correlates between black and white Health ABC participants. The Health ABC study is a prospective cohort study established in 1997 to 1998 to investigate changes in body composition and mobility decline in a biracial cohort of older adults (N=3,075; 48.4% male, 41.6% black, aged 70-79 at baseline). Pain reported in the last 12 months that lasted at least one month was determined by self-report questionnaires. The pain experience among participants was divided into three categories: no pain, single site pain, and multisite pain. Measures of physical performance included the 6-meter usual walking speed and the physical performance battery. Differences in participant characteristics in Blacks and Whites were compared using analysis of variance for continuous variables and chi-squared tests for categorical variables. Of the 3,075 people in the Health ABC study, 26% reported single site pain, and 21% reported multisite pain. Females reported more multisite pain compared to males. Participants with single site or multisite pain reported significantly higher depression scores, anxiety symptomatology, BMI >30, lower physical performance, and lower 6-meter gait speed compared to those with no pain. 47.2% of obese black participants had multisite pain compared to 21.2% of obese white participants (p-interaction = 0.04). Whites with multisite pain had higher depression scores (CES-D > 16) compared to blacks (p-interaction = 0.04). Future studies should focus on the differential impact of multisite pain and decline in physical performance over time in older adults.

(440) The effects of race and sex on experimental sleep disruption-induced hyperalgesia
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Discrepancies in both pain sensitivity and sleep quality have been attributed to differences in gender and race. In general, females and non-Caucasians tend to display greater pain sensitivity and have poorer sleep quality than males and Caucasians, respectively. Sleep disruption has been increasingly found to heighten pain sensitivity, but the effects of race and sex on sleep disruption hyperalgesia are poorly understood. Using a within-subject crossover design, 77 healthy, good sleepers were randomized to receive either two nights of uninterrupted sleep (US total sleep time opportunity 280 min) or two nights of forced awakenings (FA total sleep time opportunity 480 min). Participants represented varying demographics: sex (33 male, 44 female), and race (33 Caucasian, 26 African American, 10 Asian, and seven reported as other, more than one race, or unknown). Following the second night of both sleep conditions, we assessed heat pain threshold (HPT) and pressure pain threshold (PPT) bilaterally on the medial forearm and the interphalangeal joints of the thumbs, respectively. Linear mixed effects models revealed a sleep condition x race interaction for HPT (p < 0.05), such that HPT was significantly lower following FA compared to US selectively in Caucasian participants. A sleep condition x race x sex interaction was observed for PPT (p < 0.001), reflecting lower PPT following FA for non-Caucasian males compared to Caucasian males. In contrast, females did not display race-dependent differences following FA on PPT. These results support previous literature showing that sleep deprivation increases pain sensitivity, and to our knowledge provides the first evidence of individual differences in the association of sleep and pain as a function of race and sex. Notably, the race-dependent effects varied by nocturnal stimulus, and the finding of decreased HPT after sleep disruption in Caucasian compared to non-Caucasian individuals is seemingly counterintuitive to findings in the literature that non-Caucasians typically demonstrate decreased HPT.

(441) Differences in the experience and management of chronic pain across first-, second-, and third-generation Mexican Americans: Results from NHANES 1999-2004
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Generation status is one indicator of acculturation that may affect the chronic pain experience for Mexican Americans (MAs). Using data from the 1999-2004 National Health and Nutrition Examination Survey (NHANES), prevalence of chronic pain, healthcare insurance coverage, and analgesic medication use were examined among first-, second-, and third-generation MAs. Logistic regression models adjusted for sex and age, and sampled design effects were used to examine differences in: (1) chronic pain (≥3 months) prevalence among all MA respondents (n=3,353) and (2) location of pain, healthcare insurance coverage, and analgesic medication use among MA respondents with chronic pain (n=331). Across all respondents, second- and third-generation MAs had higher odds of reporting any chronic pain than first-generation MA (OR=1.92 [1.41-2.62]; OR=2.50 [1.69-3.69], p<.0001, respectively). Compared to first-generation MAs with chronic pain, second-generation MAs had lower odds of reporting chronic arm/hand pain (OR=0.54 [0.30-0.99], p<.05), and second- and third-generation MAs had lower odds of reporting chronic headache/migraine (OR=0.51 [0.27-0.97]; OR=0.56 [0.31-1.00], p<.05, respectively). Compared to first-generation MAs with chronic pain, second- and third-generation MAs had higher odds of healthcare insurance coverage (OR=1.77 [1.20-2.60]; OR=2.38 [1.53-3.93], p<.01, respectively), particularly private insurance (OR=2.10 [0.99-4.53]; OR=2.09 [1.18-3.70], p<.05, respectively) and Medicare (OR=6.62 [2.56-18.41]; OR=2.74 [1.13-6.62], p<.05, respectively), but reported similar rates of Medicaid (p>0.20). Compared to first-generation MAs with chronic pain, second- and third-generation MAs had higher odds of reporting opioid analgesic medication use (OR=4.07 [2.11-7.82], p<.0001) but lower odds of reporting NSAID/analgesic combination medication use (OR=0.55 [0.31-0.96], p<.05). First- and second-generation MAs reported similar analgesic medication use (p>0.50). Our results indicate that, compared to second- and third-generation MAs, first-generation MAs reported lower prevalence of chronic pain overall. Moreover, first-generation MAs with chronic pain reported lower rates of health insurance coverage and opioid analgesic use. Future investigations should examine other indicators of acculturation in MAs, such as language preference, to better understand how the acculturation process affects the experience and management of chronic pain.

(442) Racial/ethnic differences in experimental pain sensitivity and associated factors – cardiovascular responsiveness and psychological status
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This study aimed to evaluate the contributions of psychological status and cardiovascular responsiveness to racial/ethnic differences in experimental pain sensitivity. Data collected from 3,159 TMD-free individuals - non-Hispanic white (NHW): 1,637, African-American (AA): 1,012, Asian: 299, and Hispanic: 211 - from the OPPERA prospective cohort study were used. Variables analyzed included: quantitative sensory testing measures for pressure, mechanical cutaneous, and heat pain, cardiovascular responsiveness measures (BP, HR, MAP ratio, and heart rate variability), and psychological status (depression, anxiety, stress, coping, and catastrophizing). Structural equation modeling was used for mediation analyses. Putative mediators that showed significant racial/ethnic differences were entered into the final models simultaneously with age, gender, BMI, geographic study site, and education and income level as covariates. Pain catastrophizing was a significant mediator for the associations between race and heat pain tolerance, heat pain ratings (HPR), heat pain catastrophizing (HPA), mechanical cutaneous pain ratings and aftersensations (MCPTS), HPA, and mechanical cutaneous pain temporal summation (MCPTS) for both AAs vs. NHWs and AAs compared to NHWs. HR/MAP index showed a significant negative mediating effect on the association between race (AAs vs. NHWs) and heat pain tolerance. Coping negatively mediated the association between race and heat pain tolerance, HPR, and MCPTS in both AAs and Asians, compared to NHWs. Negative emotion was a significant mediator for the associations between race (AAs vs. NHWs) and mechanical cutaneous pain threshold (HPR), HPA, and mechanical cutaneous pain threshold ratios. Furthermore, sex was a significant moderator for the associations between race (Asian vs. NHWs) and mechanical cutaneous pain thresholds (HPR, HPA, and mechanical cutaneous pain threshold ratios). These results indicate that racial differences in pain sensitivity are complex, but both psychological and cardiovascular factors appear to be relevant mediators. Further clinical and experimental research is required to increase our understanding of the suggested mechanisms explaining racial/ethnic differences in pain sensitivity found in the current study and to extend our findings to clinical pain populations.

(443) Racial Differences in Appraisal of Physical Activity among Community-Dwelling Adults with Chronic Low Back Pain
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Research indicates that individuals who identify as non-Hispanic Black or Hispanic tend to report more frequent, severe, and disabling pain compared to other racial groups, particularly non-