Study Design in the Real World

The purpose of our study was to identify the relationship between caffeine consumption and effects on adolescents. We performed study on 234 middle school students at one middle school in Daegu using a self report questionnaire. We divided students to quartiles according to amount of caffeine intake. We used Beck Depression Inventory (BDI) to evaluate the degree of depression and Beck Anxiety Inventory (BAI) to evaluate the degree of anxiety. We also used Insomnia Severity Scale (ISI) to evaluate the degree of insomnia and Global Assessment of Recent Stress (GARS) to evaluate the stress in students. *The Relationship of Caffeine Intake with Depression, Anxiety, Stress, and Sleep in Korean Adolescents, Jin et. al.*

Population: Adolescents in Korea; Adolescents in industrialized nations.
Sample: 234 middle school students.
Variables: BDI, BAI, ISI, GARS, Amount of caffeine.
Categorical Response
Categorical Treatment
Observational: Adolescents chose their level of treatment. (Convenience)

Burgeoning evidence suggest that patients with chronic pain may be open to placebos treatments under certain contexts despite limited knowledge of their well-established psycho-neurobiological underpinnings. This investigation sought to examine the effects of a brief, mechanism-based placebo analgesia educational intervention on aspects placebo knowledge and acceptability. Participants with chronic musculoskeletal pain completed a web-based survey where they rated their knowledge of placebo analgesia; assessed placebo acceptability across different medical contexts; and evaluated six unique patient-provider treatment scenarios to assess the role of treatment effectiveness and deception on patient/provider attributions. Using a pre-post design, participants were randomized to receive either a placebo educational intervention or an active control education. Results demonstrated that the educational intervention greatly improved perceptions of placebo knowledge, effectiveness, and acceptability, even in deceptive treatment contexts. *Placebo use in pain management: a mechanism-based educational intervention enhances placebo treatment acceptability, Kisaalita et. al. (Placebo analgesia is pain reduction via taking placebos.)*

Papulation: Peg

Population: People with chronic pain
Sample: Participants with chronic musculoskeletal pain
Variables: Educational intervention Questionair questions
Treatment
Response
Treatment → Randomization Placebo

We aimed to determine how blood THC concentrations relate to driving impairment, with and without alcohol. Current occasional ($\geq 1\times$/last 3months, $\leq$ 3days/week) cannabis smokers drank placebo or low-dose alcohol, and inhaled 500mg placebo, low (2.9%)-THC, or high (6.7%)-THC vaporized cannabis over 10 min ad libitum in separate sessions (within-subject design, 6 conditions). Participants drove (National Advanced Driving Simulator, University of Iowa) simulated drives (0.8h duration). Blood, oral fluid (OF) and breath alcohol samples were collected before (0.17h, 0.42h) and after (1.4h, 2.3h) driving that occurred 0.5–1.3h after inhalation. We evaluated standard deviations of lateral position (lane weave, SDLP) and steering angle, lane departures/min, and maximum lateral acceleration. *Cannabis Effects on Driving Lateral Control With and Without Alcohol, Hartman et. al.*

We used adult baseline data from the LifeLines Cohort Study ($N = 71,058$) linked with data on the participants' neighborhoods from Statistics Netherlands. The current presence of a major depressive episode was assessed using the MINI neuropsychiatric interview. The association between neighborhood income and major depressive episodes was assessed using a mixed effect logistic regression model adjusted for age, sex, marital status, education and individual (equalized) income. This regression model was sequentially adjusted for lifestyle factors, chronic diseases, stress, and social participation to evaluate conceptual model 1. To evaluate conceptual models 2 and 3, an interaction term for neighborhood income*individual income was included. *Neighborhood income and major depressive disorder in a large Dutch population: results from the LifeLines Cohort study, Bart et. al.*

Our data come from Wave 13 of the Household, Income and Labour Dynamics in Australia (HILDA) survey, collected in 2013-2014. According to GAMLSS, we find that the risk of ending up in poor, fair or average health is lower for those who have relatively high incomes ($80,000) than for those who have relatively low incomes ($20,000), for both smokers and non-smokers. In relative terms, the risk-lowering effect of income appears to be the largest for those who are in poor health, again for both smokers and non-smokers. The results obtained on the basis of quantile regression are to a large extent comparable to those obtained by means of GAMLSS regression. *A distributional regression approach to income-related inequality of health in Australia, Kessels et. al.*

Recent reports indicate that simultaneous alcohol and marijuana (SAM) use is a growing health concern among college students. To explore this, the current study investigated the direct and indirect effects of two established risk factors for drinking on SAM use: perceived parental permissiveness toward drinking and friends' approval toward drinking (injunctive norms). Incoming first-year students (N=470) reported parental permissiveness, injunctive norms, alcohol use, and SAM use at baseline (T1) and 5 months later (T2). SAM use was assessed again 15 months post-baseline (T3). Path analysis was conducted to examine whether T2 variables mediated relationships between T1 variables and T3 SAM use. Results revealed that T2 student alcohol use mediated the effects of T1 parental permissiveness, injunctive norms, and alcohol use on T3 SAM use. Findings from this study extend research on SAM use by identifying perceived parental permissiveness and injunctive drinking norms as risk factors for SAM use through their effects on alcohol use. Based on these findings, it is plausible that parent-based interventions and interventions targeting peer injunctive norms during the first year of college could be used to effectively prevent or reduce SAM use. *The Prospective Effects of Parents' and Friends' Approval of Drinking on Simultaneous Alcohol and Marijuana Use During College, Trager et. al.*

Population: College students
Sample: 470 first-year students
Variables: Parental Permissiveness, injunctive norms, alcohol/SAM use
Response
treatments
Observational Study (SRS) (Census?)
Population limited only to that class (Convenience)