700 children from across Queensland and Victoria is analysed. Data on age of nap cessation, Strengths and Difficulties Questionnaire (SDQ), and Social Skills Improvement Scale (SSIS) is examined to determine whether age of nap cessation is associated with internalizing and externalizing behaviour and social skills in early childhood.

Progress to date

Data collection and cleaning are complete. Initial descriptive analyses and identification of significant covariates are underway, and final regressions will be run shortly.

Intended outcome/ Impact

This study provides new evidence on the relationship between age of napping cessation and social-emotional outcomes in young children. Such evidence is important for building an understanding of the role of sleep cessation in children's early development, and to inform practitioners and parents responsible for supporting children's sleep.

**P084****IS COGNITIVE BEHAVIOUR THERAPY FOR INSOMNIA (CBTi) RESPONSIVENESS A FUNCTION OF OBJECTIVE SLEEP EFFICIENCY RATHER THAN OBJECTIVE SLEEP DURATION?***Lovato N<sup>1</sup>, Micic G<sup>1</sup>, Lack L<sup>1</sup>*<sup>1</sup>Flinders University, Bedford Park, Australia

**Introduction:** Past research and our own has not shown a differential response to Cognitive Behaviour Therapy for insomnia (CBTi) based on objective sleep duration. It is valuable to investigate CBTi responsiveness is a function of objective sleep efficiency (SE) instead of objective sleep duration. This study is a secondary exploratory analysis of our earlier clinical trial to assess the differential therapeutic response to CBTi for older insomniacs based on SE prior to treatment.

**Method:** Seventy-nine adults (male=34, mean age=63.38, SD=6.25) with sleep maintenance insomnia were selected. Participants were grouped into 3 ordinal groups; the top 50% of participants (above the median percent sleep time-normal SE), the 25% of participants in the third quartile (moderately low SE), and the bottom 25% of participants (severely low SE) based on 1-night of home-based polysomnography. Participants were randomly allocated to CBTi or wait-list control. One-week sleep diaries, actigraphy and a battery of questionnaires evaluated the efficacy of CBTi for each SE group. Outcome measures were taken at pre-treatment, post-treatment, and 3-month follow-up.

**Results:** CBTi produced robust improvements in sleep quality including reduced wake after sleep onset, and improved sleep

efficiency. Participants reported a reduction of scores on the Insomnia Severity Index, Flinders Fatigue Scale, Epworth Sleepiness Scale, Daytime Feeling and Functioning Scale, Sleep Anticipatory Anxiety Questionnaire, Dysfunctional Beliefs and Attitudes Scale, and increased Sleep Self-Efficacy Scale. All improvements were significant relative to waitlist and comparable regardless of objective SE at pre-treatment.

**Discussion:** CBTi responsiveness did not differ as a function of objective SE.

**P085****BODY COMPOSITION EFFECTS OF HIGH INTENSITY FUNCTIONAL EXERCISE TRAINING DURING RAPID WEIGHT LOSS IN OBESE PATIENTS WITH OBSTRUCTIVE SLEEP APNOEA: A PILOT RANDOMISED CONTROLLED TRIAL.***Lowrie F<sup>1,2</sup>, Phillips C<sup>1,2,3,4</sup>, Yee B<sup>1,2,4</sup>, Gordon C<sup>1,2</sup>, Marshall N<sup>1,2,5</sup>, Cayanan E<sup>1,2</sup>*

<sup>1</sup>Faculty of Medicine and Health, The University of Sydney, Sydney, Australia, <sup>2</sup>Woolcock Institute of Medical Research, Glebe, Australia, <sup>3</sup>Department of Sleep and Respiratory Medicine, Royal North Shore Hospital, Sydney, Australia, <sup>4</sup>Department of Sleep and Respiratory Medicine, Royal Prince Alfred Hospital, Sydney, Australia, <sup>5</sup>Sydney Nursing School, University of Sydney, Sydney, Australia

**Introduction:** While Very Low Energy Diets (VLEDs) have been proven to reduce weight in patients with obstructive sleep apnoea (OSA) and co-morbid obesity, they can also result in excessive loss of muscle mass which adversely impacts health. Concurrent exercise training is considered an effective method of preventing muscle mass loss.

**Methods:** This prospective randomised controlled trial will recruit 30 overweight and obese men with untreated moderate-to-severe OSA to undergo a 12-week VLED with or without high-intensity functional exercise (HIFE) training. HIFE will be delivered through a commercially available supervised exercise program and incorporates interval training with a combination of progressively graded aerobic and anaerobic exercise.

The primary outcome measures are changes in body composition, assessed by dual x-ray absorptiometry (DEXA), and OSA severity (measured by apnoea hypopnea index). Secondary outcomes include glucose tolerance, ventilatory response, and peak oxygen uptake.

Data will be analysed on an intention-to-treat basis. Paired T-tests will be used to test the treatment effect of exercise compared to control. Confidence intervals will be used to analyse change in muscle mass and other secondary outcomes.

**Results:** Only one participant has completed the protocol to date. No results are available at this time.

**Discussion:** The results of this pilot study will look to confirm whether HIFE can protect against muscle mass loss, and additively benefit OSA severity during VLED, compared to VLED alone. It will also inform estimation of feasibility for a larger definitive study.