

RESEARCH ARTICLE

Dual identity, in-group projection, and out-group feelings among ethnic minority groups

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Abstract

This study extends research on dual identity and in-group projection by considering category prototypicality and indispensability, and by focusing on ethnic minority members and their attitudes towards the native majority and minority out-groups. Among a sample of 491 participants of the three largest immigrant-origin groups in the Netherlands, it was found that the minority in-group was seen as relatively more prototypical and relatively more indispensable for the national category in comparison with minority out-groups, but not in comparison with the native majority. In support of the in-group projection model, stronger dual identity was associated with higher relative in-group prototypicality and relative in-group indispensability in comparison with the majority and, via both these relative perceptions, to a less positive attitude towards the native Dutch. In addition and in support of the common in-group identity model, dual identity was associated with more positive minority out-group feelings via higher minority out-group prototypicality and indispensability. It is concluded that dual identity can have both positive and negative consequences for intergroup relations depending on perceived (relative) prototypicality and indispensability, and depending on whether the out-group is the majority or other minorities.

In social psychology, the so-called ‘multicultural challenge’ (Shweder et al., 2002) is viewed in terms of finding the right balance between the need for distinctiveness and for similarity (e.g., Brewer, 1991; Dovidio, Gaertner, Hodson, Riek, Johnson, & Houlette, 2006; Hornsey & Hogg, 2000a; Hogg & Hornsey, 2006). Different models on the importance of a superordinate category for intergroup relations have been proposed, like the Common In-group Identity Model (CIIM: Gaertner, Dovidio, Anastasio, Bachman, & Rust, 1993), the Dual Identity Model (Hornsey & Hogg, 2000a), and the In-group Projection Model (Mummendey & Wenzel, 1999). Research has tested these models and the conditions under which a superordinate category has beneficial effects (e.g., Gaertner, Mann, Dovidio, Murrell, & Pomare, 1990; Gaertner, Mann, Murrell, & Dovidio, 1989) or rather leads to increased intergroup tension (e.g., Brown & Wade, 1987; Deschamps & Brown, 1983; Hornsey & Hogg, 2000b).

The current study aims to make a contribution to this literature by studying among ethnic minority members dual identity, in-group projection, and out-group feelings towards the native majority group as well as towards minority out-groups. Furthermore, we examine in-group projection in terms of relative prototypicality and relative indispensability. In-group projection is typically investigated in terms of relative in-group prototypicality, but recent research suggests that the perception of being relatively indispensable for the identity of the superordinate category is an additional process of in-group projection (Verkuyten, Martinovic, & Smeekes, 2014). This process might be especially important for immigrant-origin groups in non-settler European societies who might face more reality constraints for claiming to represent the national category than for being indispensable of it. Thus, in contrast to most of the research on in-group projection, we (1) examine both category prototypicality and indispensability, (2) focus on ethnic minority members

and their attitudes towards the native majority group and minority out-groups, and (3) consider the role of dual identity.

The process of in-group projection is most likely when the subgroups are fully nested within the superordinate category (Hall & Crisp, 2005; Wenzel, Mummendy, & Waldzus, 2007). An example is different ethnic groups within a nation state whereby the nation forms the relevant comparison background for in-group projection. In the current study, we focus on the three numerically largest immigrant-origin groups in the Netherlands (of Turkish, Moroccan, and Surinamese background) who all find themselves in a disadvantageous position compared with the native Dutch (Huijnk, Gijsberts, & Dagevos, 2013).

Prototypicality and Indispensability

In-group projection refers to 'the perception, or claim, of the in-group's greater relative prototypicality for the superordinate group' (Wenzel et al., 2007, p. 337). As a consequence of this projection, people consider their subgroup as normative for the common inclusive category. When this occurs, the out-group is judged as deviating from this normative standard and therefore evaluated unfavourably.

Prototypes imply a graded category structure whereby the more peripheral parts can be relatively easily missed. In diverse, multicultural societies, the question however is not only whether some subgroups can claim to best represent the shared national category but also whether subgroups are considered to be an indispensable or necessary part of that category. Indispensability is more likely for a category representation that is compositional and in which the different parts make up the overarching whole. Membership in compositional categories is not necessarily determined by prototypical similarity or resemblance but rather by indispensability of its diverse and dissimilar components. In these 'team-like' or 'jigsaw-like' categories, all parts are necessary and therefore indispensable because it is their functional relationship that determines the meaning of the whole (Fodor & Lepore, 1996; Prinz, 2012; Sacks, 1972). Yet, people can perceive their own subgroup as relatively more indispensable for the nature of the overarching category and therefore as more relevant for it. Research in Malaysia, Mauritius, and the Netherlands has shown that category prototypicality and indispensability can be distinguished empirically and that both are independently associated with less positive out-group attitudes among ethnic majority and minority members (Ng-Tseung & Verkuyten, 2010; Verkuyten & Khan,

2012; Verkuyten et al., 2014). In the current study, we considered the distinction between perceptions of prototypicality and indispensability of relevant out-groups.

Relative in-group prototypicality (RIP) and relative in-group indispensability (RII) can both serve as criteria for negative out-group evaluation. In line with the in-group projection model, groups that consider themselves as relatively more prototypical and as more indispensable of the superordinate category can be expected to evaluate out-groups less positively. Thus, the more ethnic minority members consider their in-group as relatively prototypical and indispensable for the national category in comparison with the majority group, the more negative they will evaluate this out-group. Furthermore, these associations for RIP and RII can also be expected in comparison with minority out-groups: considering one's minority subgroup as relatively more prototypical and indispensable for the superordinate category than other minority groups will lead to evaluating these minority out-groups more negatively.

Relative in-group prototypicality is linked to social advantages such as perceived legitimate higher status and entitlements based on one's superordinate category membership (Wenzel, 2004). From an intergroup competition perspective, a gain in status and entitlements of other minority groups implies a challenge and loss for one's own minority group. Additionally, social identity theory argues that intergroup differentiation contributes to a positive social identity (Tajfel & Turner, 1979). This means that minority group members can be expected to have a tendency to perceive their ethnic in-group as relatively more prototypical for the national category than other minority groups. The same tendency can be expected for relative in-group indispensability because indispensability can form a relevant comparison standard for positive in-group distinctiveness and a basis for group status and entitlements implied in membership of the superordinate category. Ethnic minority groups have been found to associate their in-group more strongly than other minority out-groups with the concept of diversity: they are more likely to think of their in-group than to think of minority out-groups with respect to diversity (Unzueta & Binning, 2010). Thus, we expected that participants will perceive their ethnic minority in-group as more indispensable and as more prototypical of the superordinate category than other minority groups.

These perceptions are less likely in relation to the native majority group. Socio-structural realities can constrain the extent to which one's in-group is viewed to embody the superordinate category. In the West European context with its large and dominant native

majority populations, it is difficult for immigrant-origin groups to perceive their minority group as prototypical of the national category (Hahn, Judd, & Park, 2010). The fact that these groups have a relatively short history in the country of settlement and their small size and lower status and power form clear reality constraints for prototypicality perceptions (Waldzus, Mummendey, Wenzel, & Boettcher, 2004). Thus, also immigrant-origin groups should link the national identity more strongly to the native majority group (Devos & Banaji, 2005; Devos, Gavin, & Quintana, 2010).

However, it might be easier for minority members to consider their group as relatively indispensable for the national category. Small parts can be indispensable for the compositional whole without representing it. Reality constraints for perceiving one's minority group embodying the nation can have less of a limiting influence on the perception of relative indispensability. Ethnic minority members tend to have a more compositional understanding of the national category than natives. Whereas majority members tend to consider diversity as a concept relevant to minorities, minorities themselves associate their in-group with heterogeneity and consider diversity as highly relevant to their in-group (Unzueta & Binning, 2010; Verkuyten, 2006). Thus, although it is not very likely that immigrant-origin groups perceive their group as relatively more indispensable for the national category than the majority, they can be expected to perceive their in-group as relatively more indispensable than prototypical.

Dual Identity Model

The common in-group identity model (CIIM: Gaertner & Dovidio, 2000) proposes that inducing an inclusive, superordinate identity improves attitudes towards former out-groups because of processes involving perceived similarity and pro in-group bias. The original model did not take into account, however, that a common, superordinate identity can be threatening to the distinctiveness of subgroup identities and therefore leads to increased levels of bias. This is especially likely among ethnic minority members who tend to attach great importance to their heritage culture. These members might resist relinquishing their cultural identity and can have more negative attitudes towards the dominant majority group when a common identity is induced. Based on these considerations and on empirical findings (e.g., Hornsey & Hogg, 2000a) and research on the mutual intergroup differentiation model (Brown & Hewstone, 2005), a dual identity model of re-categorization has been proposed (Dovidio, Gaertner, & Saguy, 2007). This model argues for the

need to acknowledge and value subgroup identities within the context of an overarching category. Dual identity would lead to more positive out-group attitudes because it is not threatening to a valuable subgroup identity and because it uses the beneficial effects of a common in-group identity. Research has demonstrated that emphasizing or creating a dual identity is indeed effective for improving attitudes towards relevant out-groups (e.g., González & Brown, 2003, 2006).

Yet, according to the in-group projection model, a stronger sense of dual identity can lead to greater in-group projection and therefore to more negative out-group attitudes (Wenzel et al., 2007). In-group projection would occur when both the in-group and the superordinate category are psychologically relevant for the self. Dual identifiers would tend to consider their in-group as relatively prototypical and indispensable because, on the one hand, they value the superordinate category and, on the other hand, they want to maintain positive in-group regard and further the status of their in-group. Thus, RII and RIP become relevant and desirable when people identify with the common category, and the tendency to see the in-group as positively distinct on relevant standards such as prototypicality and indispensability is stronger among higher dual identifiers. Indeed, a few studies have found that stronger dual identification is related to more negative out-group evaluations (Gaertner, Bachman, Dovidio, & Banker, 2001) because of higher relative in-group prototypicality (Wenzel, Mummendey, Weber, & Waldzus, 2003; Waldzus, Mummendey, Wenzel, & Weber, 2003).

Following the in-group projection model, dual identity can be expected to be associated with higher RII and RIP in comparison with the majority. In countries such as the Netherlands and Germany, national identities are typically defined by reference to the ethnicity of the dominant majority group: Dutch tends to mean ethnic Dutch, and German means ethnic German. In addition, in these countries, dual identity among immigrant-origin groups takes the form of national identification being added to a relatively strong ethnic minority identity (Fleischmann & Verkuyten, 2015; Verkuyten & Martinovic, 2012). A dual identity is defined in relation to the native majority group, and the superordinate category of the nation is a reference point for comparisons with the native Dutch. Furthermore, seeing one's in-group as prototypical and indispensable relative to the dominant majority group is important for the public regard and social standing of one's minority in-group. Thus, stronger dual identification can be expected to be associated with higher RII and RIP in comparison with the Dutch majority and, via RII and RIP, to a less positive attitude towards the Dutch.

It is less clear whether dual identification can be expected to play a similar role in comparison with minority out-groups. On the one hand, and in line with the in-group projection model, dual identity might encourage minority intergroup differentiation with reference to the national category. For dual identifiers, the national category might be a reference point for minority subgroup comparisons leading to a tendency to show in-group projection in relation to minority out-groups. On the other hand, and more in line with the CIIM, dual identification could imply a more heterogeneous understanding of the superordinate category, as being made up of different, complementary parts.¹ Whereas low dual identifiers emphasize their distinctive ethnic minority identity, high dual identifiers might associate the national category with the concept of diversity that implies different minority groups and inhibits in-group projection (Unzueta & Binning, 2010; Wenzel et al., 2007). This would mean that dual identifiers consider not only their in-group but also minority out-groups as more prototypical and indispensable for the national category. As a result, dual identification will not be related to RII and RIP in relation to minority out-groups. Instead, we would expect a positive association between dual identity and attitudes towards minority out-groups, because of perceived minority in-group and minority out-group absolute scores for prototypicality and indispensability.

Summary

To summarize, we expect that the minority participants will consider the Dutch majority group as relatively more prototypical and indispensable for the common national category than their in-group (H1). However, the relative difference was expected to be smaller for indispensability than for prototypicality (H2). Furthermore, participants were expected to perceive their ethnic minority group as more prototypical and indispensable for the national category relative to minority out-groups (H3). Higher dual identification was expected to be associated with higher RII and RIP relative to the Dutch majority (H4), and it will be explored whether there is a similar association relative

to minority out-groups or that dual identification is related to absolute scores of in-group and minority out-group indispensability and prototypicality. Finally, considering one's minority in-group as relatively more prototypical and as relatively more indispensable was expected to be associated with less positive feelings towards the Dutch and towards minority out-groups (H5).

METHOD

Participants and Procedure

In 2014, an online survey was distributed in the Netherlands among adults of Moroccan, Turkish, and Surinamese origin by a Dutch research consultancy (TNS-NIPO) that maintains a panel of native Dutch and ethnic minority participants. The panel is diverse in terms of age, gender, education, household size, and the region of residence, thereby yielding data that are demographically quite representative for the Netherlands. Among the people who completed the survey ($N=491$), 32% were of Moroccan, 34% of Turkish, and 34% of Surinamese origin. Females made up 56%, and the age varied from 18 to 84 years ($M=41.17$, $SD=13.16$). Ten per cent of the participants only completed primary education, 12% a lower vocational track, 41% a higher vocational track, 13% the highest level of secondary education (pre-university track), and 24% were in possession of a tertiary degree.

Measures

The main independent variable in our study is dual identification that can be conceptualized and measured in different ways (e.g., Hopkins, 2011). For example, a dual identity can be conceptualized in terms of identity compartmentalization and alternation in which the context determines which aspect of the duality predominates, or rather in terms of fusion and blending. Additionally, dual identity can be assessed more indirectly by computing the interaction between separate group identifications (ethnic and national) or more directly by using dual identity items. Both approaches do not necessarily yield the same findings (Fleischmann & Verkuyten, 2015), and in the context of migration, the latter one more adequately captures the phenomenology of dual identity (Verkuyten, 2005). In the literature, different items have been suggested for measuring dual identity (Benet-Martinez and Haritatos, 2005; Simon & Ruhs, 2008; Martinovic & Verkuyten, 2014), and we used six of these items that tap into a sense of combined belonging to one's ethnic group and to the

¹Wenzel and colleagues (2007) have pointed out that in the CIIM, the dual identity representation can have two different meanings. One is the simultaneous salience of subordinate and superordinate identities that can lead to processes of in-group projection. The other—which concerns us here—refers to the complementary representation of the superordinate category. It is also important to note that the CIIM is not specifically concerned with perceptions of prototypicality and indispensability, but rather with common in-group inclusion per se.

Dutch.² The Surinamese participants, for instance, have the following wording: 'I feel Surinamese-Dutch', 'I see myself as both Surinamese and Dutch', 'I feel like I am a combination of Surinamese and Dutch', 'Depending on the situation, I feel more Surinamese or more Dutch', 'Sometimes I feel Surinamese, and at other times Dutch', and 'I have the impression I am always switching between feeling Surinamese and feeling Dutch'. Participants could disagree or agree with these statements on a 7-point scale, with a higher score representing a stronger dual identification. Although the first three items measure blended or fused dual identity and the latter three compartmentalized or alternating dual identity (Roccas & Brewer, 2002), the items were all very highly correlated, with a Cronbach's alpha of .94. Therefore, we used all six items as a measure of dual identification.

The main dependent variable *out-group attitude* was assessed with the well-known 'feeling thermometer'. Participants were asked to indicate on a scale from 0° to 100° how warm or positive their feelings were towards each of five groups: Turks, Moroccans, Surinamese, Antilleans, and native Dutch. The score for the native Dutch indicated the level of positive feelings towards the majority, and positive feelings towards other minorities represented the average score for the three minority groups other than one's own (Cronbach's $\alpha = .94$ for the Moroccans, .90 for the Turks, and .87 for the Surinamese).

We measured the first mediator—category indispensability—with the following question (5-point scale): 'To what extent is each of the mentioned groups indispensable for the cultural diversity of the Netherlands, that is, an indispensable part of the country as a whole?' (see Ng Tseung-Wong & Verkuyten, 2010; Verkuyten, et al., 2014). Five groups were listed: Turks, Moroccans, Surinamese, Antilleans, and native Dutch.

For measuring the second mediator—category prototypicality—participants were asked to assess separately the prototypicality of each of the five groups (Turks, Moroccans, Surinamese, Antilleans, and native Dutch). The question (5-point scale) was as follows: 'To what extent are the following groups representative of the Netherlands as a whole, that is, how strong is the overlap between each group and the Netherlands as a whole?' (see Ufkes, Otten, Van der Zee, Giebels, & Dovidio, 2012; Walczus et al., 2003).

A confirmatory factor analysis in Mplus (version 7) showed that the items for out-group indispensability

(each referring to one of the four out-groups), out-group prototypicality (idem), and dual identification loaded on separate latent constructs. A model with three latent factors fitted the data well, $\chi^2(67) = 79.79$, $p > .10$, CFI = .99, RMSEA = .020 (low = .000, high = .035), SMRM = .029, after allowing error variances of the items for prototypicality and indispensability referring to the same ethnic group to co-vary as well as the variances of the three items for alternating dual identity. A measurement model in which the items representing out-group indispensability and prototypicality were made to load on a common factor had a worse fit, $\chi^2(69) = 597.27$, $p < .001$, CFI = .90, RMSEA = .125 (low = .116, high = .134), SMRM = .106, as demonstrated by a significant chi-square difference test, $\Delta\chi^2 = 517.48$, $\Delta df = 2$, $p < .001$. We are therefore confident that our two mediating constructs are empirically distinct.

Moreover, the items for Dutch prototypicality and Dutch indispensability had somewhat lower loadings on their respective factors (.65 for indispensability, .33 for prototypicality) compared with the loadings for minority out-groups (all between .72 and .93). This indicates that indispensability and prototypicality of the majority group are conceptually different from indispensability and prototypicality of minority out-groups. Based on these findings and our theoretical reasoning, we proceeded with making a distinction between indispensability of the majority and minority out-groups as well as between prototypicality of the majority and minority out-groups.

The indispensability questions and listing of the groups imply an intergroup comparison for computing two relative in-group indispensability scores (Ng Tseung-Wong & Verkuyten, 2010; Wenzel et al., 2007). We computed in-group indispensability relative to the Dutch (RII-D) by subtracting the score for perceived Dutch indispensability from in-group indispensability. Second, in-group indispensability relative to other minorities (RII-M) was calculated by subtracting the average score of perceived indispensability of the three other minority groups from in-group indispensability. For both measures, a score higher than zero indicates that the in-group is seen as more indispensable than the comparison out-group. In the same way as for indispensability, we computed two relative scores for prototypicality: in-group prototypicality relative to the Dutch (RIP-D) and in-group prototypicality relative to other minorities (RIP-M).

RESULTS

Mean Scores and Associations

As shown in Table 1, participants of the three ethnic groups had similar levels of dual identification, and they

²In this paper, we focus on ethnic minority members, and therefore, the dual identity items relate to the minority perspective. The meaning of these items could be different for majority group members. Yet, in countries such as the Netherlands and Germany, majority members do not think of themselves in terms of dual identity because ethnic and national group membership overlaps (Dutch means ethnic Dutch).

Table 1. Means and standard deviations of the different measures and the three ethnic groups

	Turks (<i>N</i> = 165)	Moroccans (<i>N</i> = 158)	Surinamese (<i>N</i> = 168)	
	Mean (<i>SD</i>)	Mean (<i>SD</i>)	Mean (<i>SD</i>)	<i>F</i> -value
Feeling thermometers				
Feelings towards the Dutch	69.30 (25.9)	72.04 (26.1)	74.57 (21.1)	2.11
Feelings towards other minorities	46.07 ^a (24.9)	64.74 ^b (25.3)	47.58 ^a (24.3)	27.25***
Relative indispensability				
Relative to Dutch	−0.17 (0.87)	−0.11 (0.69)	−0.10 (0.75)	0.45
Relative other minorities	0.38 ^a (0.85)	0.12 ^b (0.48)	0.68 ^c (0.99)	18.88***
Relative prototypicality				
Relative to Dutch	−0.77 ^a (1.14)	−0.81 ^b (1.25)	−0.24 ^a (1.06)	12.35***
Relative other minorities	0.36 ^a (0.78)	0.12 ^b (0.58)	1.29 ^c (0.97)	127.76***
Dual identification	4.23 (1.95)	4.18 (1.86)	4.54 (1.83)	1.71

Note: Different superscripts in rows indicate significant differences ($p < .01$) between ethnic groups.

*** $p < .001$.

all reported significantly more positive feelings towards the native Dutch than towards the minority out-groups ($p_s < .001$).

We compared indispensability and prototypicality scores relative to the Dutch and the minority out-groups, separately for the three ethnic groups (Table 1). Participants of all three groups saw the Dutch as more indispensable and more prototypical than their own group. For the total sample and in support of the first hypothesis (H1), one sample *t*-tests showed that RII-D and RIP-D were both significantly different from zero, $t(473) = -3.55$, $p < .001$, and $t(473) = -11.08$, $p < .001$ ($M = -0.13$, $SD = 0.77$, and $M = -0.59$, $SD = 1.17$, respectively). Furthermore, as expected (H2), the minority participants considered their in-group as relatively more indispensable than prototypical compared with the Dutch, pair-wise $t(473) = 8.41$, $p < .001$.

In support of hypothesis 3, we found that all three ethnic groups considered their in-group as more indispensable and more prototypical for the national category than the other minority groups. This was strongest for the Surinamese, followed by the Turks and then the Moroccans. For the total sample, one sample *t*-tests showed that RII-M and RIP-M were both significantly higher than zero, $t(473) = 10.45$, $p < .001$, and $t(473) = 11.96$, $p < .001$ ($M = 0.41$, $SD = 0.85$, and $M = 0.55$, $SD = 0.99$, respectively). Furthermore, RII-M was again significantly higher than RIP-M, pair-wise $t(473) = 2.87$, $p = .002$.

Table 2 shows the correlations between the variables. In-group indispensability and prototypicality relative to the Dutch were moderately positively correlated ($r = .20$), and so were in-group indispensability and prototypicality relative to other minorities ($r = .39$). Furthermore, relative in-group indispensability and prototypicality were both significantly and negatively related to positive out-group feelings (regarding the Dutch out-group, $r = -.24$ and $r = -.13$, respectively; regarding minority out-groups, $r = -.33$ and $r = -.30$).

Table 2. Correlations between the different measures

	1.	2.	3.	4.
1. Feelings towards out-group	–	−.24***	−.13**	.02
2. Relative in-group indispensability	−.33***	–	.20***	.12**
3. Relative in-group prototypicality	−.30***	.39***	–	.09*
4. Dual identification	.16***	−.07	−.01	–

Note: Above the diagonal, out-group is the Dutch; below the diagonal, out-group is other minorities. Feelings towards out-group, relative in-group indispensability and relative in-group prototypicality, thus, represent different measures below and above the diagonal. Dual identification is the same construct on both sides of the diagonal.

* $p < .05$; ** $p < .01$; *** $p < .001$.

Dual identification was positively and significantly related to RII-D ($r = .12$) and RIP-D ($r = .09$), but not to RII-M and RIP-M.

Feelings Towards the Dutch Majority

To test our hypotheses about feelings towards the Dutch, we estimated a structural model in which RII-D and RIP-D were entered as mediators, and dual identification (latent factor) served as the main independent variable. We controlled for ethnicity, education, and age in relation to the dependent variable and both mediators.³ The effect of gender proved not to be significant and therefore was not further considered. Two indirect paths from dual identification to out-group feelings via RII-D and RIP-D were specified to test

³As to control variables, neither ethnicity nor education nor age was related to feelings towards the Dutch. Higher educated tended to view their in-group as relatively less prototypical than the Dutch out-group, $\beta = -.164$, $t = -3.52$, $p < .001$, but not significantly as less indispensable, $\beta = -.078$, $t = -1.71$, $p = .087$. Older participants perceived less relative in-group prototypicality, $\beta = -.155$, $t = -3.33$, $p = .001$.

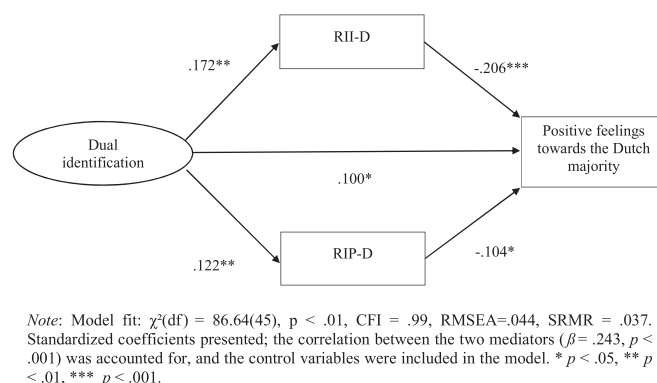


Fig. 1: In-group indispensability relative to the Dutch majority group (RII-D) and prototypicality relative to the Dutch (RIP-D) as mediators between dual identification and positive feelings towards the Dutch majority

the mediation hypotheses. Following Preacher and Hayes (2008), we used bootstrapping with 1000 samples to obtain confidence intervals for the indirect effects.

Dual identification was related to higher RII-D and RIP-D, and in turn, these were both related to less positive feelings towards the Dutch (Figure 1). These findings support hypotheses 4 and 5. The direct association between dual identification and feelings towards the Dutch was also positive and significant. Furthermore, there was only mediation via indispensability and not via prototypicality.⁴ The indirect effect of dual identification via RII-D was negative and significant, $\beta = -.035$, $t = -2.689$, $p = .007$ (lower CI = $-.061$, higher CI = $-.010$), whereas the indirect effect via RIP-D was also negative but did not reach significance, $\beta = -.013$, $t = -1.56$, $p = .118$ (lower CI = $-.029$, higher CI = $.003$).⁵

Feelings Towards Other Ethnic Minorities

Next, we tested a similar model predicting feelings towards the minority out-groups using RII-M and RIP-M as two mediators. Dual identification was again the main independent (latent) variable. In the same way as above, we controlled for ethnicity, education, and age,⁶ and we estimated two indirect paths from dual

identification to minority out-group feelings via RII-M and RIP-M.

Dual identification was not related to the perceptions of relative in-group indispensability, but it was positively related to relative in-group prototypicality.⁷ Furthermore, RIP-M and RII-M did not mediate the relationship between dual identification and minority out-group feelings (both indirect effects $p_s > .05$). Yet, the direct association between dual identification and feelings towards minorities was significant and positive: ethnic minority members with a stronger dual sense of identity tend to view other minorities in a more positive light. At the same time, and in support of hypothesis 5, there are significant associations between RII-M and RIP-M and out-group feelings. The more prototypical and indispensable participants view their in-group compared with other minorities, the less they like these minorities (Figure 2).⁸

Absolute Prototypicality and Indispensability Scores

According to the CIIM, dual identification will not be related to RII and RIP in relation to minority out-groups. Rather, dual identification should be positively related to perceived minority in-group and minority out-group absolute scores for prototypicality and indispensability. In an additional analysis, we therefore examined the

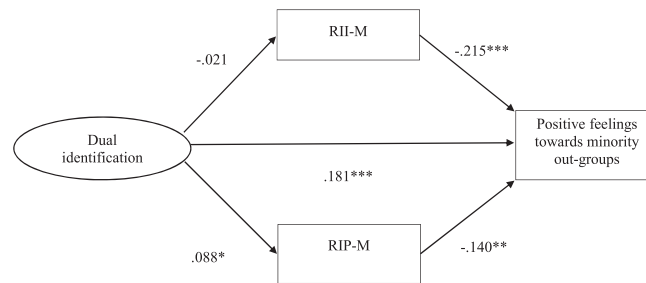
⁴We get substantially the same results when using divided instead of subtracted scores for calculating relative in-group indispensability and prototypicality (Ullrich, 2009).

⁵We also tested the model for each ethnic group separately, and the pattern of findings was similar for the three groups. For example, for the three groups, the associations between dual identification and RII-D and RIP-D were positive, and the paths between, on the one hand, RII-D and RIP-D and, on the other hand, out-group feelings were negative.

⁶Regarding the control variables, age was not related to the mediators and the dependent variable. Higher educated perceived their in-group as relatively less indispensable, $\beta = -.112$, $t = -2.56$, $p = .011$, and less prototypical than the Dutch out-group, $\beta = -.076$, $t = -1.98$, $p = .047$. Education was also related to more positive feelings towards other minorities, $\beta = .101$, $t = 2.39$, $p = .011$.

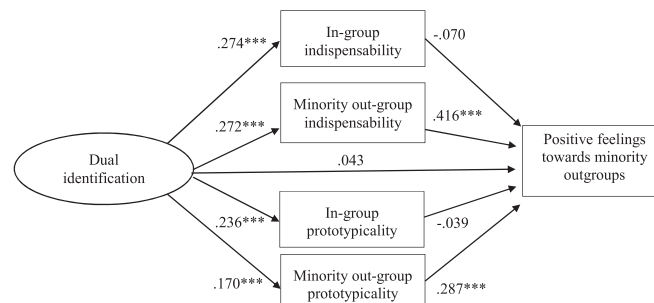
⁷We again found a similar pattern of results when using divided scores instead of subtracted scores for calculating in-group indispensability and prototypicality relative to other ethnic minorities. However, with divided scores, there was not a significant path between dual identity and RIP-M ($\beta = .035$, $p > .10$).

⁸We again examined the model for the three ethnic groups separately, and the pattern of findings is similar. For example, RII-M is negatively—although not always significantly—related to feelings towards minorities for all three groups. And with the exception of Moroccans, RIP-M is also negatively associated to out-group feelings.



Note: Model fit: $\chi^2(df) = 87.85(45)$, $p < .01$, CFI = .99, RMSEA=.044, SRMR = .038. Standardized coefficients presented; the correlation between the two mediators ($\beta = .240$, $p < .001$) was accounted for, and the control variables were included in the model. * $p < .05$, ** $p < .01$, *** $p < .001$.

Fig. 2: In-group indispensability relative to minority out-groups (RII-M) and prototypicality relative to minority out-groups (RIP-M) as mediators between dual identification and positive feelings towards other ethnic minorities



Note: Model fit: $\chi^2(df) = 118.32(57)$, $p < .001$, CFI = .98, RMSEA=.047, SRMR = .043. Standardized coefficients presented; the correlations between the four mediators were accounted for (in-group indispensability and prototypicality, $\beta = .070$, $p = .033$; out-group indispensability and prototypicality, $\beta = .148$, $p < .001$; in-group and out-group indispensability, $\beta = .669$, $p < .001$; in-group and out-group prototypicality, $\beta = .554$, $p < .001$). The control variables were included in the model. *** $p < .001$.

Fig. 3: Absolute in-group and minority out-group indispensability and prototypicality as mediators between dual identification and positive feelings towards other ethnic minorities

relations between dual identity and minority out-group perceptions further by considering the absolute scores. Figure 3 shows that dual identity was related to higher in-group and minority out-group indispensability and prototypicality, but only minority out-group indispensability and prototypicality were, in turn, related to more positive feelings towards minorities. The two indirect paths through minority indispensability and prototypicality are both significant, $\beta = .113$, $t = 4.70$, $p < .001$ (lower CI=.066, higher CI=.160), and $\beta = .049$, $t = 3.20$, $p = .001$ (lower CI=.019, higher CI=.079), respectively. Thus, stronger dual identifiers do not only see their in-group but also other minorities as more indispensable and prototypical for the superordinate national category, and therefore, they like minority out-groups more. Although in-group prototypicality and indispensability are higher for dual identifiers, this does not translate into more negative feelings towards other ethnic minorities.

We also examined the associations between dual identity and the absolute scores of Dutch out-group indispensability and prototypicality. Higher dual identification was associated with higher Dutch out-group indispensability ($\beta = .152$, $t = 2.99$, $p = .003$) but not with Dutch out-group prototypicality ($\beta = .086$, $t = 1.79$, $p > .05$). Higher Dutch prototypicality and indispensability were both associated with more favourable feelings towards the Dutch, $\beta = .193$, $t = 3.69$, $p < .001$, and $\beta = .354$, $t = 5.30$, $p < .001$, respectively. In addition, in-group indispensability ($\beta = -.141$, $t = -2.06$, $p = .039$), but not in-group prototypicality ($\beta = .078$, $t = 1.53$, $p > .05$), was significantly and negatively associated with feelings towards the native Dutch.⁹

⁹The model had a good fit: $\chi^2(df) = 123.73(57)$, $p < .001$, CFI = .98, RMSEA = .049, SRMR = .044.

DISCUSSION

We have gone beyond the existing social psychological research on common in-group identity and in-group projection in three ways: (1) by examining both category prototypicality and indispensability; (2) by focusing on ethnic minority members and their attitudes towards the native majority group as well as minority out-groups; and (3) by considering the role of dual identity.

Participants made an empirical distinction between category prototypicality and indispensability that supports recent research that shows that the sense of a being indispensable for the superordinate category is not the same as considering a group as prototypical of this category (Ng Tseung-Wong & Verkuyten, 2010; Verkuyten et al., 2014). Category representations do not necessarily, or only, have an internally graded structure in which some subgroups are more prototypical and thus define the shared category better than others. They can also be understood as consisting of combinable and complementary subgroups that are indispensable for defining the common identity, similar to a mosaic or jigsaw puzzle. Moreover, similar to relative in-group prototypicality, there can be the perception or claim of the in-group's relative indispensability for the superordinate category. Higher in-group projection implies higher in-group status and entitlement perceptions (Wenzel, 2004). A gain in status and entitlements of other minority groups implies a loss for one's own minority group, and inter-minority differentiation contributes to a positive minority identity (Esses et al., 2005; Tajfel & Turner, 1979). The findings show that all three ethnic minority groups considered their own group as more prototypical (RIP-M) and as more indispensable (RII-M) for the national category relative to the minority out-groups. Furthermore, RII-M was significantly higher than RIP-M, which indicates that in a non-settler country with a large native population such as the Netherlands, it is easier to perceive one's minority group as relatively indispensable than prototypical for the national category.

This interpretation is further supported by the findings for in-group projection relative to the native majority group. Research in immigration countries such as the USA has demonstrated that majority and minority members perceive White Americans as being more American than Asian Americans, African American, Latino Americans, and Native Americans (Devos & Banaji, 2005; Devos et al., 2010). In West European countries, there is a very large and dominant native majority group and a relatively short history of immigration. These realities further constrain the possibility of minority members to view their in-group as more

prototypical or indispensable for the national category relative to the majority group. Participants of all three groups did indeed consider the native Dutch as more indispensable and as more prototypical than their own group. Yet, the difference in indispensability was significantly smaller than for prototypicality. Compared with majority members, ethnic minority groups tend to have a more heterogeneous understanding of the national category and are more likely to associate their in-group with diversity (Unzueta & Binning, 2010; Verkuyten, 2006). This makes perceived in-group indispensability relative to the majority group more likely than perceived in-group prototypicality.

Another finding in support of the distinction between category prototypicality and indispensability is that both were independently associated with out-group feelings. In line with the in-group projection model, we found that higher relative in-group prototypicality was associated with less positive out-group feelings. In addition, relative in-group indispensability was also associated with less positive out-group feelings. Furthermore, the associations of prototypicality and indispensability existed for feelings towards the native majority group as well as minority out-groups. Both perceptions appear to be associated with less positive out-group feelings towards the relevant comparison group. Thus, minority members who perceived their in-group as relatively more prototypical and indispensable of the national category had less positive feelings towards the majority. And in establishing positive intergroup differentiation, minority group members perceived their ethnic in-group as more indispensable and prototypical for the national category compared with other minority groups, and this had negative consequences for their attitudes towards other minority groups.

According to the dual identity model of recategorization (Dovidio et al., 2007; Hornsey & Hogg, 2000), dual identification leads to more positive out-group attitudes because it is not threatening to a valuable subgroup identity and uses the beneficial effects of a common in-group identity. The in-group projection model, however, argues that a stronger sense of dual identity will lead to greater in-group projection and therefore to more negative out-group attitudes (Wenzel et al., 2007). By examining out-group attitudes of ethnic minority group members, the current findings support the former model in relation to minority out-group feelings and the latter one in relation to the native majority group. This suggests that different mediating mechanisms, specified in self-categorization theory (Turner et al., 1987), are involved (see Wenzel et al., 2007).

In support of the in-group projection model, stronger dual identification was associated with more negative

feelings towards the majority group because of higher in-group prototypicality and indispensability relative to the majority. These findings indicate that dual identity encourages minority–majority comparisons in relation to superordinate prototypicality and indispensability, resulting in more negative out-group feelings towards the majority group.

In support of the dual identity model, higher dual identifiers had more positive feelings towards minority out-groups. This suggests that dual identifiers tend to have a more complex understanding of the national category as being made up of different groups (Wenzel et al., 2007). In support of this interpretation, we found for the absolute scores that higher dual identifiers did not only perceive their ethnic in-group but also minority out-groups as more prototypical and indispensable for the national category. As a result, there was no association between dual identification and RII-M and only a weak and not very reliable association with RIP-M (footnote 7). Yet, the fact that dual identity was not associated with in-group prototypicality and indispensability relative to other minorities does not mean that in-group projection in relation to minorities does not occur. All three ethnic minority groups considered their in-group as more prototypical and indispensable for the national category compared with the minority out-groups. So, common dual identity and in-group projection processes appear to be both relevant.

Limitations and Future Directions

There are several limitations of the present work that offer opportunities for future research.

First, our correlational data preclude causal interpretations. Nevertheless, the analyses represented a valid and stringent test of the hypothesized processes that had clear theoretical rationales. Moreover, there is experimental evidence for the process of in-group projection leading to more negative out-group attitudes (Wenzel et al., 2007). Furthermore, manipulating (dual) identification is difficult, particularly for natural groups. Yet, future studies could examine these processes using a longitudinal design and experiments in the lab.

Second, we focused on three ethnic minority groups that are quite similar in numerical size but differ in immigration history and social standing. Numerical size might be important in light of structural constraints for in-group projection, and future studies could examine whether the size of the minority group has an effect on in-group projection processes. Furthermore, there were some differences between the three minority groups that might provide directions for future research.

For example, compared with Turkish and Moroccan participants, the Surinamese considered their in-group as more indispensable and prototypical of the national category relative to minority out-groups. In addition, the perceived difference in category indispensability between the in-group and the Dutch was lowest among the Surinamese. These findings might be due to the fact that the Surinamese have a colonial history with the Netherlands that makes them more similar to the Dutch in terms of language and culture, whereas Turks and Moroccans have a history of contracted labour migration. Furthermore, the Surinamese have a better socioeconomic position and are more accepted in society than Turks and Moroccans (Huijnk et al., 2013). These historical and socio-structural realities can affect minority members' perceptions of their relative in-group prototypicality and indispensability. Yet, despite these group differences in mean scores, the pattern of associations between the different constructs was quite similar for the three ethnic minority groups (footnotes 5 and 8). Future studies should examine possible differences between ethnic minority groups further. Studies that focus on different minority groups and on inter-minority relations are important because of the increasing number of social contexts in which many different minorities live together. Hence, it is increasingly important to examine the conditions and factors that contribute to in-group projection processes among minority groups and in relation to other minorities (Lie & Verkuyten, 2012).

A related point, and a third direction for future research, is an examination of the processes of in-group projection in other national and social contexts. Countries differ in many ways, and representations of national identity and inclusiveness vary depending on the historical and socio-political context (Guimond et al., 2014). These differences might be important for understanding the role of dual identity and of perceived category indispensability and prototypicality for inter-group attitudes.

CONCLUSION

With the present research, we have furthered the understanding of how processes of in-group projection and dual identification play out among ethnic minority members and how they matter for intergroup relations. We can draw two main conclusions. First, it is important to distinguish between (relative) category prototypicality and indispensability because both play an independent role in intergroup relations and both are not only associated with more negative feelings towards the native majority group but also towards minority

out-groups. Thus, not only perceived prototypicality but also indispensability for the superordinate category is important for understanding intergroup relations in diverse societies. Second, the findings for dual identification indicate that processes of common in-group identity and in-group projection can operate simultaneously. Processes of in-group projection seem more likely in relation to the native majority, whereas dual identity appears to function as a common identity in relation to minority out-groups. This finding suggests that the two processes are not contradictory but can be reconciled, and future studies should examine further the simultaneous operation of these processes and the conditions under which they operate.

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