

A/B Testing Analysis

The confidence intervals (Figure 2) suggest there is a strong evidence that the effect is positive overall across attributes in terms of both user total time and user average time. The treatment effects are different for different covariates. The largest impact is on contributors and readers, whereas the least on new users and non-readers. In this sense, the new UI could help bring more engagement and able to get new users better started with the platform. Note that the positive effect on new users helps us discard the feature's novelty effect since both users in control and treatment are new to the platform. Unknown gender has wider confidence intervals across user types although UI design has positive effect on it. Overall, all treatment distributions of difference between pre-test and post-test in terms of user total time and user average time are to the right of that of the control. See Figure 1 for example.

For future experiments, we should try to increase the treatment sample size and keep the proportion across all groups as close as possible (current ratio is 80:20 control:treatment). For instance, the contributor of the control group doubles the size of the treatment group. In sum, I recommend push to production regarding the new UI design.

Figure 1. Difference in Difference of User Average Active Time

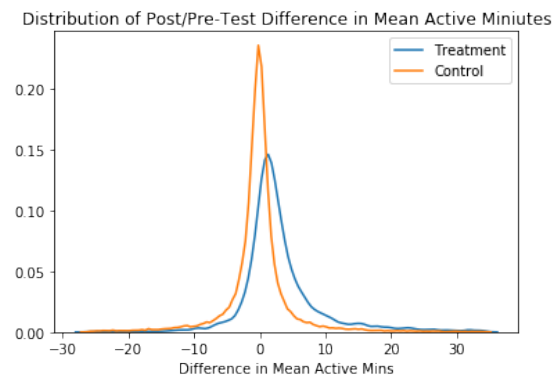


Figure 2. Confidence Intervals

