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Can music reduce national prejudice? A test of a cross-cultural musical education programme

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Abstract

This study examined the impact of a cross-cultural musical program on young Portuguese adolescents' national prejudice. Two-hundred and twenty-nine sixth-grade pupils who attended public schools in the area of Lisbon, Portugal, were first presented with two tasks measuring national prejudice: a trait attribution task comprising positive and negative personality traits, and an overall affective evaluation of in-group and out-group people. Half of the pupils were subsequently exposed, at school, to a six-month musical program that included Cape Verdean songs as well as Portuguese songs. The other half was exposed to the usual program, which comprised no songs from Cape Verde but included all the Portuguese songs. Measures of national prejudice taken at the end of the program showed that the impact of the program was specific. In the experimental group, prejudice towards Cape Verdean people was reduced whereas attitudes to other groups were not altered (Portuguese and Brazilian). In the control group no reduction for any group was observed. Measures taken three months later showed that the impact of the experimental program was enduring.

Keywords

attitude change, Brazil, Cape Verde, musical program, Portugal, prejudice reduction

Various programs aimed at reducing prejudice (e.g., anti-dark-skin prejudice) among children have been implemented. The impact of these programs on the level of different types of prejudice has not always been positive. Aboud et al. (2012) reviewed 32 studies that included children aged 8 or less. They found that (a) in 10% of the cases, the effect of the program was

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negative; that is, the level of prejudice increased; (b) in 50%, there was no detectable effect; and (c) in 40%, the effect could be considered as positive. In addition, (a) the effect was more often positive when the program was educational (47%) than when it was not (36%); (b) children' attitudes were more strongly affected than children's peer relationships; and (c) the effect was stronger on majority ethnic children's attitudes than among minority children's attitudes. Aboud et al. (2012) stressed the need for additional research on educational interventions.

The present study examined the effect of a music education program on national prejudice. It was conducted in parallel with another study published in this journal that assessed the effect of such a program on young adolescents' anti-dark skin prejudice (Neto, Pinto, & Mullet, 2016). For assessing anti-dark-skin prejudice, Neto et al. (2016) used the Greenwald et al.'s (1998) Implicit Association Test (IAT). IAT is based on response time: It is thought to reveal implicit attitudes of which individuals may be unaware. In Neto et al.'s (2016) study, IAT was used to measure the strength with which positive and negative traits were implicitly attributed to dark skin persons or to light skin persons. Portuguese sixth-grade pupils were, during regular music classes at school, exposed to African (Cape Verdean) songs, in addition to national songs. After sixth months of exposure (20 sessions), the level of anti-dark skin prejudice implicitly expressed by these young adolescents (a) was significantly lower than the level they expressed at the beginning of the study; and (b) significantly lower than the level expressed by young adolescents from a control group who were exposed to national songs only. Although implicit attitudes are often considered to be rather stable over time, this study showed that the impact of the experimental group program was enduring. Measures taken three months later and two years later were similar to measures taken at the end of the program. This study was, therefore, one of the very few that have evidenced lasting effects of an intervention on prejudice reduction (Lai et al., 2016). These findings were consistent with a previous study by Sousa, Neto, and Mullet (2005), although this study only included explicit measurements of anti-dark-skin prejudice.

The present study

In addition to measurements of anti-dark-skin prejudice, the study by Neto et al. (2016) included measurements of national prejudice, and the goal of the present article was to report the effect of the musical program on this alternative type of prejudice. National prejudice was assessed using Bennet et al.'s (2004) Overall Affective Evaluation Task (OAET) and Bennet et al.'s (2004) Trait Attribution Task (TAT).

Three target groups were considered: Portuguese (the in-group), Brazilians (an out-group that was, however, not very different), and Cape Verdeans (a very different out-group). Although they live in Latin America, Brazilians are, in many respects similar to Portuguese despite forming a clearly different group (Neto, Pinto, & Furnham, 2012). In Portugal, they currently constitute the most numerous Latino American immigrant group (28%, according to the Instituto Nacional de Estatística [INE], 2012). Culturally speaking, Cape Verdeans are more different from Portuguese than Brazilians are. In Portugal, they constitute the more numerous Western African immigrant group (10%, INE, 2012).

Music may influence individuals' thought, feelings and behaviours (North & Hargreaves, 2008). Musical activity may promote empathy and affiliation (Kreutz, 2014; Rabinowitch, Cross, & Burnard, 2013; Clarke, DeNora, & Vuoskoski, 2015). For example, Vuoskoski, Clarke, and DeNora (2017) showed that people with high trait empathy displayed preference for members of a determined culture by simply listening to music from this culture. These results are consonant with theories which suggest that music activity has an evolutionary function because it tends to reinforce group cohesion, promotion, and affiliation (Cross & Morley, 2008).

We hypothesized that if listening to music that is typical of specific ethnic group can enhance empathy and affiliation toward this group, the effect of the musical program that includes Cape Verdean songs would be positive regarding Cape Verdeans and neutral regarding Brazilians. More specifically, as the musical education program included Portuguese songs in association with Cape Verdean songs but did not include any Brazilian songs, (a) an increase in level of preference towards Cape Verdeans would be detected among adolescents from the experimental group; but (b) no change in level of preference towards Brazilians would be observed among adolescents from the experimental group; and (c) no change in level of preference towards Cape Verdeans or Brazilians would be observed among adolescents from the control group. In other words, a decrease in national prejudice was expected, specifically and exclusively towards Cape Verdeans.

Method

Participants

The sample comprised 229 Portuguese sixth-grade pupils (43% girls) who attended public schools in the area of Lisbon (Cascais and Setúbal), Portugal. All pupils were of Portuguese origin. No pupil from Brazilian or Cape Verdean origin was included in the sample. Their mean age was 11.87 (SD = 0.80); 67% were from blue-collar families, 14% from employee families, 13% from white collars families, and 6% were from families whose parents were unemployed. Once local school authorities had formally agreed to participate in the study, letters requesting pupil's parental consent were sent. All parents completed and returned the consent forms.

Material

The material, borrowed from Bennett et al. (2004), assessed: (a) the number (one to five) of positive traits (clean, happy, clever, hardworking, and honest) attributed to own (Portuguese) and other (Brazilian and Cape Verdean) national groups; (b) the number of negative traits (dirty, sad, stupid, lazy, and dishonest) attributed to own and other national groups; and (c) an overall evaluation of own and other national groups.

The participants were instructed to select traits that, in their views, appropriately described Portuguese or Brazilian or Cape Verdean people among a set of ten adjectives. (If for one national group no trait was considered appropriate, none of them was selected and the score was zero.) The exact phrasing used for the TAT was "Here are words that can be used to describe people. What I want you to do is to read all these words, one by one, and select those words that you think can be used to describe [Portuguese or Brazilian or Cape Verdean] people. Circle all the words that you want to select." The exact phrasing used for the OAET was: "Now I just want to ask you one more thing about [Portuguese or Brazilian or Cape Verdean] people. How much do you like/dislike them?" The evaluative scale ranged from *I don't like them* (1) to *I like them very much* (5).

As they allowed assessing independently participants' own positive and negative attributions towards the in-group and towards both out-groups, these tasks avoided the methodological problem noted by Cameron et al. (2001).

Procedure

In October 2010, (a) five classes, taken at random, followed the ordinary program (the control group)—that is, there was no change in their usual functioning; and (b) five other classes

followed the cross-cultural music education program (the experimental group)—that is, they were exposed to twenty 90-min long sessions specially designed for the study. As already stated, these sessions included both Portuguese (e.g., Fado) and Cape Verdean (e.g., Morna) songs (see Neto et al., 2016). During the sessions, participants listened and sang. Also, aspects of the Cape-Verdean culture were discussed. The detailed content of the 20 sessions is shown in Table 1. The three music teachers who conducted the sessions were blind to the hypotheses of the study.

All songs were in Portuguese (the official language in Portugal, Cape Verde, and Brazil) and Crioulo (a language that is specific to Cape Verde). Songs were adapted for a young public. For administrative reasons, it was not possible to have a group of participants exposed to Cape Verdean songs only.

Participants were asked to assess the three target groups, using first the TAT and then the OAET. The assessment conditions were counterbalanced. Half of the participants assessed the Cape Verdeans first and then the Brazilians and the Portuguese, and the other half assessed the Portuguese first and then the Brazilian and the Cape Verdeans. There were three separate assessment sessions: (a) in October 2010—that is, before exposition to the program; (b) in March 2011—that is, at the end on the program; and (c) in June 2011—that is, three months after completion of the program.

All assessment sessions were supervised by a light-skinned Portuguese woman, previously trained for this task. The participants were not aware that an experiment was taking place in their school. They were, however, told which songs were Cape Verdean ones and which songs were Portuguese ones.

Results

Figure 1 shows the effect of Condition (experimental vs. control), Time (from Time 1 to Time 3), and Nationality (Portuguese, Brazilians, and Cape Verdeans) on the OAET score. An ANOVA was conducted on these scores with a 2 Condition × 3 Time × 3 Nationality design. Owing to multiple comparisons, the significance threshold was set at $p = .001$. The three main effects were significant. OAET ratings were higher in the experimental ($M = 3.78$) than in the control condition ($M = 3.51$), $F(1, 207) = 18.34$, $p < .001$, $\eta^2_p = .08$. OAET ratings were lower at Time 1 ($M = 3.52$) than at Time 2 ($M = 3.71$) and at Time 3 ($M = 3.70$), $F(2, 414) = 14.80$, $p < .001$, $\eta^2_p = .07$. Post-hoc analysis using the Scheffé test showed that the last two means were not significantly different, $p = .99$. Portuguese ($M = 4.29$; $SD = 0.71$) were preferred to Brazilians ($M = 3.25$; $SD = 0.90$) and Cape Verdeans ($M = 3.38$; $SD = 0.94$), $F(2, 414) = 157.79$, $p < .001$, $\eta^2_p = .43$. Post-hoc analysis showed that the last two means were not significantly different, $p = .12$.

The Nationality × Time interaction was significant, $F(4, 828) = 14.79$, $p < .001$, $\eta^2_p = .07$. Three separate ANOVAs, one for each nationality, were conducted with a 2 Condition × 3 Time design. When the Portuguese were the target, OAET ratings were lower at Time 1 ($M = 4.17$) and at Time 2 ($M = 4.18$) than at Time 3 ($M = 4.51$), $F(2, 432) = 26.16$, $p < .001$, $\eta^2_p = .11$. When the Brazilians were the target, OAET ratings were lower at Time 1 ($M = 3.14$) and at Time 3 ($M = 3.23$) than at Time 2 ($M = 3.40$), $F(2, 438) = 9.32$, $p < .001$, $\eta^2_p = .04$. Post-hoc analysis showed that ratings at Time 1 and Time 3 were not significantly different, $p = .38$. When the Cape Verdeans were the target, OAET ratings were, as in the case of the Brazilians, lower at Time 1 ($M = 3.26$) and at Time 3 ($M = 3.37$) than at Time 2 ($M = 3.53$), $F(2, 432) = 10.81$, $p < .001$, $\eta^2_p = .05$. Post-hoc analysis showed that only ratings at Time 1 and Time 2 were significantly different, $p < .001$.

Table 1. Contents of the 20 sessions.

Session	Content
1	Localization of the archipelago of Cape Verde on the world map; characteristics of the people of Cape Verde; morna; listening to and analysis of morna: "Nos Morna" by Ildo Lobo
2	Localization of Portugal on the world map; characteristics of the people of Portugal; fado; listening to and analysis of fado: "Os Putos" by Carlos do Carmo
3	Morna and its definition; locating the island of Boa Vista on the world map; morna singers of Cape Verde; listening to morna "Sodade" by Cesária Évora
4	Fado and its definition; fado singers of Portugal; locating the cities of Lisbon and Coimbra on Portuguese map; listening to and analysis of fado song "Tudo isto é fado" by Amália Rodrigues
5	Listening to, interpretation and analysis of morna "Sodade" by Cesária Évora
6	Listening to, interpretation and analysis of fado "Tudo isto é fado" by Amália Rodrigues
7	The singer Cesária Évora and his biography, listening to and viewing of song lyrics "África Nossa" by Cesária Évora
8	The singer Amalia Rodrigues and her biography, listening to and viewing of fado lyrics "Canção do Mar" by Amália Rodrigues
9	Listening to and viewing the lyrics of the song "Morna" by Tito Paris; the singer Tito Paris and his biography
10	Listening to and viewing the lyrics of the song "Ó gente da minha terra" by Mariza; the singer Mariza and her biography
11	Listening to morna "Sodade" by Cesária Évora; interpretation with recorder (bisel flute) of the chorus of morna described above
12	Listening to fado "Canção do mar" by Amália Rodrigues; interpretation with recorder (bisel flute) of the introduction of fado described above
13	Creating choreography for morna "Verde Aninha" by Bana
14	Creating choreography for fado "Chuva" by Mariza
15	Illustration, through drawings, morna "Cabo Verde" by Cesária Évora
16	Interpretation and analysis of fado "Lenda da Fonte" by Sérgio Nunes
17	Distinction between monophony and polyphony in morna "Sodade" sung by Cesária Évora and Dorothean College Choir, Lisbon (CSD)
18	Listening to and analysis (monophony and polyphony) of Fado "Fado do estudante" played by musical groups Radio Voices (a cappella group) and North Pole (pop group)
19	Cape Verde and its music seen through the testimony of a music education teacher of Cape Verdean descent
20	Rhythmic body interpretation of Fado "Fado Toninho" by Deolinda

Finally, the Condition × Nationality × Time interaction was significant, $F(4, 828) = 8.87$, $p < .001$, $\eta^2_p = .04$. When the Portuguese or when the Brazilians were the targets, the Nationality × Time interaction was not significant. When the Cape Verdeans were the target, the Nationality × Time interaction was significant, $F(2, 432) = 14.78$, $p < .001$, $\eta^2_p = .07$. As a result, two additional ANOVAs were conducted, one for each condition. In the experimental condition, OAET ratings were lower at Time 1 ($M = 3.35$) than at Time 2 ($M = 3.72$) or at Time 3 ($M = 3.76$), $F(2, 210) = 14.54$, $p < .001$, $\eta^2_p = .12$. Post-hoc analysis showed that only ratings at Time 1 and Time 2 were significantly different, $p < .001$. In the control condition, OAET ratings were higher at Time 2 ($M = 3.35$) than at Time 1 ($M = 3.18$) or at Time 3 ($M = 2.97$), $F(2, 222) = 10.86$, $p < .001$, $\eta^2_p = .09$. Post-hoc analysis showed that only ratings at Time 2 and at Time 3 were significantly different, $p < .001$.

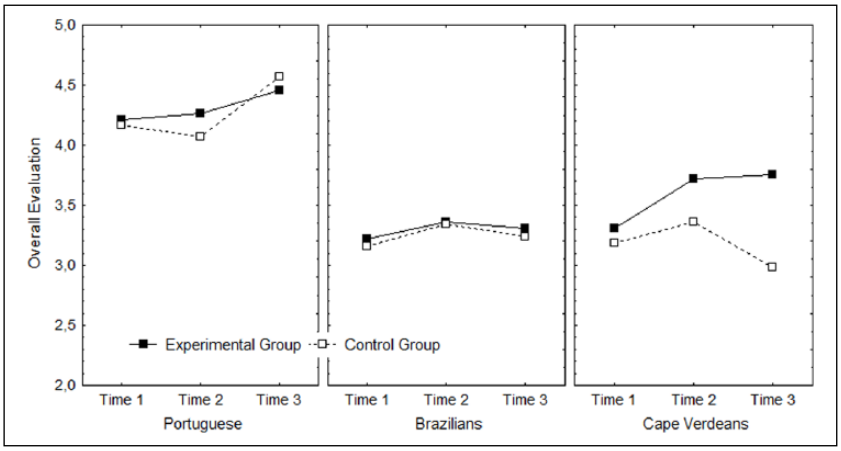

Figure 1. Effect of condition, time, and nationality on national prejudice measured with the overall affective evaluation scale (OAET). Measures of prejudice are on the y-axis. The three time levels are on the x-axis: before exposure to the program, immediately after, and 3 months later. The two curves correspond to the two conditions: exposure to the experimental program and exposure to the usual, control program. Each panel corresponds to a nationality.

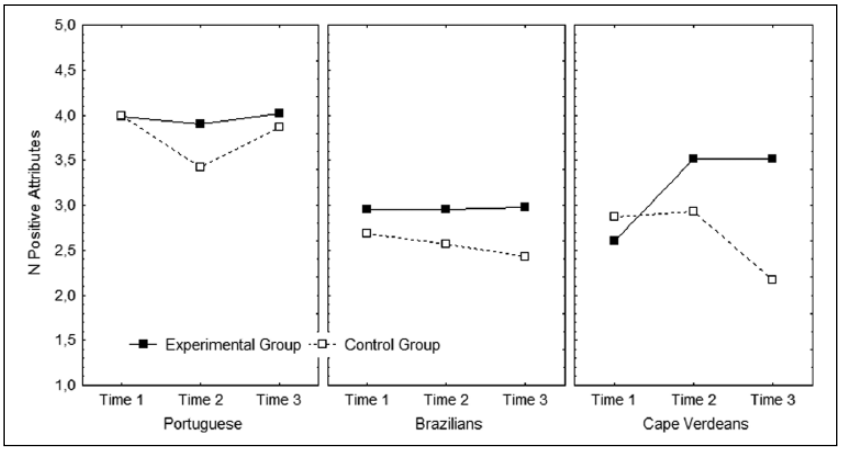

Figure 2. Effect of condition, time, and nationality on national prejudice measured using the Attribution of Positive Personality Traits task (TAT). Measures of prejudice are on the y-axis. The three time levels are on the x-axis: before exposure to the program, immediately after, and 3 months later. The two curves correspond to the two conditions: exposure to the experimental program and exposure to the usual, control program. Each panel corresponds to a nationality.

Figure 2 shows the effect of Condition, Time and Nationality. An ANOVA was conducted on these scores with a 2 Condition × 3 Time × 3 Nationality design. Only two of the three main effects were significant. TAT scores were higher in the experimental (M = 3.43) than in the control condition (M = 2.92), $F(1, 224) = 29.77$, $p < .001$, $\eta^2_p = .12$. Higher scores were attributed to the Portuguese (M = 3.86; SD = 0.70) than to the Brazilians (M = 2.74; SD = 0.91) or to the Cape Verdeans (M = 3.93; SD = 0.95), $F(2, 448) = 104.97$, $p < .001$, $\eta^2_p = .32$. Post-hoc analysis showed that the last two means were not significantly different, $p = .08$.

The Nationality × Time interaction was significant, $F(4, 896) = 10.51$, $p < .001$, $\eta^2_p = .04$. Three separate ANOVAs, one for each nationality, were conducted with a 2 Condition × 3 Time design. When the Portuguese were the target, TAT scores were lower at Time 2 ($M = 3.65$) than at Time 1 ($M = 3.97$) or at Time 3 ($M = 3.94$) but the effect of Time was not significant at the chosen threshold, $p = .02$. When the Brazilians were the target, TAT scores were similar over time ($M = 2.77$, 2.77, and 2.70, respectively). When the Cape Verdeans were the target, TAT scores were higher at Time 2 ($M = 3.22$) than at Time 1 ($M = 2.73$) or at Time 3 ($M = 2.85$), $F(2, 452) = 11.70$, $p < .001$, $\eta^2_p = .05$. Post-hoc analysis showed that only scores at Time 1 and Time 2 were significantly different, $p < .001$.

Finally, the Condition × Nationality × Time interaction was significant, $F(4, 896) = 9.36$, $p < .001$, $\eta^2_p = .04$. When the Portuguese or when the Brazilians were the targets, the Nationality × Time interaction was not significant. When the Cape Verdeans were the target, the Nationality × Time interaction was significant, $F(2, 452) = 28.40$, $p < .001$, $\eta^2_p = .11$. As a result, two additional ANOVAs were conducted, one for each condition. In the experimental condition, TAT scores were lower at Time 1 ($M = 2.61$) than at Time 2 ($M = 3.52$) or at Time 3 ($M = 3.56$), $F(2, 222) = 22.07$, $p < .001$, $\eta^2_p = .17$. In the control condition, scores were lower at Time 3 ($M = 2.17$) than at Time 1 ($M = 2.86$) or at Time 2 ($M = 2.93$), $F(2, 222) = 10.86$, $p < .001$, $\eta^2_p = .09$. Post-hoc analysis showed that ratings at Time 1 and at Time 2 were not significantly different, $p = .89$.

An ANOVA was also conducted on the Attribution of Negative Personality Traits score (TAT) with a 2 Condition × 3 Time × 3 Nationality design. Only two of the three main effects were significant. TAT scores were lower at Time 2 ($M = 1.38$) than at Time 1 ($M = 1.54$) or at Time 3 ($M = 1.78$), $F(2, 450) = 13.32$, $p < .001$, $\eta^2_p = .06$. Post-hoc analysis showed that only scores at Time 2 and scores at Time 3 were significantly different, $p < .001$. Lower scores were attributed to the Portuguese ($M = 1.22$; $SD = 0.68$) than to the Brazilians ($M = 1.77$; $SD = 0.95$) or to the Cape Verdeans ($M = 1.71$; $SD = 0.89$), $F(2, 450) = 25.67$, $p < .001$, $\eta^2_p = .10$. Post-hoc analysis showed that the last two means were not significantly different, $p = .13$.

The Nationality × Time interaction was significant, $F(4, 900) = 6.00$, $p < .001$, $\eta^2_p = .03$. Three separate ANOVAs, one for each nationality, were conducted with a Condition × Time, 2 × 3 design. When the Portuguese were the target, TAT scores were lower at Time 1 ($M = 1.04$) than at Time 2 ($M = 1.20$), and lower at Time 2 than at Time 3 ($M = 1.42$), $F(2, 450) = 7.19$, $p < .001$, $\eta^2_p = .03$. Post-hoc analysis showed that only scores at Time 1 and 3 were significantly different, $p = .001$. When the Brazilians were the target, TAT scores were lower at Time 2 ($M = 1.59$) than at Time 1 ($M = 1.73$) or at Time 3 ($M = 2.00$), $F(2, 454) = 7.50$, $p < .001$, $\eta^2_p = .03$. Post-hoc analysis showed that only scores at Time 2 and 3 were significantly different, $p = .001$. When the Cape Verdeans were the target, TAT scores were lower at Time 2 ($M = 1.36$) than at Time 1 ($M = 1.84$) or at Time 3 ($M = 1.91$), $F(2, 454) = 13.47$, $p < .001$, $\eta^2_p = .06$. Post-hoc analysis showed that scores at Time 1 and at Time 3 were not significantly different, $p = .77$.

Finally, the Condition × Nationality × Time interaction was significant, $F(4, 900) = 10.32$, $p < .001$, $\eta^2_p = .04$. When the Portuguese or when the Brazilians were the targets, the Nationality × Time interaction was not significant. When the Cape Verdeans were the target, the Nationality × Time interaction was significant, $F(2, 452) = 23.70$, $p < .001$, $\eta^2_p = .09$. As a result, two additional ANOVAs were conducted, one for each condition. In the experimental condition, TAT scores were higher at Time 1 ($M = 1.99$) than at Time 2 ($M = 1.31$) or at Time 3 ($M = 1.29$), $F(2, 222) = 12.62$, $p < .001$, $\eta^2_p = .10$. Post-hoc analysis showed that scores at Time 2 and at Time 3 were not significantly different, $p = .99$. In the control condition, scores were lower at Time 2 ($M = 1.41$) than at Time 1 ($M = 1.69$) or at Time 3 ($M = 2.52$), $F(2, 232) = 24.09$, $p < .001$, $\eta^2_p = .17$. Post-hoc analysis showed that ratings at Time 1 and at Time 2 were not significantly different, $p = .24$.

Discussion

This study examined the impact of a cross-cultural musical program on young Portuguese adolescents' level of national prejudice. Our hypotheses were that the effect of this program would be (a) positive—that is, the level of national prejudice towards Cape Verdeans would decrease; and (b) specific—that is, the level of national prejudice towards them would decrease, whereas the level of national prejudice towards Portuguese or Brazilians would not change. These hypotheses were supported by the data. The mean positive trait ratings for Cape Verdeans increased from the start of the program to the end of the program and were maintained for 3 months after the program ended. Neither the Cape Verdean control group, nor the Portuguese and Brazilian groups showed the same pattern of ratings. The opposite is true for the negative trait ratings.

In summary, when changes occurred, they were, as expected, specific to the Cape Verdean target. Regarding the other targets, either no change was detected or change occurred but in the reverse way. These findings were consistent with previous findings by Sousa et al. (2005) who used another measurement (PRAM II) that is closely related to the TAT. These findings were also consistent with findings by Hill and Agoustinos (2001) who examined the impact of an in-house education program that was specifically designed to reduce the level of prejudice expressed by White employees working in public service organizations towards Aboriginal Australians. Immediately after completion, the program had a strong positive effect. Finally, these findings nicely paralleled Neto et al.'s (2016) findings regarding reduction of anti-dark-skin prejudice.

Processes similar to those suggested in Paluck and Green's (2009) theory of narrative persuasion can be evoked to explain prejudice reduction in the present field study. Music encourages perspective taking (Strange, 2002) and empathy (Zillmann, 1991). Music can inspire people to travel to other emotional worlds, to set together one's emotions with other cultures, and to "remove filters that might otherwise screen out different perspectives" (Paluck & Green, 2009, p. 353).

The results of the present study have implications in the domain of education. Although modest in size, the effects reported above are very robust; they have been detected despite the stringent significance threshold ($p = .001$) that has been chosen. Teachers are important socialization agents. Teachers and afforded curricula may play a role in the reduction of many kinds of prejudice towards national groups. Education providers should therefore be encouraged to create and implement cross-cultural intervention programs at school (Cohen, 2008; Ilari, Chen-Hafteck, & Crawford, 2013).

A first limitation of the study resided in the time frame. Even though three assessments were performed, they were close together in time. A follow-up assessment one year later (or more) would allow assessing the extent to which the cross-cultural program has had an enduring impact. Also, the effect of longer and of shorter music educational programs on national prejudice should be tested in order to determine the optimum duration of such programs

A second, more serious limitation of the study is that it was tested against cultures that, despite evident differences, share similarities: Cape Verdeans and Brazilians are Portuguese speakers as were the participants. Would the program work in increasing preference ratings toward much different culture, such as Muslim, Hindu or Chinese culture?

Future studies, using the same music education perspective, should be devoted to testing the effectiveness of naturalistic programs aimed at reducing other prejudices, among them ageism, sexism, and negative attitudes towards obese people.

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