Dissertation/NRSA R Scripts

**Hypothesis 1 Script:**

* NRSA hyp1.r

**Hypothesis**:

For hypothesis 1, we predict that daily discrimination will increase negative affect, which, concordant with prior research, will increase craving and subsequent substance use. # Discrimination is also predicted to increase substance use directly. To test this, we will test MLMs with discrimination as a level-1 predictor, and negative affect and craving as level-1 outcomes. I hypothesize that daily experiences of discrimination will increase negative affect and subsequent craving in line with stress generation models. To test this hypothesis, discrimination will be examined as a predictor of negative affect and craving, such that each outcome variable is lagged by one EMA assessment occasion (e.g., discrimination at Time 2 predicting negative affect at Time 3). To ensure appropriate understanding of these variables for Latine participants, I will examine U.S. nativity and fears of deportation as level-2 covariates and cross-level moderators. To ensure adequate consideration of gender, it will also be examined as a cross-level moderator. The cross-level effects will be tested in accordance with recommendations by Preacher and colleagues (Preacher et al., 2006) in that the random slopes measuring the effect of discrimination on negative affect, craving, and substance use will be examined as a level-2 (between- participant) outcome. We will then examine gender, U.S. nativity, and fears of deportation (if feasible) as predictors of these random slopes. Note that US nativity and fears of deportation were not analyzed due to having so few data on it.

**Hypothesis 2 Scripts:**

* NRSA Hypo 2 formal.R (main)
  + Script for formal substance use health seeking behavior as outcome
* NRSA Hypo 2 HSBANY.R (exploratory)
  + script for hypothesis 2 with HSBANY ("have you sought ANY treatment for your substance use this past week?") We had more complete data for this question, albeit not much variability as most were "0" (No).
* NRSA hyp2 informal.R (exploratory)
  + Script for informal substance use health seeking behavior as outcome

**Hypothesis**:

For hypothesis 2, I hypothesize that healthcare and overall discrimination will decrease perceptions of substance use treatment effectiveness, which will decrease formal treatment use. Analyses for Hypothesis 2 will mirror analyses of Hypothesis 1. That is, we will examine daily discrimination and ongoing healthcare discrimination as level-1 predictors and lifetime discrimination as a level-2 predictor of perceived treatment effectiveness measures. Both the random intercept (average levels) and random slope (change in treatment effectiveness) will be examined as outcomes. Treatment utilization will also be examined as a dichotomous (yes/no) level-2 outcome. Tests of moderation will follow the same procedures as Hypothesis 1. These analyses will test the hypothesis that lifetime and ongoing discrimination decrease perceived treatment effectiveness and ultimately treatment utilization. Treatment utilization will initially be examined using data from the subsequent RHC interview wave; however, additional waves will also be examined.

**Hypothesis 3 Script:**

* NRSA Hypo 3.R

**Hypothesis**:

Finally, for hypothesis 3, I predict use of formal treatment for substance use is hypothesized to decrease substance use. Each of these mechanisms represents a unique pathway leading to substance use among Latine and African American persons. Analyses for hypothesis 3 will mirror analyses from hypothesis 1 and 2. That is, daily discrimination will be examined as a level-1 predictor of multiple forms of help seeking and directly test potential mediators of these relations. Tests of moderation will follow the same procedures and include the same variables as hypothesis 1 & 2. Specifically, analyses will test the hypothesis that daily, lifetime, and healthcare discrimination will decrease formal help seeking to which participants do not have current social ties (e.g., outpatient treatment use or formal peer-based services), but not informal sources of help from within existing social networks (i.e., those in which participants would not anticipate discrimination-seeking help from friends/family. Seeking help from each source will be examined as level-2 outcomes. Similarly, discrimination will be tested as a predictor of both short- and long-term substance use. Daily discrimination will be tested as a level-1 predictor of subsequent interval substance use in EMA measures. Daily, lifetime, and healthcare discrimination will be examined as predictors of continued substance use at subsequent RHC waves (both self-report and urinalysis). These analyses will test hypotheses that discrimination increases the likelihood of sustained use. Finally, the indirect effects of perceived treatment effectiveness, help seeking, and negative affect will be explored as potential mediators of short- (EMA-based) and long-term (from RHC interviews) substance use.

**Additional Scripts:**

* Recoding Demographics.R
  + Script for cleaning, recoding demographic variables
* Recoding missing values from raw files.R
  + Script used to recode missing values. Original values in downloaded (raw) files from Qualtrics included data that needed recoding (e.g., cells with “MISSING\_VALUE” and “UNASKED\_QUESTION”)