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SOC 412

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An Online Engagement Experiment in an Interplanetary Exo-Biology Community:  
Pre-Registration Plan

**Introduction**

Online communities provide an important space for discussion and debate, especially now that humanity has spread across the stars and heavily relies on digital means of communication. From sports to politics to more obscure interests, there’s an online community for almost every topic imaginable. Thus, making everyone feel welcome is of the utmost importance to those who moderate these communities. The goal of this report is to explore new methods of encouraging participation in online discussions; specifically, we aim to discover whether or not “welcome messages” pinned to the top of a thread will increase engagement as measured by participant comments.

This experiment will take place in an interplanetary exo-biology community on Reddit. Participants come to this community for a wide array of reasons – to share their knowledge, meet others with similar interests, and even discover jobs and opportunities in the field of exo-biology. Of particular note is the fact that fierce debates about topics such as the nature of life and the politics of intergalactic exploration are frequent in this community; thus, this is an ideal community in which to test new methods of encouraging participation, as we want to ensure that controversial conversations don’t become vitriolic, and that members both old and new feel comfortable participating.

**Experiment Procedures**

The experiment has the following steps:

* We randomize posts to show or hide a welcome message at the top of the thread
  + Control: no welcome message above the poster’s content
  + Treatment: a message welcoming the viewer to the community and inviting them to participate in the discussion
* We observe the total number of comments received by each post
* We observe the number of comments posted by newcomers on each post
* Per our previous power analysis, in order to have an 80% chance of observing a statistically significant effect, we need at least [x] observations. Thus, we will stop the experiment after [x] observations, which should take approximately [y] days.

**Outcomes**

The following variables will be used to estimate the effect of welcome messages on community participation. Newcomers are defined as accounts who have not contributed to a discussion in the exo-biology community within the past 6 months.

*Outcome 1: the total number of comments per post*

The unit of observation for this outcome is a post, and the measure is the total number of comments received by the post.

*Outcome 2: the total number of newcomer comments per post*

The unit of observation for this outcome is a post, and the measure is the number of comments posted by newcomers, as defined above.

**Estimation Procedures**

**Community Q&A**

***GalagaGenius19:*** *These messages suck. For those of us on mobile phones, it's annoying to scroll past them. It won't make anything better, why are you wasting our time?*

We apologize that we weren’t able to optimize the welcome message for mobile users; your mobile experience will be back to normal once our experiment concludes in roughly [y] days. You may suspect that welcome messages won’t make anything better, but a previous study actually found that newcomer comments increased by 38%, while total comments increased by 10%. We’re excited to share the results from this study with the exo-biology community.

***MrAsteroid999:*** *This is just another example of the censorship and efforts to manipulate our lives by the reddit company. Stop messing with our lives, Princeton; we're not on your planet anymore!*

This study isn’t affiliated with Reddit; we are an independent team of researchers from Princeton University. Furthermore, we’re not removing any content from the subreddit, or censoring anyone’s opinions. In fact, we hope that our welcome messages will actually encourage more people to share their opinions with the rest of the community.

***FearMyBotanyPowers27:*** *This isn't real science. Most of the social sciences are just hand-waving anyway, since they can't control for unknown factors (I know space has messed with my head, rite?) and since all these studies have samples that are waay too small for the diversity of human experience out here in the 'verse.*

***Sector28Counselor:*** *While I don't mind scrolling past these messages, I do worry that we'll lose some people. Are we really sure we want to risk that with this study?*