Results: Average GWG rates over the study period, weeks 1-7, and weeks 8-13 were 0.53±0.19, 0.58±.23, and 0.48±23 kg/week, respectively. Average TST and SE early in the 2nd trimester (weeks 1-3) were 439.7±53.1 min and 83.9±4.3%, respectively. Average changes in TST and SE across the study period were 10.8±46.0 min, (range:-55.8-100.7) and -0.5±3.6% (range:-8.3-6.0), respectively. Greater GWG rate was significantly associated with reduced TST across the study period (r=-.76, p =.004). Greater GWG rate in the 1st half of the 2nd trimester was significantly related to decreases in TST in the 2nd half of the 2nd trimester (r=-.79, p=.006). There were no other significant relationships among the study variables.
Conclusion: In a small sample of pregnant women, higher GWG rate early in the 2nd trimester was significantly associated with decreases in objective TST across the 2nd trimester. Poor sleep may be a sequela rather than a risk factor for excessive GWG. The impact of this relationship on maternal, labor, delivery, and child outcomes is uncertain.
Support (If Any): N/A

0248

STRESS, SLEEP, AND COPING SELF-EFFICACY IN ADOLESCENTS

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Introduction: Adolescence, particularly the transition to high school, is a period of development characterized by high stress and poor sleep. Bidirectional associations between stress and sleep have been established in adult populations, where a downward spiral of stress leading to worse sleep quality leading to increased stress impairs socioemotional function and has serious consequences for mental health. It is not clear whether a similar spiral is evident in teenagers, and if so, what factors might interrupt this cycle. In the present study, we examined the role of coping self-efficacy: the belief in one's capacity to cope with stresses and challenges.
Methods: In a sample of 381 9th graders, we tracked the temporal dynamics of self-reported stress, sleep quality, and coping self-efficacy in daily diary surveys across two school weeks using time-lag and cumulative multilevel models.
Results: We found that sleep quality on a given night influences next-day perceived stress and coping self-efficacy. We also found bidirectional associations, such that perceived stress and coping-self-efficacy on a given school day predicted sleep quality that night. Finally, we found that these effects accumulated over the course of the school week, so that nights of poor sleep showed larger associations with perceived stress and coping self-efficacy by Thursday and Friday. Likewise, accumulated stress and low coping self-efficacy across the school week magnified the likelihood of poor sleep quality by the end of the week. Following a weekend, cumulative sleep quality continued to impact stress and coping self-efficacy on the next Monday; however, accumulated levels of stress and coping self-efficacy no longer predicted sleep quality in a new school week.
Conclusion: This study unpacks the complex dynamics of interacting variables in a vulnerable developmental period. Our results reveal the crucial impact of students' own beliefs in their coping skills to either exacerbate or alleviate a destructive cycle of stress and poor sleep.
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0249

NIGHT SLEEP AND NAPPING TOGETHER CONSOLIDATE INFANTS' MOTOR PROBLEM SOLVING.

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Introduction: In adults, napping and night sleep have an additive effect on motor learning (Korman et al., 2007). Infant research typically tests the impact of either napping or night sleep on learning, but there may be a similar cumulative pattern (Seehagen et al., 2015). However, because infant sleep differs from adult sleep in duration, timing, and structure (Ednick et al., 2009), and possibly in functions, we cannot generalize across ages. The current study examines the roles of napping and night sleep on motor problem solving in infancy.
Methods: Thirty-two infants, within a week of giving up crawling, stood upright at the entrance of a tunnel. Navigating the tunnel requires a postural shift from walking to crawling, which is taxing for new walkers. A strict 15-step training protocol controlled when and how to highlight relevant details of the task. The session ended once infants exited the tunnel or exhausted the protocol.
Infants were tested on this task again, after their *nap* (n=9), after a *delay without a nap* (n=13), or *immediately* (n=10) after training. They also received it the next morning after night sleep. The primary outcome measure for all sessions was the number of prompts.
Results: Proportion of change in prompt number from training to test and test to follow-up were calculated. The *immediate* group showed a 40% improvement from training to test, but a 35% decrement from test to follow-up. The *nap* group showed a 20% decrement from training to test, but a 47% improvement from test to follow-up. The *no nap* group showed a 71% decrement from training to test, and a further decrement of 9% from test to follow-up.
Conclusion: Surprisingly, the *nap* group did not improve from training to test; however, they were the only group to improve after night sleep. In contrast, neither of the other groups demonstrated long-term improvements. Thus, it appears that napping and night sleep have an additive effect.
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0250

GENDER MODERATES THE RELATIONSHIP BETWEEN YOUTH SLOW WAVE SLEEP AND EMOTIONAL SYMPTOMS

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Introduction: Altered sleep architecture has been associated with emotional disorders (e.g., anxiety and depression). However, research on sleep architecture and symptoms in youth is limited, with inconsistent results (Ivanenko, Crabtree, & Gozal, 2005; McMakin & Alfano, 2015). Adult studies have found reliable gender differences, with a greater decrease in slow wave activity for depressed men but not women (Armitage & Hoffmann, 2001). Research has yet to examine gender differences in child samples.
Methods: Participants were 30 healthy pre-pubertal children with no psychiatric disorders (ages 7-11; M = 9.33, SD = 1.24; 70%