Appendix for:

Understanding Ethnic Identity in Africa: Evidence from the Implicit Association Test (IAT)

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Program and medium

The IATs were designed in OpenSesame, an open-source platform used primarily for programming psychology experiments. The IATs were administered on Samsung Galaxy Tab 3 10.1 tablets with Android 4.2.2. The tablets have dual core 1.6 Ghz Intel Atom processors, 1 GB of RAM, and a 10.1-inch screen with a resolution of 1280 x 800 pixels.

Procedure

We describe the details of two Single-Target Implicit Association Tests (ST-IAT) in this appendix. The first ST- IAT was used to measure participant attitudes towards food, spiders and snakes. This IAT has three targets of interest: food, spiders, and snakes. We call this the "food IAT".

The second IAT, which we call the "ethnicity IAT," is a ST-IAT used to measure participants' attitudes towards ethnic groups. This IAT has four target categories: the Luluwa, Luba, Lele and Kuba ethnic groups.

In the IATs, the participants either sort images (for the food IAT) or sounds (for the ethnicity IAT) that represent the target category to the left or right side of the screen.

For the food IAT, images appear in the center of the screen. There are three types of images: images of happy people, images of sad people, and images of the target of interest, namely food, spiders or snakes.

Before each part, or "block," of the IAT, participants are instructed to sort the images that appear on the screen to a particular side of the screen. Participants sorted images that appeared to the left of the screen by pressing a button on the left side of the touch-pad screen and to the right by pressing a button the right side of the screen. A screenshot, showing the two buttons, is provided in Figure 1. In the food IAT, participants are instructed to sort pictures of happy people to the left, pictures of sad people to the right, and the target to either the left or right depending on the IAT block.

Each opportunity to sort an image or sound is called a "trial," and there are 24 trials in a block. The block structure of each IAT is reported in Table 1 (for the food IAT) and Table 2 (for the ethnicity IAT).

The screenshot shown in Figure 1 is from Block C of the food IAT (see Table 1), in which images of spiders are sorted to the right, images of sad people are sorted to the right, and images of happy people are sorted to the left. On the top left and right of the screen there are images that remind the participant on which side to sort the images. This is standard formatting for IATs. In the block shown, there is an image of a snake on the right, an image of a sad person on the right, and an image of a happy person on the left.

For the ethnicity IAT, sounds were used instead of images to represent the target categories because images associated with each ethnic group do not exist. Since we used sounds for ethnic groups, we also used sounds to represent the positive and negative words (rather than images of happy people and sad people). The enumerators were instructed to administer the IAT in

Tshiluba, the predominant local language whenever possible. When Tshiluba was not used—due to the preferences of the participant—IATs were administered in French.

A screenshot from the ethnicity IAT is shown in Figure 2. The screen is taken from "Block H" of the ethnicity IAT (see Table 2) in which sounds of Luba words are sorted to the left, sounds of good words are sorted to the left, and sounds of bad words are sorted to the right.

Note that for the ethnicity IAT, target labels are simply the written names of the four ethnic groups ("Luba" in Figure 2). Because literacy levels are low in this setting, enumerators also gave detailed verbal instructions about where to sort the various targets before participants played each block.
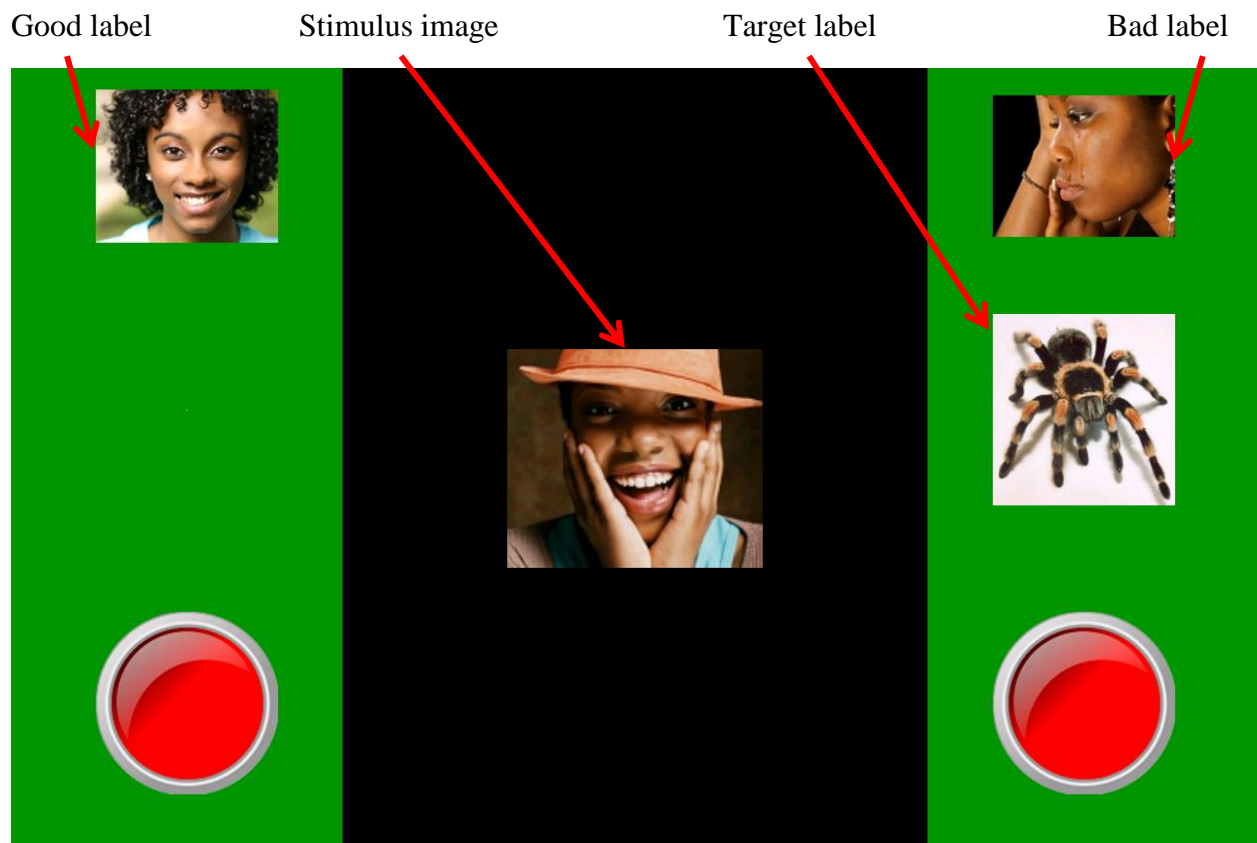

Figure 1. A screenshot of Block C of the food IAT in which spiders are sorted to the right.
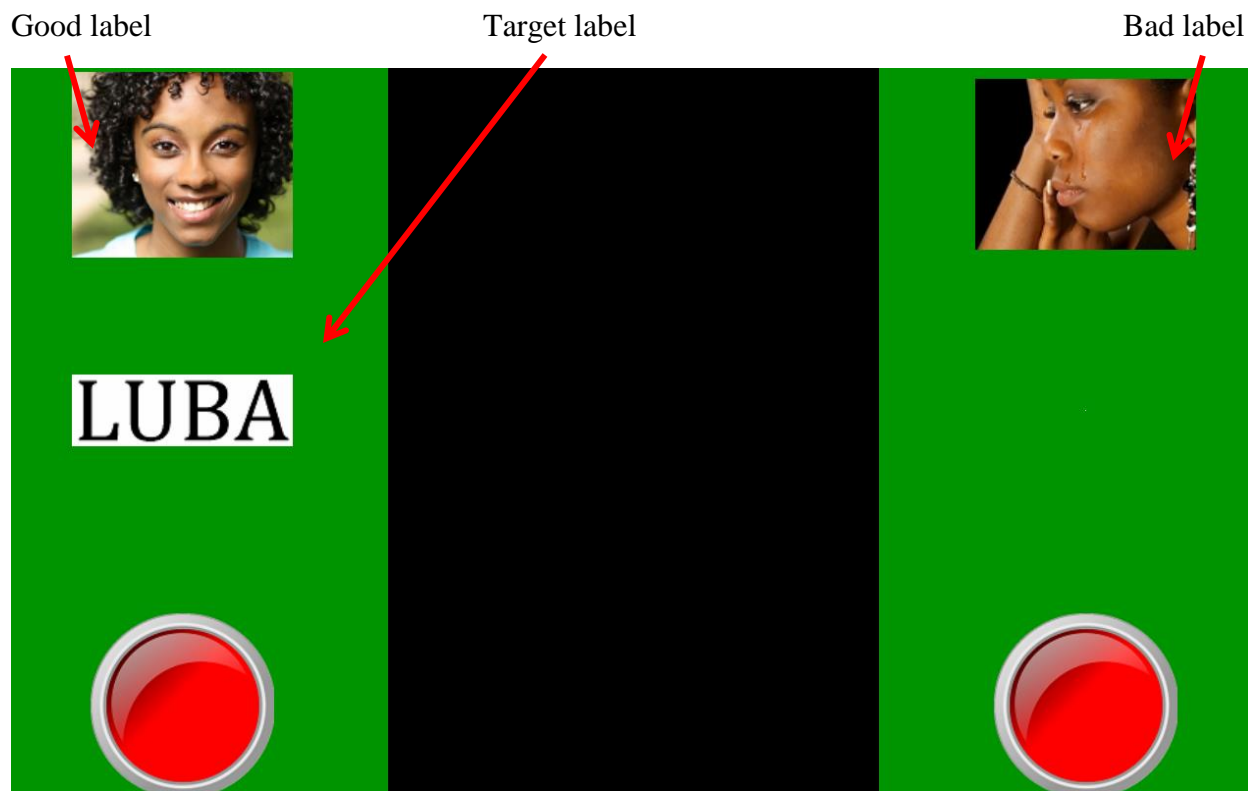
Figure 2. A screenshot of Block H of the ethnicity IAT in which Luba is sorted to the left.

As summarized in Tables 1 and 2, the food IAT has 7 blocks and the ethnicity IAT has 9 blocks. The first block of both IATs was a practice round. In the practice round of the food IAT, participants practiced sorting happy images left and sad images right. In the practice round of the ethnicity IAT, participants practice sorting good words left and bad words right.

In subsequent blocks, the stimulus images (or sounds) also included the target images (or sounds). For example, in the food IAT, during "Block B [Spiders Left]" participants were instructed to sort images of snakes to the left, images of happy people to the left, and images of sad people to the right. In the ethnicity IAT, during "Block B [Luluwa Left]" participants were instructed to sort Luluwa words to the left, good words to the left, and bad words to the right.

In general, the IATs required participants to complete two blocks for each target of interest. During one block of the two, target images were sorted to the same side as good images or sounds (i.e., to the left) and in the other block of the two, target images were sorted to the same side as bad images or sounds (i.e., to the right). The full block structure of each IAT is reported in Tables 1 and 2.

The order of the blocks was randomly assigned. This means the order in which the targets appeared in the IAT was random, and also that the side of the screen to which a target was sorted in the first block was random.

Table 1. Summary of the block structure of the food IAT.

Block	Left Key Assignment	Right Key Assignment
A [Practice]	GOOD	BAD
B [Spiders Left]	GOOD + SPIDER	BAD
C [Spiders Right]	GOOD	BAD + SPIDER
D [Food Left]	GOOD + FOOD	BAD
E [Food Right]	GOOD	BAD + FOOD
F [Snakes Left]	GOOD + SNAKE	BAD
G [Snakes Right]	GOOD	BAD + SNAKE

Table 2. Summary of the block structure of the ethnicity IAT.

Block	Left Key Assignment	Right Key Assignment
A [Good-Bad Practice]	GOOD	BAD
B [Luluwa Left]	GOOD + LULUWA	BAD
C [Luluwa Right]	GOOD	BAD + LULUWA
D [Lele Left]	GOOD + LELE	BAD
E [Lele Right]	GOOD	BAD + LELE
F [Kuba Left]	GOOD + KUBA	BAD
G [Kuba Right]	GOOD	BAD + KUBA
H [Luba Left]	GOOD + LUBA	BAD
I [Luba Right]	GOOD	BAD + LUBA

For the food IAT, we created a cycle so that each target of interest appears first, second, and third in the IAT. The cycle also ensured that within the pair of blocks for each target, half the

time the target is first sorted to the left and half the time it is first sorted to the right. Participants were randomly allocated the following block orders for their IATs: ABCDEFG (Order 1), ACBEDGF (Order 2), ADEFGBC (Order 3), AEDGFCB (Order 4), AFGDEBC (Order 5), AGFEDCB (Order 6). Each letter is the letter of a block, and the order of the letters represents the order in which the participants play the blocks. Note again that participants always play a practice block (Block A) before they begin sorting target images or sounds.

For the ethnicity IAT, we created a randomly implemented cycle so that each target group appears first, second, third and fourth in the IAT. The cycle guarantees that each target will be first sorted to the left half the time and first sorted to the right half the time. Block orders include: ABCDEFGHI (Order 1), ACBEDGFIH (Order 2), AFGBCHIDE (Order 3), AGFCBIHED (Order 4), AHIFGDEBC (Order 5), AIHGFEDCB (Order 6), ADEHIBCFG (Order 7) and AEDIHCBGF (Order 8). As before, each letter is the letter of a block, and the order of the letters represents the order in which the participants play the blocks.

If a participant completed a block with seventy-five percent accuracy or better, the participant continued to the next block in their (randomly) assigned sequence. Otherwise, the participant was required to repeat the block. In calculating D-scores, we only use information from blocks that were not repeated.

Description of images and sounds used

In each trial, an image or sound was drawn from a pool of possible images or sounds. The order in which they appear is random. Table 3 summarizes the number of images used for both IATs.

Table 3. Number of images or sounds for target, happy, and sad categories.

IAT	Target	Number of target images / sounds	Number of good / bad images / sounds
Food IAT	Spider	4 images	6 images
	Snakes	4 images	
	Food	4 images	
Ethnicity IAT	Kuba	7 sounds	6 sounds
	Lele	6 sounds	
	Luluwa	6 sounds	
	Luba	6 sounds	

Below are the images used for the food IAT. The first image in each line is the image used as the label that appeared in either the top left or top right side of the screen to indicate where players should sort good and bad images or sounds. The subsequent images in each line are those used as

stimulus items, which appear in the center of the screen. These are the images that were sorted by the participant during the IAT.

Good images

Bad images

Spiders

Snakes

Food

For the ethnicity IAT, sounds were used to represent the four ethnic groups, the good words and the bad words. Within a block, participants heard eight sounds associated with the target category eight sounds associated with the category (or notion) of happiness and eight sounds associated with the category (or notion) of sadness. Table 4 lists the good words and bad words used in the ethnicity IAT, and Table 5 lists the words associated with each ethnic group. The words were first chosen in Tshiluba based on their familiarity among the population of Kananga; they were subsequently translated into French and then into English. At times, there are no appropriate equivalents in French, in which case the Tshiluba words are used. When there is no exact English translation, an approximation of the meaning in Tshiluba is given. Note that the English words are never used in the IAT, but are translated simply for English-speaking readers here.

Table 4. Good words and bad words used in ethnicity IAT, in English, French, and Tshiluba.

Good Words			Bad Words		
English	**French**	**Tshiluba**	**English**	**French**	**Tshiluba**
Laughter	Le rire	Tuseku	Evil	Le mal	Bubi
Happy	Heureux	Diakalenga	Failure	L'échec	Dipanga
Pleasure	Le plaisir	Kusankisha	Hurt	La douleur	Bisama
Joy	La joie	Disanka	Bad	Mauvais	Bibi
Love	L'amour	Dinanga	Horrible	Horrible	Tshienza bowa
Glorious	Glorieux	Butumbi	Terrible	Terrible	Tshikuate bowa
Generous	Généreux	Muena Kalolo	Suffering	La souffrance	Dikenga
Nice	Sympatique	Buimpe	Wicked	Méchant	Lonji

Table 5. Ethnicity words, in French and Tshiluba.

Ethnicity	English	French	Tshiluba
Luluwa Words	Luba (language)	Tshiluba	Tshiluba
	The Luluwa	Bena Luluwa	Bena Luluwa
	Luluwa person	Muena Luluwa	Muena Luluwa
	The chief of the Luluwa	Le Chef de Bena Luluwa	Nfumu wa bena Luluwa
	Luluwa culture	La culture Luluwa	Bienzelu bia bena Luluwa
	Luluwa tradition	La tradition Luluwa	Bilele bia bena Luluwa
Luba Words	Luba (language)	Le Luba	Buluba
	The Luba	Baluba	Baluba
	Luba person	Muluba	Muluba
	The chief of the Luba	Le Chef de Baluba	Mfumu wa Baluba
	Luba culture	La culture Luba	Bienzelu bia Baluba
	Luba tradition	La tradition Luba	Bilele bia Baluba
Lele Words	Lele (language)	Le Lele	Tshishilele
	The Lele	Bashilele	Bashilele
	Lele person	Mushilele	Mushilele
	The chief of the Lele	Le Chef de Lele	Mfumu wa Bashilele
	Lele culture	La culture Lele	Bienzelu bia Bashilele
	Lele tradition	La tradition Lele	Bilele bia Bashilele
Kuba Words	Kuba (language)	Le Kuba	Tshikuba
	The Kuba	Bakuba	Bakuba
	Kuba person	Mukuba	Mukuba
	King of the Kuba	Le Roi de Bakuba	Mukalenge wa Bakuba
	Kuba Kingdom	Le Royaume Kuba	Bukalenge bua Bakuba
	Kuba culture	La culture Kuba	Bienzelu bia Bakuba
	Kuba tradition	La tradition Kuba	Bilele bia Bakuba

Instructions

We now report the instructions that were used by enumerators when administering the IATs. Because a significant proportion of the population is illiterate, verbal instructions, rather than written instructions, were used. The instructions were conveyed verbally by local enumerators prior to every block of the IAT. The instructions were given in Tshiluba unless participants explicitly requested French.

The protocols were first written in English and then translated into Tshiluba and French. They were subsequently back-translated from both languages to ensure quality.

After enumerators completed the instructions, participants were given complete privacy while performing each block of the IAT.

Food IAT Instructions

Block A [Practice Block]:

We are going to play a game on a tablet.

You are going to see pictures of people. Some people will be **[happy]** and some people will be **[sad]**. If you see a **[happy person]** please press the **[left]** button as fast as you can. Look, there is a picture of a **[happy person]** on the **[left]** side to remind you to press the **[left]** button when you see a picture of a **[happy person]**. But if you see a **[sad person]**, please press the **[right]** button as fast as you can. And, there is a picture of a **[sad person]** on the **[right]** side to remind you to press the **[right]** button when you see a **[sad person]**.

Now, there are a couple things I want you to remember. First, I want you to use one finger for each button. [*Demonstrate holding one figure by both buttons and pressing each one at a time.*] Second, after you press the button, be sure to take your finger off of it because if you hold it down [*demonstrate holding it down*] the button will stop working.

Now, the last thing I want you to remember is that I want you to try and go as fast as you can. It is okay if you make mistakes, I just want to see how quickly you can play.

Okay, are you ready?

Block B [SPIDERS LEFT]:

Ok, that was great.

Now, you are going to see pictures of **[spiders]** in the middle of the screen.

If you see a picture of a **[spider]**, please press the **[left]** button as quickly as you can. And, look there is a picture of a **[spider]** on the **[left]** side to remind you to press the **[left]** button when you see a picture of a **[spider]**.

As before, you are also going to either see pictures of **[happy people]** or **[sad people]**. If you see a picture of a **[sad person]** in the middle of the screen, please press the **[right]** button as quickly as you can like you were doing before. And, if you see a picture of a **[happy person]**, please also press the **[left]** button as fast as you can like you were doing before.

Remember, I want you to try and go as fast as you can. It is okay if you make mistakes.

Block C [SPIDERS RIGHT]:

Ok, that was great.

Now, you will see pictures of **[spiders]** in the middle of the screen.

If you see a picture of a **[spider]** in the middle of the screen, please press the **[right]** button as quickly as you can. And, see there is now a picture of a **[spider]** on the **[right]** side to remind you to press the **[right]** button when you see a picture of a **[spider]**.

As before, you are going to either see pictures of **[happy people]** or **[sad people]**. If you see a picture of a **[sad person]** in the middle of the screen, please press the **[right]** button as quickly as you can like you were doing before. And, if you see a picture of a **[happy person]**, please also press the **[left]** button as fast as you can like you were doing before.

Remember, I want you to try and go as fast as you can. It is okay if you make mistakes.

Are you ready to go?

Block D [FOOD LEFT]:

Ok, that was great.

Now, you are going to see pictures of **[food]** in the middle of the screen.

If you see a picture of **[food]**, please press the **[left]** button as quickly as you can. And, look there is a picture of **[food]** on the **[left]** side to remind you to press the **[left]** button when you see a picture of **[food]**.

As before, you are also going to either see pictures of **[happy people]** or **[sad people]**. If you see a picture of a **[sad person]** in the middle of the screen, please press the **[right]** button as quickly as you can like you were doing before. And, if you see a picture of a **[happy person]**, please also press the **[left]** button as fast as you can like you were doing before.

Remember, I want you to try and go as fast as you can. It is okay if you make mistakes.

Block E [FOOD RIGHT]:

Ok, that was great.

Now, you will see pictures of **[food]** in the middle of the screen.

If you see a picture of **[food]** in the middle of the screen, please press the **[right]** button as quickly as you can. And, see there is now a picture of **[food]** on the **[right]** side to remind you to press the **[right]** button when you see a picture of **[food]**.

As before, you are going to either see pictures of **[happy people]** or **[sad people]**. If you see a picture of a **[sad person]** in the middle of the screen, please press the **[right]** button as quickly as you can like you were doing before. And, if you see a picture of a **[happy person]**, please also press the **[left]** button as fast as you can like you were doing before.

Remember, I want you to try and go as fast as you can. It is okay if you make mistakes.

Are you ready to go?

Block F [SNAKE LEFT]:

Ok, that was great.

Now, you are going to see pictures of [**snakes**] in the middle of the screen.

If you see a picture of a **[snake]**, please press the **[left]** button as quickly as you can. And, look there is a picture of a **[snake]** on the **[left]** side to remind you to press the **[left]** button when you see a picture of **[snakes]**.

As before, you are also going to either see pictures of **[happy people]** or **[sad people]**. If you see a picture of a **[sad person]** in the middle of the screen, please press the **[right]** button as quickly as you can like you were doing before. And, if you see a picture of a **[happy person]**, please also press the **[left]** button as fast as you can like you were doing before.

Remember, I want you to try and go as fast as you can. It is okay if you make mistakes.

Block G [SNAKE RIGHT]:

Ok, that was great.

Now, you will see pictures of **[snakes]** in the middle of the screen.

If you see a picture of **[snakes]** in the middle of the screen, please press the [**right**] button as quickly as you can. And, see there is now a picture of **[snakes]** on the **[right]** side to remind you to press the [**right**] button when you see a picture of **[snakes]**.

As before, you are going to either see pictures of **[happy people]** or **[sad people]**. If you see a picture of a **[sad person]** in the middle of the screen, please press the **[right]** button as quickly as you can like you were doing before. And, if you see a picture of a **[happy person]**, please also press the **[left]** button as fast as you can like you were doing before.

Remember, I want you to try and go as fast as you can. It is okay if you make mistakes.

Are you ready to go?

Ethnicity IAT Instructions

Block A [Good-Bad Practice]:

We are going to play a tablet game. Before we play I want you to put on these headphones.

You are going to hear some words. Some words will be **[good words]** and some words will be **[bad words]**. If you hear a **[good]** word, please press the **[left]** button as fast as you can. Look, there is a picture of a **[happy person]** on the **[left]** side to remind you to press the **[left]** button when you hear a **[good word]**. But if you hear a **[bad word]**, please press the **[right]** button as fast as you can. And, there is a picture of a **[sad person]** on the **[right]** side to remind you to press the **[right]** button when you hear a **[bad word]**.

Now, there are a couple things I want you to remember. First, I want you to use one finger for each button.

[*Demonstrate holding one figure by both buttons and pressing each one at a time.*]

Second, after you press the button, be sure to take your finger off of it because if you hold it down [*demonstrate holding it down*] the button will stop working.

Now, the last thing I want you to remember is that I want you to try and go as fast as you can. It is okay if you make mistakes, I just want to see how quickly you can play.

Okay, are you ready?

Block B [LULUWA LEFT]:

Ok, that was great.

Now, you will hear words related to the **[Luluwa tribe]**.

If you hear a **[Luluwa]** word, please press the **[left]** button as quickly as you can. And look, it is written **[Luluwa]** on the **[left]** side to remind you to press the **[left]** button when you hear **[Luluwa words]**.

As before, you are also going to either hear **[good words]** or **[bad words]**. If you hear a **[bad word]**, please press the **[right]** button as quickly as you can like you were doing before. And, if you hear a **[good word]**, please also press the **[left]** button as fast as you can like you were doing before.

Remember, I want you to try and go as fast as you can. It is okay if you make mistakes.

Block C [LULUWA RIGHT]:

Ok, that was great.

Now, you will hear words related to the **[Luluwa tribe]**.

If you hear a **[Luluwa word]**, please press the **[right]** button as quickly as you can. And look, it is written **[Luluwa]** on the **[right]** side to remind you to press the **[right]** button when you hear a **[Luluwa word]**.

As before, you are also going to either hear **[good words]** or **[bad words]**. If you hear a **[bad word]**, please press the **[right]** button as quickly as you can like you were doing before. And, if you hear a **[good word]**, please also press the **[left]** button as fast as you can like you were doing before.

Remember, I want you to try and go as fast as you can. It is okay if you make mistakes.

Are you ready to go?

Block D [LELE LEFT]:

Ok, that was great.

Now, you will hear words related to the **[Lele tribe]**.

If you hear a **[Lele word]**, please press the **[left]** button as quickly as you can. And, look it is written **[Lele]** on the **[left]** side to remind you to press the **[left]** button when you hear **[Lele words]**.

As before, you are also going to either hear **[good words]** or **[bad words]**. If you hear a **[bad word]**, please press the **[right]** button as quickly as you can like you were doing before. And, if you hear a **[good word]**, please also press the **[left]** button as fast as you can like you were doing before.

Remember, I want you to try and go as fast as you can. It is okay if you make mistakes.

Block E [LELE RIGHT]:

Ok, that was great.

Now, you will hear words related to the **[Lele tribe]**.

If, you hear a **[Lele word]**, please press the **[right]** button as quickly as you can. And look, it is written **[Lele]** on the **[right]** side to remind you to press the **[right]** button when you hear a **[Lele word]**.

As before, you are also going to either hear **[good words]** or **[bad words]**. If you hear a **[bad word]**, please press the **[right]** button as quickly as you can like you were doing before. And, if

you hear a **[good word]**, please also press the **[left]** button as fast as you can like you were doing before.

Remember, I want you to try and go as fast as you can. It is okay if you make mistakes.

Are you ready to go?

Block F [KUBA LEFT]:

Ok, that was great.

Now, you will hear words related to the **[Kuba tribe]**.

If you hear a **[Kuba word]**, please press the **[left]** button as quickly as you can. And look, it is written **[Kuba]** on the **[left]** side to remind you to press the **[left]** button when you hear **[Kuba words]**.

As before, you are also going to either hear **[good words]** or **[bad words]**. If you hear a **[bad word]**, please press the **[right]** button as quickly as you can like you were doing before. And, if you hear a **[good word]**, please also press the **[left]** button as fast as you can like you were doing before.

Remember, I want you to try and go as fast as you can. It is okay if you make mistakes.

Block G [KUBA RIGHT]:

Ok, that was great.

Now, you will hear words related to the **[Kuba tribe]**.

If you hear a **[Kuba word]**, please press the **[right]** button as quickly as you can. And look, it is written **[Kuba]** on the **[right]** side to remind you to press the **[right]** button when you hear a **[Kuba word]**.

As before, you are also going to either hear **[good words]** or **[bad words]**. If you hear a **[bad word]**, please press the **[right]** button as quickly as you can like you were doing before. And, if you hear a **[good word]**, please also press the **[left]** button as fast as you can like you were doing before.

Remember, I want you to try and go as fast as you can. It is okay if you make mistakes.

Are you ready to go?

Block H [LUBA LEFT]:

Ok, that was great.

Now, you will hear words related to the **[Luba tribe]**.

If you hear a **[Luba word]**, please press the **[left]** button as quickly as you can. And look, it is written **[Luba]** on the **[left]** side to remind you to press the **[left]** button when you hear **[Luba words]**.

As before, you are also going to either hear **[good words]** or **[bad words]**. If you hear a **[bad word]**, please press the **[right]** button as quickly as you can like you were doing before. And, if you hear a **[good word]**, please also press the **[left]** button as fast as you can like you were doing before.

Remember, I want you to try and go as fast as you can. It is okay if you make mistakes.

Block I [LUBA RIGHT]:

Ok, that was great.

Now, you will hear words related to the **[Luba tribe]**.

If you hear a **[Luba word]**, please press the **[right]** button as quickly as you can. And look, it is written **[Luba]** on the **[right]** side to remind you to press the **[right]** button when you hear a **[Luba word]**.

As before, you are also going to either hear **[good]** or **[bad words]**. If you hear a **[bad word]**, please press the **[right]** button as quickly as you can like you were doing before. And, if you hear a **[good word]**, please also press the **[left]** button as fast as you can like you were doing before.

Remember, I want you to try and go as fast as you can. It is okay if you make mistakes.

Are you ready to go?

Post-IAT survey-based questions

After completion of the food IAT, participants were asked questions about each of the IAT targets. The following question was asked about each target for the food IAT: "In which of the following ways do you view [TARGET]: very positively, somewhat positively, neutral, somewhat negatively or very negatively?"

After completion of the ethnicity IAT, the following two questions were asked about each of the IAT targets: (1) "In which of the following ways do you view [TARGET] people: very positively, somewhat positively, neutral, somewhat negatively or very negatively?"; and (2) "Using the figure provided, which set of figures best represents how close you feel to [TARGET] people?"

The figure shown for this question is provided below.
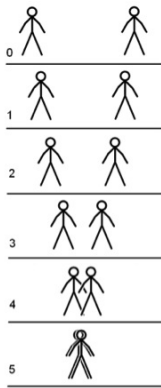
Responses to these questions are used as measures of explicit bias in the accompanying *Papers and Proceedings* article.

Assessing the effectiveness of the IAT within a low-literacy population

IATs have primarily been administered among educated populations in developed countries. We designed the ethnicity and food IAT to facilitate participation among individuals that are illiterate and/or have minimal experience using computers or touchscreen tablets. To assess the extent to which we achieved this goal, we compare accuracy rates and the frequency of repeated blocks among literate and illiterate individuals, as well as among individuals who attended some university and those who did not.

Within our sample, the average accuracy rate (of trials in non-practice blocks) was 0.95 in the food IAT and 0.94 in the ethnicity IAT. The standard deviation of each was 0.060 and 0.058, respectively.

The average number of repeated blocks within an IAT was 1.09 for the food IAT and 1.12 for the ethnicity IAT. The standard deviation was 0.30 and 0.58 respectively.

Not surprisingly, we find that more educated individuals have greater accuracy and fewer repeated blocks. However, the differences are fairly small and at times not statistically significant. Individuals who attended university have higher accuracy rates in both the food IAT (approx. a quarter of a standard deviation) and ethnicity IAT (approx. half a standard deviation). University attendees also repeated blocks less often in the ethnicity IAT (approx. a quarter of a standard deviation), but not in the food IAT.

Comparing literate participants to illiterate participants, we find that literate participants have a higher accuracy rate (approx. a quarter of a standard deviation) in the food IAT but are not more accurate in the ethnicity IAT. In both IAT, literate and illiterate individuals both repeat blocks at a similar rate.

Comparing average latency -- the time it takes to sort an image or sound to the correct side of the screen -- we find that those who attended university are slightly faster (approx. a quarter of a standard deviation) in both IATs than those who did not attend university. We find no significant differences in latency between the literate and illiterate participants.