Pre-Analysis Plan: How does Congruence Impact Civic Engagement with Organizations?

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This document lays out the pre-analysis plan for a project that aims to identify how organizational attributes can signal congruence – similarity in values — and such congruence can impact their willingness to engage with an organization, following Hoellerbauer (2021). It also describes a methodological approach to analyzing both of these questions. I argue that we can place organizations and individuals in the same latent values space. Individuals will be more likely to want to engage with organizations to which they are closer in that space. Individuals will generally prefer organizations that are closer to them in values. There are many different organizational traits that can cue shared values. In this project I focus on descriptive representation and localness: people will be more likely to think an organization shares their value if its membership reflects them in descriptive ways and if its roots are close to them geographically. The student sample for this project facilitates this investigation because there is a clear shared identity *and* a shared place of residence. I propose a novel two-step modeling approach that allows me to estimate an individual's proximity to a conjoint profile, and then test the effect of that proximity on other outcomes of interest. My model has two parts: an IRT-like component that helps estimate where organizations and individuals are in the same space, and a logistic regression that uses the results of the IRT model when estimating latent distances.

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†This pre-analysis plan adapts and extends the pre-analysis plan for a previous version of this project, which was registered with EGAP, ID: EGAP Registration ID: 20200612AD. I have analyzed the results from that experiment and found support for my hypotheses. However, further theoretical clarifications and concerns about the design have led me to seek to corroborate the results of that study after addressing these issues.

1 Theoretical Background of Expectations

The development literature argues that development-oriented civil society organizations can struggle to connect to local populations due to a lack of shared values (Mendelson and Glenn, 2002; Porter, 2003; Murdie, 2014). I call this values match between organizations and individuals *congruence*. Yet, how do individuals decide whether an organization will match their values or not? We know that localness and descriptive representation can lead voters to assume shared values with politicians in the case of elections (Evans et al., 2017; Shugart, Valdini and Suominen, 2005; Carlson, 2015; Keele et al., 2017; Carnes and Sadin, 2015; Calfano and Djupe, 2009; McDermott, 2009, 2005). In prior work (Hoellerbauer, 2021), I argue and find evidence that similar logic applies to civil society organizations. Individuals take cues about potential congruence from information they know about an organization – in other words, they obtain information on organizational attributes and characteristics and use them to assess congruence. Their perception of how congruent they are with an organization then influences how likely they are to engage with it.

More formally, I argue that individuals first use organizational attributes to form a picture how congruent an organization is with them. Second, individuals use information on congruence to make decisions about engagement. As Olson (1971) points out, contrary to many assumptions that humans are inherently social creatures, individuals will not automatically join an organization or engage in collective action. The costs involved can often be severe, and the benefits can seem far over the horizon. I argue, however, that organizations will find it easier to mobilize collective action when they exhibit traits that make them seem closer in values to the population they seek to engage. In Hoellerbauer (2021), I use a conjoint survey experiment to show that market vendors in Malawi are more likely to interact with an election-oriented civil society organization if it was founded in their district capital and if the leader is a former vendor. This supports my theory; nevertheless, the constraints of that survey made the mechanism – congruence – difficult to study directly. As such, the study described here tackles congruence much more directly. In the rest of this section, I first more concretely lay out my theory. I then describe the model I have developed to study the mechanism of congruence.[1]

1.1 Organizational Attributes, Congruence, and Engagement

I propose the following simple, utility function for individual i faced with organization j:

$$U_i(\mathbf{x}_j, C_{ij}, B_{ij}) = -(\theta_i - \xi(\mathbf{x}_j))^2 + B_{ij} - C_{ij} \tag{1}$$

where $\mathbf{x}_j$ is a vector of organizational traits, and C_{ij} and B_{ij} are other costs—such as time, money, reputation, or government censure—and benefits—such as the financial benefit of no longer having to pay bribes or achieving a more equitable distribution of government services—that individual i may incur or receive, respectively, when interacting with organization j. θ_i and $\xi(\mathbf{x}_j)$ represent individual i's and organization j's locations in a latent space. The substantive nature of this space can depend on the application, but I theorize that the

[1] Although, note that the model can be applied more generally.

space is a 1D representation of values – in other words, this is the congruence space.[2] You can tell what "kind" of organization an organization is by seeing where it falls in the latent space. θ_i can be seen as the location of individual i's ideal organization, which they compare with organization j's perceived location in that space, which is a function of its characteristics $\mathbf{x}_j$. Considered together, the $\theta_i - \xi(\mathbf{x}_j)$ term characterizes individual i's *congruence* with organization j, including directionality.[3] The smaller this distance, the more congruent an individual and an organization are. For simplicity's sake, here lack of congruence imposes an additional cost on an individual, although it could be framed as higher affinity leading to lower overall costs. In this formulation congruence is a benefit in and of itself — individuals will be happier working with an organization with which they are congruent because they will be among like-minded individuals and will feel like they belong.[4]

A logical conclusion from this utility function is that, all else equal, when an organization and an individual do not have a high degree of congruence, it will struggle to get that individual involved in its programming. As long as the distribution of ideal points is not uniform, but centered in a different place from location of an organization in the latent space, then the consequences of this model in terms of expected members are magnified.[5] An organization located far from the center of ideal points will then struggle to mobilize individuals collectively. Further, if the center of the distribution of organization locations is far from the center of the ideal point distribution, then organizations as a whole will struggle to mobilize individuals for collective action.

As Alinsky (1989[1971]) indicated in *Rules for Radicals*, individuals should be more open to engagement with organizations that reflect them and their interests. Mendelson and Glenn (2002, 241) restate this intuition in the context of development: "[i]f new ideas and practices are presented in a way that directly competes with local organizational cultures, local people are likely to reject them." Murdie (2014, 10) states that organizations must

[2]This space can be be multi-dimensional.

[3]This model formalizes the identity comparison model developed by Foreman and Whetten (2002) and casts it in terms of utility. The problem with the identity comparison model, and with the organizational identity literature (Foreman and Whetten, 2002; Dutton, Dukerich and Harquail, 1994; Reger, Gustaffson, Demarie and Mullane, 1994; Ashforth and Mael, 1989), is that it can be very difficult to pin down what identity means with respect to organizations, both for individuals and the organizations themselves. It is also not entirely clear how the identity mechanism works.

[4]An alternative formulation could be the following:

$$U_i(\mathbf{x}_j, C_{ij}, B_{ij}) = \frac{1}{(\theta_i - \xi(\mathbf{x}_j))^2} * B_{ij} - (\theta_i - \xi(\mathbf{x}_j))^2 * C_{ij} \tag{2}$$

where as the distance between an individual and an organization increases (the lower the congruence), the larger other costs seem and the smaller other benefits seem. In this formulation, congruence impacts the perception of costs and benefits. Individuals may believe that an organization has a higher chance of being effective and having similar goals (and thus more likely to gain them material benefits). They may also view the cost of attending a meeting — either direct, such as time or resources required to travel to the meeting, or indirect, such as potential social stigma — as less important because they will be among like-minded individuals. Of course, the utility function can also include congruence as a direct cost *and* as a moderator for existing costs and benefits. Note that the empirical implication of all of these formulations is the same — higher congruence should leader to higher engagement.

[5]If the distribution of ideal points *is* uniform, then the location of the organization will not matter as much. But it seems extremely unlikely for the distribution of ideal points to be uniform.

demonstrate "'shared values' with the domestic population." The necessity for respecting local customs when it comes to development organizations is also echoed in the works of Porter (2003); Challand (2005); Bardhan and Wood (2015). Scholars have thus recognized how important it is for organizations and aid programs to reflect—and if not reflect, then at least be able to integrate with—the values of communities they seek to reach and serve. My model formalizes this disconnect and its consequences in terms of a latent space and utility.

As the $\xi(\mathbf{x}_j)$ function indicates, an organization's position in the latent space (and thus, per the theoretic model, how congruent it can be with an individual) is a function of its characteristics. However, emprically, this will be the *perceived* location. I do not argue that individuals will know exactly where an organization is located, vis-à-vis their own ideal location in this latent space. In other words, individuals do not automatically know whether an organization is congruent with them. I also do not argue that traits automatically localize an organization *in truth*. As the space is latent, it is not observed directly, especially by individuals. However, they may get a sense of the location of an organization in the latent space due to its characteristics.[6] I hypothesize that those traits that indicate what values an organization may hold will be most important for determining where an organization sits in the latent space. This leads me to a hypothesis about the nature of the latent space itself, which up to this point has remained unmentioned. While many traits may factor into congruence, in this project I look at attributes that provide information about geographic localness and descriptive representation. In this, I build on the voting and elections literature, which shows that individuals use information on the localness of electoral candidates (Shugart, Valdini and Suominen, 2005; Evans et al., 2017) and information on descriptive representation – such as race and ethnicity (Carson, 2017; Keele et al., 2017), social class (Carnes and Sadin, 2015), religion (Calfano and Djupe, 2009; McDermott, 2009), and occupation (McDermott, 2005) – to assess the potential values of electoral candidates. In other words, because local and descriptively representative traits suggest a values match, I theorize that organizations that are local relative to a respondent and descriptively representative of a respondent will be at one pole, whereas organizations that are not local and that are not descriptively representative will be at the antipole. The nature of the values does not matter in this conceptualization – it is enough to specify that this is a values space.[7]

In summary, I theorize the following causal process, from the perspective of the individual,

Org. Attributes → Org.'s Percevied Values → Congruence → Costs and Benefits → Engagement

noting that my theory predicts that the organizational attributes that indicate an organization will be local and descriptively representative of an individual will be taken as signaling congruence.

It is important to note that for some individuals in some contexts, organizational characteristics that signal localness and descriptive similarity may *not* signal congruence. This is particularly true if an individual does not expect their values to match the values of others like them. For example, a progressive white farmer from Idaho may avoid organizations made up by other white farmers from Idaho with the expectation that such an organization

[6]Guarrieri (2018) makes a similar argument about how the nature of an organization serves as a cue for individuals—my theory digs deeper into which cues matter and how they influence behavior.

[7]Further questions could be used to determine the exact tone of the values space.

will not match their values. For such individuals, large distance terms would be correlated with choosing to engage with an organization. This means that, in general terms, I hypothesize that the mass of the individual ideal point distribution will be closer to the more local and descriptively representative pole of the space. They will then also be more willing to contribute financial resources to such an organization and will be more willing to participate in its campaigns.

1.2 General Model and Statistical Approach

In section 1, I lay out a two-part theory. The first has do with how organizational attributes allow individuals to place organizations in a latent values space, and to assess a perceived values distance between them and organizations. The second part has to do with how individuals use the perceived congruence to determine whether they want to interact with an organization or not. The model I sketch out in this section allows me to first estimate the distance between individuals and organizations and then models the impact of that distance on a secondary outcome. The model can illuminate which traits are most important for defining the latent space, which does not require assuming that only certain traits matter and will help identify the nature of the space. The model I describe here is general — it can be used to study other research questions with conjoints that involve an analogous two-step process and is not limited to organizations and engagement. It could also be used to study spatial voting patterns, for example.

In general terms, the model consists of two parts:

1. Item Response Theory (IRT): to place individuals and profiles in the same latent space, making it possible to estimate the distance between them.[8]
    - Motivated by a random utility model, where individuals prefer profiles closer to them:

$$U_{ij}(\mathbf{x}_j) = -(\theta_i - \xi(\mathbf{x}_j))^2 + \epsilon_{ij}$$

      where $\xi(\mathbf{x}_j) = \mathbf{x}_j^\top \boldsymbol{\beta}$. $\mathbf{x}_j$ represents the vector of profile attributes for profile j, and θ_i is individual i's ideal point in a latent space.[9][10]
2. Any other modeling strategy, like a GLM: to see how distance impacts a secondary

[8] For this part of the model, I adapt (Caughey, Katsumata and Yamamoto, 2019)'s IRT approach to conjoint analysis by dropping the valence component in the assumed utility function.

[9] Note that the latent space could be D-dimensional. In that context, we would have a length D vector of ideal points, $\boldsymbol{\theta}_i = \begin{bmatrix}\theta_{1,i} & \dots & \theta_{d,i} & \dots & \theta_{D,i}\end{bmatrix}$. This would lead to a length D vector of differences $\boldsymbol{DIFF}_{ij} = \begin{bmatrix}\theta_{1,i} - \xi(\boldsymbol{x}_{1,j}) & \dots & \theta_{d,i} - \xi(\boldsymbol{x}_{d,j}) & \dots & \theta_{D,i} - \xi(\boldsymbol{x}_{D,j})\end{bmatrix}$, where $\boldsymbol{x}_{d,j}$ represents a vector of profile attributes for profile j relevant to the d-th dimension of the latent space. However, each dimension of the latent space may not be equally important to individuals. Therefore *distance* could be more important in one dimension than another. We can model this by introducing a D-length weights vector $\boldsymbol{w}$, where element w_d indicates the importance of dimension d. This vector could be the same for all individuals, or there could be a weight vector $\boldsymbol{w}_i$ unique to each individual i. The utility function would then be $U_{ij}(\mathbf{x}_j) = -\|\boldsymbol{w}_i \circ \boldsymbol{DIFF}_{ij}\|_2^2 + \epsilon_{ij}$. In other words, we replace the square of the distance with the square of the L2 norm of the Hadamard product of the weight vector and the distance vector. If the weights are all equal this reduces to the square of the L2 norm. For simplicity's sake, I assume the latent space is uni-dimensional for the rest of this section.

[10] The model could further be generalized by allowed θ_i to be a function of respondent characteristics.

outcome.[11]

There are **separate** outcome questions for each part; the rationale behind this approach is to better fit the assumed causal process. The IRT portion of the model enables us to place individuals and profiles in the same latent space. The outcome of the second part can be anything related to a single profiles or profile pairs - the goal is to see whether respondent affinity for a profile impacts the outcome of interest.

For the IRT portion, N respondents are asked to choose between two different randomly constructed profiles, K times. We can term the sets of attribute-levels that describe these two profiles for profile-pair k for respondent i as $\mathbf{x}_{ik1}, \mathbf{x}_{ik2}$, where $i = 1, \ldots, N$ and $k = 1, \ldots, K$.

Using the quadratic random utility function assumed above, we can show that the probability of choosing profile 1 versus profile 2 in profile-pair k can be modeled in the following way:

$$\begin{aligned}
\Pr(Y_{ik} = 1|\mathbf{x}_{ik1}, \mathbf{x}_{ik2}) &= \Pr(U_{ik1} > U_{ik2}) \\
&= \Pr(-(\theta_i - \xi(\mathbf{x}_{ik1}))^2 + \epsilon_{ik1} > -(\theta_i - \xi(\mathbf{x}_{ik2}))^2 + \epsilon_{ik2}) \\
&= \Pr(-(\theta_i - \xi(\mathbf{x}_{ik1}))^2 + (\theta_i - \xi(\mathbf{x}_{ik2}))^2 > -\epsilon_{ik1} + \epsilon_{ik2}) \\
&= \Pr(-\theta_i^2 + \xi(\mathbf{x}_{ik1})\theta_i - \xi(\mathbf{x}_{ik1})^2 + \theta_i^2 - \xi(\mathbf{x}_{ik2})\theta_i + \xi(\mathbf{x}_{ik2})^2 > \epsilon_{ik}) \\
&= \Pr(2(\xi(\mathbf{x}_{ik1}) - \xi(\mathbf{x}_{ik2}))\theta_i) + (-\xi(\mathbf{x}_{ik1})^2 + \xi(\mathbf{x}_{ik2})^2 > \epsilon_{ik}) \\
&= \Pr(2(\xi(\mathbf{x}_{ik1}) - \xi(\mathbf{x}_{ik2}))\theta_i - (\xi(\mathbf{x}_{ik1})^2 + -\xi(\mathbf{x}_{ik2})^2) > \epsilon_{ik}) \\
&= \Pr(2(\mathbf{x}_{ik1}^\top\boldsymbol{\beta} - \mathbf{x}_{ik2}^\top\boldsymbol{\beta})\theta_i - ((\mathbf{x}_{ik1}^\top\boldsymbol{\beta})^2 + -(\mathbf{x}_{ik2}^\top\boldsymbol{\beta})^2) > \epsilon_{ik}) \\
&= \Phi(b(\mathbf{x}_{ik1}, \mathbf{x}_{ik2})\theta_i - g(\mathbf{x}_{ik1}, \mathbf{x}_{ik2}))
\end{aligned}$$

If we assume $\epsilon_{ik} \sim \mathcal{N}(0, \sigma)$, then $\Phi(.)$ represents the CDF of the Standard Normal distribution. This is then in the form of a two-parameter IRT model. $b(\mathbf{x}_{ik1}, \mathbf{x}_{ik2})$ and $g(\mathbf{x}_{ik1}, \mathbf{x}_{ik2})$ represent the item difficulty and combined item discrimination and item difficulty parameters, respectively where $b(\mathbf{x}_{ik1}, \mathbf{x}_{ik2}) = 2(x_{ik1} - x_{ik2})^\top\boldsymbol{\beta}/\sigma$ and $g(\mathbf{x}_{ik1}, \mathbf{x}_{ik2}) = \boldsymbol{\beta}^\top(\mathbf{x}_{ik1}\mathbf{x}_{ik1}^\top - \mathbf{x}_{ik2}\mathbf{x}_{ik2}^\top)\boldsymbol{\beta}/\sigma$. The $\boldsymbol{\beta}$ from this model allows us to place individuals and profiles into the same space via $\boldsymbol{\beta}$.

Note that since each Y_{ik} is binary, this IRT model is somewhat analogous to a probit model (the inverse link function is the Normal CDF).

I then connect the IRT model to second part of the model via $\boldsymbol{\beta}$ and θ_i very generally. If W_{ijl} is a response to an outcome question asked of respondent i about profile l in profile-pair j (where each respondent sees J total profile-pairs for this part), then

$$\mathbb{E}[W_{ijl}|\mathbf{x}_{ijl}, \theta_i, \boldsymbol{\beta}] = g^{-1}(\gamma_0 + \alpha_i + \gamma_1 * (\theta_i - \mathbf{x}_{ijl}^\top\boldsymbol{\beta})^2 + \mathbf{z}_i^\top\boldsymbol{\delta})$$

where g^{-1} is a link function suitable for the outcome variable, α_i is a random intercept for respondent i (if $j > 1$, as responses may be correlated then), and $\mathbf{z}_i^\top\boldsymbol{\delta}$ are a vector of other covariates for respondent i and the coefficient vector for those covariates. Note that I now index $\mathbf{x}$ by j to make clear that *different* profile-pairs should be used for the IRT portion and GLM portions of the model. Respondents will each see $K + J$ profile-pairs.

[11] If the latent space is multi-dimensional, then we can investigate the impact of the square of the L2 norm of the distance vector impacts a secondary outcome. We can also look at subsets of the distance vector. There can be also be *different* weights for this part of the model than for the first part.

There are numerous modifications we can make to this general model. For example, if our outcome is whether individual i chooses profile 1 in profile pair j or not for some question, we can formulate the following logistic regression:

$$\Pr(W_{ij} = 1|\mathbf{x}_{ij1}, \mathbf{x}_{ij2}, \boldsymbol{\beta}, \theta_i) = \text{logit}^{-1}(\gamma_0 + \alpha_i + \gamma_1 * (2\theta_i(\mathbf{x}_{ij1} - \mathbf{x}_{ij2})^\top \boldsymbol{\beta} + \boldsymbol{\beta}^\top(\mathbf{x}_{ij2}\mathbf{x}_{ij2}^\top - \mathbf{x}_{ij1}\mathbf{x}_{ikj}^\top)\boldsymbol{\beta})$$

where $\boldsymbol{\beta}$ are the coefficients from the IRT model. Note that the term with the γ_1 coefficient is equal to $(\theta_i - \mathbf{x}_{ij2}^\top\boldsymbol{\beta})^2 - (\theta_i - \mathbf{x}_{ij1}^\top\boldsymbol{\beta})^2$: the *difference in the distance between ideal points and profile locations*. A positive value here would indicate that respondent i is closer to profile 1 than profile 2. This is a modification of the general structure above due to the forced choice nature of the outcome. Because of the forced choice nature, coupled with the fact that conjoint profiles are created totally randomly (so the expected value of W_{ij} will around .5), additional covariates no longer fully make sense.

To avoid outcome questions contaminating one another, separate profile-pairs should be used for each part of model.

1.3 Model in Theoretical Context

More specifically, in context of my theory, I first model an individual's congruence with an organization, that is, the extent to which they think it shares their values — this is a function of organizational characteristics. It is important to note that I consider congruence as separate from engagement. This motivates the model choice. It is not guaranteed a priori that an individual who feels congruent with an organization will want to engage with it, nor that they will be congruent with an organization with which they want to engage, although this is what my theory predicts. As such, the IRT part of the model helps me place individuals and organizations in the same values space. The second part of the model helps assess the second step of the theory — does congruence help predict secondary outcomes, such as engagement. The second part of the model is therefore to assess the validity of the utility function 1. Thus, outcomes Y_{ik} will come from a question about values. Outcomes W_{ijl} will in general ask about engagement.

The model can also be used to assess the mechanisms by which congruence affects organizational engagement. We can use an intermediate outcome, such as perceived costs or benefits to see what effect congruence has on this outcome, which is theoretically prior to the decision about engagement.

2 Experimental Design

To test both the determinants of congruence and the impact of affinity on organizational engagement, I designed a conjoint survey experiment. In this section, I first address the design of the survey, including a discussion of the sample. Then, I explain the conjoint experiment itself.

2.1 Survey Design

The study will be carried out on the Political Science Subject Pool (PSSP) at the University of North Carolina at Chapel Hill. The sampling frame consists of all undergraduate students

enrolled in introductory American politics, comparative politics, and international relations classes. All individuals in the pool (a total of approximately 1000 students) will be invited to participate. Students in these classes are required to complete a certain number of surveys during the semester in which they are enrolled in these introductory political science classes. However, they are not required to participate in any particular study. Students also always have the option of writing a short research paper. However, given the number of students enrolled in introductory political science classes, I expect a sample size of around 1,000 students. The survey will be fielded online via Qualtrics from November 8 to November 23, 2021.

The respondents are all students at UNC – Chapel Hill. As such, the sample is not nationally representative. However, the fact that all respondents are descriptively similar–in the sense that all are college students–and are all local to the Chapel Hill area meant that I was able to choose attributes in the conjoint experiment that had the potential to see if descriptive similarity and geographic localness influence how students would participate in organizations. This gives me much greater statistical power to test the concepts of interest.

The survey will have the following general structure:

1. Demographic Questions
2. Conjoint Experiment Part 1 – Engagement Questions
3. Political Participation Questions
4. Questions about importance of being a student and about place of origin
5. Conjoint Experiment Part 2 – Values Questions
6. Civil Society Questions

Demographic questions will include questions about how much free time students had and where they come from, as these are factors that could influence engagement with organizations. The conjoint survey experiment is split into two blocks – profile-pair creation will be the same in each block, but the associated outcome questions will be different. I have separated out the two conjoint sections because I want to minimize spillover between the main outcome (engagement) and the mechanism outcome (values). I put the engagement question first because I want students to answer about engagement without being first primed by being asked to think about values. I ask about how important student identity is to students and where they are from before the values conjoint block because I *do* want students to keep these factors in mind as they think about factors. The civil society questions will ask about students' involvement with organizations on and off campus. In addition, two questions will ask students to evaluate how important different organizational attributes are when they considered getting involved with an organization. These questions came after the conjoint because I did not want them to prime students to think about these factors during the conjoint itself. The survey should take about 15 minutes to complete. Please see Appendix A for the full instrument.

2.2 Conjoint Experiment

In order to test the theory described above, I designed a conjoint survey experiment. In this experiment, respondents will see pairs of profiles consisting of 6 attributes each, describing a hypothetical civil society organization. The levels within each attribute were fully randomized. The order of attributes was randomized by respondent, so each individual saw

attributes in the same order in all profile pairs. The profiles will be created in the same way in both of the conjoint blocks.

Attribute (*What is cued*)	**Level**
Other members are (*Descriptive Representation*)	mainly students; students and non-students; mainly non-students
Leader is (*Descriptive Representation*)	a student; not a student
Organization's headquarters located in (*Localness*)	Chapel Hill, NC; Raleigh, NC; Richmond, VA; Washington, DC
Organization is (*Localness*)	not a chapter of a national organization; a chapter of a national organization
Funding mostly comes from (*Localness*)	donations from members and community; donations from national partners
Aiming to increase voter registration (*Localness*)	on campus; in the town of Chapel Hill; throughout North Carolina

Table 1: Attributes and Levels of Conjoint

Table 1 lays out the attributes and associated levels. The attributes correspond to organizational attributes that could influence an individual's willingness to engage with it. The first two attributes have to do with the demographic makeup of the organization; the first speaks to membership and the second to the nature of the leadership. The third, fourth, and fifth attributes have to do with the origin and nature of the organization - where was it founded, is it an independent organization or part of a larger national organization, and where does its funding come from. These attributes have a more geographic focus. The last attribute is also geographic in nature, but focuses more on where the organization is doing its work as opposed to its origin.

Please see appendix B for examples of how profiles will be presented to respondents.

2.2.1 Engagement Block

The engagement conjoint block will begin with the following introduction, which will be shown only once:

> For the next few minutes, we are going to ask you to act as if you were considering getting involved with an organization.
>
> You will be shown 3 pairs of hypothetical organizations. For each pair, imagine that these are two non-partisan organizations working in Chapel Hill to increase voter registration ahead of the November 2022 elections.
>
> They are both holding meetings on campus for potential volunteers to work registration tables on campus.

The profiles will be constructed from the attributes and levels in Table 1. Before each pair in the engagement block, respondents will be reminded to: *Imagine that these are two non-partisan organizations working in Chapel Hill to increase voter registration ahead of the 2022*

North Carolina primaries and the November 2022 elections. They are looking for volunteers to work registration tables on campus.

I am specifying that volunteers will work on campus so that the "Aiming to increase voter registration" attribute is a test of the localness of the goals and does not induce respondents to think that they would be expected to travel to volunteer, if an organization has broader goals than campus. For similar reasons, I specify that meetings will be held on campus.

Outcome Questions:
Respondents will answer a series of questions after each profile-pair in the engagement block (response options listed beneath each question):

1. How likely would you be to attend a meeting held by organization 1?
    - Very unlikely
    - Somewhat unlikely
    - Neither likely nor unlikely
    - Somewhat likely
    - Very likely
2. How likely would you be to attend a meeting held by organization 2?
    - Very unlikely
    - Somewhat unlikely
    - Neither likely nor unlikely
    - Somewhat likely
    - Very likely
3. If you had to choose, would you be more likely to attend a meeting held by organization 1 or organization 2? Even if you aren't entirely sure about your choice, please select one.
    - Organization 1
    - Organization 2
4. Now, please think more specifically about **organization 1**. To what extent do you agree with the following statements? It would be fun to work with this organization.
    - Strongly agree
    - Somewhat agree
    - Neither agree nor disagree
    - Somewhat disagree
    - Strongly disagree
5. Now, please think more specifically about **organization 1**. To what extent do you agree with the following statements? My input would be valued at meetings of this organization.
    - Strongly agree
    - Somewhat agree
    - Neither agree nor disagree
    - Somewhat disagree
    - Strongly disagree
6. Now, please think more specifically about **organization 1**. To what extent do you agree with the following statements? Volunteering for this organization would be good for my resume.

- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree

7. Now, please think more specifically about **organization 1**. To what extent do you agree with the following statements? I would be likely to make friends while volunteering for this organization.
   - Strongly agree
   - Somewhat agree
   - Neither agree nor disagree
   - Somewhat disagree
   - Strongly disagree
8. Now, please think more specifically about **organization 1**. To what extent do you agree with the following statements? Meetings for this organization would go on for a long time.
   - Strongly agree
   - Somewhat agree
   - Neither agree nor disagree
   - Somewhat disagree
   - Strongly disagree
9. Now, please think more specifically about **organization 1**. To what extent do you agree with the following statements? My friends would make fun of me for volunteering for this organization.
   - Strongly agree
   - Somewhat agree
   - Neither agree nor disagree
   - Somewhat disagree
   - Strongly disagree
10. Now, please think more specifically about **organization 1**. To what extent do you agree with the following statements? I would feel very tired after meetings for this organization.
    - Strongly agree
    - Somewhat agree
    - Neither agree nor disagree
    - Somewhat disagree
    - Strongly disagree

The first three questions allow me to assess the relationship between congruence and organizational engagement. I first ask separately about organization 1 and 2 in order to directly estimate the effect of congruence. The forced-choice question can be used to see if the *difference* in perceived congruence between organization 1 and 2 affects engagement. I include the forced-choice outcome because it is possible for respondents to select the same likeliness level for the both organizations (in questions 1 and 2) for satisficing reasons, which could possibly limit the utility of those questions for testing the theory. Questions 4-10 test potential mechanisms. Questions 8-10 can be used to see whether congruence impacts estimates

of costs (time, reputation, and energy, respectively). Questions 4-7 get at different types of benefits (enjoyment, ability to contribute, career, and personal connections, respectively).

I ask about only one organization each for costs and benefits to avoid burdening the respondents. In expectation, profile 1 and profile 2 in each pair are the same. Three observations per respondent should still give me the power necessary to estimate the effect of distance.

In the last profile-pair, I will also ask

- Why do you think you would be more likely to attend a meeting by this organization versus the other organization?

after question 3 above. This allows me to collect qualitative evidence that can be used to help evaluate the validity of my results. I only ask this question once, for the last profile-pair that respondents see in the engagement task, to limit the cognitive burden on the respondent. I ask this question last because I want respondents' instinctual choices; I do not want this extended response question to affect their choices during this conjoint experiment.

2.2.2 Values Block

The values conjoint block will begin with the following introduction, which will be shown only once:

> Now, we are once again going to ask you to consider several hypothetical organizations. This time, we are interested in whether you think organizations will reflect your values.
>
> You will be shown 12 pairs of hypothetical organizations. For each pair, imagine that these are two non-partisan organizations working in Chapel Hill to increase voter registration ahead of the November 2022 elections.
>
> They are both holding meetings on campus for potential volunteers to work registration tables on campus.

The profiles will be constructed from the attributes and levels in Table 1. Before each pair in the values block, respondents will be reminded to: *Imagine that these are two non-partisan organizations working in Chapel Hill to increase voter registration ahead of the 2022 North Carolina primaries and the November 2022 elections. They are looking for volunteers to work registration tables on campus.*

I am specifying that volunteers will work on campus so that the "Aiming to increase voter registration" attribute is a test of the localness of the goals and does not induce respondents to think that they would be expected to travel to volunteer, if an organization has broader goals than campus. For similar reasons, I specify that meetings will be held on campus.

Outcome Questions:
Respondents will answer one questions after each profile-pair in the values block:

1. If you had to choose, would you say that organization 1 or organization 2 reflects your values more closely? Even if you aren't entirely sure about your choice, please select one.

- Organization 1
- Organization 2

This question allows me to put organizations and individuals in the same latent space.

In the first profile-pair, I will also ask:

- Why do you think you that this organization reflects your values more closely?

after the last profile-pair. This allows me to collect qualitative evidence that can be used to help evaluate the validity of my results. I only ask this question once to limit the cognitive burden on the respondent. I ask this question last because I want respondents' instinctual choices; I do not want this extended response question to affect their choices during this conjoint experiment.

2.3 Data Validity Decisions

If a respondent does not finish the survey, I will drop them from the analysis. In the PSSP, students cannot be forced to respond to questions if they do not want to. This does mean that a respondent may "finish" the survey but not respond to all questions. If a respondent does not provide responses to any of the 3 engagement block profile-pairs, I will drop them from the analysis. If a respondent answers the questions associated with fewer than 9 values block profile-pairs blank, I will drop them from the analysis.

3 Analysis

The baseline value for each of the categorical variables that will be used to make $\boldsymbol{\beta}$ (i.e. the attributes of the conjoint) will be the least local or descriptively representative level. In other words, the level listed *last* in table 1 will be the baseline.

I will fit the connected models described in section 1.2 in a Bayesian framework (i.e. both parts of the overall model at the same time), which allows me to incorporate uncertainty around the estimated parameters into the engagement model. Y_ik will be 1 if student i choose organization 1, and 0 if they choose organization 2. The full model will also simultaneously fit nine W outcomes:

1. $W_{l,ijl}$, $q = 1, 2$, which is the answer to questions 1 and 2 pooled together (as each question asks about a different organization). Associated part 2 model will be $\mathbb{E}[W_{l,ijl}|\mathbf{x}_{ijl}, \theta_i, \boldsymbol{\beta}] = \gamma_0 + \alpha_i + \gamma_1 * (\theta_i - \mathbf{x}_{ijl}^\top \boldsymbol{\beta})^2 + \epsilon_{1,ijl}$. In other words, this is normal linear regression. if there are N respondents, then $i = 1, \ldots, N$ indexes respondents, $j = 1, 2, 3$ indexes profile-pairs, and $l = 1, 2$ indexes profiles within a profile-pair.
2. $W_{3,ij}$, which is the answer to questions 3. Associated model part 2 model will be $\Pr(W_{ij} = 1|\mathbf{x}_{ij1}, \mathbf{x}_{ij2}, \boldsymbol{\beta}, \theta_i) = \text{logit}^{-1}(\nu_0 + \tau_i + \nu_1 * (2\theta_i(\mathbf{x}_{ij1} - \mathbf{x}_{ij2})^\top \boldsymbol{\beta} + \boldsymbol{\beta}^\top(\mathbf{x}_{ij2}\mathbf{x}_{ij2}^\top - \mathbf{x}_{ij1}\mathbf{x}_{ikj}^\top)\boldsymbol{\beta})$. In other words, this is a logistic regression model. because it is forced choice, we can only use the differences in the distances for the two profiles, not the distance for each profile, unlike in the model for $W_{2,ij}$.

3.–9. $W_{q,ij1}$, which is the answer for respondent i to question q (questions 4-10 asked after the each engagement conjoint; there are 7 such questions). Associated part 2 model will be $\mathbb{E}[W_{q,ij1}|\mathbf{x}_{ij1}, \theta_i, \boldsymbol{\beta}] = \zeta_0 + \delta_i + \zeta_{q,1} * (\theta_i - \mathbf{x}_{ij1}^\top \boldsymbol{\beta})^2 + \epsilon_{q,ijl}$. In other words, this is normal linear regression where the outcome can be 1-5, where 5 = Strongly agree,

and 1 = Strongly disagree.

The only parameters shared between the five models are $\boldsymbol{\beta}$ and $\boldsymbol{\theta}$. I do not include controls in the profile-level models (so models 1, 3-9) because only the effects of the distances are identified through randomization.

I will use the `cmdstanr` interface of the Bayesian model fitting language `Stan` to fit the model (Stan Developers and their Assignees, 2021; Team, 2020). I will use $\mathcal{N}(0, \sigma^2)$ priors for all regression coefficients, with all variance parameters distributed half-Normal(0, 1). I will fix $\theta \sim \mathcal{N}(0, 1)$ and will force β_4 (coefficient associated with HQ attribute) to be positive as identifying restrictions.

In order to assess model fit, I will designate $\frac{1}{4}$ of the observations as test observations and the remaining $\frac{3}{4}$ as training observations. Prior to selecting the training and test sets, I will set the seed to 891. I will use the AUC to assess model fit for the binary outcomes. I will use mean squared error to assess model fit for the continuous/ordered outcomes.

Because only the effect of the attributes is causally identified by the random creation of organization profiles, I cannot causally examine the relationship between affinity and other costs and benefits. This means that I cannot adjudicate whether the utility function proposed in 1 is correct. However, I can test the main theoretical expectation, which is that as congruence increases (distance between an individual and an organization decreases), an individual's probability of engagement with an organization goes up.

4 Main Hypotheses

4.1 Organization Latent Locations Hypotheses

H1: If attributes matter for determining where organizations place in the latent values space, then the $\boldsymbol{\beta}$ coefficients should be discernible from zero. Thus, the 95% credible intervals for all $\boldsymbol{\beta}$ coefficients should not include 0.

H2: If the attributes matter for determining where organizations place in the latent values space, then the attribute-level coefficients should not collectively be statistically zero. To test this, I will compare the full model to the null model by computing the associated Bayes factor, K. My theory implies that $K > 1/2$.

H3: If different levels within an attribute do not shift an organization in the affinity space, then that attribute is not likely to be overly important. I will compare the full model to models dropping each attribute using Bayes factors. *This is exploratory.*

H4: Student- and local-oriented attributes should place organizations in the same area of the latent space. As such, the coefficients on all student-only and local attribute-levels should be in the same direction. In other words, a profile consisting of all local- and all student-attributes should be in a different part of the latent space from an organization that is not local and not student-oriented. Thus, the 95% credible intervals of these coefficients should not include 0 or negative numbers.

4.2 Individuals' Latent Ideal Points Hypotheses

H5: Students will feel a greater congruence for student-involved and local organizations. In other words, I predict that the mass of the ideal points distribution will be in the same portion of the latent space as all-student/all-local organizations. By implication, the 95% credible interval of the distribution of the distance between ideal points and the all-student/all-local organization should be not be wholly negative.

4.3 Distance Hypotheses

H6: For the first set of outcome questions, I can test the direct effect of distance. My theory suggests that an individual who is closer to organization will be more likely to want to engage with an organization. Because the key predictor is the distance, the higher the distance, the lower the chances of engagement. In terms of the model, I predict that the coefficient on the distance (γ_1) will be negative (95% credible interval).

H7: For the third outcome question, I have relative results. As such, my theory suggests that an individual who is closer to organization 1 than organization 2 will be more likely to want to attend a meeting held by organization 1. The closer they are to organization 2 than organization 1, the more likely they will be to want to attend a meeting held by organization 2. In terms of the model, I predict that the coefficient on the difference in distances (ν_1) will be positive (95% credible interval).

H8: For outcome questions four through seven, my theory predicts that individuals will perceive a less congruent organization (higher distance) as being less beneficial. In terms of the model, I predict that the coefficient on the distance ($\zeta_{q,1} \forall q = 4 \dots 7$) will be negative (95% credible interval).

H9: For outcome questions eight through ten, my theory predicts that individuals will perceive a less congruent organization as being more costly. In terms of the model, I predict that the coefficient on the distance ($\zeta_{q,1} \forall q = 8 \dots 10$) will be positive (95% credible interval).

5 Subgroup Analyses

I do expect there to be some treatment heterogeneity in different sample subgroups. An advantage of an all UNC student sample is that cues for student membership and leadership and localness should be taken as signs of congruence. However, I expect other aspects of an individual's identity can influence how they respond to the organizational attributes. As such, I am planning on running subgroup analyses by the variables listed in table 2, with accompanying expectations. I recognize that these individual characteristics are not randomly assigned. Thus, this analysis is exploratory and descriptive, not causal.

I will refit the model for each group. I will look at the credible intervals for the differences in $\boldsymbol{\beta}$ within each subgroup. I will also compare the distribution of θ's for each subgroup in the full data model. Finally, I will see how γ_1, ν_1, ζ_1, ν_1, and μ_1 change in the Part 2 regressions in each subgroup. If there is not enough heterogeneity in the sample with respect to

Table 2: Planned Subgroup Analyses and Associated Theoretical Expectations

Variable	**Groups**	**Theoretical Expectations**
Individual's free time	more than median; less than median	Could go both ways. Individuals with more free time might have lower costs in general and so may care more about congruence. Alternatively because they have more time, congruence may not matter as much, However, individuals with less free time might be more of a joiner type and so congruence may not matter as much to them. **Implication is for difference in Part 2 coefficients.**
Individual's place of origin	from the Raleigh metro area; from elsewhere in North Carolina; from elsewhere in the US; from outside of the US	The local attributes will not matter as much for individuals (with respect to determining congruence) not from the Raleigh metro area. **Implication is difference in estimated β.**
Individual's attachment to UNC	proud to be UNC student; not proud to be UNC student	The student-identity cuing attributes will matter more for individuals who are proud to be a UNC student versus those who are not. **Implication is difference in estimated β.**
Importance of being a student	being a student is an important part of who they are; being a student is not an important part of who they are	The student-identity cuing attributes will matter more for determining will matter more for individuals who consider being a student an important part of who they are. **Implication is difference in estimated β.**
Level of political involvement	more politically involved; not politically involved	More politically involved individuals will care more about congruence than those who are not. **Implication is difference Part 2 coefficients.**
Individual's existing organizational involvement	involved with multiple other organizations; involved with some other organizations; not involved with other organizations	Could go both ways, for similar reasons for possible heterogeneity by free time.

these groups (i.e. if one group in each sample is significantly larger than the other(s)), then I will not perform that subgroup analysis.

6 Additional Analyses

There are a considerable number of other questions included in the survey that try to get at the respondents' levels of organizational involvement. I plan to do descriptive analysis of these questions. I will also use some of these questions to do purely correlational observational analysis, with the goal of identifying which responses co-vary (such as free time and belief about being able to start an organization). However, there are important demographic characteristics about which I was not able to ask due to space constraints, such as personal income and parent's income. Because of this and because of the lack of causal identification, I will not make any causal claims.

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A Survey Instrument

Most of the conjoint profile-pairs are not populated in the following instrument; it does not show them in the way they would actually be seen by all respondents. This is because the technicalities of printing of the Qualtrics survey. Appendix B includes several examples of how profiles will be seen by respondents.

Consent Statement

The purpose of this research study is to study student engagement with organizations.

You are being asked to be in the study because as a student in a POLI 100, POLI 130, or POLI 150 class you are required to participate in research studies conducted by the Political Science Subject Pool (PSSP). However, participation in THIS research study is not mandatory. Students who object to participating in this study will have the opportunity to satisfy the research participation requirement in another way. You must be at least 18 years of age to participate.

What does the study entail? If you agree to be in this study, you will be asked to answer an on-line survey composed of questions addressing your feelings on a series of hypothetical organizations that could be active in Chapel Hill. You will also be asked about your involvement with organizations and your opinion on civil society and organizations, in addition to some basic demographic questions. The completion of this study satisfies 1 credit towards the research requirement of POLI 100, POLI 130, or POLI 150 courses for the Fall 2021 semester.

Do I have to participate? Participation in this study is voluntary. You may refuse to participate, and you may withdraw your participation without penalty. You may also skip any question or other aspects of this study for any reason without penalty. If you do not wish to participate or withdraw from this study, you can fulfill the research requirement by completing other studies listed in the Political Science Subject Pool (PSSP) Web Portal (go.unc.edu/pssp) or by completing a research-oriented paper as explained in your POLI 100, POLI 130, or POLI 150 syllabus.

What should I do if I wish to participate? You can participate in the study by any computer terminal by accessing the PSSP Web portal: go.unc.edu/pssp.

Will you ever tell us what you're studying? Yes, you will receive an email summary of our findings once the data are collected and analyzed. In addition, to protect the integrity of the responses, the full study purpose will not be disclosed until after the survey is completed. If

there is anything about the study or your participation that is unclear or that you do not understand, or if you have questions or wish to report a research-related problem, you may contact the principal investigator: Simon Hoellerbauer. For questions about your rights as a research participant, you may contact the Institutional Review Board at 919-966-3113 or by email to IRB_subjects@unc.edu

Investigators:
Simon Hoellerbauer
Political Science, UNC Chapel Hill
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Background1

Which gender identity best matches yours?

- ○ Nonbinary
- ○ Female
- ○ Male
- ○ _____ Other

How many years have you attended UNC, including this one?

- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ More than 5

The next two questions ask about your *free time*. By free time, we mean time **not spent** working, studying, doing homework, attending classes, or volunteering.

Think about an average week, not midterms or finals time.

On an average **weekday**, how many hours of free time do you have?

On an average **weekend**, that is, both Saturday and Sunday combined, how many hours of free time do you have?

Conjoint 1 Introduction

For the next few minutes, we are going to ask you to act as if you were considering getting involved with an organization.

You will be shown 3 pairs of hypothetical organizations. For each pair, imagine that these are two non-partisan organizations working in Chapel Hill to increase voter registration ahead of the November 2022 elections.

They are both holding meetings on campus for potential volunteers to work registration tables on campus.

EngPair1

Scenario 1 out of 3
Imagine that these are two non-partisan organizations working in Chapel Hill to increase voter registration ahead of the 2022 North Carolina primaries and the November 2022 elections. They are looking for volunteers to work registration tables on campus.

	Organization 1	Organization 2

For each organization, how likely would you be to attend a meeting held by it?

	Very unlikely	Somewhat unlikely	Neither likely nor unlikely	Somewhat likely	Very likely
Organization 1	○	○	○	○	○
Organization 2	○	○	○	○	○

If you had to choose, would you be more likely to attend a meeting held by organization 1 or organization 2? Even if you aren't entirely sure about your choice, please select one.

○ Organization 1 ○ Organization 2

Now, please think more specifically about **organization 1**. To what extent do you agree with the following statements?

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
It would be fun to work with this organization.	○	○	○	○	○
My input would be valued at meetings of this organization.	○	○	○	○	○
Volunteering for this organization would be good for my resume.	○	○	○	○	○
I would be likely to make new friends while volunteering for this organization.	○	○	○	○	○
Meetings for this organization would go on for a long time.	○	○	○	○	○
My friends would make fun of me for volunteering for this organization.	○	○	○	○	○
I would feel very tired after meetings for this organization.	○	○	○	○	○

EngPair2

Scenario 2 out of 3

Imagine that these are two non-partisan organizations working in Chapel Hill to increase voter registration ahead of the 2022 North Carolina primaries and the November 2022 elections. They are looking for volunteers to work registration tables on campus.

	Organization 1	**Organization 2**

For each organization, how likely would you be to attend a meeting held by it?

	Very unlikely	Somewhat unlikely	Neither likely nor unlikely	Somewhat likely	Very likely
Organization 1	○	○	○	○	○
Organization 2	○	○	○	○	○

If you had to choose, would you be more likely to attend a meeting held by organization 1 or organization 2? Even if you aren't entirely sure about your choice, please select one.

○ Organization 1 ○ Organization 2

Click to write the question text

Now, please think more specifically about **organization 1**. To what extent do you agree with the following statements?

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
It would be fun to work with this organization.	○	○	○	○	○

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
My input would be valued at meetings of this organization.	○	○	○	○	○
Volunteering for this organization would be good for my resume.	○	○	○	○	○
I would be likely to make new friends while volunteering for this organization.	○	○	○	○	○
Meetings for this organization would go on for a long time.	○	○	○	○	○
My friends would make fun of me for volunteering for this organization.	○	○	○	○	○
I would feel very tired after meetings for this organization.	○	○	○	○	○

EngPair3

Scenario 3 out of 3

Imagine that these are two non-partisan organizations working in Chapel Hill to increase voter registration ahead of the 2022 North Carolina primaries and the November 2022 elections. They are looking for volunteers to work registration tables on campus.

	Organization 1	**Organization 2**

For each organization, how likely would you be to attend a meeting held by it?

	Very unlikely	Somewhat unlikely	Neither likely nor unlikely	Somewhat likely	Very likely
Organization 1	○	○	○	○	○
Organization 2	○	○	○	○	○

If you had to choose, would you be more likely to attend a meeting held by organization 1 or organization 2? Even if you aren't entirely sure about your choice, please select one.

○ Organization 1 ○ Organization 2

Now, please think more specifically about **organization 1**. To what extent do you agree with the following statements?

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
It would be fun to work with this organization.	○	○	○	○	○
My input would be valued at meetings of this organization.	○	○	○	○	○
Volunteering for this organization would be good for my resume.	○	○	○	○	○
I would be likely to make new friends while volunteering for this organization.	○	○	○	○	○
Meetings for this organization would go on for a long time.	○	○	○	○	○
My friends would make fun of me for volunteering for this organization.	○	○	○	○	○
I would feel very tired after meetings for this organization.	○	○	○	○	○

Background2

Are you currently registered to vote?

○ Yes
○ No, but I have thought about it
○ No

In talking to people about elections, we often find that a lot of people were not able to vote because they weren't registered, they were sick, or they just didn't have time. With respect to

the **2020 general election that took place in November 2020**, which of the following statements best describes you?

- ◯ I am not eligible to vote
- ◯ I did not vote
- ◯ I thought about voting but didn't that time
- ◯ I usually vote but didn't that time
- ◯ I am sure I voted

To what extent do you agree or disagree with the following statements?

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I am proud to be a student at UNC	◯	◯	◯	◯	◯
Being a student is an important part of who I am	◯	◯	◯	◯	◯

Where did you live before starting UNC?

- ◯ Raleigh metro area, including Durham/Chapel Hill/Carrboro
- ◯ Somewhere else in North Carolina
- ◯ Somewhere else in the US
- ◯ Outside of the US

Conjoint 2 Introduction

Now, we are once again going to ask you to consider several hypothetical organizations. This time, we are interested in whether you think organizations will reflect your values.

You will be shown 12 pairs of hypothetical organizations. For each pair, imagine that these are two non-partisan organizations working in Chapel Hill to increase voter registration ahead of the November 2022 elections.

They are both holding meetings on campus for potential volunteers to work registration tables on campus.

ValPair1

Scenario 1 out of 12
Imagine that these are two non-partisan organizations working in Chapel Hill to increase voter registration ahead of the 2022 North Carolina primaries and the November 2022 elections. They are looking for volunteers to work registration tables on campus.

	Organization 1	Organization 2

If you had to choose, would you say that organization 1 or organization 2 reflects your values more closely? Even if you aren't entirely sure about your choice, please select one.

○ Organization 1 ○ Organization 2

ValPair2

Scenario 2 out of 12
Imagine that these are two non-partisan organizations working in Chapel Hill to increase voter registration ahead of the 2022 North Carolina primaries and the November 2022 elections. They are looking for volunteers to work registration tables on campus.

	Organization 1	Organization 2

If you had to choose, would you say that organization 1 or organization 2 reflects your values more closely? Even if you aren't entirely sure about your choice, please select one.

○ Organization 1 ○ Organization 2

ValPair3

Scenario 3 out of 12
Imagine that these are two non-partisan organizations working in Chapel Hill to increase voter registration ahead of the 2022 North Carolina primaries and the November 2022 elections. They are looking for volunteers to work registration tables on campus.

	Organization 1	**Organization 2**

If you had to choose, would you say that organization 1 or organization 2 reflects your values more closely? Even if you aren't entirely sure about your choice, please select one.

○ Organization 1 ○ Organization 2

ValPair4

Scenario 4 out of 12
Imagine that these are two non-partisan organizations working in Chapel Hill to increase

voter registration ahead of the 2022 North Carolina primaries and the November 2022 elections. They are looking for volunteers to work registration tables on campus.

	Organization 1	Organization 2

If you had to choose, would you say that organization 1 or organization 2 reflects your values more closely? Even if you aren't entirely sure about your choice, please select one.

○ Organization 1 ○ Organization 2

ValPair5

Scenario 5 out of 12
Imagine that these are two non-partisan organizations working in Chapel Hill to increase voter registration ahead of the 2022 North Carolina primaries and the November 2022 elections. They are looking for volunteers to work registration tables on campus.

	Organization 1	Organization 2

If you had to choose, would you say that organization 1 or organization 2 reflects your values more closely? Even if you aren't entirely sure about your choice, please select one.

○ Organization 1 ○ Organization 2

ValPair6

Scenario 6 out of 12
Imagine that these are two non-partisan organizations working in Chapel Hill to increase voter registration ahead of the 2022 North Carolina primaries and the November 2022 elections. They are looking for volunteers to work registration tables on campus.

	Organization 1	Organization 2

If you had to choose, would you say that organization 1 or organization 2 reflects your values more closely? Even if you aren't entirely sure about your choice, please select one.

○ Organization 1 ○ Organization 2

ValPair7

Scenario 7 out of 12
Imagine that these are two non-partisan organizations working in Chapel Hill to increase voter registration ahead of the 2022 North Carolina primaries and the November 2022 elections. They are looking for volunteers to work registration tables on campus.

	Organization 1	Organization 2

If you had to choose, would you say that organization 1 or organization 2 reflects your values more closely? Even if you aren't entirely sure about your choice, please select one.

○ Organization 1 ○ Organization 2

ValPair8

Scenario 8 out of 12
Imagine that these are two non-partisan organizations working in Chapel Hill to increase voter registration ahead of the 2022 North Carolina primaries and the November 2022 elections. They are looking for volunteers to work registration tables on campus.

	Organization 1	Organization 2

If you had to choose, would you say that organization 1 or organization 2 reflects your values more closely? Even if you aren't entirely sure about your choice, please select one.

○ Organization 1 ○ Organization 2

ValPair9

Scenario 9 out of 12
Imagine that these are two non-partisan organizations working in Chapel Hill to increase voter registration ahead of the 2022 North Carolina primaries and the November 2022 elections. They are looking for volunteers to work registration tables on campus.

	Organization 1	Organization 2

If you had to choose, would you say that organization 1 or organization 2 reflects your values more closely? Even if you aren't entirely sure about your choice, please select one.

○ Organization 1 ○ Organization 2

ValPair10

Scenario 10 out of 12
Imagine that these are two non-partisan organizations working in Chapel Hill to increase voter registration ahead of the 2022 North Carolina primaries and the November 2022 elections. They are looking for volunteers to work registration tables on campus.

	Organization 1	Organization 2

If you had to choose, would you say that organization 1 or organization 2 reflects your values more closely? Even if you aren't entirely sure about your choice, please select one.

○ Organization 1 ○ Organization 2

ValPair11

Scenario 11 out of 12
Imagine that these are two non-partisan organizations working in Chapel Hill to increase voter registration ahead of the 2022 North Carolina primaries and the November 2022 elections. They are looking for volunteers to work registration tables on campus.

	Organization 1	Organization 2

If you had to choose, would you say that organization 1 or organization 2 reflects your values more closely? Even if you aren't entirely sure about your choice, please select one.

○ Organization 1 ○ Organization 2

ValPair12

Scenario 12 out of 12
Imagine that these are two non-partisan organizations working in Chapel Hill to increase voter registration ahead of the 2022 North Carolina primaries and the November 2022 elections. They are looking for volunteers to work registration tables on campus.

	Organization 1	Organization 2

If you had to choose, would you say that organization 1 or organization 2 reflects your values more closely? Even if you aren't entirely sure about your choice, please select one.

○ Organization 1 ○ Organization 2

Why do you think you that this organization reflects your values more closely?

Civil Society

The next section asks you about your involvement with organizations.

Are you involved with any on-campus, university-affiliated organizations?

○ Yes
○ No

With how many of such organizations are you involved? Please enter a number.

With which organization(s) are you involved? Please list them, with each organization's name separated by a comma.

Are you involved with any organizations that are not affiliated with the university?

○ Yes
○ No

With how many of such organizations are you involved? Please enter a number.

With which organization(s) are you involved? Please list them, with each organization's name separated by a comma.

On average, how many hours a week do you spend attending meetings, volunteering for, or otherwise engaging with the organizations with which you are involved? Please enter a number.

What does the phrase "civil society" mean to you?

What does the acronym NGO mean to you?

How important are the following characteristics when you are considering whether to get involved with an organization?

	Extremely important	Very important	Moderately important	Slightly important	Not at all important
How local the organization is	○	○	○	○	○
The organization's goals	○	○	○	○	○

	Extremely important	Very important	Moderately important	Slightly important	Not at all important
How much free time you have	○	○	○	○	○
How much the organization can benefit you	○	○	○	○	○

How important are the following characteristics when you are considering whether to get involved with an organization?

	Extremely important	Very important	Moderately important	Slightly important	Not at all important
How likely you think it is that the organization can achieve its goals	○	○	○	○	○
How much you think the organization reflects you as a person	○	○	○	○	○
How close you feel to the organization	○	○	○	○	○
The extent to which you think the organization's values seem to match your values	○	○	○	○	○

If you wanted to, do you think you could start your own campus or community group?

○ Yes
○ No

Are you involved with Greek life on campus?

○ Yes
○ No

To what extent do you agree or disagree with the following statements:

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
If UNC students act together, we can get the UNC administration to listen to us.	○	○	○	○	○
If UNC students act together, we can get the North Carolina State Legislature to listen to us.	○	○	○	○	○

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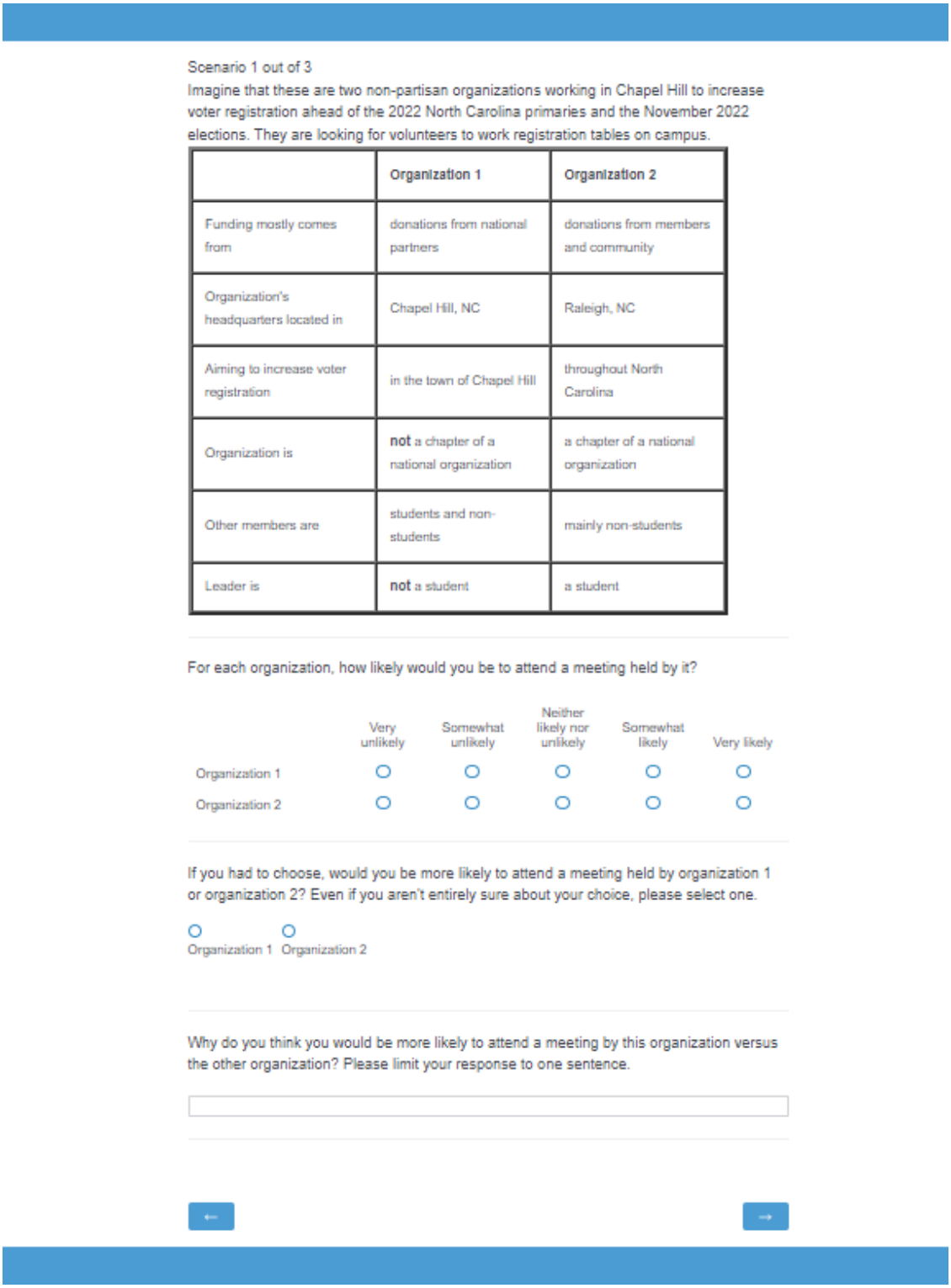
B Example Profiles



Scenario 1 out of 3

Imagine that these are two non-partisan organizations working in Chapel Hill to increase voter registration ahead of the 2022 North Carolina primaries and the November 2022 elections. They are looking for volunteers to work registration tables on campus.

	Organization 1	**Organization 2**
Funding mostly comes from	donations from national partners	donations from members and community
Organization's headquarters located in	Chapel Hill, NC	Raleigh, NC
Aiming to increase voter registration	in the town of Chapel Hill	throughout North Carolina
Organization is	**not** a chapter of a national organization	a chapter of a national organization
Other members are	students and non-students	mainly non-students
Leader is	**not** a student	a student

For each organization, how likely would you be to attend a meeting held by it?

	Very unlikely	Somewhat unlikely	Neither likely nor unlikely	Somewhat likely	Very likely
Organization 1	○	○	○	○	○
Organization 2	○	○	○	○	○

If you had to choose, would you be more likely to attend a meeting held by organization 1 or organization 2? Even if you aren't entirely sure about your choice, please select one.

○ Organization 1 ○ Organization 2

Why do you think you would be more likely to attend a meeting by this organization versus the other organization? Please limit your response to one sentence.

Press F11 to exit full screen

Scenario 1 out of 12

Imagine that these are two non-partisan organizations working in Chapel Hill to increase voter registration ahead of the 2022 North Carolina primaries and the November 2022 elections. They are looking for volunteers to work registration tables on campus.

	Organization 1	Organization 2
Organization's headquarters located in	Washington, DC	Richmond, VA
Aiming to increase voter registration	in the town of Chapel Hill	on campus
Leader is	**not** a student	**not** a student
Funding mostly comes from	donations from members and community	donations from national partners
Other members are	mainly students	students and non-students
Organization is	a chapter of a national organization	a chapter of a national organization

If you had to choose, would you say that organization 1 or organization 2 reflects your values more closely? Even if you aren't entirely sure about your choice, please select one.

○ Organization 1 ○ Organization 2

Why do you think you that this organization reflects your values more closely? Please limit your response to one sentence.

C Previous Version of Study

As mentioned above, this pre-analysis plan is the follow-up to a different study run on the PSSP in March and April 2020, which I also pre-registered (ID: EGAP Registration ID: 20200612AD). I have analyzed the results of that study and found support for the main hypotheses registered in that pre-analysis plan. However, my theory has changed somewhat since then – the nature of the latent space is less nebulous now, for example, and I have introduced the concept of congruence. In addition, during the analysis of the previous study, I realized that the design was somewhat suboptimal. In that design, I asked two forced choice outcome questions after each of 15 profile-pairs; one was to be used for the IRT model and the other for the GLM model. However, I was worried about spillover so I used only the first profile-pair for the GLM portion and the other 14 profile-pairs. In addition, because the GLM outcome question was forced choice, I could only identify the difference in distances, not the distances themselves. I have addressed all of these issues in this new protocol.