Explaining majority members’ acculturation preferences for minority members: A mediation model

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**ABSTRACT**

Two studies were conducted to integrate processes described in the literature on acculturation, stereotype content, and intergroup threat. Spanish majority members filled out questionnaires about their views of Moroccan immigrants (Study 1) and Ecuadorian immigrants (Study 2). They reported their perception of the immigrants’ endorsement of culture maintenance and adoption, their preferences for immigrants to maintain the original culture and adopt the host culture, their positive stereotypes about immigrants, and perceptions of threat. Results showed that ‘perceived culture adoption’ had an effect on ‘stereotypes’, which in turn had an effect on ‘perceived threat’, which in turn had an effect on ‘preference for culture maintenance’ (Studies 1 and 2) and ‘preference for culture adoption’ (Study 1). Moreover, results confirmed that there were significant indirect effects of the majority’s acculturation perceptions on majority members’ acculturation preferences, yielding further support that ‘stereotypes’ and ‘perceived threat’ are important mediators in the process. Stereotypes and perceived threat were both consequences of majority members’ acculturation perceptions and predictors of majority members’ acculturation preferences.

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1. Introduction

Every year thousands of people across the world migrate to another country, searching for a way to improve their lives. This leads to the coexistence between groups of different cultures in many settings. When different cultural groups enter into contact and have to live together in the same physical and social space, this generates several processes of change commonly called ‘acculturation’. Acculturation, in fact, is the result of the multiple changes which take place when different cultural groups come into continuous contact, with changes in the original cultural patterns of both groups (Redfield, Linton, & Herskovits, 1936).

Acculturation can take many different forms. Initially, scholars were mainly interested in the immigrants’ acculturation process. However, due to the interactive nature of acculturation, the majority’s perspective began to wake interest (Bourhis, Moise, Perreault, & Senecal, 1997; Dinh & Bond, 2008). Host majority members can influence the acculturation strategies of minority members’, who in turn may also affect the orientations of the host majority’ (Bourhis et al., 1997, p. 375). Consequently, acculturation researchers have started to show interest for majority members’ preferences and...
perceptions regarding majority groups’ acculturation behavior (Berry, Kalin, & Taylor, 1977; Berry, 2001; Bourhis et al., 1997; Navas et al., 2005; Piontkowski, Florack, Hoelker, & Obrdzalek, 2000; Piontkowski, Rohmann, & Florack, 2002; Van Acker & Vanbeselaere, 2011, 2012; Zagelfka & Brown, 2002). Indeed, it seems essential to understand the antecedents of majority members’ perceptions regarding the acculturation of different minority groups. As Van Acker and Vanbeselaere (2011) have highlighted, knowing these antecedents may offer chances to modify majority members’ preferences and to fill the gap between the positions of both the majority and the minority groups, and consequently, to improve their relations.

The aim of this research was to investigate predictors of majority members’ acculturation preferences for minority members. Specifically, an objective was to illuminate the relationship between majority members’ acculturation perceptions and their preferences for minority groups, stereotypes, and perceived threat, and to integrate some prominent approaches and insights from the acculturation literature (Berry, 1997; Berry et al., 1977), the stereotype content literature (Fiske, Cuddy, Glick, & Xu, 2002), and the intergroup threat literature (Stephan & Renfro, 2002).

1.1. The majority’s acculturation perceptions and preferences about minority groups

Acculturation preferences have been conceptualized as an independent variable (e.g., Zagelfka & Brown, 2002; Pfafferott & Brown, 2006) as well as a dependent variable (Zagelfka, Brown, Broquard, & Martin, 2007; Van Acker & Vanbeselaere, 2011), exploring, in this last case, how the majority’s perceptions of what immigrants want inform the majority’s own acculturation preferences.

The present work intends to extend this current research by exploring the possible antecedents of the majority’s acculturation preferences for minority groups. Following previous findings (Zagelfka et al., 2007; Van Acker & Vanbeselaere, 2011), we hypothesize that majority members’ acculturation perceptions of what immigrants do predict majority members’ acculturation preferences for these immigrants. Further, we predict that these relations between the majority’s acculturation perceptions and their preferences would be mediated by two important psychosocial variables: stereotypes and perceived threat.

1.1.1. Measuring acculturation perceptions and preferences

From a psychological perspective, Berry’s framework is the most influential in the field of acculturation (Berry, 1997, 1999). This approach argues that acculturation is shaped by two distinct dimensions: on the one hand, the preference for culture maintenance (i.e., the wish to preserve aspects of one’s original culture), and on the other hand, the preference for contact (i.e., the wish to interact with members of another group). Nevertheless, Bourhis et al. (1997) proposed later that the contact dimension should be replaced by ‘culture adoption’ (i.e., the wish to adopt cultural practices of the other group), a term that would be more consistent with the other dimension of cultural maintenance.1 This research will follow the adoption (rather than contact) conceptualization for both acculturation perceptions and preferences.

Although the two acculturation dimensions have traditionally been combined into discrete categories (e.g., integration, assimilation), several studies with majority members have found that the underlying dimensions may be related rather than orthogonal (Van Acker & Vanbeselaere, 2011, 2012; Zagelfka, Brown, & González, 2009). Therefore, it has been recommended to assess the dimensions underlying acculturation preferences and perceptions separately (Brown & Zagelfka, 2011; Rudmin & Ahmadzadeh, 2001; Rudmin, 2003; Van Acker & Vanbeselaere, 2011; Zagelfka et al., 2009; Zagelfka, Tip, González, Brown, & Cinnirella, 2012; Zick, Wagner, Van Dick, & Petzel, 2001).

‘Stereotypes’ can be assumed to influence the acculturation preferences of majority members. The Stereotype Content Model (SCM; Fiske et al., 2002; Fiske, Xu, Cuddy, & Glick, 1999) proposes that people will have very fundamental judgments about groups in terms of ‘warmth’ and ‘competence’. Currently, some scholars (Brambilla, Rusconi, Sacchi, & Cherubini, 2011; Brambilla, Sacchi, Rusconi, Cherubini, & Yzerbyt, 2012; Leach, Ellemers, & Barreto, 2007) consider three stereotype dimensions in group perception: ‘morality’ (with traits such as honest, sincere, trustworthy), ‘sociability’ (with traits such as likeable, warm, friendly), and ‘competence’ (with traits such as capable, intelligent, skillful). The main contribution of our

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1 Some authors (Berry & Sabatier, 2011; Ward & Kus, 2012) have recently shown that there are some implications when comparisons are made between Berry’s dimension of contact and dimension of adoption. Van Acker and Vanbeselaere (2011) have suggested that perceived contact engagement and perceived culture adoption may be used as equivalents, since they are positively and strongly correlated. However, for acculturation preferences the dimension of contact proposed by Berry and the dimension of adoption are not equivalent (the correlation between them is small and they correlate with approval of culture maintenance and negative outgroup affect in different ways).
present work is analyzing the relations between the majority’s acculturation perceptions and preferences and their positive stereotypes about immigrants on these three core dimensions.

Lee and Fiske (2006) suggested in the discussion of their paper of stereotypes about different immigrants that the stereotype dimensions of warmth and competence may influence majority members’ preferences for immigrants’ acculturation strategies, since they could work as a catalyst in intergroup relationships. Despite their recommendation, this interesting issue does not seem to have been developed. Although empirical evidence for the effect of stereotypes on acculturation preferences is scarce to date, we might consider some findings as indirect evidence.

Bourhis et al. (1997) have argued that majority members’ acculturation preferences may differ depending on the national origin of the immigrant group assessed, and on whether immigrant groups are valued or devalued (Montreuil & Bourhis, 2001; Montreuil & Bourhis, 2004). Montreuil and Bourhis (2001, p. 701) predict that majority members ‘may be more likely to adopt acculturation orientations such as assimilationism and segregationism toward ‘devalued’ immigrant outgroups against whom they already have negative stereotypes or whose culture and religion may be felt to differ considerably from their own’. Thus, it might be inferred that stereotypes will inform acculturation preferences.

1.3. Predicting stereotypes about minority groups from acculturation perceptions

Moreover, stereotypes may not only affect but also be affected by acculturation options, particularly by perceptions by the majority of what strategies the minority outgroup is pursuing. In general, it has been found (Van Oudenhoven, Prins, & Buunk, 1998) that majority members show the most positive affective and normative responses when they perceive minority groups to desire to have contact with the majority group (assimilation and integration), whereas a perception that minority groups want to have little contact with the majority (separation and marginalization) evokes more negative affective and normative responses.

Maisonneuve and Testé (2007) manipulated the immigrants’ acculturation strategies with a scenario method (Van Oudenhoven et al., 1998; Van Oudenhoven, Ward, & Masgoret, 2006), and measured the majority’s perceptions of immigrants on the classic dimensions of the SCM (Fiske et al., 2002), warmth and competence. They found that both adoption of the host culture and maintenance of the original culture influenced majority members’ judgments about immigrants on the warmth dimension, whereas only adoption of the host culture influenced judgments on competence. They argue that the immigrants’ adoption or maintenance constitute diagnostic behaviors for majority members’ stereotypes about them. However, people do not treat both acculturation dimensions in the same way, but they activate ‘different evaluative frameworks’ to judge behaviors of adoption or maintenance, which leads perceivers to trigger different inferences from each behavior. Notably, it seems that ‘adoption has the greatest effect on evaluations of immigrants’ (Maisonneuve & Testé, 2007, p. 684).

Similarly, Van Oudenhoven et al. (1998, p. 1010) have pointed out that for majority members it is important that minority members want contact with majority, ‘while it basically does not matter whether its members additionally keep traditional values or not’. Adoption seems more important for majority members than maintenance (Van Oudenhoven et al., 1998), and it is possible that it is perceived to be a more active behavior than maintenance. For this reason, perceived culture adoption might be more salient and relevant for social perceptions about immigrants than perceived culture maintenance. In the light of this reasoning, one aim of our research was to confirm the more prominent role of ‘perceived adoption’ over ‘perceived maintenance’ in predicting positive stereotypes.

Although Maisonneuve and Testé (2007) studied the effect of perceived acculturation strategies on stereotypes and Montreuil and Bourhis (2001) studied the effect of proxies of stereotypes on acculturation preferences, to date no work has tried to combine these two aspects in one parsimonious model. This current work aims to integrate these processes and to analyze the mutual relationships between acculturation and stereotypes. It was predicted that the majority’s acculturation perceptions about immigrants would affect stereotypes, and stereotypes would themselves impact on the majority’s acculturation preferences.

1.4. The mediating role of threat

It seems plausible that the mutual influence between acculturation and stereotypes can be explained by the expectations generated by stereotypes about immigrants. Specifically, perceived intergroup threat resulting from these expectations might play an important mediating role. Intergroup threat occurs when people perceive an outgroup’s actions, beliefs or characteristics to challenge the goal achievement or well-being of the ingroup (Riek, Mania, & Gaertner, 2006). Threats might be realistic (related to power, resources and general welfare of the groups) or symbolic (related to religion, values, and worldviews of the groups) (Stephan et al., 2002). As Lee and Fiske (2006, p. 765) have asserted, ‘groups perceived as both competent and warm presumably have the most to offer to the host country while groups perceived as neither competent nor warm might be seen as exploiting resources’. Negative stereotypes activate negative expectations about the behavior of outgroup members (Hamilton, Sherman, & Ruvolo, 1990), and these negative expectations imply feeling uneasy or even threatened during intergroup interactions (Stephan, Renfro, Esbes, Stephan, & Martin, 2005).

Intergroup threat theory (Stephan & Renfro, 2002) initially considered negative stereotypes as a special kind of threat itself (in its original version, labeled integrated threat theory, Stephan & Stephan, 2000), but recently, negative stereotypes have been conceptualized as a cause of threat involving characteristics of the outgroup which could have a negative impact
on the ingroup (e.g., aggressiveness, deviousness, immorality) (Stephan et al., 2002). Indeed, negative stereotypes are a significant predictor of both realistic and symbolic threats (Stephan et al., 2002).

Simultaneously, perceived intergroup threat negatively predicts positive attitudes toward immigrants (Ward & Masgoret, 2006). In line with the idea that perceived threat is strongly related to acculturation (Florack et al., 2003; Tip, Zagelka, González, Brown, & Cinnirella, 2012), it is also plausible to expect that people will be motivated to eliminate/neutralize the source of a perceived threat. If the threat emanates from a culturally distinct group, a very effective way to reduce the threat is to make this group cease to exist by ‘mutating’ into the majority group through low culture maintenance and high culture adoption. Furthermore, several studies have recognized a stronger impact of affect than of cognition on intergroup attitudes (Greenland & Brown, 1999; Stangor, Sullivan, & Ford, 1991; Stephan, Ybarra, & Bachman, 1999).

Taken together, we hypothesized that the negative expectations triggered by stereotypes (i.e., perceived threat) may determine the acculturation preferences regarding these immigrants. Specifically, the present research aimed to test the mediating effect of threat (i.e., realistic and symbolic) between stereotypes and majority members’ acculturation preferences.

Moreover, there is previous evidence for the mediating role of threat between the majority’s acculturation perceptions and the majority’s acculturation preferences for minority members. Van Acker and Vanbeselaere (2011) have recently found that majority members’ negative outgroup affect toward immigrants (which included perceived threat) worked as a mediator between perceived culture adoption and majority members’ preferences for host culture adoption and approval of original culture maintenance, lending further support to our prediction.

1.5. Acculturation preferences, and perceptions, stereotypes and threat

van Osch and Breugelmans (2012, p. 10) have recently shown that minority groups who were perceived as less different by majority members ‘received simultaneously more support for multiculturalism; were seen as less threatening, more warm and more competent; were preferred to adopt less and maintain more; but perceived to adopt more and maintain less’ by majority members.

Focusing on the variables relevant for this present work, these findings suggest that majority members’ stereotypes, perceived threat, and acculturation perceptions and preferences may be related to each other. Although we do know these variables are related because they follow a coherent pattern (van Osch and Breugelmans, 2012), we know little about the specific relations and mediating effects of these variables when they are considered together. Our research aims to test and clarify these relationships.

1.6. The present study

Following the previous recommendations, this research tested a model of multiple relationships among stereotypes, perceived threat and majority members’ acculturation preferences and perceptions in order to clarify how majority members’ stereotypes and perceptions of threat are related to their preferred and perceived acculturation regarding minority groups. This was done by extending previous research by not only considering the two traditional stereotype dimensions (i.e., warmth and competence) (see Maisonneuve & Testé, 2007), but by considering three different dimensions of stereotypes (i.e., morality, sociability, and competence; Brambilla et al., 2011; Leach et al., 2007).

We predicted that a perception that immigrants are adopting the host culture would render stereotypes more positive, whereas the effects of perceived culture maintenance would be much weaker. It was further anticipated that positive stereotypes would influence perceived threat, reducing both realistic and symbolic threat from immigrants when they are perceived as highly moral, sociable and competent. Finally, perceived threat was expected to increase the majority’s preference for host culture adoption, and to reduce the preference for original culture maintenance.

Overall, the resulting model is one whereby ‘acculturation perceptions’ impact on ‘stereotypes’, which in turn impact on ‘perceived threat’, 2 which in turn impacts on the ‘majority’s acculturation preferences’ for minority members. Such a model implies the possibility of various indirect effects, i.e. that of acculturation perceptions on perceived threat (mediated by stereotypes), of acculturation perceptions on majority’s acculturation preferences (mediated by stereotypes and perceived threat), and that of stereotypes on majority members’ acculturation preferences (mediated by perceived threat).

Two studies were conducted with different target groups. Although clearly mean level attitudes differ for different minority groups (Bourhis et al., 1997; Montreuil & Bourhis, 2001), it was expected that the psychological processes affecting acculturation preferences would be reasonably generic and generalize across different minority groups. We felt that this assumption could best be tested by examining the hypothesized processes for two quite different minority groups. In Study 1, Spanish majority participants assessed Moroccan immigrants, while in Study 2 they evaluated Ecuadorian immigrants. Moroccan and Ecuadorian immigrants are very different in various respects (e.g., language, religion, traditions) and there are

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2 The stereotype dimensions were all specified to load on the same factor. Also, the two threat dimensions were specified to load on one common factor. They were hypothesized to affect and be affected by the other variables in similar ways. Hence, although we wanted to measure them separately to be able to check our assumption that they would work similarly, no differences were expected, and we therefore chose the model, which would present the most parsimonious account of processes.
also important differences between the history of intergroup relations and conflicts that Spain has with both groups. Moreover, Moroccans are more stigmatized than Ecuadorians in Spanish society. A study (Rodríguez-Pérez, Delgado, Betancor, Leyens, & Ph Vaes, 2011) showed that the cluster which included Latin America (a region with stronger cultural and linguistic ties to Spain) obtained very high scores in perceived similarity, whereas the cluster which included North Africa received significantly less perceived similarity. Moreover, a recent study (Navas, Cuadrado, & López-Rodríguez, 2012) has shown that Moroccans trigger more realistic and symbolic threat in Spanish people than Ecuadorians.

In spite of these fundamental differences, we hypothesized that the model would provide a good fit with the data in both the Moroccan and Ecuadorian target samples, showing that the relations among stereotypes, perceived threat and acculturation options are basically the same for these very different groups.

2. Study 1

2.1. Method

The study was carried out in Almería, a region in the South of Spain characterized by a high influx of immigrants. According to the General Secretary of Immigration and Migration (Secretaría General de Inmigración y Emigración, 2012), 20.51% of its population is foreign. From among all the immigrant groups, those of Moroccan (6.59% of the general population), and Ecuadorian origin (1.07%) are sizable minority groups in the area.

2.1.1. Participants

The study had a convenience sample including students and non-students. Questionnaires were distributed by research assistants. One hundred and forty nine Spanish people volunteered to participate in this study anonymously, reporting their attitudes toward Moroccan immigrants. The age of the participants varied from 18 to 80, with a mean of 37.47 (SD = 17.72); 59.1% were female; 33.1% indicated that they were employed, 10.8% were housekeepers, 9.5% were retired, 5.4% were unemployed, and 41.2% were students.

2.1.2. Procedure and measures

Participants were asked to fill out a questionnaire with the following measures:

The participants’ perception of and preference for original culture maintenance and culture adoption were measured following an adaptation of Berry’s (1997) taxonomy of acculturation options (see also Interactive Acculturation Model [IAM], Bourhis et al., 1997; Relative Acculturation Extended Model [RAEM], Navas et al., 2005). Important for our theorizing, the measures were designed to allow analyzing the two underlying dimensions separately with simple straightforward single items as previous studies have used (Piontkowski et al., 2000; Van Acker & Vanbeselaere, 2011).

The participants’ perceptions of immigrants’ original culture maintenance was measured with the following item: ‘To what extent do you think Moroccan immigrants who live here maintain the customs of their original country?’. Their perception of immigrants’ host culture adoption was measured asking: ‘To what extent do you think Moroccan immigrants who live here have adopted the customs of the Spanish society?’.

The majority’s preference for immigrants’ original culture maintenance was measured with the following question: ‘To what extent do you want Moroccan immigrants who live here to maintain the customs of their original country?’. Their preference for host culture adoption was measured with the following question: ‘To what extent do you want Moroccan immigrants who live here to adopt the customs of the Spanish society?’. All items that tackled acculturation perceptions and preferences were measured on 5-point Likert scales (1 = not at all to 5 = very much).

Stereotypes toward immigrants were measured in line with the SCM (Fiske et al., 2002) and its extensions (Brambilla et al., 2011; Leach et al., 2007). Participants had to express their opinion regarding the following questions: ‘Think about Moroccan immigrants, and tell us to what extent you think these traits describe them’: Likeable, Friendly, Warm, Kind, Helpful, Good-tempered, Respectful (all for the ‘sociability’ dimension, α = .93); Honest, Sincere, Trustworthy, Well-intentioned, Righteous (for the ‘morality’ dimension, α = .91); Capable, Competent, Self-Confident, Intelligent, Efficient, and Skillful (for the ‘competence’ dimension, α = .85). All items were measured on 5-point Likert scales (1 = not at all to 5 = very much). Higher values indicate a more positive perception of immigrants.

Perceived threat was measured with the following question: ‘To what extent do you feel, due to Moroccan immigrants, the following aspects are in danger?’. The areas of threat were measured by a threat scale adapted from Stephan and Renfro (2002) to the Spanish context with 9 items to measure realistic threat, and 4 items for symbolic threat. To measure ‘realistic threat’ participants answered if they felt that Moroccan immigrants threaten: Spanish people’s access to the healthcare system, the access to welfare support, the access to the educational system, getting jobs, the country’s economic stability, physical health, law and order, personal safety, and the country’s safety (α = .94). To measure ‘symbolic threat’, participants indicated if they felt that Moroccan immigrants threaten: Spanish people’s religious beliefs, values, educational values, and the traditions of the Spanish culture (α = .87). All items were measured on 5-point Likert scales (1 = not at all to 5 = very much). Higher values indicate more perceived threat from Moroccan immigrants.

Participants also completed some other items, for example about demographic information, which are not relevant to the present study. All aspects of this and the subsequent study were in line with APA ethical guidelines.
Table 1
Means, standard deviations and correlations among the measured variables, Study 1.

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<td>-.05</td>
<td>.08</td>
<td>.04</td>
<td>-.01</td>
<td>-.05</td>
<td>.04</td>
<td>-.01</td>
<td>.04</td>
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<td>2. Perceived culture adoption</td>
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<td>-.07</td>
<td>.45**</td>
<td>.49**</td>
<td>.36**</td>
<td>-.34**</td>
<td>-.29**</td>
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<td>3. Preference for culture maintenance</td>
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<td>-.13</td>
<td>.21**</td>
<td>.25**</td>
<td>.26**</td>
<td>-.22</td>
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<td>4. Preference for culture adoption</td>
<td>-</td>
<td>-.21</td>
<td>-.18</td>
<td>-.09</td>
<td>.25**</td>
<td>.18</td>
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<tr>
<td>5. Sociability</td>
<td>-</td>
<td>.83</td>
<td>.68</td>
<td>.57</td>
<td>-.57</td>
<td>-.46</td>
<td></td>
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<td>6. Morality</td>
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<td>-.59</td>
<td>-.51</td>
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<td>7. Competence</td>
<td>-</td>
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<td>9. Symbolic threat</td>
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<tr>
<td>Mean</td>
<td>4.11</td>
<td>2.12</td>
<td>2.65</td>
<td>3.76</td>
<td>2.77</td>
<td>2.47</td>
<td>3.18</td>
<td>2.95</td>
<td>2.47</td>
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<tr>
<td>Standard deviation</td>
<td>1.11</td>
<td>.86</td>
<td>1.16</td>
<td>1.05</td>
<td>.90</td>
<td>.83</td>
<td>.75</td>
<td>1.06</td>
<td>1.10</td>
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</tbody>
</table>

Note: Standardized correlation coefficients are given.

* p = .05.
** p = .01.
*** p = .001.

Fig. 1. Structural equation model assessing the effects of ‘perceived culture adoption’, ‘perceived culture maintenance’, ‘stereotypes’ and ‘perceived threat’ on ‘preference for culture adoption’ and ‘preference for culture maintenance’ with the Moroccan target (Study 1). **p < .01, ***p < .001.

2.2. Results

The means, standard deviations and correlations of all measured variables are displayed in Table 1. The pattern of bivariate correlations confirms that the different stereotype and threat dimensions are related to the other variables in one consistent pattern, further justifying our approach to have them load on the same underlying factors.

A model was specified using the software EQS (see Fig. 1). ‘Perceived culture maintenance’ and ‘perceived culture adoption’ were predictors of the latent factor of ‘stereotypes’, ‘stereotypes’ was a predictor of the latent factor of ‘perceived threat’, and ‘perceived threat’ was a predictor of ‘preference for culture maintenance’ and ‘preference for culture adoption’. In this model, ‘morality’, ‘sociability’, and ‘competence’ loaded on the latent factor ‘stereotypes’. Both ‘realistic threat’ and ‘symbolic threat’ loaded on the latent factor ‘perceived threat’. We also allowed ‘perceived culture maintenance’ and ‘perceived culture adoption’ to covary.

The model provided a very good fit with the data. The chi-square value was non-significant, $\chi^2(25, 145) = 29.19; p = .26$, the AIC was $-20.81$, and the fit indices confirmed a very good fit (CFI = .99; GFI = .96; SRMR = .04; RMSEA = .03). The model explained 10% of the variance in ‘preference for culture maintenance’, 7% of the variance in ‘preference for culture adoption’, 26% of the variance in ‘stereotypes’, and 50% of the variance in ‘perceived threat’. The full model and standardized coefficients are displayed in Fig. 1.

As hypothesized, several indirect effects were also significant. ‘Perceived culture adoption’ had a significant indirect effect on ‘perceived threat’, $z = -5.46, \beta = -36; p < .001$, through ‘stereotypes’; and on ‘preference for culture adoption’, $z = -2.66, \beta = -.09; p < .01$; and ‘preference for culture maintenance’, $z = 3.10, \beta = .11; p < .01$, through both ‘stereotypes’ and ‘perceived threat’. An indirect effect was also found for ‘stereotypes’ on both ‘preference for culture adoption’, $z = -2.86, \beta = -.18; p < .01$; and ‘preference for culture maintenance’, $z = 3.42, \beta = .22; p < .001$, through ‘perceived threat’. To sum up, the model fitted the data very well, and all the estimated path coefficients were in line with the predictions. Additional confirmation for the predicted model was sought by running two alternative models, which showed a worse fit with the data than the hypothesized model.  

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3 An alternative model with both stereotypes and perceived threat as mediators at the same level between acculturation perceptions and preferences fitted the data considerably less well than our hypothesized model: $\chi^2(25,145) = 48.56, p = .003; AIC = -1.44; CFI = .95; GFI = .93; SRMR = .06; RMSEA = .08$. A second alternative model, with stereotypes as a mediator of the effects of threat on acculturation preferences, fitted the data considerably less well than our hypothesized model: $\chi^2(25,145) = 48.56, p = .003; AIC = -1.44; CFI = .95; GFI = .93; SRMR = .06; RMSEA = .08$. 

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Table 2
Means, standard deviations and correlations among the measured variables, Study 2.

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<td>24*</td>
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<td>-02</td>
<td>01</td>
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<td>-01</td>
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<td>2. Perceived culture adoption</td>
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<td>-08</td>
<td>40*</td>
<td>-01</td>
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<td>16</td>
<td>23*</td>
<td>-19</td>
<td>-37*</td>
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<td>4. Preference for culture adoption</td>
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<td>-08</td>
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<td>5. Sociability</td>
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<td>6. Morality</td>
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<td>7. Competence</td>
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<td>8. Realistic Threat</td>
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<td>9. Symbolic Threat</td>
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<td>Mean</td>
<td>3.77</td>
<td>2.97</td>
<td>3.28</td>
<td>3.64</td>
<td>3.64</td>
<td>3.23</td>
<td>3.41</td>
<td>2.37</td>
<td>1.83</td>
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<tr>
<td>Standard deviation</td>
<td>.91</td>
<td>.86</td>
<td>1.04</td>
<td>.92</td>
<td>.82</td>
<td>.78</td>
<td>.66</td>
<td>.97</td>
<td>.84</td>
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</table>

Note: Standardized correlation coefficients are given.

* p = .05.
** p = .01.

2.3. Discussion

As predicted, Study 1 showed that a perception that minority members want to adopt the majority culture leads to more positive stereotypes about immigrants, which in turn reduces the perceived threat. Perceived threat, in turn, was shown to be linked positively to a preference amongst majority members that minority members adopt the majority culture, and negatively to a preference that minority members maintain their original culture. In contrast to the effect of ‘perceived adoption’ on ‘stereotypes’, the effect of ‘perceived maintenance’, which had been expected to be weaker, did not reach significance. The model fitted well for the target of Moroccan immigrants.

3. Study 2

Study 2 was designed in order to test the same model with a different target minority group: Ecuadorian immigrants.

3.1. Method

3.1.1. Participants

The study had a convenience sample including students and non-students. Questionnaires were distributed by research assistants. One hundred and forty nine Spanish people volunteered to participate in this study anonymously, assessing Ecuadorian immigrants. The age of the participants varied from 18 to 79, with a mean of 36.33 (SD = 16.87); 53.4% were female; 33.1% indicated that they were employed, 8.8% were housekeeper, 7.4% were retired, 7.4% were unemployed, and 42.6% were students. Although the characteristics of this sample were similar to the sample of Study 1, there was no overlap between the participants; the samples were completely independent.

3.1.2. Procedure and measures

Participants were asked to fill out a questionnaire. Measures were identical to those used in Study 1, except that the target ‘Moroccan’ was replaced by the target ‘Ecuadorian’. Cronbach’s alphas (α) were excellent: .93 for the sociability dimension, .89 for morality, .85 for competence, .94 for realistic threat, and .84 for symbolic threat.

3.2. Results

The means, standard deviations and correlations of all measured variables are displayed in Table 2. The same model as for Study 1 was specified, with ‘perceived culture maintenance’ and ‘perceived culture adoption’ as predictors of the latent factor of ‘stereotypes’, ‘stereotypes’ as a predictor of the latent factor of ‘perceived threat’, and ‘perceived threat’ as predictor of ‘preference for culture maintenance’ and ‘preference for culture adoption’. Again, ‘morality’, ‘sociability’, and ‘competence’ loaded on the latent factor ‘stereotypes’. Both ‘realistic threat’ and ‘symbolic threat’ loaded on the latent factor ‘perceived threat’. The two exogenous variables were again allowed to covary.

The model provided a good fit with the data. Although the chi-square value of the hypothesized model was significant, \( \chi^2(25,147) = 39.78; p = .03 \), the arguably more important fit indices (c.f. the results of Gibbons, Gerrard, Blanton, & Russell, 1998) confirmed a satisfactory fit (CFI = .96; GFI = .95; SRMR = .06; RMSEA = .06). Finally, the AIC was -10.21. The model explained 16% of the variance in ‘preference for culture maintenance’, 3% of the variance in ‘preference for culture adoption’, 20% of the variance in ‘stereotypes’, and 44% of the variance in ‘perceived threat’. The full model and standardized coefficients are displayed in Fig. 2.

As hypothesized, several of the indirect effects were significant. ‘Perceived culture adoption’ had an indirect effect on ‘perceived threat’, \( z = -4.64, \beta = -31; p < .001 \), through ‘stereotypes’; and on ‘preference for culture maintenance’, \( z = 3.36, \)
\[
\beta = .12; \ p < .001, \text{ through both 'stereotypes' and 'perceived threat'. An indirect effect was also found of 'stereotypes' on 'preference for culture maintenance', } z = 4.06, \ \beta = .26; \ p < .001, \text{ mediated by 'perceived threat'. In sum, then, the model fitted the data very well, and all the estimated path coefficients were in line with the predictions, with the notable exception of the path from threat to preference for culture adoption which was now non-significant, in contrast to Study 1.}
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Additional confirmation in favor of the hypothesized model was also found when running the same two alternative models as for Study 1. As expected, these alternative models fitted the data considerably less well, thereby yielding further support for the hypotheses.\(^4\)

**Two-sample analysis with equality constraints.** A further analysis was carried out to get even more stringent evidence that the processes captured by the model are essentially the same across the two different immigrant target groups. We built a multiple group model in line with the processes described in Figs. 1 and 2. Equality constraints specified that all paths would be equal in both samples. For example, although the path from ‘perceived threat’ to ‘preference for culture adoption’ was significant in Study 1 but not in Study 2, this test ascertained whether the magnitude of this path was significantly different between the two samples. After all, it is quite possible that although one path is significant and the other is not, that they are nonetheless not significantly different from each other. Inspection of the Lagrange Multiplier (LM) test revealed none of the equality constraints were violated (\(p > .05\)). Hence, there was evidence that—as predicted—the multiple relationships among acculturation options, stereotypes, and perceived threat were the same for two very different target groups.

### 3.3. Discussion

Corroborating the results of Study 1, Study 2 showed that a perception that minority members adopt the majority culture leads to more positive stereotypes about immigrants, which in turn reduce the perceived intergroup threat. Perceived threat, in turn, was shown to be linked negatively to a preference that minority members maintain their original culture. This was shown for the target of Ecuadorian immigrants. In this, the results were identical to those obtained in Study 1. The only difference between the studies was that perceived threat had a significant effect on preference for culture adoption in Study 1 but not Study 2. However, the 2-group analysis confirmed that in spite of this, the magnitude of this path was comparable across the two studies.

### 4. General discussion

Overall, the results revealed clear evidence supporting the hypotheses. As predicted, a perception that immigrants (e.g., Moroccans and Ecuadorians) have adopted the customs of Spanish society improved stereotypes about them (i.e., they were perceived as more sociable, moral, and competent). Also, as predicted, perceived threat from immigrants depended on stereotypes; majority members reported feeling less realistic and symbolic threat when they evaluated immigrants as higher in sociability, morality, and competence. Finally, perceived threat had a negative effect on majority members’ preference for culture maintenance (both studies), and a positive effect on majority members’ preference for culture adoption (especially in Study 1, vis-à-vis Moroccan immigrants). The pattern of significant indirect effects confirmed that the effects of acculturation perceptions on the majority’s acculturation preferences were indeed mediated, in a two-step process, by stereotypes and intergroup threat.

These findings confirm that stereotypes are fundamentally related to both acculturation perceptions and preferences. The majority’s perceptions of immigrants’ acculturation choices affect the majority’s stereotypes about them; and at the same time, these stereotypes about immigrants influence the majority’s acculturation preferences for them (via threat). The two-sample analysis with equality constraints suggested that these relations might be independent from the national origin.

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\(^4\) The alternative model with both stereotypes and perceived threat mediating at the same level between acculturation perceptions and preferences fitted the data considerably less well than our hypothesized model: \(\chi^2(22,147) = 80.23; \ p < .001; \text{ AIC} = 36.23; \text{ CFI} = .86; \text{ GFI} = .90; \text{ SRMR} = .14; \text{ RMSEA} = .13\). The alternative model with stereotypes as a mediator of the effects of threat on acculturation preferences fitted the data considerably less well than our hypothesized model: \(\chi^2(25,147) = 61.09; \ p < .001; \text{ AIC} = 11.09; \text{ CFI} = .91; \text{ GFI} = .92; \text{ SRMR} = .08; \text{ RMSEA} = .10\).
of immigrants, and might indeed generalize across different immigrant groups. Furthermore, hypothesized sequence of psychological processes was supported, since the two alternative models in which stereotypes and threat were mediators at the same level or stereotypes mediated the threat effect on intergroup outcomes fitted the data worse than our hypothesized model.

The present results confirm speculations in the literature about the relationship between acculturation and stereotype content. Notably, Lee and Fiske (2006) proposed that the stereotype dimensions may influence majority members’ preferences for immigrants’ acculturation strategies. Our results are also in line with but extend previous studies which showed that perceptions of acculturation options influence stereotypes (see Maisonneuve & Testé, 2007), and that the majority’s acculturation preferences may differ depending on valuation or devaluation of the immigrant group assessed (Montreuil & Bourhis, 2001, 2004) since this (de)valuation, as it has already been pointed out, may depend on stereotypes.

One aspect of this research which deserves further reflection is the fact that perceptions of culture adoption had a stronger effect on stereotypes than perceptions of culture maintenance. Maisonneuve and Testé (2007) found similar results, recognizing that when people are judging these two types of behavior (culture adoption or maintenance) they activate different evaluative frameworks which lead them to generate different types of inferences. It seems that the inferences related to culture adoption (rather than maintenance) are more diagnostic and relevant for the majority’s stereotypical perceptions (Maisonneuve & Testé, 2007). This might due to the fact that the immigrants’ action to adopt the host culture is perceived by majority members as more active (and hence more salient) than the action to maintain their original culture. When predicting immigrant stereotypes, the more active behavior (i.e., adoption) might be more relevant in social perception. Other authors have found too that the two acculturation dimensions seem to have effects of different magnitude (Van Oudenhoven et al., 1998; Zagefka et al., 2009), and more research is needed to ascertain under which conditions one dimension might prevail over the other.

The current work makes contributions at different levels. One of the most important is that, although previous research has demonstrated that stereotypes about immigrants are affected by acculturation perceptions (see Maisonneuve & Testé, 2007), little work to date has tried to integrate stereotypes with the majority’s acculturation preferences, and even fewer contributions have tried to understand through which process stereotypes are related to the majority’s acculturation preferences. The model presented here allows for an integration of different psychosocial variables and constructs that hitherto have been studied only in isolation. The current model therefore enhances our understanding of the relationships between stereotypes (from the amplified SCM), threat (ITT), and acculturation options (Berry, 1997; Bourhis et al., 1997; Navas et al., 2005). All of these are essential for the comprehension of the complex relationships between majority and minority groups in a multicultural society.

Another innovation of this work is that it considers stereotypes on three dimensions (i.e., sociability, morality, and competence) instead of the two traditional dimensions of warmth and competence. It therefore provides a more differentiated picture than some previous studies (e.g., Maisonneuve & Testé, 2007), and is in line with current recommendations (Brambilla et al., 2011; Leach et al., 2007). In our data, a perception that immigrants adopt the majority culture affected stereotypes on all three dimensions in the same direction, by making evaluations on all dimensions more positive (more morality, sociability, and competence).

It is also important to highlight that the model was replicated with two very different target groups. Moroccan are more stigmatized than Ecuadorian immigrants in Spanish society (Navas et al., 2012; Rodríguez-Pérez et al., 2011), and they are very different in several respects (e.g., language, religion, traditions). Nonetheless, results across the two groups were strong and consistent. This can be seen as evidence that the hypothesized processes do indeed present a robust model for the prediction of acculturation preferences of majority members.

However, some differences were found between these two samples of different target groups. For the Moroccan target sample ‘perceived culture maintenance’ and ‘perceived culture adoption’ were orthogonal variables (as Berry, 1997), whereas these acculturation perceptions were negatively related in Ecuadorian target sample (as Van Acker & Vanbeselaere, 2012). This could be explained by the different context compared to previous studies and the particular relations of the Spanish people with each immigrant group. Moreover, for the Moroccan target, a perception of ethnic maintenance was not related to any of the other measured variables, whereas for the Ecuadorian target, ‘perceived culture maintenance’ was negatively related to ‘perceived culture adoption’ and positively related to ‘preference for culture adoption’. Possibly, for majority members who assess Moroccans, ‘perceived culture maintenance’ is not as predictive as ‘perceived culture adoption’, with the adoption dimension being more decisive than the maintenance one (see Van Oudenhoven et al., 1998). However, for majority members who assess Ecuadorians, adoption and maintenance have the same importance when predicting other psychosocial variables. It might mean that they are equivalent variables, and for that, they are related. These findings might explain why culture adoption seems to be more diagnostic than culture maintenance (see also Maisonneuve & Testé, 2007) under some circumstances. Nevertheless, more research is necessary to clarify this pattern.

However, this work is not free of limitations. The sample was a convenience sample and not systematically representative of the general population, and we only considered two different immigrant targets (Moroccans and Ecuadorians). Subsequent studies could aim for a more representative sample, consider different targets, and investigate different national contexts, to test the generalizability of the model further.

Furthermore, we have used one-item measures for acculturation perceptions. Although others have pioneered this (Piontkowski et al., 2000; Van Acker & Vanbeselaere, 2011), and it seems like single-item measures can be reasonably reliable indicators of acculturation attitudes (Brown & Zagefka, 2011), future work could endeavor to employ potentially
even more accurate multi-item measurement instruments, specifically in order to test if the scale produces any difference in this model.

Another restriction is that we have only focused on the majority’s perspective. It would be interesting to carry out the same study from a minority’s perspective in order to know if acculturation options, stereotypes and perceived threat are related in the same way when minority groups assess majority groups.

Finally, due to the correlational nature of this survey, this work cannot ascertain the direction of causality among these variables. Therefore, future research should experimentally test the proposed mediation model.

4.1 Conclusions

In spite of these limitations, this work and its findings are important to understand in a better way the consequences and antecedents of majority members’ acculturation options regarding minority members, by proposing that stereotypes and perceived threat work simultaneously as consequences of acculturation perceptions and as predictors of acculturation preferences. Some important practical implications can be derived from this work: for example, improving stereotypes about immigrants would reduce the perceived threat emanating from them, and consequently generate more support for integration and multiculturalism policies. This and other ideas might be generated from the model to provide pointers how to improve intergroup relations to create a thriving multicultural society. At the same time as being of practical value, the model makes an important theoretical contribution by helping to join different perspectives within the field of the psychology of intergroup relations.

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