Optimal Policies to Battle the Coronavirus "Infodemic" Among Social Media Users in Sub-Saharan Africa

Revisions to data collected for evaluation

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Following collection of the data under adaptive assignment, we made several changes to our evaluation plans:

- For **best uniform policies**, we collect both the best as well as the second best of the headline- and respondent-level treatments. We use the approach for learning best fixed policies as described in Section 5.1 of the pre-analysis plan, and, as described there, while we evaluate across a balanced distribution of background treatment assignment, we implement *only* the uniform version of each policy. For headline-level treatments, the treatments implemented are the factcheck and related articles treatments. For the respondent-level treatments, the treatments implemented are the accuracy nudge and Facebook tips treatments.
- For the **optimal contextual policy**, we determined
  - We would focus only on a contextual *respondent*-level policy, to yield a better comparison between the best overall fixed treatment (accuracy, respondent-level) and a personalized contextual policy. Our initial approach crossed headline and respondent-level treatments, however, in comparing such a policy to the best uniform policy, it would not be straightforward to determine whether

differences were due to personalization, or to the joint assignment of headline-level treatments in the contextual policy.
  - To better share data across treatment conditions, instead of estimating a random forest model separately under each condition, we use a multi-arm causal forest estimated across conditions, as implemented in `grf`'s `multi_arm_causal_forest` function. In the evaluation data, then, we predict response under each unique (respondent-level) treatment, and take the maximum. For our causal forests, we set the best overall treatment, the accuracy nudge, as the reference level.
  - For a less granular policy, we restricted treatments assigned in the policy to the top four respondent-level treatment conditions: accuracy nudge, emotion suppression, Facebook tips, and video training.

In our evaluation split, we assign treatment to each observation with equal probability to:

- Pure control
- Related articles (pure headline-level)
- Factcheck (pure headline-level)
- Accuracy nudge (pure respondent-level)
- Facebook tips (pure respondent-level)
- Personalized respondent-level policy, as described above.

We target 2,000 observations in each condition.