

MIT Saxelab Research Partnership

In order to establish robust tools that can measure the educational impact of virtual exchange, the Saxelab Social Cognitive Neuroscience Laboratory at MIT is engaged in a multi-year iterative research process with the Virtual Exchange Coalition.

The Saxelab refines and/or adapts existing research and measurement tools, then tests them for sensitivity and applicability in a virtual exchange medium, and ultimately applies them over one or multiple rounds of programming amongst both virtual exchange participants and a matched control group. Both an overview of several of the Saxelab instruments and a summary of some existing findings are included below.

We hope that by adapting these tools and methodologies for use within your own virtual exchange programs, you will not only illuminate the impact of your own work but also contribute to the body of research on outcomes that can be achieved through this growing field.

Part I: The Tools

SELF-OTHER OVERLAP

This is an interactive visual tool that measures the degree to which an individual feels a sense of commonality with another group.

Research indicates that increased self-other overlap correlates with compassion and predicts pro-social behavior, i.e. increased willingness to forgo personal rewards to alleviate suffering of the other (Batson, Turk, Shaw & Klein, '95), and is associated with greater trust and cooperative exchange (Zak & Knack, '01).

META-PERCEPTIONS

Responses to another group can be heavily dependent upon how you think that group perceives you (Vorauer and Sasaki, 2009). This has been demonstrated to be particularly important for the perception that the other group listens to and respects your views: research shows that 'feeling heard' facilitates positive change in intergroup behaviors, even in groups involved in direct protracted conflict (e.g. Israelis and Palestinians) (Bruneau and Saxe, 2012; Sagy et al., 2002). The Saxelab measures meta-perceptions that the other group 'listens to' and 'respects' your own group.

CROSS-CULTURAL COLLABORATION SKILLS TEST

MIT Saxelab is partnering with the Collective Intelligence Group at MIT to develop cooperative online games that are designed to measure communication and collaboration skills across cultures. The games are played before and after the virtual exchange program to gauge whether participants become better able to overcome anxieties and performance inhibitors in cross cultural environments.

INTER-GROUP AFFECT

This measure consists of a 'feeling thermometer' that is widely used to assess intergroup negativity (Choma, Hodson, & Costello, 2012; S. Paolini, M. Hewstone, E. Cairns, & A. Voci, 2004; Turner & West, 2012) and is employed to measure affect towards the 'other'.

CHALLENGING NORMS

Participants are asked to report their agreement with statements that present a range of perspectives toward the other identity group.

This measure enables Saxelab to assess whether participants going through the virtual exchange program are able to challenge norms that perpetuate intergroup conflict.

Norms of intergroup conflict (e.g. belief in the 'Clash of Civilizations' hypothesis) have been shown to help drive violent intergroup conflict (e.g. in Rwanda), so diminishing these norms is particularly desirable to help buffer against future conflict (Paluck, 2009).

The following are examples of how these tools have looked when applied to Soliya's Connect Program, a virtual exchange program that connects students from "The West" with students in the Arab and Muslim worlds:

The screenshot shows a survey interface with the Soliya logo and MIT branding. The instruction reads: "Please choose the picture that most closely represents YOUR relationship with each of the groups below." There are seven picture options labeled A through G, each showing two overlapping circles of different colors. Below the pictures is a table for selecting a group:

Group:	A	B	C	D	E	F	G
Muslims	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Christians	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Arabs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Europeans	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Americans	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

At the bottom, there is a slider bar with a red indicator and a "100%" label.

1. A slider asking students to compare their personal identities to those of various identity groups, including their own.

In this case American students are asked to represent their own relationships to different groups, including to Americans.

solijo **PIIT**

Please choose the picture that most closely represents your group's relationship with the other groups listed below.

Other Groups:

	A	B	C	D	E	F	G
Arabs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Europeans	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Christians	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Muslims	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

0% 100%

2. A slider asking how students would represent their own identity group's relationship to other identity groups. Here, American students are asked to represent the group-to-group relationships between Americans and others

solijo **PIIT**

Please answer the following questions about your identity as an American:

Not at all true for me Very true for me

I am proud to be an American

I value my American identity

I feel very connected to other Americans

0% 100%

3. Questions about how students feel about their own identity.

When there is a conflict, Americans listen to my people's perspective on the issues.

Strongly Disagree Strongly Agree

4. A question on whether Arabs feel listened to by Americans in times of conflict.

The average American is committed to finding solutions to the tensions between the U.S. and the Arab world that benefit both sides

Cooperation between Americans and Arabs is a pretty normal thing

Americans respect Arab cultures and values

5. Questions on Arabs' perceptions of Americans, including on whether they feel Americans respect Arab values and culture.

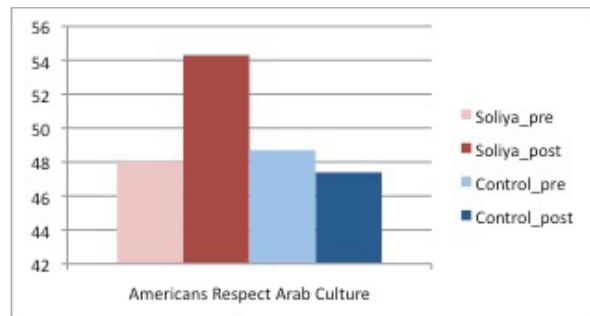
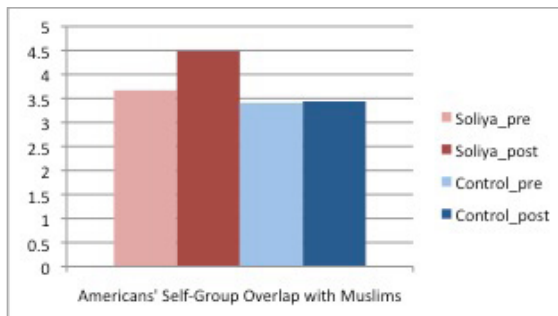
Part II: The Results

In a recent manuscript, Saxelab researcher Emile Bruneau argued that, “Intergroup contact has the demonstrated potential to stem the tide of intergroup negativity. However, modern socio-political conflicts that span great physical distances make direct contact difficult, costly and rare. Recently, ‘virtual exchange’ programs have attempted to provide the benefits of contact to a far larger (and broader) audience, at a fraction of the cost. Soliya is one such program.”

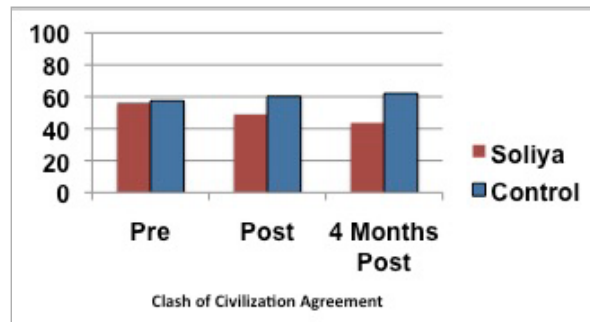
Over the Spring 2013 semester, the Saxelab evaluated the effect of Soliya on program participants, relative to a control group – all university students in either “The West” or in Arab and/or predominantly Muslim societies. In the middle of the semester, the Boston marathon bombings occurred, which were committed by two Muslim brothers. This tragic event allowed for investigation of the effect of a virtual contact program in the context of an act of violence that could be construed as ‘intergroup’.

For nearly all measures, American Soliya participants experienced increased positivity towards Muslims and Islam, or were insulated from increased negativity exhibited by the control group, despite the bombings by two Muslim individuals.

The following three charts show Soliya participants’ changing attitudes towards Arabs and/or Muslims:



Four months after the program, the large gap between Soliya participants and all controls persisted, particularly around the measure of whether participants agreed with Samuel Huntington’s contentious “Clash of Civilizations” argument:



The results provide evidence for the efficacy of “virtual contact,” even in the face of intergroup aggression.

According to Bruneau, “Virtual contact is not only an alternative to direct contact; virtual interactions could be used to enhance or maintain the effects of direct contact before or after the initial experience.

Soliya’s Connect Program illustrates ‘virtual contact’ as a new effective type of intervention that could dramatically expand the scope and extend the reach of intergroup contact, and achieve broad change in intergroup perceptions and attitudes.”