



Bridging Skills and Norms Survey

Why a new set of questions?

The Listen First Project's first measurement tool, SCIM, works well for many community bridging organizations, but not all. In a series of interviews with leaders in the bridging field, the following pieces of feedback stood out:



We want to measure **cohesion, collaboration, and belonging**

The use of references to **specific "others"** isn't well-suited to our audience



Goals:

- A set of questions that can be used **alongside or as an alternative to SCIM**
- A set of questions that measures changes in **behavioral intentions** and **skills**
- A set of questions that measures **collaboration** and **belonging**
- A set of questions that does **not reference specific outgroups**

Validation Study 1

After an extensive literature review, we selected 60 potential items, representing 15 separate constructs, to pretest (displayed in Table 1). We recruited a nationally representative sample (N = 342) of participants to complete an online survey in which they responded to these 60 items.

Exploratory Factor Analysis

First, we performed an exploratory factor analysis on the potential items and current SCIM (which respondents also completed), indicating how these constructs are related to each other. Shown below are the constructs that emerged as distinct from current SCIM items:

	Factor Loading	
	Bridging Skills	Community Belonging and Norms
Bridge Building	0.737	
Bridge Builder	0.704	
Cooperation	0.353	
Motivation	0.771	
Belonging		0.538
Collab Norms		0.800
Conflict Norms		0.614
Respect Norms		0.851



As shown above, these 8 constructs are **highly related** to each other, but **distinct from SCIM**.

Reliability

All constructs* (displayed in Table 1) had cronbach's alphas of > 0.76 and coefficient omegas of $> .86$, indicating that responses are **highly consistent** on these items. *Only a subset of the motivation scale was highly reliable (items reflecting interest in learning/sharing one's own group), so only this subset was used for further analyses.

Validity

One important step in validating a survey is testing whether the survey measures items that are related to, but distinct from existing scales (criterion validity). To establish criterion validity for BOSS, we also had participants complete six additional measures (comfortability expressing dissent, psychological safety, intergroup anxiety, ethnocentrism, dichotomous thinking, and antidemocratic norms).

- We expected our item set to be small to moderately correlated with the first 4 constructs, demonstrating **convergent validity**, and uncorrelated with the last 2 constructs (reflecting ingroup/outgroup thinking more similar to the SCIM framework), demonstrating **discriminant validity**.
- Of the 8 constructs identified by the EFA above, only Conflict Norms was shown to NOT have high convergent validity, and thus was dropped from the final list.

Distribution

We examined whether the items were subject to ceiling effects by examining the medians. Of the 7 remaining constructs, only Cooperation was subject to ceiling effects, and thus was dropped from the final list.

In Study 1 we identified **6 constructs** that were **highly reliable, valid**, and relatively **normally distributed**. We further tested these items by measuring their change after a bridging intervention in Study 2.

Validation Study 2

We recruited a nationally representative sample ($N = 261$) of participants to complete an online survey in which they responded to these 6 constructs before and after a **10-minute intervention** provided by Civity. Respondents also completed the Belonging Barometer.

Five out of six constructs **significantly increased** after the bridging intervention (effect sizes were low, between $d = .10$ and $d = .20$). Respect norms had a marginal ($p = .076$) increase. This demonstrates the **practical validity** of these items.

We found that two items on the **Belonging Barometer** were more reliable, more likely to change, and more evenly distributed than the original belonging items, so we use these instead.



In Study 2 we demonstrated the practical validity of the **6 constructs** identified in Study 1, showing that they change in response to a bridging intervention and updated the **belonging** items. We examined several exploratory items designed to measure behavioral intentions in Study 3.

Validation Study 3

We recruited a nationally representative sample (N = 252) of participants to complete an online survey in which they responded to the 6 core constructs and **six exploratory behavioral intentions items** before and after a 10-minute intervention provided by Civity.

A few of the exploratory behavioral intentions items (donation to a bridging organization, civility pledge, interest in finding out more about the bridging organization) were also included in Studies 1 and/or 2. In Study 3, we added items about signing up for a bridging event and inviting others to sign up for the event.

Only one behavioral intentions item (donation) significantly increased after the intervention. However, due to its impractical application in real-world contexts, it was excluded from the set.

Based on these results and the limitations of the online pretest environment, we decided to include two behavioral intentions in the post-test only (sign-up and invitation).

In Study 3 we explored different items for **measuring behavioral intentions**. Based on the limited practical validity of these items (resistant to change after an intervention), we decided to include two exploratory items in the post-test only (signing up for another event and inviting others to the event).

The **Finalized Item Set** is reported here: [BOSS](#) .



Table 1.
All Items Tested in Study 1

Construct	Items	Source
Self-Efficacy for Creating a Better Bridging Community	I can make a difference in my community	Holmes et al. (2022)
	I have confidence in my ability to help shift social norms about how we engage with others who are different from us/who disagree with us	Original items specific to bridging inspired by work by Holmes et al. (2022), Pulimood et al. (2020), and Knapp et al. (2010)
	I have the abilities to contribute to a community that promotes collaboration between people who disagree	
	By working together, we can make conflicts between members of the community more productive	
	By working together, we can make conflicts between members of the community more respectful and understanding	
Self-Efficacy for Becoming a Better Bridge-BUILDER	I believe that through effort, I can improve the way I handle conflicts with others in my community	Original items specific to bridging inspired by work by Holmes et al. (2022), Pulimood et al. (2020), and Knapp et al. (2010)
	I am confident in my ability to have fruitful conversations with the people that I hate/disagree with the most	
	I can collaborate well with the people who I hate/disagree with the most	
Cooperation Skills	When in conflict with [friend or family member], I...When possible, treat the problem as one that can be solved by working together	Negotiation Evaluation Survey developed by Coleman & Lim (2001) and used in published research by the Constructive Dialogue Institute
	When in conflict with [friend or family member], I...Seek and build on areas of agreement between myself and the other	
	When in conflict with [friend or family member], I...Make suggestions about working more cooperatively together or sharing resources	
	When in conflict with [friend or family member], I...Act as if I were a partner rather than an enemy	
	When in conflict with [friend or family member], I...Suggest solutions that address what is important to all parties	
Motivation to Bridge Differences	I like to learn about groups different from my own	Gurin et al. (2013)
	It is important for me to educate others about my group	
	Sharing stories and experiences of my groups with others matters a lot to me	
	As I learn more about other groups, I find myself wanting to learn more about people of my own group	
	I don't feel the need to help people from different groups learn from each other (R)	
	I don't care if other people understand my group (R)	
	I don't enjoy getting into unfamiliar situations involving members of other groups (R)	



	I want to help improve relationships between different identity groups in my school	Spencer et al. (2008)
	It is important for me to educate others about the identity groups to which I belong	
	I like to learn about identity groups different from my own	
	I want to bridge differences between different identity groups	
Belonging	I feel a sense of belonging in my community	Adapted from Bollen & Hoyle (1990)
	I see myself as part of a larger community	
	My thoughts and opinions are valued in my community	Original items specific to bridging inspired by work by McColl et al. (2001), Levett-Jones et al. (2009), and Allen et al. (2021)
	I am welcomed by others in my community, even if we disagree	
Collaboration Norms	[Descriptive] People in my community make frequent and meaningful efforts to collaborate with people who are different from them/who they disagree with	
	[Injunctive] People in my community believe it is important to collaborate with people who are different from them/who they disagree with	
	[Injunctive] People in my community expect others in the community to collaborate with people who are different from them/who they disagree with	
	[Dynamic-Descriptive] The number of people in my community who believe it is important to collaborate with people who are different from them/who they disagree with is increasing over time	
	[Dynamic-Injunctive] The number of people in my community who make frequent and meaningful efforts to collaborate with people who are different from them/who they disagree with is increasing over time	
Conflict Norms	[Descriptive] When talking to someone they disagree with, most people in my community... try to change the other person's opinion (R)	Original items specific to bridging inspired by work by Gudykunst (2004), Gurin et al. (2013) and general research on social norms (for a review, see Shulman et al., 2017)
	[Descriptive] When talking to someone they disagree with, most people in my community... do not try to learn anything from others (R)	
	[Injunctive] When talking to someone they disagree with, most people in my community... think it is important to try to change the other person's opinion (R)	
	[Injunctive] When talking to someone they disagree with, most people in my community... think it is important to learn from the other person	
Respect Norms	[Descriptive] People in my community respect others who do not share their values	Original items specific to bridging inspired by



	[Injunctive] People in my community believe it is important to respect others who do not share their values	work by Gudykunst (2004), Gurin et al. (2013) and general research on social norms (for a review, see Shulman et al., 2017)
	[Injunctive] People in my community expect others to respect others who do not share their values	
	[Dynamic-Descriptive] The number of people in my community who believe it is important to respect others who do not share their values is increasing	
	[Dynamic-Injunctive] The number of people in my community who respect others who do not share their values is increasing over time	
Donation	For participating in this survey, you will be entered into a raffle to win \$\$\$\$. If you win, you can donate some of your money to a non-governmental organization or charity. X is an organization that seeks to bridge differences between people. Please indicate below how much you would like to donate of your potential reward.	For similar items, see Hoskin et al. (2018), Graf & Sczesny (2019), and Reimer et al. (2017)
Ethnocentrism	I do not apply my values when judging strangers (R) I see people who are similar to me as virtuous I cooperate with strangers (R) I prefer to associate with people who are like me I trust strangers (R) I am obedient to authorities I do not fear strangers (R) I try to maintain distance from members of other groups I do not blame strangers for troubles I have (R) I believe that my values are universal values	Brewer (1981)
Value Disagreement	To what extent do you think opinions different from yours are worth considering?	Adapted from Strickler (2018)
	To what extent do you think opinions different from yours are reasonable?	
	Disagreement is valuable for a healthy democracy	Original items specific to bridging inspired by the disagreement is destructive subscale (Cramer, 2001)
	Disagreement is necessary in order to achieve progress in a community	
Value Diversity	A community with a high degree of cultural diversity is better able to tackle new problems	Wallrich et al. (2020)



	A community with a high degree of ideological diversity is better able to tackle new problems	Adesokan et al. (2011)
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