

A critical investigation of the effects of (in) congruence between host group's own acculturation expectancies and the acculturation expectancies they perceive in immigrant groups:

The decisive role of host group's expectancies of acculturation

Joke Meeus

Department of Psychology, Universidad Catolica de Chile, Chile

Johan Braeken

Bart Duriez

Norbert Vanbeselaere

Karen Phalet

Batja Mesquita

Department of Psychology, KU Leuven, Belgium

The contribution of the third author was supported by the Fund for Scientific Research Flanders (FWO).

Correspondence may be sent to Joke Meeus, KU Leuven, Department of Psychology, Tiensestraat 102, B-3000 Leuven, Belgium. E-mail: Joke.Meeus@psy.kuleuven.be

Abstract

The present study investigates the effects of incongruence and congruence between host group's (Flemings) acculturation expectancies and perceptions of Moroccan immigrant acculturation efforts on attitudes towards this immigrant group. The study is conducted among Dutch-speaking Belgian high-school students ($N = 447$). Incongruence and congruence effects were investigated with polynomial regression analyses. First, differential incongruence effects indicated that attitudes towards Moroccan immigrants were more positive when immigrants were perceived to do a bigger acculturative effort than expected, whereas attitudes were more negative when immigrants were perceived to fall short of the expectations. Second, differential congruence effects indicated that attitudes towards Moroccan immigrants became more negative when expectancies were more demanding. Last, conditional regression analyses indicated that, whereas the attitudes towards Moroccan immigrants of people with clear-cut expectancies (either high or low) are entirely determined by these expectancies, the attitudes of people with moderate expectancies are altered by their perception of immigrant efforts. These results suggest that acculturation expectancies have a greater impact on host group's attitudes towards Moroccan immigrants than the acculturation expectancies they perceive in this immigrant group.

A critical investigation of the effects of (in)congruence between host group's own acculturation expectancies and the acculturation expectancies they perceive in immigrant groups:

The decisive role of host group's expectancies of acculturation

Since the early 1960s Western European countries have seen a significant increase in the number of immigrants coming into the country. Immigration has changed the landscape of these countries from mono-cultural into multi-racial and multi-ethnic societies. In recent years, conflicts between host group members and immigrants have become one of the key issues on the political agenda of Western European countries. Psychologists, in an attempt to contribute to this issue, have tried to gain insight into the process and the genesis of negative intergroup relations. Therefore, they investigate the consequences of acculturation, which is defined as the process of change occurring when two groups come into contact over an extended period of time (Redfield, Linton, & Herskovits, 1936).

Research initially focused on the acculturation of immigrants groups themselves, since they experience the most visible and most demanding adaptation process. The starting point for this research was that immigrants are confronted with two basic issues, which we call acculturation dimensions (Berry, 1997). The first acculturation dimension pertains to the extent to which immigrants want to maintain the heritage culture; the second to the extent to which immigrants want to adopt the host culture (Arends-Toth & Van de Vijver, 2007)¹. Both acculturation dimensions can be combined in a classification system of four acculturation strategies. *Assimilation* occurs when immigrants' desire for maintenance is low, while the desire for adoption is high. *Integration* occurs when immigrants want a high level of adoption to the host culture, without losing the own ethnic cultural roots. *Separation* occurs when immigrants don't want adopt the host society's culture in combination with maintenance of the own heritage culture. *Marginalization* is characterized by the loss of cultural and psychological connectedness with the culture of both the host and the immigrant group. Acculturation dimensions and

strategies of immigrants, are related to immigrants' psychosocial and physical health outcomes (e.g. Berry, 1997; Liebkind, 2001) as well as to affective attitudes towards members of the host society (Piontkowski, Rohmann, & Florack, 2002; Zagefka & Brown, 2002).

Recently, the acculturation orientations of host group members have been included in studies on intergroup relations as well (Breugelmans & Van de Vijver, 2004). This new development reflects the realization among researchers that the host group also experiences a process of acculturation. Increasingly, the assumption is that intergroup outcomes, and even the adjustment of the immigrant group, depend on an interaction between host and immigrant groups within a given context. One of the factors contributing to the interaction is the way in which host group members think immigrants *should* acculturate (acculturation expectancies); that is, how immigrants should relate to the two acculturation dimensions, culture maintenance and adoption, in the eyes of the host group. Conceptually, four acculturation orientations can be distinguished for the host group that run parallel to the four distinguished for immigrants. However, empirically, the data on host group members' acculturation orientations appear to be unidimensional; when the data are subjected to factor analysis, the maintenance and adoption dimensions load on one single factor (e.g. Rudmin, 2003; Zick, Wagner, van Dick, & Petzel, 2001).

Several studies have established that acculturation attitudes of the host group are associated to affective attitudes towards immigrants (Snauwaert, Soenens, Vanbeselaere, & Boen, 2003; Zagefka and Brown, 2002; Zick et al., 2001). However, it has been proposed that the intergroup attitudes of the host group members are better understood yet from the perceived (in)congruence between their own acculturation expectancies and those of immigrants (Bourhis, Moise, Perreault, & Senecal, 1997). In this respect, empirical studies have found that the (in)congruence of perceived differences between the host group's acculturation expectancies and acculturation perceptions -- referring to the acculturation attitudes that host group members perceive in immigrant groups acculturation attitudes—predict intergroup outcomes (Rohmann, Florack, & Piontkowski, 2006; Zagefka and Brown, 2002). Specifically,

the level of (in)congruence was a predictor of perceived threat, negative outgroup attitudes, ingroup bias, and a number of other indicators of negative intergroup relations. The joint evidence suggests that the most positive outcomes were associated with congruence between acculturation expectancies and perceptions, whereas negative intergroup outcomes increased with the incongruence between expectancies and perceptions. The idea that congruence between acculturation expectancies and perceptions is related with most positive attitudes will be referred to as 'the congruence model'.

Previous operationalisations of the congruence model. Despite the fact that past studies converged on the congruence model, they made use of very different operationalisations of (in)congruence. This means that the results are less reliable than the conclusions drawn from them suggest. In the study of Piontkowski and colleagues (2002), a study that led up to the studies that we build on in the current research, (in)congruence was operationalised in a categorical way. Thus, Piontkowski and colleagues (2002) distinguished three a priori categories of (in)congruence, based on categorical combinations of acculturation expectancies and acculturation perceptions (acculturation strategies). From most to least congruent, these categories were referred to as harmonious, problematic, and conflictual. When looking at the acculturation attitudes of German majority group members towards Polish and Italian immigrants, harmony was associated with most positive outcomes, whereas conflict categories were linked to most negative outcomes. In reaction to the categorical approach of Piontkowski and colleagues (2002), Zagefka & Brown (2002), introduced a continuous operationalisation of (in)congruence, by calculating the absolute difference scores between acculturation expectancies and perceptions by German majority group members concerning Turkish and Russian immigrants. Acculturation was measured on the basis of the acculturation dimensions (i.e., culture maintenance and adoption) and therefore, two scores of incongruence were obtained. On both acculturation dimensions, they found incongruence to predict more negative outcomes, whereas congruence predicted more positive outcomes. A second continuous operationalisation of (in)congruence was used by Rohmann and colleagues (2006), who calculated the algebraic difference

scores between acculturation expectancies and acculturation perceptions on the two acculturation dimensions, predicting to which extent majority Germans experience Italian and Turkish immigrant groups as threatening (e.g., symbolic and realistic threat, and intergroup anxiety). Overall, they found linear relationships between (in)congruence and feelings of threat. They concluded that in line with previous studies incongruence, defined as immigrants maintaining the own culture more and adopting the host culture less than the host group wants them to, is related to higher levels of threat than congruence. However, as we will make clear in the remainder of the text, the results of the last study can be interpreted somewhat differently, leading to more far-reaching conclusions.

The current study challenges the congruence model. We will argue that the apparent agreement in results hides some important differences in the conceptualisation of (in)congruence that render the results from previous studies (Rohmann et al., 2006; Zagefka and Brown, 2002) less robust than they might seem at first sight. More importantly, we will argue that whereas both congruence and incongruence in all former studies were considered homogenous concepts, in reality they both take on different instantiations (e.g., high adoption host culture congruence, low adoption host culture congruence). The main idea behind the current study is to test the idea that different types of congruence and incongruence might predict distinct intergroup outcomes.

Different types of (in)congruence. Whereas previous studies approach (in)congruence similarly as a unidimensional concept, the current study will challenge this assumption by looking more closely at different types of incongruence and congruence. First, we will examine what different forms of incongruence exist and whether incongruence is then always related to negative intergroup outcomes. Past studies did not differentiate between incongruence as host group's perception that immigrants maintain their own culture to a larger, and adopt the host culture to a lesser extent than would be desirable (= negative incongruence) and incongruence as host group's perception that immigrants are perceived to maintain to a lesser, and adopt the host culture to a greater extent than desirable (= positive incongruence). In the present study, we will examine the associated outcomes of these two

forms of incongruence separately. We expect that, whereas a negative difference may be related to negative outcomes, a positive difference would yield positive outcomes.

Second, congruence between acculturation expectancies and perceptions may exist at different levels of acculturation. Previous studies have not taken the level of acculturation in account. In this study we distinguish and compare the associated intergroup outcomes of congruence that is based on low, moderate or high acculturation expectancies respectively, with high acculturation referring to lowest levels of culture maintenance and to highest levels of culture adoption. In this way, we will explore whether different types of congruence are related with different attitudes towards immigrants.

What is the optimal type of (in)congruence? When having gained more insight in different types of incongruence and congruence, the question still remains which combination of acculturation expectancies and perceptions relates to most positive attitudes towards immigrants and which combinations relates to most negative attitudes. Therefore, we will investigate for low, moderate, and high acculturation expectancies separately, whether either congruent or incongruent acculturation perceptions constitute most positive outgroup attitudes. In doing so, we simultaneously gain insight in what acculturation perceptions contribute to the effect of acculturation expectancies.

In sum, the goal of the present study is to explore differential effects of different forms of incongruence and congruence. We will (a) describe differential effects of different types of incongruence and congruence, and (b) compare the effects of the different types of incongruence with the effects of different types of congruence. To ascertain that our results are due to a more refined method of analysis and not to other differences in findings, we will also use past studies' methods (Rohmann et al., 2006; Zagefka & Brown, 2002) of analysis to see if we can replicate their findings.

Method

Participants and Procedure

Participants were high-school students following an academic track ($N = 447$; 46% male; mean age = 16.27, $SD = .50$, age range = 15 - 19) who were recruited in secondary schools in Flanders, the

Dutch speaking part of Belgium, and who took part in our research during regular class hours. All of them had the Belgian nationality, spoke Flemish at home and all their grand parents were born in Flanders. Hence, they all belonged to the Flemish host group. As a relevant immigrant group, Moroccan immigrants were chosen because they form a large and visible immigrant group in Flanders. Moreover, differences in perceived acculturation attitudes of Flemish respondents can be expected, since both (a) the Moroccan immigrant group is in fact a heterogeneous group, with members of the first, second, and third generation holding largely varying acculturation attitudes, and (b) host group members vary considerably with regard to the reported contact with Moroccan immigrants (Phalet & Swyngedouw, 2004). Contact, however, gives the opportunity to learn about actual acculturation attitudes held by the Moroccan immigrant group.

Measures

All measures were administered in Dutch. All items were scored on 5-point Likert scales, ranging from 1 (*strongly disagree*) over 3 (*neither agree nor disagree*) to 5 (*strongly agree*).

Acculturation attitudes. Acculturation expectancies and perceptions were measured on the two acculturation dimensions (maintenance of the heritage culture, adoption of the host culture). In order to measure acculturation expectancies, participants completed 3-item scales assessing their approval of Moroccan immigrants' maintaining their heritage culture, in general, in private, and in the public domain respectively (e.g., "I approve of Moroccan immigrants' maintaining their culture at home") and the expectation that Moroccan immigrants adopt the Flemish culture in general, in private, and in the public domain (e.g., "I expect Moroccan immigrants to adopt the Flemish culture at home"). In addition, 3-item scales assessed the perception that Moroccan immigrants maintain the original culture in general, in private, and in the public domain (e.g., "Most Moroccan immigrants maintain their culture at home") and that they adopt Flemish culture in general, in private, and in the public domain (e.g., "Most Moroccan immigrants adopt the Flemish culture at home").

The data suggested that maintenance of the heritage culture and adoption of the host culture fell

along one dimension; this is consistent with several other studies on host groups (e.g. Rudmin, 2003; Zick et al., 2001). One factor resulted in a good factor solution, as evidenced by substantial explained variance (41%), and as appearing from good internal reliability of the resulting scale (Cronbach's alpha = .71). Therefore, we constructed a single factor, acculturation expectancies, indicating the extent to which host group member expect immigrants to adopt the host culture versus approve of them maintaining the heritage culture (Mean = 2.78; SD = 0.64).

Similarly, acculturation perceptions were best described as uni-dimensional. One factor resulted in a good factor solution, as evidenced by substantial explained variance (41%), and as appearing from good internal reliability (Cronbach's alpha = .77). For this reason, we constructed a single factor, acculturation perceptions, indicating the extent to which host group members perceive that immigrants adopt the host culture versus maintain the heritage culture (Mean = 2.18; SD = 0.57). The means indicate that, in general, respondents prefer more host culture adoption versus less maintenance of the heritage culture than they perceived ($t = 13.33, p < .001$).

Attitudes towards Moroccan immigrants. Participants completed 8-item scale assessing both negative (e.g., "I would prefer to have no contact with Moroccan immigrants at school") and positive (e.g., "In general, I have respect for what Moroccan immigrants do") attitudes towards Moroccan immigrants. Factor analysis pointed to a one-factor solution, explaining 60% of the variance. Items were recoded so that high scores reflect positive attitudes towards Moroccan immigrants (Cronbach's alpha = .90; Mean = 3.51; SD = 0.85).

Results

Previous operationalisations in the congruence model. We tested whether we could replicate the 'congruence model' using past methods to measure (in)congruence (Rohmann et al., 2006; Zagefka, & Brown, 2002). This was done to insure that our approach, rather than some random variation in the data was responsible for the findings reported in the present study.

Following Zagefka and Brown (2002), we first calculated the absolute value of the difference between acculturation expectancies and acculturation perception (acculturation perceptions minus acculturation expectancies) and then entered it as predictor for attitudes towards Moroccan immigrants. Results of the regression analyses indicated that there was a significant negative linear effect of the absolute difference between acculturation expectancies and acculturation perceptions, on the host group's attitudes towards Moroccan immigrants (Adjusted $R^2=.24$, $F(1, 425) = 135, 77$, $p < .001$; $b_0=1.02$, $p < .001$, $b_1 = -.59$, $p < .001$). This result replicates the finding of Zagefka and Brown (2002) in the Flemish context and is supportive for the 'congruence model'. The congruence model indicates that most positive attitudes toward Moroccan immigrants occur when there is congruence between acculturation expectancies and perceptions, while attitudes become more negative when incongruence becomes bigger.

Following the method used by Rohmann and colleagues (2006), we proceeded by calculating the algebraic difference between acculturation expectancies and acculturation perception and then entered it as predictor for attitudes towards Moroccan immigrants. The positive linear effect of the algebraic difference indicated that we also replicated the findings by Rohmann and colleagues (2006) in the Flemish context (Adjusted $R^2=.36$, $F(1, 425) = 241, 43$, $p < .001$; $b_0= 3.85$, $p < .001$, $b_1 = .56$, $p < .001$). Hence, we replicated the positive linear effect that was found by Rohmann and colleagues (2006).

Analytic Strategy in the Present Study. The present study will make use of an alternative method, polynomial regression analysis (Edwards, 2001; 2002; Edwards & Parry, 1993) to investigate possible differential congruence and incongruence effects. This method allows us to investigate differential effects of different types of incongruence and congruence, because both are represented on separate incongruence and congruence lines (see below). Moreover, effects are not restricted to linear relations because quadratic terms are also included. This method has proved useful in examining congruence and incongruence effects between persons and organizations, promised and delivered inducements, and self and others (e.g., Atwater, Ostroff, Yammarino, & Fleenor, 1998; Lambert, Edwards, & Cable,

2003). Both the independent and dependent variables were centred at the same values (from -2 to +2), based on the midpoint of their scales. Expectancies and perceptions (i.e., EX and PE), their squared terms (EX^2 and PE^2) and their interaction ($EX * PE$) were entered as predictors of attitudes towards Moroccan immigrants ($Y = f(EX, PE) = \text{intercept} + b_1 EX + b_2 PE + b_3 EX^2 + b_4 EX * PE + b_5 PE^2$). Although this regression equation can be represented as a regressed surface in a 3-dimensional structure, it is not necessary to describe the whole surface, as, for the purpose of the present study, sufficient information is provided by two lines that can be drawn on the surface: The line of congruence and the line of incongruence.

The line of incongruence describes the effects of incongruence when expectancies and perceptions are opposites ($PE = -EX$), containing the EX / PE couples -2/2, -1/1, 0/0, 1/-1, and 2/-2. Hence, this line ranges from perceiving that immigrants do more than is expected by the members of the host group (= highly positive incongruences) to perceiving that immigrants do less than is expected by the members of the host group (=highly negative incongruences). In this way, differential effects of positive and negative incongruences can be compared. The regression coefficients for the incongruence line ($Y = f(EX, PE = -EX) = \text{intercept} + a_1 EX + a_2 EX^2$) can be derived from the general regression equation by substituting PE for $-EX$ (i.e., $a_1 = b_1 - b_2$, and $a_2 = b_3 - b_4 + b_5$).

The line of congruence describes the congruence effects when expectancies and perceptions are equal ($PE = EX$), containing the EX / PE couples -2/-2, -1/-1, 0/0, 1/1, and 2/2. Hence, the congruence line ranges from congruence on low over moderate to high levels of acculturation. In this way, differential effects of congruence on low, moderate, and high levels of acculturation expectancies and perceptions can be investigated. The regression coefficients ($Y = f(EX, PE = EX) = \text{intercept} + a_3 EX + a_4 EX^2$) can be derived from the general regression equation by substituting PE for EX (i.e., $a_3 = b_1 + b_2$, $a_4 = b_3 + b_4 + b_5$).

In order to be able to meaningfully interpret these lines, both EX and PE have to contribute to the prediction of the outcome. This condition is fulfilled when both components have a significant effect

(either linear or quadratic) or when the interaction is significant. Results of the polynomial regression analyses indicated that there was a significant linear effect of EX and a significant quadratic effect of PE on attitudes towards Moroccan immigrants (Adjusted $R^2=.40$, $F(5, 421)= 56, 73$, $p < .001$; $b_0 = .72$, $p < .001$, $b_1 = -.69$, $p < .001$; $b_2 = .00$, *ns*; $b_3 = .07$, *ns*; $b_4 = -.02$, *ns*; $b_5 = -.23$, $p < .01$).¹

Different types of (in)congruence. First, in order to answer the question whether incongruence is always related to negative outgroup attitudes or, alternatively, whether differential effects for positive and negative incongruences exist, the incongruence line was inspected. A negative incongruence is observed when $EX > PE$ because, in this case, immigrants are perceived to adopt the host culture to a lesser extent than a host group member expects from them ($N = 296$). A positive incongruence is observed when $EX < PE$ because, in this case, immigrants are perceived to adopt the host culture to a greater extent than a host group member expects from them ($N= 96$). Because both linear and quadratic effects can be tested on the incongruence line, differential effects of incongruence can be tested instead of constraining the data as was the case in the previously used methods. In support of our hypothesis, a significant negative slope and no significant curvature (indicated in the equation by, respectively, $a_1 = -.69$, $p < .01$ and $a_2 = -.14$, *ns*) were observed. The negative slope on the incongruence line indicates that incongruence is not always related to negative attitudes and that a distinction has to be made between positive and negative incongruences. The negative linear trend indicates that perceiving more acculturation effort than expected is related to more positive attitudes (positive incongruence, $EX < PE$), whereas perceiving less acculturation effort than expected (negative incongruence, $EX > PE$) is related to more negative attitudes.

Second, in order to answer the question whether congruence is always related with positive outgroup attitudes or, alternatively, whether differential effects exist depending on the acculturation level that is agreed upon, the congruence line was inspected. A significant negative slope and no significant curvature (indicated in the equation by, respectively, $a_3 = -.68$, $p < .01$ and $a_4 = -.20$, *ns*) were observed. In contrast to the “congruence model”, the negative slope on the congruence line indicates that

congruence is not always related to positive outgroup attitudes and that a distinction has to be made between congruence on high, moderate, and low acculturation levels. The negative linear trend indicates that congruence on low acculturation levels is related to more positive attitudes towards Moroccan immigrants than congruence on moderate acculturation levels which in turn is related to more positive attitudes towards Moroccan immigrants than congruence on high acculturation levels. This means that the effect of congruence varies in function of how demanding the acculturation effort is for immigrants, with attitudes becoming more negative when congruence becomes more and more demanding for immigrants.

What is the optimal type of (in)congruence? Finally, when describing incongruence and congruence effects next to each other, it is also interesting to see which combination of acculturation expectancies by acculturation perceptions will lead to the most positive / the most negative attitudes towards Moroccan immigrants. From our previous analyses, we know that both positive incongruence and congruence on low acculturation levels are related to positive attitudes towards Moroccan immigrants, but we do not know which of the two conditions is related to the most positive attitudes towards Moroccan immigrants. Similarly, we know from our previous analyses that both negative incongruence and congruence on high acculturation levels are related to more negative attitudes, but we do not know which of the two conditions is related to the most negative attitudes towards Moroccan immigrants. To answer these questions, another analysis, namely conditional regression analysis is needed. For this, we divided the respondents in 3 groups on the basis of tertiles, resulting in a group expecting high levels of acculturation (= high expectancy group), a group expecting moderate levels of acculturation (= moderate expectancy group), and a group expecting low levels of acculturation (= low expectancy group). In the high expectancy group, it can be tested whether negative discrepancies or congruence on high expectancy levels will be related to the most negative attitudes towards Moroccan immigrants. In the low expectancy group, it can be tested whether positive discrepancies or congruence on low expectancy levels will be related to most positive attitudes towards Moroccan immigrants. For

each group, we regressed acculturation perceptions upon attitudes towards Moroccan immigrants ($Y = \beta_1 PE + \beta_2 PE^2$). For the high expectancy group (N= 129, acculturation perceptions ranging from 1 to 3, 67), no significant slope or curvature was found ($R^2=.13$; $\beta_1= .63, ns$; $\beta_2= -.27, ns$), indicating that attitudes towards Moroccan immigrants are not influenced by acculturation perceptions, or, in other words, that people who perceive a negative incongruence are equally negative towards Moroccan immigrants as people who perceive congruence. For the low expectancy group (N= 162, acculturation expectancies ranging from 1 to 3, 87), no significant slope or curvature was found ($R^2=.23$, $\beta_1= .74, ns$; $\beta_2= -.53, ns$), again indicating that attitudes are not influenced by acculturation perceptions, and that people who perceive a positive incongruence are equally positive towards Moroccan immigrants as people who perceive congruence. In the moderate expectancy group (N= 141, acculturation expectancies ranging from 1 to 4), however, both a significantly positive slope and curvature were found ($R^2=.20$, $\beta_1= 2.08, p < .01$; $\beta_2= -1.74, p < .01$). This curvilinear relation indicates that attitudes towards Moroccan immigrants became more negative at an exponential rate when people perceived low acculturation levels, or, in other words, that attitudes towards Moroccan immigrants were more positive when perceiving high or moderate acculturation levels compared to when low acculturation levels were perceived.

Discussion

In the present study, we investigated the effects of incongruence as well as congruence between host group's own acculturation expectancies (= the preferred acculturation attitudes of the host group members) on the one hand, and their acculturation perceptions (= the attitudes that host group members perceive in immigrant groups) on the other. We were interested in the differential effects of different types of incongruence and congruence on outgroup attitudes. This study focused on the attitudes of the Flemish host group towards Moroccan immigrants in Flanders.

Previous operationalisations in the congruence model. Two past studies (Rohmann et al., 2006; Zagefka and Brown, 2002) concluded that congruence between acculturation expectancies and

perceptions is related to the most positive intergroup outcomes, whereas increasing incongruence was related to increasingly negative intergroup outcomes. We labelled this finding as the 'congruence model', because congruence between acculturation expectancies and perceptions is believed to be optimal for intergroup relations. Despite the different methodologies in these studies, there was commonality with respect to the understanding of (in)congruence as a unidimensional concept. The current study challenged this assumption, postulating instead that different types of incongruence and different types of congruence could be differentially related to outgroup attitudes. By means of an alternative method, polynomial regression analysis, we demonstrated that different types of congruence and incongruence are associated with different attitudes towards Moroccan immigrants.

In order to ascertain, however, that our results could be attributed to a more refined method of analysis, and were not due to random differences in the data, we also replicated the regression analyses that were used in previous studies (Rohmann et al., 2006, Zagefka and Brown, 2002). Thus, we conducted regression analyses both with absolute differences between acculturation expectancies and perceptions as a predictor (Zagefka and Brown, 2002), and with algebraic differences (Rohmann et al., 2006) as a predictor of outgroup attitudes. Adopting the methodologies of previous research, we were in fact able to replicate previous findings. Here, we want to indicate that although we have consensual results, we want to propose a slightly different interpretation of the results obtained with the algebraic difference score than the one of Rohmann and colleagues (2006). In our opinion, the positive linear effect doesn't provide evidence for the congruence model, because a certain type of incongruence, namely positive incongruence, was found to result in most positive attitudes towards Moroccan immigrants. When Moroccan immigrants were found to maintain less and adopt more that the host group wants them to, attitudes tended to be more positive than was the case for congruence in acculturation attitudes. Consistent with the congruence model, negative differences were found to be related with more negative attitudes towards Moroccans than congruence. In sum, whereas absolute differences suggest that incongruence is always a bad thing, algebraic differences show that when

immigrants acculturate more than is expected (positive incongruence), this leads to even more positive attitudes than congruence.

Different types of (in)congruence. The same data analyzed with the polynomial regression analysis suggested that different types of congruence and different types of incongruence exist and that they have differential effects on attitudes towards Moroccan immigrants. First, we examined whether incongruence is always related to negative outgroup attitudes, as suggested by the results obtained with absolute difference scores, or whether different types of incongruence are differentially related to attitudes towards Moroccan immigrants as was suggested by the results obtained with algebraic difference scores. In support of the results obtained with algebraic differences scores, we found a difference between negative and positive incongruence; that is, whether minorities are perceived to acculturate more (positive incongruence) or less (negative incongruence) than expected is consequential for the host group's attitudes towards Moroccan immigrants. Attitudes towards Moroccan immigrants were more positive when a positive incongruence was observed than when a negative incongruence was observed. This means that host group members do not necessarily perceive any deviation from their expectations as negative, but rather that they are sometimes positively surprised by immigrants' acculturation level.

The unequal distribution of respondents over positive and negative incongruence, is the likely reason that we were also able to replicate the results by Zagefka and Brown (2002). Although a substantial group perceives positive incongruence, a clear majority of the Flemish perceived negative incongruence. When negative and positive incongruence are collapsed, as in Zagefka & Brown's (2002) method, negative incongruence thus drives the effect. This, however, is an artefact of the method and when using a more refined method, it becomes clear that differential effects for positive and negative incongruence exist.

Second, we investigated whether congruence between acculturation expectancies and perceptions is always associated with positive attitudes towards Moroccans, as was suggested in the

'congruence model' or whether there are differential effects depending on the level of acculturation at which perceptions and expectancies match (i.e., high, moderate, and low expectancy levels). Our analysis revealed that different types of congruence exist since attitudes towards Moroccan immigrants become more positive when the acculturation expectancies/perceptions congruence becomes less demanding. In effect, in case of congruence, host group's attitudes are most positive when the expectancy level concerns high levels of maintenance and low levels of adoption. These people seem to hold a multiculturalistic stance, because their idea of cultural diversity seems to go along with positive attitudes towards immigrants, including a desire for contact. In contrast, people who perceive congruence at high levels of acculturation demandingness (low levels of maintenance and high levels of adoption) are most negative towards immigrants. Even if they perceive immigrants to comply with host group's high assimilation demands, this does not temper their more negative stance towards them. This suggests that host group's attitudes towards minorities are largely implied, not by immigrants' (perceived) acculturation effort, but rather by preconceived expectations of the host group. We will return to this point.

What is the optimal type of (in)congruence? We investigated which specific combinations of expectancies and perceptions are related to the most negative / the most positive attitudes towards Moroccan immigrants. In order to answer this question, conditional regression analyses were conducted. Respondents were divided in three groups on the basis of their acculturation expectancies (i.e., a high, a moderate, and a low expectancy group). In this way, we were able to compare the results produced by the incongruence line with those produced by the congruence line. Concerning the most optimal acculturation expectancy and perception combination, we knew from our previous analyses, that both positive incongruence and congruence on low acculturation levels are related to positive attitudes towards Moroccan immigrants. Inspecting the slope of acculturation perception for the low expectancy group, we learned that positive outgroup attitudes are equally well predicted by perceiving congruence at low acculturation levels and by positive incongruence (=perceiving that immigrants do more than you

expect from them). This is in contrast with the congruence model, stating that only congruence is the most optimal combination of acculturation expectancies and perceptions for host group members. Concerning the least optimal combination, we knew from our previous analyses, that both negative incongruence and congruence at high levels of acculturation are related to negative attitudes towards Moroccan immigrants. Inspecting the slope of acculturation perceptions for the high expectancy group, we learned that both perceiving congruence at high acculturation levels and perceiving that immigrants do less than you expect from them (= negative incongruence) are equally related to negative outgroup attitudes. Yet again, this is inconsistent with the congruence model, which states that only incongruence will result in negative outgroup attitudes. In sum, not congruence or incongruence by itself, but rather the nature of both congruence and incongruence between acculturation expectancies and perceptions determines outgroup attitudes.

The conditional regression analyses give some indication about what minorities can contribute to majorities outgroup attitudes by allowing us to examine the effects that acculturation perceptions have for each expectancy group (high, moderate, and low expectancy group) separately. For both the high and the low expectancy group, perceived acculturation efforts did not modify the host group's attitudes towards Moroccan immigrants. Looking at the high expectancy group only, neither congruence nor negative incongruence had an effect on outgroup attitudes, suggesting that these attitudes are unaffected by the acculturation effort of immigrants. Similarly, isolating the low expectancy group, neither congruence nor positive incongruence had an effect on the outgroup attitudes of the host group. In this case, host group members may have a positive attitude towards immigrants regardless of the acculturation efforts of immigrants. The moderate expectancy group is the only one for which the perceptions of immigrant acculturation efforts did seem to matter. In this group, the attitudes towards Moroccan immigrants became more positive when perceiving high or moderate rather than low acculturation efforts. This may imply that, for people with pronounced expectancies, whether these are high or low, attitudes towards Moroccan immigrants are entirely determined by these expectancies. In

contrast, people having moderate acculturation expectancies will adapt their attitudes based on their perception of immigrants' acculturation effort.

Of course it could still be that immigrants' efforts will have an influence in the sense that they could change the acculturation expectancy itself. Evidence for this emerged from a more recent study by Zagefka, Brown, Broquard, & Leventoglu Martin (2007). Host group's perception of immigrants' orientation towards the own heritage culture was found to be negatively related to host group's preference for integration, whereas host group's perception of immigrants' orientation towards the host culture had a positive effect.

Methodological limitations and implications

A possible critique on the present study might be that the high and low expectancy groups are restricted in the acculturative efforts they perceive. For the high expectancy group, it is impossible to perceive positive incongruences, and for the low expectancy group, it is impossible to perceive negative incongruences. Hence, one could argue that our findings are an artefact of the restriction-of-range effect. However, perceptions had similar standard deviations and minimum/maximum ranges for the high, the low, and the moderate expectancy group. Moreover, low correlations were found between expectancies and perceptions in all three groups ($r = -.08, -0.13, \text{ and } -.24$). Hence, the finding that only the moderate group's attitudes towards Moroccan immigrants are context dependent does not merely reflect a statistical artefact. However, we want to indicate that rewording the acculturation items could lead to different effects. In the present items we asked to which extent participants approve of immigrants to maintain their culture in general, and to which extent they demand from them to adopt the Flemish culture in general. It became clear that people in the low expectancy group don't want to be too demanding for immigrants. When respondents would be asked what would be the best option for immigrants in the view of their own well-being it could well be that the preferred acculturation scores would be higher. Future research might want to clarify this. Further, it could be that the contact conceptualisation of the second acculturation issue (Berry, 1997) would lead to different results than the

presently used adoption conceptualisation. However, here we want to indicate that despite the fact that the adoption conceptualisation was used in the present study, we were able to replicate the findings of previous studies (Rohmann et al., 2006; Zagefka, & Brown, 2002) when using their methodology.

Conclusion. In sum, the effect of (in)congruence on the host group's outgroup attitudes appears to be more complicated than the simple story of the congruence model. Furthermore, perceived acculturation only influences these attitudes, when host group members have moderate acculturation expectancies. This means that immigrants' acculturation efforts may be less central to positive intergroup relations than has often been assumed. Thus our data suggest that in order to improve intergroup relations within immigrant societies, we should address the host expectancies as much as the immigrants' acculturation efforts. The focus of the debate on immigration that is now largely focused on motivating immigrants to change, may have to shift to including changes that the host group has to make in order to accommodate immigrants.

References

- Arends-Toth, J. V., & van de Vijver, F. J. R. (2007). Acculturation attitudes: A comparison of measurement methods. *Journal of Applied Social Psychology, 37*, 1462-1488.
- Atwater, L. E., Ostroff, C., Yammarino, F. J., & Fleenor, J. W. (1998). Self-other agreement: does it really matter? *Personnel Psychology, 51*, 577-598.
- Berry, J. W. (1997). Immigration, acculturation, and adaptation. *Applied Psychology: An International Review, 46*, 5-68.
- Breugelmans, S. M., & Van de Vijver, F. J. R. (2004). Antecedents and components of majority attitudes toward multiculturalism in the Netherlands. *Applied Psychology: An International Review, 53*, 400-422.
- Bourhis, R. Y., Moise, L. C., Perreault, S., & Senecal, S. (1997). Towards an interactive acculturation model: A social psychological approach. *International Journal of Psychology, 32*, 369-389.
- Edwards, J. R. (2001). Ten difference score myths. *Organizational Research Methods, 4*, 265-287.
- Edwards, J. R. (2002). Alternatives to difference scores: Polynomial regression analysis and response surface methodology (pp. 307- 324). In F. Drasgow & N. W. Schmitt (Eds.), *Advances in Measurement and Data Analysis*. San Francisco: Jossey-Bass .
- Edwards, J. R. & Parry, M. E. (1993). On the use of polynomial regression equations as an alternative to difference scores in organizational research. *Academy of Management Journal, 36*, 1577-1613.
- Lambert, L. S, Edwards, J. R., & Cable, D. M. (2003). Breach and fulfillment of the psychological contract: A comparison of traditional and expanded views. *Personnel Psychology, 56*, 895-934.
- Liebkind, K. (2001). Acculturation. In S. Brown & S. Gaertner (Eds.): *Blackwell Handbook of Social Psychology: Intergroup Processes* (pp. 386-406). Oxford: Blackwell.
- Phalet, K. & Swyngedouw, M. (2004). Immigrant and host values and acculturation orientations. In H. Vinken, J. Soeters, P. Ester (Eds), *Comparing cultures: Dimensions of culture in a comparative perspective* (pp. 181-208). Leiden-Boston: Brill.

- Piontkowski, U., Rohmann, A., & Florack, A. (2002). Concordance of acculturation attitudes and perceived threat. *Group Processes and Intergroup Relations*, 5, 221–232.
- Ramsey, F. L., & Schafer, D. W. (2002). *The statistical Sleuth: A course in methods of data analysis*. (2nd ed.). New York: Duxbury Press.
- Redfield, R., Linton, R., & Herskovits, M. (1936). Memorandum on the study of acculturation. *American Anthropologist*, 38, 149-152.
- Rohmann, A., Florack, A., & Piontkowski, U. (2006). The role of discordant acculturation attitudes in perceived threat: An analysis of host and immigrant attitudes in Germany. *International Journal of Intercultural Relations*, 30, 683-702.
- Rudmin, F. W. (2003). Critical history of the acculturation psychology of assimilation, separation, integration, and marginalization. *Review of General Psychology*, 7, 3–37.
- Snauwaert, B., Soenens, B., Vanbeselaere, N., & Boen, F. (2003). When integration does not necessarily imply integration: Different conceptualizations of acculturation orientations lead to different classifications. *Journal of Cross-Cultural Psychology*, 32, 231-239.
- Zagefka, H., & Brown, R. (2002). The relationship between acculturation strategies, relative fit and intergroup relations: immigrant-majority relations in Germany. *European Journal of Social Psychology*, 32, 171-188.
- Zagefka, H., Brown, R., Broquard, M., & Leventoglu Martin, S. (2007). Predictors and consequences of negative attitudes toward immigrants in Belgium and Turkey: The role of acculturation preferences and economic competition, *British Journal of Social Psychology*. 46: 153-169.
- Zick, A., Wagner, U., Van Dick, R., & Petzel, T. (2001). Acculturation and prejudice in Germany: Majority and minority perspectives. *Journal of Social Issues*, 57, 541–557.

Footnotes

- 1 Observations were screened using studentized residuals, leverage, and Cook's D statistics criteria. Observations that exceeded the recommended cutoff value of Cook's D in combination with exceeding cutoff values of either studentized residuals or leverage were diagnosed as deviating and influential (Ramsey, & Schafer, 2002). In practice, no observations had to be removed from analysis.