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RESEARCH ARTICLE

Acculturation preferences and behavioural tendencies between majority and minority groups: The mediating role of emotions

Lucía López-Rodríguez*, Isabel Cuadrado† & Marisol Navas†

* Universidad Nacional de Educación a Distancia

† University of Almería, Centro de Investigación para el Estudio de las Migraciones y las Relaciones Interculturales (CEMyRI)

Correspondence

Lucía López-Rodríguez, Department of Social and Organizational Psychology, Universidad Nacional de Educación a Distancia, C Juan del Rosal 10, 28040. Madrid, Spain.
E-mail: lucialopezrod@gmail.com

Abstract

The main goal of this research was twofold. First, we aimed at determining how acculturation preferences and emotions were related to specific intergroup behavioural tendencies towards majority and minority groups. Second, we aimed at developing an intergroup behavioural tendencies scale that differentiates between valence (facilitation and harm) and intensity (active and passive). The role of intergroup contact was also examined, as it is a known predictor of intergroup prejudice. In order to fulfil these goals, we carried out two studies. In Study 1, Spanish participants ($N = 279$) answered a questionnaire about Moroccans (a devalued group) or Ecuadorians (a valued group) by reporting their acculturation preferences for immigrants, their positive and negative emotions, quantity of contact with them and behavioural tendencies towards them. In Study 2, Moroccans ($N = 92$) and Ecuadorians ($N = 87$) assessed Spaniards on these measures. Results confirmed the structure of the new behavioural tendencies scale across four groups of participants. Overall, findings also showed that acculturation preferences and quantity of contact indirectly predicted behavioural tendencies through positive emotions. This research contributes to knowledge on how the majority and minority's acculturation preferences are related to their emotions and specific dimensions of intergroup behavioural tendencies, confirming the predominant mediating role of positive emotions in this process.

Even if acculturation processes have a long tradition in human history, the coexistence of different cultures is still a highly relevant issue. The current economic crisis and recent events of different natures (e.g., shocking terrorist attacks) seem to have worsened the relationships between majority and some minority groups. In this context, the analysis of the emotions and behavioural tendencies between majority and minority groups, as well as their mutual acculturation processes, become essential because they may be quite reliable indicators of future coexistence.

This paper focuses on majority and minority group relationships. On the basis of recent models (i.e., stereotype content model and BIAS Map; Cuddy, Fiske, & Glick, 2008), we start from the premise that prejudice and intergroup bias are not generic and uniform, but multiple and specific, and include both negative and subjectively positive responses. Consequently, the beliefs, emotions and behavioural tendencies that people hold vary across groups and situations (e.g., Cottrell & Neuberg, 2005; Cuddy, Fiske, & Glick, 2007; Fiske, Cuddy, Glick, & Xu, 2002; Mackie, Devos, & Smith, 2000). This specificity has also been claimed in the research on acculturation processes. In this regard, the interactive acculturation model (IAM; Bourhis, Moïse, Perreault, & Senécal, 1997) highlights that the majority's acculturation preferences for immigrants differ according to the target group (valued *vs* devalued immigrants; Bourhis & Dayan, 2004; Montreuil & Bourhis, 2001). Other acculturation proposals confirm this assertion in both majority and minority groups (e.g., relative acculturation extended model [RAEM], Navas, García, Sánchez, Rojas, Pumares, & Fernández, 2005; Piontkowski, Florack, Hölker, & Obdrzálek, 2000).

Although existing studies offer evidence about the relationships between acculturation preferences and both intergroup behaviours (Geschke, Mummendey, Kessler, & Funke, 2010; Zick, Wagner, Van Dick, & Petzel, 2001) and emotions (Geschke et al., 2010; Zagefka et al., 2014), no previous work has specifically linked dimensions of specific behavioural tendencies, acculturation preferences and emotions in majority and minority groups. In order to cover this gap, we present two studies, which address an important research question: how are acculturation preferences and emotions related to specific intergroup behavioural tendencies towards majority and minority groups? The role performed by intergroup contact in these relationships will also be analysed.

Beyond the Univalent Prejudice: Dimensions of Intergroup Behavioural Tendencies

Recent approaches to prejudice and intergroup bias emphasise their specificity and contextual nature (e.g., Dovidio & Gaertner, 2010). Research has shown that these constructs are not rigid but specific: They are both group-dependent and context-dependent and can involve positive and negative responses (e.g., Cuddy et al., 2008). So, different out-groups in distinct contexts elicit different perceptions, emotions and behavioural tendencies.

In order to capture this specificity and improve traditional views of intergroup bias and prejudice as an univalent antipathy, Cuddy et al. (2007) considered two dimensions of intergroup behaviours: active–passive (concerns intensity) and facilitation–harm (concerns valence). Accordingly, they distinguish four classes of behavioural tendencies: active facilitation (AF), passive facilitation (PF), passive harm (PH) and active harm (AH).

According to Cuddy et al. (2007, p. 633; 2008, p. 109), AF has the aim of explicitly benefiting others. At an intergroup level, it implies behaviours related to promoting and establishing friendships with members from other groups. PF involves behaviours through which people accept an obligatory relationship or convenient cooperation with others in order to achieve one's own goals, benefiting the other group as a result. At an intergroup level, it includes, for example, contracting the services of out-group members. PH refers to the tendency to degrade others by diminishing their social value, either by excluding, ignoring or neglecting them, and it implies avoiding or ignoring out-group members. Lastly, through AH, one explicitly attempts to harm others or its interests. At the intergroup level, it includes, for example, using negative group appellatives.

These patterns have traditionally been measured by using action verbs (e.g., help, cooperate with, exclude and attack), and by assessing the societal perspective and not the perceiver's viewpoint, which is addressed in the present research. In this regard, Cuddy et al. (2007, p. 644) recognise that "societal prejudices do not always equal personal prejudices" and that the perspective of the perceiver may be "a central question for future research". In order to cover these gaps, we aim at developing a specific intergroup behavioural tendencies scale based on the four patterns of discrimination Cuddy et al. (2007) identified.

Linking behaviours to acculturation research, some authors (e.g., Zick et al., 2001) have emphasised the importance of acculturation preferences on intergroup behaviours "often over and above the effects of general prejudice towards other groups" (p. 548). However, we do not yet know what particular relationships may be established between acculturation preferences and specific dimensions of intergroup behavioural tendencies for majority members and, especially, for minority groups. The present research deals with this question.

Acculturation Preferences and Intergroup Relations: Majority and Minority Perspectives

Acculturation research has shed some light on the links between acculturation preferences and intergroup relations. As Zick et al. (2001) highlighted, the majority's acculturation preferences are important in order to predict their behaviour towards minority groups. These authors found that the more integration that is preferred, the more positive the behaviour is towards minority members, whereas a preference for assimilation and segregation is related to discriminatory behaviour.

Recently, a longitudinal field study (Geschke et al., 2010) extended these findings. This work demonstrated that majority members' acculturation preferences (called *goals* by the authors) are associated with their own attitudes and behaviours towards minority groups. The authors found out that the acculturation preferences (or goals) concerning immigrants' cultural maintenance and adoption were related to prejudice, negative emotions and discrimination intentions. In this study, there was no clear one-sided causal direction, but rather, reciprocal causation: acculturation preferences/goals could simultaneously be causes and effects of attitudes and behaviours towards minority groups (Geschke et al., 2010).

Considering majority and minority perspectives, a longitudinal study conducted by Zagefka et al. (2014) in three European countries showed that acculturation preferences about cultural maintenance and adoption predicted negative intergroup emotions. Particularly, they found that the majority's preference for immigrants to maintain their original culture decreases their negative emotions towards minority groups, whereas their preference for immigrants to adopt the host culture increases negative intergroup emotions over time. However, for minority members, their preference for culture adoption decreased their negative emotions towards the majority group.

Taken together, these findings provide some interesting ideas about the relationship between acculturation preferences, intergroup emotions and behaviours. However, no study has looked at the relationship between dimensions of specific behavioural tendencies, acculturation preferences and emotions taking both majority and minority perspectives. Regarding this concern, we wondered if intergroup emotions might mediate the relationship between acculturation preferences and specific behavioural tendencies. We theoretically address this central question in the next section.

The Mediating Role of Intergroup emotions

There is an extended agreement that emotions are strongly and directly related to behaviours (e.g., Cuddy

et al., 2007; Dovidio, Brigham, Johnson, & Gaertner, 1996; Stangor, Sullivan, & Ford, 1991; Talaska, Fiske, & Chaiken, 2008). Specifically, Kessler et al. (2010) showed that positive intergroup emotions towards immigrants were negatively related with social distance, blatant prejudice, cultural distance, social competition and realistic competition (both considered indicators of potential behavioural outcomes of prejudice).

Furthermore, it is quite accepted that emotions appear to mediate the effect of cognitions on behaviours. According to appraisal theories of emotion (e.g., Frijda, 1986; Smith & Ellsworth, 1985), cognitive appraisals elicit emotions, which in turn promote specific behavioural responses. Intergroup emotions theory (IET, Mackie et al., 2000; Mackie, Smith, & Ray, 2008), an appraisal-based approach to intergroup relations, emphasises that group-based emotions direct intergroup behaviour. For example, Mackie et al. (2000) analysed the mechanisms by which appraisals and behaviour were related, revealing, among other results, that appraising the out-group as weaker than the in-group leads to offensive action tendencies through emotions of anger. This evidence allows us to suggest that emotions might work as a means to implement the specific actions destined to achieve participants' acculturation preferences.

In short, the existing studies move directly from the acculturation preferences to the emotions (Zagefka et al., 2014) or from the acculturation preferences to the behaviour (Zick et al., 2001). Geschke et al. (2010) analysed all of these relationships but exclusively from the majority view and without considering specific behaviours that capture currently identified discrete discrimination patterns. Even more, they did not analyse the possible mediating role of emotions in this process. The present research is designed to make contributions on the relationships that may be established between acculturation preferences, emotions and specific intergroup behaviours, as well as the mediating role of emotion in such process, considering majority and minority perspectives.

Furthermore, we also take into account intergroup contact research, which has consistently demonstrated that this variable has a strong impact in terms of reducing intergroup bias and prejudice (for revisions, see Binder et al, 2009; Dovidio & Gaertner, 2010), as well as on the acculturation process (e.g., González, Sirlopú, & Kessler, 2010; Montreuil & Bourhis, 2004; Piontkowski et al., 2000; Van Acker & Vanbeselaere, 2011). Consequently, our work will also address the role performed by intergroup contact as predictor of facilitation and harm tendencies through intergroup emotions.

The Present Research

In order to address the aforementioned research questions, we carried out two studies, taking into account majority and minority perspectives. In Study 1, majority members assessed two different immigrant targets.

Moroccans and Ecuadorians were respectively chosen as devalued and valued immigrant groups, because previous research in Spain had found that majority members perceived Moroccan immigrants as being less moral, sociable and competent (López-Rodríguez, Cuadrado, & Navas, 2013) and evoking a more realistic and symbolic threat than did Ecuadorian immigrants (Navas, Cuadrado, & López-Rodríguez, 2012). In Study 2, the perspective of these two minority groups was in turn considered when assessing the majority group (i.e., Spaniards).

Our first goal, which relies on the research line that claims that prejudice is group-dependent and context-dependent, was to develop a new scale of behavioural tendencies to apply to both majority and minority groups. We expect that the structure of this scale, distinguishing four behavioural tendencies (i.e., AF, PF, PH and AH), is being confirmed across different groups and targets (Hypothesis 1; H1). Based on the specificity of intergroup bias and acculturation research, our second objective was aimed to determine if there would be intergroup differences in the variables of study. In this regard, we predicted (Hypothesis 2, H2) that behavioural tendencies, acculturation preferences and intergroup emotions varied depending on the target assessed (Study 1) or the group that carried out the evaluation (Study 2). Based on both acculturation research and appraisal theories of emotion, our third goal was to explore whether or not intergroup emotions would mediate the relationships between acculturation preferences and behavioural tendencies. As different dimensions are considered, we expected a distinct pattern between positive/negative emotions and facilitation/harm tendencies (Hypothesis 3; H3). Finally, on the basis of literature showing the role performed by intergroup contact in prejudice and intergroup bias reduction, intergroup contact was expected to indirectly affect facilitation and harm tendencies through intergroup emotions (Hypothesis 4; H4).

The present work took place in Almería, a province of southern Spain known for its large foreign population because of its geopolitical (very close to Africa) and economical features (the intensive agriculture is, together with the tourism, the most important economic activity).

Study 1

From the previous considerations, Study 1 focuses on the majority perspective and pursues three main objectives. The first objective is to test whether four dimensions (AF, PF, AH and PH) could be identified in the intergroup behavioural tendencies scale designed when the majority group assessed different minority targets (valued *vs* devalued). We expected that the new scale worked in a similar way in both targets (H1).

Our second goal is to analyse whether behavioural tendencies, acculturation preferences and intergroup

emotions varied depending on the target assessed (valued *vs* devalued). In this regard, we expected a more negative disposition (more restrictive acculturation preferences, fewer positive and more negative emotions and fewer facilitation and more harm tendencies) towards a devalued target in comparison with a valued immigrant group (H2).

Finally, this study aimed to analyse whether intergroup emotions would mediate the relationship between the majority acculturation preferences for immigrants and their behavioural tendencies towards them. These processes are expected to be relatively independent on the immigrant target, with positive emotions predicting more facilitation tendencies and negative emotions predicting more harm tendencies (H3). Additionally, intergroup contact was expected to indirectly affect facilitation and harm tendencies through intergroup emotions (H4).

Method

Participants. Two hundred and seventy-nine people with Spanish nationality volunteered to participate in this study. The devalued-target group ($N = 140$) filled out a questionnaire assessing Moroccan immigrants (MT group), whereas the valued-target group ($N = 139$) assessed Ecuadorian immigrants (ET group). About half of the participants (54.3%) were women (MT$_{group}$ = 56.4%; ET$_{group}$ = 52.2%). The participants' mean age was 39.69 years ($SD = 17.17$): $M_{AgeMT} = 40.86$ ($SD = 17.08$) and $M_{AgeET} = 38.51 (SD = 17.24)$. Regarding participants' occupations, 37.2% of the total sample were active employees, 33.2% were students, 11.2% were housekeepers, 10.1% were retired, 7.9% were unemployed and 0.04% marked the option *others*. This study used a convenience sample by using a specific criterion in the sample selection to obtain comparable samples in sex and different age ranges (from 18 to 35 years, from 36 to 55 years and 56 or older). This convenience sample included participants recruited outside the university (O-U), who represent the 81.4% of the total sample and participants recruited at University of Almería (U), who represent the 18.6% of the sample. O-U participants had several occupations (43.1% employees, 20.4% students, 13.8% housekeepers, 12.4% retired, 9.8% unemployed and 0.4% others). Most of the U participants were students enrolled at university (88.5%), and the rest worked as employees (11.5%).

Instruments. Two types of identical questionnaires were created, with exception of the reference group (Moroccans or Ecuadorians) used, following an intergroup design. Participants were asked to fill out a questionnaire with the following measures:

Acculturation preferences. Two dimensions were contemplated following an adaptation of Berry's (1997) taxonomy of acculturation options and other acculturation models (i.e., IAM, Bourhis et al., 1997; RAEM,

Navas et al., 2005): (1) the majority's preference for immigrants *to maintain their original culture*, measured by the following question "To what extent would you like Moroccan/Ecuadorian immigrants who live here to maintain the customs of their original country regarding the following aspects?", and (2) the majority's preference for immigrants *to adopt the host culture*, measured by the following question: "To what extent would you like Moroccan/Ecuadorian immigrants who live here to adopt/practice the customs of this country regarding the following aspects?". Each question was composed of eight items to capture different life areas (Navas & Rojas, 2010): *political and governmental system* (how governments are chosen, governmental functioning, political participation, laws, etc.), *social welfare system* (education, health system, social services, etc.), *ways of working* (rhythm, labour conditions such as social security or unemployment compensation, etc.), *consumer habits and household economy* (products, food, family economy—e.g., money they spend and save or how they administer what they have), *social relationships* (ways of interacting, common places for social relationships, use of leisure time and ways to find enjoyment), *family relationships* (ways to interact with the partner, with children and with elderly people within the family, division of roles, etc.), *religious practices and beliefs* (beliefs, practices, personal accomplishment of religious obligations or prohibitions, etc.) and *values* (respect for the elderly, methods of children's education, equality between men and women, role of the religion within life, etc.). All items were measured on five-point Likert scales (1 = *not at all* to 5 = *very much*). In each dimension (i.e., original culture maintenance and host culture adoption), the scores of the different life areas were averaged. The reliability indices of Preference for Maintenance (eight items) were $\alpha = .87$ for both MT and ET groups. Preference for Adoption (eight items) also showed an adequate internal consistency with $\alpha = .87$ for MT, and .82 for ET.

Positive emotions. We used four positive emotions extracted from Fiske et al. (2002). The participants were instructed: "Please think of Moroccan/Ecuadorian immigrants and tell us the extent to which you feel or have felt the following emotions about them: security, comfort, admiration, and fondness". The participants responded on a five-point Likert-type scale (1 = *not at all*; 5 = *very much*). The reliability indices were $\alpha = .82$ for MT, and .71 for ET.

Negative emotions. We used four negative emotions extracted from Fiske et al. (2002). The participants were instructed: "Please think of Moroccan/Ecuadorian immigrants and tell us the extent to which you feel or have felt the following emotions about them: contempt, disgust, hate, and resentment". The participants responded on a five-point Likert-type scale (1 = *not at all*; 5 = *very much*). The reliability indices were $\alpha = .87$ for MT, and .85 for ET.

Intergroup behavioural tendencies. To measure this variable, we designed a new scale based on the definitions provided by Cuddy et al. (2007, 2008) about behavioural tendencies at the intergroup level (see Appendix). The participants had to indicate to what extent they were willing to carry out certain actions (11 items) towards a group of immigrants of Moroccan/Ecuadorian origin. The response scale ranged between 1 (*not at all*) and 5 (*very much*) in all cases.

Quantity of intergroup contact. We measured this variable by the following question: "To what extent do you maintain contact with Moroccan/Ecuadorian immigrants? Several options can be marked" (Navas & Rojas, 2010). There were six options, which ranged from the least degree of contact to the greatest degree of intergroup contact: (a) No contact at all. You only see them around the street or in public places, but you never talk to them; (b) You often see them because of neighbourhood, work or study, but you do not usually talk to them, or at least they talk to you first; (c) You often see them because of neighbourhood, work or study, and you usually interact with them; (d) You have Moroccan/Ecuadorian friends; (e) You have Moroccan/Ecuadorian family, (f) Your partner is Moroccan/Ecuadorian. The more inclusive option was used in the analysis.

Procedure. The previous measures were included in a more extensive questionnaire that was administered by the investigators and trained assistants. The participants were randomly assigned to answer one of the two types of questionnaires (about Moroccan or Ecuadorian immigrants), which were identical, except for the target immigrant group.

Data analysis. First, some preliminary results are presented. Then, we tested the dimensions of the intergroup behavioural tendencies scale through confirmatory factor analyses (CFAs), testing for configural equivalence across different target-groups with the EQS 6.2 programme. Afterwards, multivariate analyses of covariance were conducted in order to analyse if participants showed a worse disposition towards Moroccan immigrants (devalued group) compared with Ecuadorian immigrants (valued group), with quantity of contact as the covariable. Finally, a structural equation model was tested to ascertain if intergroup emotions might operate as a mediator in the relationship between acculturation preferences and intergroup behavioural tendencies with quantity of contact as the covariable. As we were also concerned about knowing whether theoretically interesting parameters differed across immigrant targets or they were invariant, model testing was carried out in both samples simultaneously by using the multiple group method. First, we conducted an unconstrained multi-group model, and then, a constrained multi-group model specifying that all regression paths would be equal across samples. EQS 6.2 provides the Lagrange multiplier (LM) test,

which evaluates cross-group constraints on the equality of parameters. According to Byrne (2008, p. 878), compared with χ^2 difference ($\Delta\chi^2$) or the difference between the CFI values (ΔCFI), the LM test is "a more precise approach to identifying parameters that are not group-equivalent".

Results

Preliminary analyses. Even if we followed convenience sampling when recruiting participants, once they were selected, they were randomly allocated to assess different immigrant targets. Preliminary analyses confirmed that there were no a priori differences in demographic characteristics between the group of respondents who assessed Moroccans and the participants who assessed Ecuadorians. Overall, the data showed that there were no significant differences in their age, $t_{(275)} = 1.14$, $p = .257$, $d = 0.14$; quantity of intergroup contact, $t_{(277)} = -0.17$, $p = .863$, $d = 0.02$; sex proportion, $\chi^2_{(1)} = 0.51$, $p = .476$; age-range proportion, $\chi^2_{(2)} = 0.19$, $p = .910$; educational level, $\chi^2_{(3)} = 0.31$, $p = .959$; or occupations, $\chi^2_{(5)} = 2.74$, $p = .740$.

The effect of some demographic features on the variables studied was also explored. Effects of sex were found for the devalued-target group on AH, $t_{(89.87)} = 2.13$, $p = .036$, $d = 0.45$, with men tending to more actively harm Moroccans, and for the valued-target group on quantity of contact, $t_{(136)} = -2.74$, $p = .007$, $d = 0.47$, with women maintaining more contact with Ecuadorians. Regarding participants' age, no effects were found for the devalued-target group. However, for the valued-target group, age was negatively correlated with AF, $r_{(136)} = -.21$, $p = .015$, and PF, $r_{(137)} = -.23$, $p = .007$. No effects of these variables, either on intergroup emotions or on acculturation preferences, were found.

We also explored if there were differences between the U and O-U participants on the remainder variables. For the devalued-target group, we found an effect on positive emotions, $t_{(137)} = 1.98$, $p = .050$, $d = 0.34$, and AH, $t_{(73.93)} = -3.86$, $p < .001$, $d = 0.90$, whereas for the valued-target group, we found an effect on preference for maintenance, $t_{(136)} = 3.19$, $p = .002$, $d = 0.55$; AF, $t_{(135)} = 2.56$, $p = .012$, $d = 0.44$, and PF, $t_{(136)} = 2.86$, $p = .005$, $d = 0.49$. U participants (which represent the 18.6% of the sample) generally showed a better disposition than did O-U participants in these variables.

As can be seen, we did not find a clear and consistent pattern of differences in the studied variables because of demographic features. Accordingly, these demographic characteristics were not considered in the subsequent analyses.

Additional analyses with the macro PROCESS (Hayes, 2013) showed no interaction effects between preference for maintenance and preference for adoption when predicting intergroup emotions or behavioural tendencies ($p > .05$).

Confirmatory factor analysis for behavioural tendencies. To analyse whether the operationalised scale of intergroup behavioural tendencies towards minority groups could be subdivided into the four dimensions identified by Cuddy et al. (2007), we carried out a CFA with the programme EQS 6.2. A model of 11 behavioural tendencies was delimited, where each indicator loaded only on its hypothesised factor (see Appendix). We tested for the configural equivalence of such model (Byrne, 2008) across both the devalued-target group and the valued-target group.

As prerequisite to test for the configural equivalence of the model, we established a well-fitting baseline model for each group separately.[1] The four latent factors of AF, PF, PH and AH were allowed to covary. The hypothesised model with four factors for the devalued-target group yielded a very good fit to the data[2]: S-B $\chi^2_{(38, 130)} = 44.44$, $p = .22$; Comparative Fit Index (CFI) = 0.984; Root Mean Square Error of Approximation (RMSEA) = 0.036; standardised root-mean-square residual (SRMR) = 0.058. The same model for the valued-target group also yielded an acceptable fit to the data: S-B $\chi^2_{(38, 125)} = 70.69$, $p = .001$; CFI = 0.910; RMSEA = 0.083; SRMR = 0.073.

Once a well-fitting baseline model was established for each group separately, the models were combined to test the multi-group model. As we were interested in testing for configural equivalence, no equality constraints were imposed. This model fits the data reasonably well: S-B $\chi^2_{(76, 255)} = 112.33$, $p = .004$; CFI = 0.952; RMSEA = 0.061; SRMR = 0.066. This finding allows us to conclude that both the number of factors and the pattern of their item loadings were similar (Byrne, 2008) when assessing a devalued and a valued immigrant group. These results confirm H1.[3]

The internal consistency of each dimension for the MT/ET Group was: AF (three items, $\alpha = .79/.81$), PF (two items, $r = .72/.70$), PH (three items, $\alpha = .81/.81$) and AH (three items, $\alpha = .77/.84$). As the items on the different dimensions showed an adequate internal consistency, they were averaged to create the four dimensions of AF, PF, PH, and AH. Correlations among these dimensions are shown in Table 1.

Differences when assessing devalued *versus* valued immigrant groups. In order to test H2, multivariate analyses of covariance (MANCOVAs) were performed with the target group as an independent factor (coded as 1: devalued target and 0: valued target) and quantity of contact as the covariable. We performed three different MANCOVAs separately for acculturation preferences (with preference for adoption and maintenance), intergroup emotions (positive and negative) and behavioural tendencies (AF, PF, PH and AH) as dependent variables.

These analyses showed that participants were more restrictive with Moroccans than with Ecuadorians by preferring that Moroccans (a devalued target) maintain their original culture less ($M = 2.18$, $SD = 0.84$) compared with what they prefer for Ecuadorians (a valued target, $M = 2.79$, $SD = 0.83$), $F_{(1, 275)} = 36.26$, $p < .001$, $\eta_p^2 = 0.12$, $d = 0.73$. No differences were found in their preference for adopting the host culture, $F_{(1, 275)} = 0.14$, $p = .709$, $\eta_p^2 = 0.01$, $d = 0.05$.

Regarding emotions, participants felt fewer positive emotions towards Moroccans ($M = 2.13$, $SD = 0.79$) than towards Ecuadorians ($M = 2.56$, $SD = 0.77$), $F_{(1,275)} = 22.69$, $p < .001$, $\eta_p^2 = 0.08$, $d = 0.57$. They also felt more negative emotions towards Moroccans ($M = 1.81$, $SD = 0.98$) than towards Ecuadorians ($M = 1.39$, $SD = 0.68$), $F_{(1,275)} = 17.28$, $p < .001$, $\eta_p^2 = 0.06$, $d = 0.50$.

Likewise, participants also showed differences in their behavioural tendencies towards these immigrant groups. Results showed that majority members had a lower AF tendency towards Moroccans ($M = 2.67$, $SD = 1.00$) than towards Ecuadorians ($M = 3.01$, $SD = 0.94$), $F_{(1,274)} = 9.48$, $p = .002$, $\eta_p^2 = 0.03$, $d = 0.37$. Similarly, participants had a lower PF tendency towards Moroccans ($M = 2.61$, $SD = 1.14$) than towards Ecuadorians ($M = 3.00$, $SD = 1.09$), $F_{(1,274)} = 8.70$, $p = .003$, $\eta_p^2 = 0.03$, $d = 0.36$, and more to PH towards Moroccans ($M = 2.07$, $SD = 1.03$) than towards Ecuadorians ($M = 1.70$, $SD = 0.88$), $F_{(1,274)} = 11.05$, $p = .001$, $\eta_p^2 = 0.04$, $d = 0.40$. No differences were found regarding AH, $F_{(1,274)} = 1.58$, $p = .211$, $\eta_p^2 = 0.01$, $d = 0.15$.

In general, these data confirm H2.

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[1]The programme did not include some participants because some of their values were missing (10 participants from the MT group and 14 participants from the ET group).

[2]Because the data showed substantial multivariate kurtosis for both groups (Mardia's normalised coefficients of 16.54 for the devalued-target group and 21.49 for the valued-target group), we reported the Satorra–Bentler (S-B) scaled chi-square statistic (Satorra & Bentler, 1994), a correction for χ^2 when distributional assumptions are violated (Byrne, 2008). According to Kline (2005), the following indices were used as indicating of good fitting model: CFI (based on the S-B χ^2 statistic) with value ranges from zero to one, and values greater than roughly 0.90 indicating reasonably good fit; a robust version of RMSEA with values below 0.08 indicating a good fit and values between 0.08 to 0.10, a mediocre fit (MacCallum, Browne, & Sugawara, 1996), and SRMR (value ranges from zero to one) with values less than 0.10 generally considered favourable.

[3]A more parsimonious model only with two factors (facilitation and harm) combining items of active and passive behavioural tendencies was tested for both groups. This alternative two-factor model yielded a poor fit to the data for both the devalued-target group: S-B $\chi^2_{(43, 130)} = 92.94$, $p < .001$; CFI = 0.875; RMSEA = 0.095; SRMR = 0.095 and the valued-target group: S-B $\chi^2_{(43, 125)} = 121.80$, $p < .001$; CFI = 0.784; RMSEA = 0.122; SRMR = 0.093. These results offer additional confirmation for the predicted four-factor model based on the prediction of Cuddy et al. (2007).

Table 1. Correlations among variables for both groups (Study 1)

	1	2	3	4	Positive emotions 5	6	7	8	9	Negative emotions 10	11	12	Facilitation 13	14	Harm 15
1. Contact	1	−0.03	−0.11	0.29**	0.31**	0.29**	0.40**	−0.09	−0.09	−0.22*	−0.07	0.24**	0.31**	−0.26**	−0.05
2. P. Maintenance	0.09	1	0.01	0.12	0.09	0.27**	0.25**	0.04	0.08	0.01	−0.05	0.21*	0.03	0.01	−0.01
3. P. Adoption	−0.04	−0.20*	1	−0.07	0.03	0.11	0.09	−0.08	−0.17*	−0.18*	−0.08	0.15	0.07	−0.10	−0.23**
4. Admiration	0.17*	0.29**	−0.06	1	0.45**	0.59**	0.40**	−0.12	−0.10	−0.17*	−0.11	0.39**	0.45**	−0.39**	−0.20*
5. Security	0.17*	0.26**	0.05	0.38**	1	0.67**	0.47**	−0.10	−0.10	−0.18*	−0.24**	0.50**	0.53**	−0.35**	−0.24**
6. Comfort	0.18*	0.35**	0.01	0.37**	0.48**	1	0.55**	−0.27**	−0.24**	−0.32**	−0.26**	0.61**	0.58**	−0.51**	−0.29**
7. Fondness	0.22**	0.15	−0.04	0.37**	0.32**	0.39**	1	−0.11	−0.05	−0.21*	−0.11	0.45**	0.47**	−0.28**	−0.10
8. Hate	−0.12	−0.20*	−0.03	−0.23**	−0.07	−0.14	−0.24**	1	0.74**	0.63**	0.63**	−0.23**	−0.25**	0.52**	0.53**
9. Contempt	−0.14	−0.20*	−0.04	−0.30*	−0.08	0.17*	−0.13	0.67**	1	0.64**	0.52**	−0.24**	−0.25**	0.50**	0.63**
10. Disgust	−0.08	−0.15	−0.14	−0.27**	−0.17	−0.17*	−0.14	0.59**	0.69**	1	0.58**	−0.31**	−0.35**	0.54**	0.59**
11. Resentment	−0.07	−0.17	−0.13	−0.24**	−0.11	−0.02	−0.01	0.45**	0.52**	0.64**	1	−0.29**	−0.30**	0.48**	0.45**
12. AF	0.27**	0.48**	0.14	0.38**	0.37**	0.42**	0.39**	−0.27**	−0.32**	−0.32**	−0.23**	1	0.65**	−0.45**	−0.16†
13. PF	0.19*	0.39**	0.10	0.32**	0.19*	0.38**	0.34**	−0.25**	−0.30**	−0.25**	−0.18*	0.68**	1	−0.51**	−0.29**
14. PH	−0.11	−0.30**	0.03	−0.4**	−0.39**	−0.30**	−0.30**	0.29**	0.27**	0.37**	0.29**	−0.46**	−0.38**	1	0.64**
15. AH	0.01	−0.29**	0.14	−0.44**	−0.31**	−0.22**	−0.30**	0.48**	0.36**	0.43**	0.29**	−0.24**	−0.19*	0.64**	1

Note: Moroccan Target results are shown above the main diagonal; Ecuadorian Target results are below the main diagonal.

AF, active facilitation; PF, passive facilitation; PH, passive harm; AH, active harm.

**p < .01;

*p < .05;

†*p*=.056.

Mediation model. In order to ascertain if intergroup emotions may mediate the impact of the majority's acculturation preferences on their behavioural tendencies towards different minority groups, the following model was tested: "preference for maintenance" and "preference for adoption" (both observed variables) would predict "positive emotions" (a latent factor conformed by four items of positive emotions) and "negative emotions" (a latent factor composed by four items of negative emotions). Then, "positive emotions" would improve "facilitation" and simultaneously decrease "harm" towards minority groups, whereas "negative emotions" would have the opposite pattern (increasing "harm" and reducing "facilitation"). Because of the high correlations between the active and the passive behavioural tendencies, we loaded the observed variables of AF and PF on the latent factor "facilitation", and the observed variables of AH and PH were loaded on the latent factor "harm". We did not collapse items of active and passive behaviours on one latent factor, given that a four-factor model was better than a two-factor one (confirming H1). "Quantity of contact" was considered as covariable in this model. We also allowed "preference for maintenance" and "preference for adoption" to covary. All measures were previously standardised for testing the specified model.[4]

Once we had assessed that the proposed model was tenable separately for each group of interest,[5] two multi-group analyses were performed: the first one without constraints and the second one subject to cross-group equality constraints for regression coefficients.

Model without equality constraints. The unconstrained multi-group model fitted the data well: S-B $\chi^2_{(160, 255)} = 250.16$, $p < .001$; CFI $= 0.913$; RMSEA $= 0.067$; SRMR $= 0.081$. Most predictions were confirmed with the devalued-target group. As shown in Fig. 1, acculturation preferences (both maintenance and adoption) and quantity of contact elicited more positive emotions towards Moroccans, which in turn, triggered more facilitation, and fewer harm tendencies towards this group. Negative emotions (which were only affected by quantity of contact but not by acculturation preferences) triggered more harm and fewer facilitation tendencies. Facilitation tendencies were strongly predicted by positive emotions, whereas harm tendencies were more strongly predicted by negative emotions.

As hypothesised, several of the indirect effects were significant. The latent factor "Facilitation" was indirectly predicted by "preference for maintenance", $z = 2.68$, $\beta = .24$, $p < .01$, and "preference for adoption", $z = 2.38$, $\beta = .18$, $p < .05$, through positive emotions. The latent

factor "Harm" was indirectly predicted only by "preference for adoption", $z = -1.99$, $\beta = -.21$, $p < .05$, through positive emotions. As no acculturation preference predicted negative emotions (i.e., path *a* was not significant), we cannot talk about mediation with negative emotions in this case. Although latent factors were preferred (because of the high correlations between active and passive tendencies), similar indirect effects were confirmed with these variables separately.[6]

Quantity of contact indirectly improved facilitation, $z = 3.29$, $\beta = .39$, $p < .001$, and reduced harm, $z = -3.36$, $\beta = -.33$, $p < .01$, through positive and negative emotions. Effect sizes of facilitation and harm tendencies were really large ($R^2 > 0.70$). Likewise, the proportion of variance explained by "positive emotions" was considerable compared with the explained variance by "negative emotions". Most predictions were also confirmed with the valued-target group. As shown in Fig. 1, preference for maintenance elicited more positive emotions and fewer negative emotions towards Ecuadorians. Quantity of contact also elicited positive emotions. Positive emotions, in turn, triggered more facilitation and fewer harm tendencies, whereas negative emotions triggered more harm and fewer facilitation tendencies. Again, facilitation tendencies were strongly predicted by positive emotions.

As hypothesised, several of the indirect effects were significant. "Preference for maintenance" had an indirect effect on "Facilitation", $z = 3.33$, $\beta = .39$, $p < .001$, and on "Harm", $z = -2.98$, $\beta = -0.37$, $p < .01$, through "positive emotions" and "negative emotions".[7] Preference for culture adoption had no indirect effect on either facilitation or harm ($p > .05$).

Once again, quantity of contact indirectly improved facilitation tendencies, $z = 2.07$, $\beta = .14$, $p < .05$, and reduced harm tendencies, $z = -2.01$, $\beta = -.13$, $p < .05$, through positive emotions.

Effect sizes of facilitation and harm tendencies were quite large ($R^2 > 0.50$), and the proportion of explained variance for "positive emotions" was considerable compared with that explained for "negative emotions".

Model with equality constraints. In order to ascertain if these processes worked in the same way across groups, some equality constraints were imposed. As we were not interested in equivalence in factor loadings, cross-group equality in loadings was not imposed. Equality constraints specified that all paths (i.e., regression coefficients, F→F and V→F paths) would be equal in both the devalued-target group and the valued-target group. A total of 10 constraints were imposed: paths from

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[4]The programme did not include some participants because some of their values were missing (nine participants from the MT group and 15 participants from the ET group).

[5]Devalued-target group: S-B $\chi^2_{(80, 131)} = 135.86$, $p < .001$; CFI $= 0.909$; RMSEA $= 0.073$; SRMR $= 0.086$; Valued-target group: S-B $\chi^2_{(80, 124)} = 114.39$, $p = .007$; CFI $= 0.918$; RMSEA $= 0.059$; SRMR $= 0.076$.

[6]Preference for adoption indirectly predicted AF, $z = 2.38$, $\beta = .14$, $p < .01$, PF, $z = 2.44$, $\beta = .14$, $p < .01$, PH, $z = -1.99$, $\beta = -.16$, $p < .05$, and AH, $z = -2.27$, $\beta = -.15$, $p < .05$. Preference for maintenance indirectly predicted AF, $z = 2.68$, $\beta = .19$, $p < .01$, and PF, $z = 2.62$, $\beta = .19$, $p < .01$.

[7]Preference for maintenance indirectly predicted AF, $z = 3.33$, $\beta = .36$, $p < .01$, PF, $z = 3.24$, $\beta = .29$, $p < .01$, PH, $z = -2.98$, $\beta = -.29$, $p < .01$, and AH, $z = -3.84$, $\beta = -0.29$, $p < .001$.
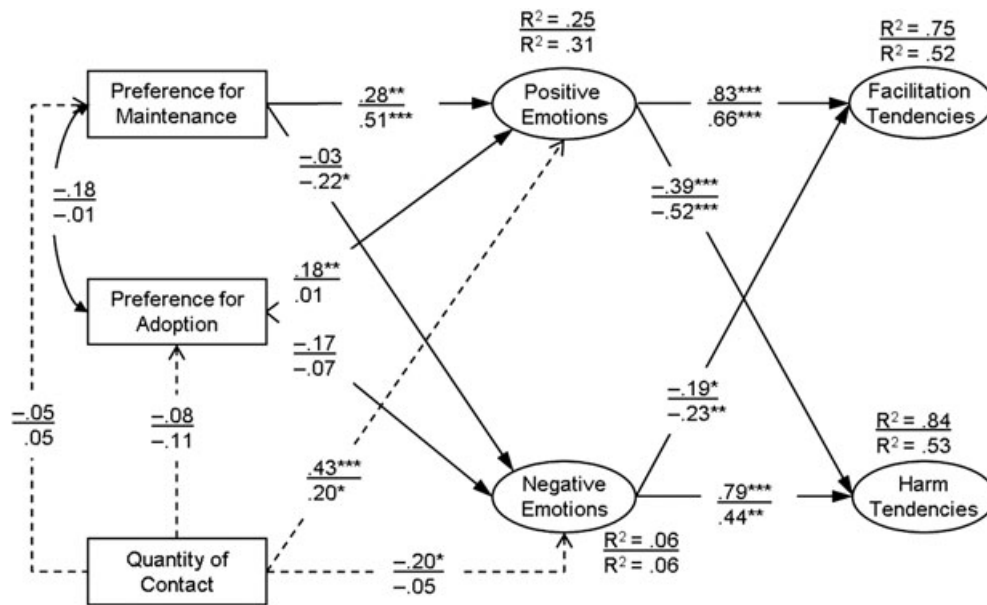
Fig. 1: Multigroup structural model (Moroccan Target [above]/Ecuadorian Target [below]), with emotions mediating the effect of acculturation preferences on facilitation and harm tendencies and quantity of contact as covariable. Standardised coefficients are shown. *$p \leq .05$, **$p \leq .01$, ***$p \leq .001$

preference for maintenance, preference for adoption and quantity of contact to positive and negative emotions and paths from positive and negative emotions to facilitation and harm tendencies. All equality constraints were correctly imposed. This constrained model also yielded an acceptable fit to the data: S-B $\chi^2_{(170, 248)}$ = 263.62, $p < .001$; CFI = 0.910; RMSEA = 0.066; SRMR = 0.097. The LM test automatically tested the appropriateness of the cross-group equality constraints. Inspection of the LM test revealed that no equality constraints were violated. Univariate tests indicated that constraints were reasonable because each p exceeded .05. None of the univariate increments were significant, with the multivariate test coming to the same conclusion (for an interpretation of such results, see Bentler, 2006).

In summary, despite some paths being significant for one target and non-significant for the other, the LM test confirmed that the magnitude of such paths were not significantly different between groups. According to these findings, the multiple relationships among acculturation preferences, emotions, and behavioural tendencies were similar for two very different target groups.

Alternative model. As it is possible that emotions might be also an antecedent of acculturation preferences (e.g., Geschke et al., 2010), an alternative model was tested. Accordingly, the latent factors of positive and negative emotions predicted preference for maintenance and adoption, which in turn, predicted the latent factors of facilitation and harm tendencies. Quantity of contact was still used as a covariable. This model fits the data worse than did the previous one for the valued-target group: S-B $\chi^2_{(80, 124)}$ = 162.61, $p < .001$; CFI = 0.804; RMSEA = 0.092; SRMR = 0.146, and for the devalued-target group: S-B $\chi^2_{(80, 131)}$ = 299.72,

$p < .001$; CFI = 0.642; RMSEA = 0.145; SRMR = 0.234. Together, these results partially confirm H3 and support H4.

Discussion

In this study, we developed and applied a new scale based on four behavioural dimensions (i.e., AF, PF, PH and AH) as a specific measure beyond univalent out-group discrimination (Cuddy et al., 2007, 2008). In line with our prediction (H1), this four-factor structure was confirmed when two different targets were evaluated.

Supporting H2 and previous research (e.g., Montreuil & Bourhis, 2001), our findings also show that more positive attitudes or dispositions were associated with valued immigrants compared with devalued immigrants.

We also found that acculturation preferences indirectly predict behavioural tendencies through intergroup emotions, with positive emotions more related to facilitation tendencies and negative emotions more related to harm tendencies. Coherently with appraisal theories (e.g., Mackie et al., 2000, 2008), the stronger role of emotions (over acculturation preferences) was confirmed when predicting behavioural tendencies, independent of the valuation of the immigrant target assessed. Concretely, acculturation preference for immigrants to maintain their original culture influenced majority members' behavioural tendencies of facilitation towards devalued and valued minority groups through positive emotions. Negative emotions were not as good mediators as positive ones, especially when assessing Moroccan immigrants. Preference for culture adoption was not related to behavioural tendencies when assessing Ecuadorian immigrants. On the other hand, harm tendencies were indirectly predicted by

preference for adoption—through positive emotions—when assessing Moroccans, and by preference for maintenance—through positive and negative emotions—when assessing Ecuadorians. According to these results, H3 was partially confirmed.

Finally, H4 was supported, because contact indirectly affects facilitation and harm tendencies through intergroup emotions, especially positive emotions. This finding extends the research about the role performed by intergroup contact on both prejudice (e.g., Binder et al., 2009) and acculturation (e.g., Van Acker & Vanbeselaere, 2011). The subsequent study complements these findings, testing our research questions with minority groups.

Study 2

The analysed variables, as well as their specific relationships, have received less attention from the minority perspective. For this reason, we aim at confirming our predictions in Moroccan and Ecuadorian immigrants who live in Spain, assessing a majority group (Spaniards). Moreover, in this way, we could understand the similarities and differences between majority and minority groups in this set of variables, as well as their relationships.

Method

Participants. One hundred and seventy-nine people with Moroccan nationality (M_{group}, $N = 92$) and Ecuadorian nationality (E_{group}, $N = 87$) volunteered to participate in this study. Most of the Moroccans were male (72.8%), whereas Ecuadorians were more balanced in sex, with 45.9% men. All participants were around 30 years old: $M_{AgeM} = 31.14$ ($SD = 11.58$), and $M_{AgeE} = 31.06$ ($SD = 10.12$). They were living in Spain for about 10 years: $M_M = 11.02$ ($SD = 6.91$), and $M_E = 10.89$ ($SD = 6.98$); and they arrived to Spain when they were approximately 20 years old: $M_M = 20.20$ ($SD = 12.04$), and $M_E = 20.86$ ($SD = 8.64$).

Regarding Moroccans' occupations, 50% were active employees, 26.7% were unemployed, 18.9% were students and 4.4% were housekeepers. From the active employees, 42.1% worked in agriculture, 23.7% in services (e.g., cleaning and nursing), 7.9% in construction, 10.5% in commerce, 5.3% in the hospitality sector, and 10.5% worked at other occupations. Regarding Ecuadorians' occupations, 23.8% were active employees, 42.9% were unemployed, 27.4% were students, 4.8% were housekeepers, and 1.2% selected the option *others*. From the active employees, 4.2% worked in agriculture, 25% in services (e.g., cleaning and nursing), 8.3% in commerce, 8.3% in construction, 16.7% in the hospitality sector and 37.5% worked at other occupations.

Instruments. Moroccans and Ecuadorians were asked to fill out a questionnaire with the following measures:

Acculturation preferences. This variable was measured asking for their own general acculturation preferences in two dimensions: original culture maintenance and host culture adoption. These two dimensions were measured by a specific question on five-point Likert scales (1 = *not at all* to 5 = *very much*): "To what extent would you like to maintain the customs from your original country in this society?" and "To what extent would you like to adopt or practice the customs of this society?"

Positive emotions. The same emotions used in Study 1 were used in this study, but this time, the emotions were towards Spanish people. The reliability indices were $\alpha = .66$ for the M group and .70 for the E group.

Negative emotions. The same emotions used in Study 1 were used in this study, but this time, the emotions were towards Spanish people. The reliability indices were $\alpha = .80$ for the M group and .86 for the E group.

Intergroup behavioural tendencies. The scale used in Study 1 was adapted to measure behavioural tendencies towards Spanish people. All items were basically the same, with one exception: The item "*Prevent them from opening businesses*" was substituted by the item "*Prevent them from entering our businesses*".

Quantity of intergroup contact. The same variable used in Study 1 was used for this study, but this time, it referred to contact with Spanish people.

Procedure. Study 2 used a convenience sample. We contacted different associations to get access to immigrants, who voluntarily participated in the research. The previous measures were included in a more extensive questionnaire that was administered by the investigators and trained assistants.

Data analysis. The same analyses that were carried out for Study 1 were repeated here, except for the multi-group analyses.

Results

Preliminary analyses. Preliminary analyses showed that there were no relevant a priori differences between Ecuadorians and Moroccans in their demographics aspects. Overall, there were not significant differences in their age, $t_{(173.67)} = -0.05$, $p = .960$, $d = 0.01$, age of arrival, $t_{(163.37)} = 0.42$, $p = .675$, length of stay in Spain, $t_{(174)} = -0.12$, $p = .903$, $d = 0.02$, quantity of intergroup contact, $t_{(174)} = 0.48$, $p = .629$, $d = 0.07$, or educational level, $\chi^2_{(3)} = 4.62$, $p = .202$. There were differences in sex proportion, $\chi^2_{(1)} = 13.35$, $p < .001$, with more men than women in the M group, and occupations, $\chi^2_{(4)} = 13.73$, $p = .008$.

The effect of some demographic features on the studied variables was also explored. No effects of

sex were found on the variables for either the M group or the E group ($p > .05$). Age was negatively correlated to both preference for adoption for the M group, $r_{(91)} = -.25$, $p = .019$, and positive emotions for the E group, $r_{(84)} = -.24$, $p = .029$, and PH, $r_{(84)} = -.27$, $p = .013$.

Confirmatory factor analysis for behavioural tendencies.
In order to confirm that the operationalised scale of intergroup behavioural tendencies towards Spaniards could be subdivided into the four dimensions (Cuddy et al., 2007) already confirmed in Study 1, we carried out a new CFA for each sample. The same model of 11 behavioural tendencies tested in Study 1 for the majority group was delimited here for the minority groups. We tested for the configural equivalence of such model across the Moroccan and Ecuadorian samples. We established a well-fitting baseline model for each group separately.[8] Once again, the four latent factors of AF, PF, PH and AH were allowed to covary.

The hypothesised model with four factors for the Moroccan group yielded a good fit to the data: S-B $\chi^2_{(38, 81)} = 46.58$, $p = .16$; CFI = 0.967; RMSEA = 0.053; SRMR = 0.071. The same model for the Ecuadorian group yielded a non-acceptable fit to the data: S-B $\chi^2_{(38, 81)} = 59.46$, $p = .01$; CFI = 0.884; RMSEA = 0.084; SRMR = 0.082. The Walt test and LM test may explain these results. A review of the LM test statistics revealed that only one parameter could be improved: the item "*Use disparaging nicknames to refer to them*" (that previously loaded on the latent factor of AH) should also load on the latent factor of PH. Thus, the model was subsequently respecified and reestimated with this parameter estimated. This respecification yielded some improvement in goodness-of-fit, thereby resulting in an acceptable fit: S-B $\chi^2_{(37, 81)} = 54.97$, $p = .03$; CFI = 0.903; RMSEA = 0.078; SRMR = 0.075. These CFAs revealed that the behavioural tendencies scale, in general, works well for the two minority groups when assessing the majority group. So, we again confirm H1, now in the immigrant groups. The internal consistency of each dimension for the M/E Group was: AF (three items, $\alpha = .72/.77$), PF (two items, $r = .33/.49$), PH (three items, $\alpha = .74/.85$) and AH[9] (three items, $\alpha = .83$/two items, $r = .76$). Correlations among these dimensions are shown in Table 2.

Differences between immigrant groups when assessing the majority group.
In order to test H2, three MANCOVAs were performed with the immigrant group as an independent factor (Moroccans *vs.* Ecuadorians) and quantity of contact as a covariable. We performed three different MANCOVAs separately for acculturation preferences (with preference for adoption and

maintenance), intergroup emotions (positive and negative) and behavioural tendencies (AF, PF, PH, and AH) as dependent variables. No differences were found in their preference for maintaining or adopting their original culture.

Regarding intergroup emotions, Moroccans felt more intense emotions towards Spaniards compared with the level of the Ecuadorians' emotions. Specifically, Moroccans felt more positive emotions ($M = 3.52$, $SD = 0.74$) than did the Ecuadorians ($M = 3.21$, $SD = 0.72$), $F_{(1,171)} = 10.57$, $p = .001$, $\eta_p^2 = 0.06$, $d = 0.50$. Paradoxically, they also felt more negative emotions ($M = 2.11$, $SD = 0.92$) than did the Ecuadorians ($M = 1.53$, $SD = 0.63$), $F_{(1,171)} = 23.47$, $p < .001$, $\eta_p^2 = 0.12$, $d = 0.74$.

Finally, Moroccans had a slightly increased AF tendency towards Spaniards ($M = 3.72$, $SD = 0.90$) compared with the Ecuadorians ($M = 3.51$, $SD = 0.91$), $F_{(1,172)} = 4.00$, $p = .047$, $\eta_p^2 = 0.02$, $d = 0.30$. They also tended to more PH ($M = 1.61$, $SD = 0.85$) compared with the Ecuadorians ($M = 1.33$, $SD = 0.60$), $F_{(1,172)} = 5.99$, $p = .015$, $\eta_p^2 = 0.03$, $d = 0.37$. No other significant differences were found.

In summary, these data partially confirm H2 in immigrant groups.

Mediation model.
In order to ascertain H3 and H4, we defined the same model presented in Study 1.[10]

For the Moroccan group,[11] the hypothesised model yielded an acceptable fit to the data: $\chi^2_{(67,78)} = 81.17$, $p = .114$; CFI = 0.957; RMSEA = 0.052; SRMR = 0.081. As shown in Fig. 2, preference for adoption and quantity of contact elicited more positive emotions towards Spaniards, which in turn, triggered more facilitation and fewer harm tendencies towards this group. Negative emotions (which were only affected by quantity of contact but not by acculturation preferences) triggered more harm and fewer facilitation tendencies. Facilitation tendencies were strongly predicted by positive emotions.

The latent factor "Facilitation" was indirectly predicted by "preference for adoption", $z = 2.08$, $\beta = .23$, $p < .05$, through positive emotions.[12] The effect sizes of facilitation tendencies were really large ($R^2 > 0.80$). Moreover, quantity of contact indirectly improved facilitation tendencies, $z = 3.72$, $\beta = .42$, $p < .001$ and reduced harm tendencies, $z = -2.99$, $\beta = -.27$, $p < .01$, through positive and negative emotions. No other indirect effects were found.

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[8]Some participants were excluded from these particular analyses because some values were missing (11 participants from the Moroccan sample and six participants from the Ecuadorian sample).

[9]As the item "*Use disparaging nicknames to refer to them*" loaded on both PH and AH, the means were created without this problematic item.

[10]In this case, the emotion "comfort" was skipped from the analyses because the variance explained by its factor was below 0.10. The variance of the rest of variables was greater than 0.10.

[11]Fourteen participants were excluded from these particular analyses because a variable was missing

[12]Preference for adoption indirectly predicted AF: $z = 2.09$, $\beta = 0.19$, $p < .05$, and PF: $z = 2.05$, $\beta = .16$, $p < .05$.

Table 2. Correlations among variables for both groups (Study 2)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
					Positive emotions				Negative emotions			Facilitation		Harm	
1. Contact	1	0.08	0.31**	0.25*	0.03	0.05	0.29**	-0.25*	-0.10	-0.33**	-0.26*	0.43**	0.35**	-0.32**	-0.31**
2. P. Maintenance	-0.20	1	-0.07	-0.08	0.06	-0.29**	-0.05	0.04	-0.06	-0.10	-0.01	-0.03	0.08	-0.08	-0.12
3. P. Adoption	0.33**	-0.05	1	0.34**	0.08	-0.05	0.20	0.02	0.11	-0.04	-0.10	0.43**	0.31**	0.08	-0.05
4. Admiration	0.34**	-0.13	0.33**	1	0.28**	0.31**	0.54**	-0.20	-0.11	-0.32**	-0.37**	0.50**	0.51**	-0.38**	-0.39**
5. Security	0.30**	-0.36**	0.05	0.28**	1	0.33**	0.34**	-0.07	-0.01	-0.03	-0.18	0.23*	0.34**	-0.03	-0.04
6. Comfort	0.54**	-0.11	0.14	0.39**	0.61**	1	0.19	-0.46**	-0.19	-0.20	-0.20	0.24*	0.20	-0.09	0.06
7. Fondness	0.40**	-0.17	0.38**	0.42**	0.24*	0.28**	1	-0.17	-0.06	-0.23*	-0.23*	0.52**	0.46**	-0.28**	-0.28**
8. Hate	-0.19	0.27**	-0.31**	-0.11	-0.20	-0.16	-0.35**	1	0.57**	0.59**	0.47**	-0.39**	-0.24*	0.27*	0.30**
9. Contempt	-0.26*	0.32**	-0.18	-0.25*	-0.24*	-0.08	-0.21	0.70**	1	0.48**	0.34**	-0.14	-0.07	0.30**	0.25*
10. Disgust	0.04	0.23*	0.06	-0.09	-0.16	0.06	0.05	0.45**	0.59**	1	0.60**	-0.44**	-0.33**	0.35**	0.40**
11. Resentment	-0.08	0.36**	-0.11	-0.13	-0.22*	-0.01	-0.13	0.62**	0.55**	0.54**	1	-0.38**	-0.36**	0.24*	0.25*
12. AF	0.54**	-0.37**	0.39**	0.42**	0.26*	0.33**	0.45**	-0.31**	-0.39**	-0.12	-0.38**	1	0.61**	-0.31**	-0.30**
13. PF	0.21	0.03	0.21	0.09	-0.09	-0.01	0.48**	-0.31**	-0.09	0.05	-0.11	0.37**	1	-0.36**	-0.35**
14. PH	-0.09	0.25*	-0.03	-0.15	0.15	0.01	-0.12	0.24*	0.21	0.34**	0.36**	-0.27*	-0.26*	1	0.71**
15. AH	-0.02	0.25*	-0.13	-0.15	0.09	0.07	-0.23*	0.32**	0.25*	0.11	0.33**	-0.21	-0.26*	0.61**	1

Note: Moroccans results are shown above the main diagonal; Ecuadorians results are below the main diagonal.

AF, active facilitation; PF, passive facilitation; PH, passive harm; AH, active harm.
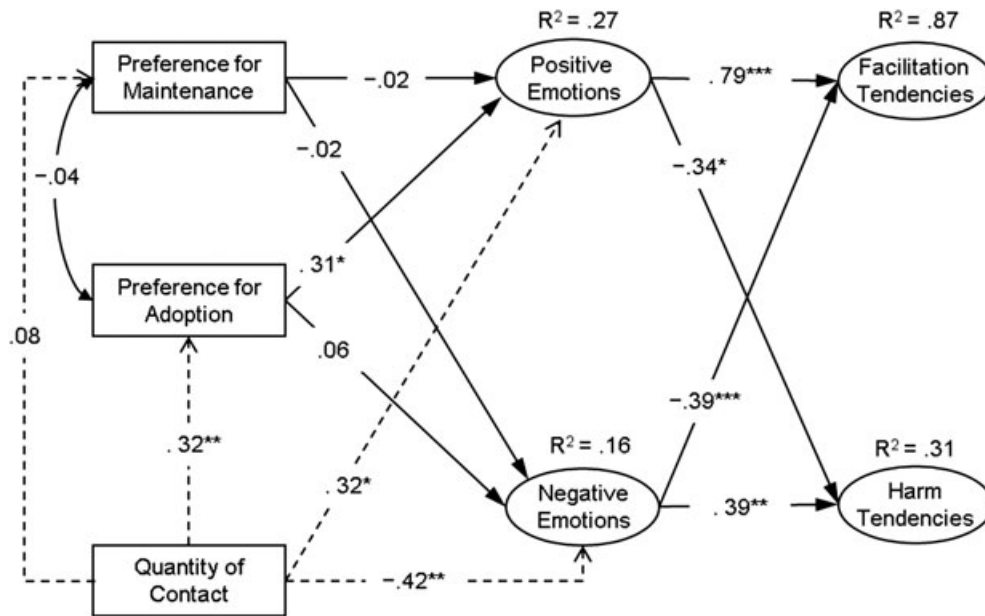
** $p < .01$;

* $p < .05$.

Fig. 2: Positive emotions mediating between preference for adoption and behavioural tendencies (Study 2; M Group). Standardised coefficients are shown. *$p \leq .05$, **$p \leq .01$, ***$p \leq .001$

The hypothesised model was also defined for Ecuadorians, but it did not fit the data well: S-B $\chi^2_{(80, 75)} = 165.94$, $p < .001$; CFI = 0.817; RMSEA = 0.120; SRMR = 0.099.

These data partially confirm H3 and support H4 in immigrants, but only for the M group.

General Discussion

Migratory processes and new multicultural realities in many European countries increase the need to understand the intergroup behavioural tendencies displayed by majority and minority groups in order to improve integration processes and intergroup relationships.

The present work makes some contributions in this direction by joining different theoretical approaches: one focused on the specificity and contextual nature of intergroup bias and prejudice (Cuddy et al., 2008; Dovidio & Gaertner, 2010), and the other focused on the acculturation process. In this sense, acculturation research has already suggested that acculturation preferences may be related to both emotions (Geschke et al., 2010; Zagefka et al., 2014) and intergroup behaviours (Geschke et al., 2010; Zick et al., 2001). But, in general, this evidence was partial and incomplete and widely carried out with majority groups, relegating the minority perspective.

This research aimed mainly to analyse specific intergroup behavioural tendencies (active and passive facilitation and harm), taking into account both majority and minority perspectives, in addition to verifying the specificity and contextual nature of both intergroup bias and the acculturation process. Finally, we attempted to explore how acculturation preferences are related to specific behavioural tendencies towards out-groups, taking into account

the role of intergroup emotions and intergroup contact in this process.

Same dimensions of behavioural tendencies for different groups and targets

Based on the specificity and contextual nature of prejudice and intergroup bias (Cuddy et al., 2008; Dovidio & Gaertner, 2010), the present study developed and applied an extended behavioural tendencies scale to measure—from a personal (*vs* societal) perspective—intergroup behaviours of majority and minority groups, by differentiating between valence and intensity (Cuddy et al., 2007).

The configural equivalence of the four-factor model was verified for the majority group (when assessing two very different minority targets) and for two minority groups (when assessing the majority group). These findings confirm that the number of factors and the pattern of their item loadings were similar for the four groups (with some particularities in the Ecuadorian group). In the Ecuadorian group, the item "*Use disparaging nicknames to refer to them*" loaded on both PH and AH, which was not theoretically inconsistent, because applying negative appellatives to the out-group (i.e., Active Harm) is a very extended habit, many times without a deliberate intention of harm (i.e., Passive Harm). Therefore, researchers interested in using this scale in future studies with minority groups are suggested to include this item in order to test the dimension in which it will load.

Different evaluations for different groups and targets

Confirming specificity of both intergroup bias and the acculturation process, the present research

shows that distinctive dimensions of intergroup behavioural tendencies, intergroup emotions and acculturation preferences varied depending on the group who evaluates and the target that is evaluated.

Concretely, majority members differed in their behavioural tendencies towards different immigrant groups, preferring fewer positive actions and more negative actions towards a devalued target (Moroccan immigrants) compared with a valued target (Ecuadorian immigrants). Majority members were also more restrictive with a devalued target (preferring them to maintain less of their original culture) and felt fewer positive emotions and more negative emotions towards Moroccan immigrants compared with a valued target, Ecuadorian immigrants. These specific findings not only confirmed but also extended previous results in research in and out of Spain (Bourhis & Dayan, 2004; Bourhis et al., 1997; Cottrell & Neuberg, 2005; López-Rodríguez et al., 2013; Montreuil & Bourhis, 2001; Navas et al., 2005, 2012; Piontkowski et al., 2000).

The two minority groups also varied in their evaluation of Spaniards, with Moroccans feeling more intense emotions and tending to more active facilitation and passive harm towards the majority group. The negative disposition showed by majority members towards this group (López-Rodríguez et al., 2013; Navas et al., 2012) could explain this result. In this sense, the emotional intensity of this minority group (i.e., not only feeling more negative but also more positive emotions) might be interpreted as a reaction to the majority's evaluations. More research is needed in order to test this assertion.

Acculturation preferences and behavioural tendencies: The mediating role of intergroup emotions

Linking behaviours to acculturation research, our main research question was to explore the mechanisms that might explain how acculturation preferences were related to specific intergroup behavioural tendencies. Mediation analyses revealed that, for the majority group, preference for maintenance (more frequently than preference for adoption) and quantity of contact increased intergroup positive emotions, which in turn increased facilitation tendencies and decreased harm tendencies. Positive emotions always mediated the effect of preference for maintenance on facilitation tendencies. These findings were true for the majority group when assessing both the devalued and valued immigrant targets.

Some variations are found from the minority perspective. For Moroccans, it was a preference for adoption—instead of maintenance—that indirectly predicted facilitation tendencies through positive emotions. In this case, their preference for adopting the host culture elicited more positive emotions towards Spaniards, which in turn, motivated more facilitation tendencies

towards the majority. However, this model failed to achieve an acceptable fit for Ecuadorians. This might due to the reduced sample size of this group or other reasons that should be thoroughly explored in future studies.

Some differential results were also found for the majority group when assessing different minority targets regarding the adoption dimension of acculturation preferences. For instance, a preference for cultural adoption for the Moroccan out-group is associated with more positive emotions and facilitation tendencies and fewer harm tendencies towards this target, whereas it has no significant effect for the Ecuadorian target. Accordingly, more research is needed to clarify possible differences across devalued *versus* valued out-groups. Otherwise, negative emotions have shown a minor role in this process. So, these emotions only mediated between the majority's acculturation preferences (maintenance) and behavioural tendencies towards Ecuadorians. Preference for Ecuadorians to maintain their original culture indirectly increased facilitation tendencies and decreased harm tendencies towards this minority group by reducing negative emotions.

Overall, these findings support previous research, which had already shown that acculturation preferences were related to emotions (Geschke et al., 2010; Zagefka et al., 2014) and behaviours (Geschke et al., 2010; Zick et al., 2001).

On the other hand, our findings are also in line with previous research about emotions being potent predictors of behavioural tendencies (Cuddy et al., 2007; Dovidio et al., 1996; Mackie et al., 2000, 2008; Stangor et al., 1991; Talaska et al., 2008). As Mackie et al. (2008, p. 1867) pointed out, "It is the anger, anxiety, pride, and guilt that other groups evoke in our own that drive our social, political, and physical responses to them, and it is only by changing such emotions that intergroup behaviour can change". Indeed, several authors, such as Cottrell and Neuberg (2005), have recognised that emotions are critical to the natural goal-seeking process of human beings, because they organise and coordinate the psychological action (including behavioural tendencies).

Finally, our results confirm the extensively proven role of intergroup contact as a fundamental variable in the research on both intergroup bias (Binder et al, 2009; Dovidio & Gaertner, 2010) and acculturation process (González et al., 2010; Montreuil & Bourhis, 2004; Piontkowski et al., 2000; Van Acker & Vanbeselaere, 2011).

Conclusions

These studies not only confirm previous research but also contribute to the literature on intergroup behavioural tendencies, acculturation preferences and emotions in three important ways. First of all, the current work adds the discrete behavioural dimensions Cuddy

et al. (2007, 2008) identified and tries to understand the process that links all variables (acculturation preferences, emotions, behavioural tendencies) for the majority and minority groups. Secondly, the present research goes further in analysing the mediating role of emotions in the link between acculturation preferences and behavioural tendencies, confirming once again that emotions—especially positive affect—are essential predictors of behaviours. Accordingly, emotions can work as means to make the acculturation desires possible by translating them into behaviours. Finally, this work shows that the quantity of intergroup contact is, in general, associated with more positive emotions and fewer negative emotions, indirectly predicting behavioural tendencies through emotions.

Among the limitations of the study is the small size of the immigrant sample, because of the difficult access to this population. Because samples were not representatives, generalising these results should be done with caution. Forthcoming research should also incorporate more minority groups.

Despite these limitations, obtained findings could help to build a more complete framework to understand and improve future relationships between majority and minority groups. The results suggest that eliciting positive emotions towards out-groups is more effective than reducing negative emotions. Because our emotions are usually implicit and difficult to control, new positive emotions about out-groups may replace the previous—and negative—ones. In fact, one implication derived from these findings is the power of positive emotions when predicting behavioural tendencies.

It is also worth noting that the majority's preference for immigrants to maintain their original culture is consistently related to positive emotions, and indirectly motivates facilitation tendencies through this kind of emotions. We might infer that education in tolerance and intercultural understanding might be essential for starting the way towards intercultural harmony. Some of our findings here have shown that we should not forget that learning the importance to respect and appreciate everyone's culture could be the first step to improve intercultural relationships.

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Appendix: Intergroup Behavioural Tendencies Scale

Imagine you are in the following situations with a GROUP OF MOROCCAN/ /ECUADORIAN IMMIGRANTS. How willing would you be to carry out the following actions towards them?Use the following scale to answer:

1	2	3	4	5
Not at all	Not much	Somewhat	Pretty much	Very much

1. Avoid crossing paths with them on the street (PH)
2. Share leisure time with them (AF)
3. Facilitate their promotion at work (if I could) (AF)
4. Avoid their businesses (shops, restaurants, etc.) (PH)
5. Ignore them when I encounter them (PH)
6. Shop at their stores (PF)
7. Talk disparagingly about them (AH)
8. Prevent them from opening businesses (AH)
9. Recommend them for a job (AF)
10. Go to their catering establishments (i.e., restaurants, bars, etc.) (PF)
11. Use disparaging nicknames to refer to them (AH)

Note: AF: Active Facilitation item; PF: Passive Facilitation item; PH: Passive Harm item; AH: Active Harm item.