poorer mood and loneliness, highlighting some of the impacts that situations such as lockdown has among female workers.

O043
PRE-TRAUMA SLEEP DIFFICULTIES AND FATIGUE PREDICT TRAUMA-INDUCED CHANGES IN MENTAL HEALTH SYMPTOMS IN POLICE RECRUITS
Wolkow A.1,2, Kaldewaij R.3,4, Klumpers E.3,4, Koch S.3,4, Drummond S.1, Roelofs K.3,4
1Turner Institute for Brain and Mental Health, Monash University, Notting Hill, Australia, 2Paramedic Health and Well-being Research Unit, Monash University, Frankston, Australia, 3Donders Institute for Brain, Cognition and Behaviour, Centre for Cognitive Neuroimaging, Radboud University, Nijmegen, The Netherlands, 4Behavioural Science Institute, Radboud University, Nijmegen, The Netherlands

Introduction: Police are at risk of trauma and related mental health outcomes. Sleep disturbances and fatigue predict poor mental health in other populations, thus it is critical to determine whether they represent risk factors for mental health problems in first responders. We examined if pre-trauma sleep and fatigue experienced by police recruits predicted trauma-related mental health changes.

Methods: This study utilised data from the Police-in-Action Study, a longitudinal study which assessed police recruits (n=340) pre- (baseline) and post-15 months of emergency work (follow-up). Participants self-reported depression (Beck Depression Inventory; BDI), PTSD (PTSD Checklist for DSM-5; PCL-5), anxiety (State-Trait Anxiety Inventory) and stress (Perceived Stress Scale). Baseline sleep was measured using sleep items on the BDI and PCL-5, and the BDI fatigue item assessed baseline fatigue. Linear regressions examined whether baseline sleep and fatigue predicted the development of mental health symptoms (i.e., change in symptoms over time) while controlling for demographics, baseline mental health and trauma severity. Analyses were restricted to participants experiencing their core traumatic event between time-points (n=225), determined using the Clinician Administered PTSD Scale.

Results: Sleep difficulties in police at baseline predicted the development of depression (β=0.371 [0.109,0.633], p=0.006) and stress (β=0.243 [0.756,4.484], p=0.021) post-trauma. Baseline fatigue predicted post-trauma development of depression (β=0.272 [0.045,0.500], p=0.019) and anxiety (β=0.060 [0.007,0.113], p=0.028).

Discussion: Poor sleep and fatigue are pre-trauma risk factors for the development of mental health outcomes in new police. This suggests the need to investigate interventions targeting sleep and fatigue to reduce trauma-related mental health outcomes in police.

O044
THE ASSOCIATION OF THE SLEEP REGULARITY INDEX WITH SUBJECTIVE COGNITIVE FUNCTION AND ACADEMIC SKILLS IN ADOLESCENTS
Hand A.1, Stone E. J.1, Lu S.1, Chacos E.1, Carskadon A. M.2, Lockley W. S.3,4, Wiley F. J.1, Bei B.1, Klerman B. E.3,4,5, Rajaratnam M. W. S.1,3,4, Phillips J. K. A.1
1Turner Institute for Brain and Mental Health, School of Psychological Sciences, Monash University, Clayton, Australia, 2Department of Psychiatry & Human Behavior, Chronobiology & Sleep Research Laboratory, Providence, United States of America, 3Division of Sleep and Circadian Disorders, Departments of Medicine and Neurology, Brigham and Women’s Hospital, Boston, United States of America, 4Division of Sleep Medicine, Harvard Medical School, Boston, United States of America, 5Department of Neurology, Massachusetts General Hospital, Boston, United States of America

High-level cognitive function is essential for academic performance in adolescents. While obtaining sufficient sleep duration has been shown to support cognitive function less is known about the role of sleep regularity in cognitive function. We investigated how sleep regularity relates to self-report cognitive function in 179 Year 7 students (M±SD=12.81±0.41 years, 56% females) in Australia. Sleep/wake timing was measured via wrist actigraphy and daily sleep diaries over two-school-weeks. Sleep regularity was measured using the Sleep Regularity Index (SRI) calculated via actigraphy measured sleep (SRI range = 58-95). Self-report cognitive function was measured using the PROMIS Paediatric Cognitive Function questionnaire, which requires participants to self-report cognitive performance over the last four-weeks. Academic skills were measured using two-subtests (reading comprehension and numerical operations) from the Wechsler Individual Achievement Test – Third Edition (WIAT-III). We found that adolescents with more regular sleep self-reported better subjective cognitive function (β = 0.39, p = .001), even when controlling for age, sex, circadian phase assessed using DLMO, and total sleep time. In contrast, average total sleep time (range = 5.78-11.30 hours) alone was not associated with subjective cognitive function (β = 0.06, p = .99). Higher self-reported cognitive function was also associated with improved reading and numerical ability on the WIAT-III (β = 0.42, p = .04; β = 0.37, p = .02, respectively). The SRI did not predict performance on the WIAT (p>.05). Our findings suggest regular sleep may be important in supporting optimal cognitive functioning. These results have important implications for learning adolescence.

O045
SLEEP MANAGEMENT STRATEGIES AMONG MEDICAL STUDENTS
Duthie C.1, Cameron C.1, Smith-Han K.1, Beckert L.1, Delpachitra S.1,2, Garland S.3, Sparks B.1, Wibowo E.1
1University Of Otago, Dunedin, New Zealand, 2Memorial University of Newfoundland, St. John’s, Canada, 3Sleep Well Clinic, Christchurch, New Zealand

Introduction — Medical students are undertaking an intense curriculum, the stress of which may cause or worsen insomnia and depressive symptoms. We aim to investigate factors which might affect the sleep of medical students, and how they currently manage their sleep.

Methods — A brief online survey was sent to medical students, consisting of validated questionnaires, and questions related to sleep management strategies.

Results — We recruited 828 participants—49.5% reported insomnia symptoms and 51.4% reported depressive symptoms. After adjusting for gender, ethnicity and age, depressive symptoms (Mild: odds ratio (OR) = 6.26; Moderate: OR = 18.13; Severe: OR = 15.57), and sleep hygiene (OR = 1.07) were associated with insomnia symptoms. Commonly endorsed strategies for sleep management by students were undertaking regular exercise (80.1%), having consistent sleep-wake time (71.3%), and limiting caffeine intake (70.3%). Few were willing to see a clinician (23.4%) or take medication (22.3%). Participants with insomnia symptoms were more likely to prefer limiting their alcohol intake (OR = 1.77), limiting daytime naps (OR = 1.5), seeing clinicians (OR = 1.86), and taking sleep medication (OR = 3.98), but less likely to prefer avoiding intense work (OR = 0.71) or...