

# exploratory

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## load packages

```
library(data.table)
library(readxl)
```

## load data3

```
full <- read_excel("~/Downloads/Updated DATAforBIOSTAT699.xls")
full <- data.table(full)
pain <- full[, .(pid, initialsite, condition, grpnbr, numsessions, therapysite, AGE, yearfmonset, yearfmoend)]
```

## Study Aims

Primary Aim # 1: Main effects of the interventions vs. control. To test the hypothesis that both EET and CBT will lead to greater improvements in outcomes (pain, mood, disability, fatigue, sleep, positive affect and life satisfaction, and cognitive functioning) over a 1-year follow-up than the control condition.

Secondary Aim # 1: Differential outcome efficacy of interventions. To explore the hypotheses that EET leads to greater improvement in depression and anxiety than does CBT, whereas CBT leads to greater improvement in physical functioning and activity than does EET.

## Methods

This dataset comes from a two-site, three-arm, allegiance-controlled randomized clinical trial. The dataset contains 230 individual subjects, with 94% females and 6% males.

Subjects were randomized to three different treatments. The outcome variable, pain, was measured at baseline, immediately post-treatment, and six months post-treatment.

Because this study was a randomized trial, we look at the different groups to see if the randomization was successful in creating evenly distributed groups.

## Description of Issues with data

There were 216 female subjects and only 14 male subjects, representing 94% and 6%, respectively. Due to this gender imbalance in the study design, we cannot make any conclusive statements about men.