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Social identification when an in-group identity is unclear: The role of self-anchoring and self-stereotyping

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The present paper investigates *how* people identify with groups depending on the clarity of a group's identity content. According to self-categorization theory, *self-stereotyping* (i.e., projection of group prototypes onto self) should be the cognitive process underlying social identification. We argue, however, that this is only plausible in clearly defined groups. If a group is unclear in terms of its identity content, we argue that *self-anchoring* (i.e., projection of personal self onto group) accounts for social identification. In line with these hypotheses, two studies (with minimal and real groups) reveal that *self-anchoring* positively predicts the level of social identification and entitativity in unclearly, but not clearly defined groups. Conversely, *self-stereotyping* positively predicts the level of social identification in clearly, but not unclearly defined groups. Together, these findings are the first to demonstrate the differential impact of cognitive projection processes on social identification depending on group clarity.

In 2007, Princess Maxima from the Netherlands made the controversial statement that 'The Dutch identity does not exist' (WWR, 2007). This statement elicited much debate in the Netherlands about what it means to be Dutch. Nonetheless, many Dutch people identify strongly with their nationality (Dottinga & van der Zee, 2010). In fact, considering her involvement in public life in the Netherlands, Princess Maxima may be a high-identifier herself. The debate illustrates that even a well-established group identity such as a nationality can, at certain times and for certain people lack clarity regarding its identity content, and that it may be possible for people to identify with unclearly defined groups.

The Dutch identity is just one example of how a group may be unclearly defined. There are, in fact, many examples of groups lacking clarity, such as newly formed work teams, or complex social categories such as European. Yet, considerably little is known about *how* people identify with unclearly defined groups. This is unfortunate, as we assume that how people identify with groups will depend on the *clarity* of the group's

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identity content. Therefore, in the present paper, we focus on the differential impact of cognitive routes leading to social identification as a function of group clarity.

Cognitive routes to social identification

In order for people to identify with a group, a certain degree of perceived mental overlap between the self- and the group concept must be present (Smith & Henry, 1996). More mental overlap between self and group indicates higher social identification (Coats, Smith, Claypool, & Banner, 2000; Tropp & Wright, 2001, 2003).

According to self-categorization theory (SCT; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) the general cognitive strategy to create mental overlap is *self-stereotyping*, or the assimilation of the self to group prototypes (e.g., Lorenzi-Cioldi, 1991; Simon & Hamilton, 1994). SCT posits that each individual has a social self and a personal self, existing at opposing ends of the same continuum. With self-stereotyping, the social self becomes salient and the personal self shifts to the background, or depersonalizes; people come to describe themselves in terms of prototypical group characteristics. Thus, self-stereotyping implies self-group overlap based on conformity to socially shared, prototypical group norms.

In line with SCT, we agree that self-stereotyping may indeed be a cognitive process accounting for social identification. Yet if self-stereotyping were the *only* cognitive route towards identification, this would imply that people solely identify with clearly defined groups. Only in these groups, well-defined group prototypes can quite easily be projected onto the self. Nevertheless, prior research has shown that people also identify with groups lacking clarity in their identity content (see Jetten, Hogg, & Mullin, 2000; Lickel *et al.*, 2000, Study 2; Peker, Crisp, & Hogg, 2010). In these groups, self-stereotyping cannot convincingly account for social identification; there is no group information readily available to assimilate the self to. Therefore, the question is *how* do people identify with groups lacking clarity regarding their identity content? We propose that *self-anchoring* may be the cognitive route to social identification in these groups.

Research has shown that mental overlap between self and group not only emerges top-down, via self-stereotyping, but also bottom-up, via *self-anchoring*¹ (Cadinu & Rothbart, 1996). Self-anchoring implies the projection of personal self-attributes onto a group. Self-anchoring was first demonstrated in minimal groups to explain why people display in-group favouritism even towards such arbitrary groups (Cadinu & Rothbart, 1996; Clement & Krueger, 2002; Gramzow, Gaertner, & Sedikides, 2001; Otten & Wentura, 2001). The findings revealed that the projection of positive self-perceptions onto the in-group can account for the preference of the in-group over out-groups in minimal group paradigms (MGP). Additional evidence shows that self-anchoring is not only relevant in minimal, but also in real groups (Otten, 2004; Otten & Epstude, 2006; Van Veelen, Otten, & Hansen, 2011).

Self-anchoring does not depend on the availability of group knowledge (as self-stereotyping does), but on the use of the *personal self*. It enables individuals to fill in cognitive gaps in a group's representation based on self-knowledge, thereby allowing the construction of a meaningful group identity. Following from this, we expect that

¹ The terms *self-anchoring* and *social projection* are often used interchangeably in the literature, thereby referring to the process of using the self as a heuristic to make group judgments (e.g., Robbins & Krueger, 2005). For ease of readability we only use the term *self-anchoring* in the present paper, yet conceptually we consider the two terms as equivalents.

in unclearly defined groups, self-anchoring – and not self-stereotyping – accounts for the level of social identification. To our knowledge, this idea has not yet been tested empirically. Moreover, there is no research providing a comparison between self-anchoring and self-stereotyping as predictors of social identification depending on group clarity.

Thus far, both self-stereotyping and self-anchoring have mainly been investigated in separate lines of research, specifically for their impact on *intergroup level* processes such as intergroup bias and in-group favouritism (self-stereotyping, e.g., Hogg & Turner, 1987; Latrofa, Vaes, Pastore, & Cadinu, 2009; self-anchoring, e.g., Clement & Krueger, 2002; Gramzow *et al.*, 2001; Krueger, 2007; Otten & Wentura, 2001). Only recently, researchers have begun to investigate the *interplay* between self-anchoring and self-stereotyping, and their unique predictive value for social identification. This research has shown that both self-anchoring and self-stereotyping can occur *simultaneously* within an individual, and that both predict a unique proportion of variance in social identification (Van Veelen *et al.*, 2011). We aim to further extend these findings and provide evidence that the predictive value of self-anchoring and self-stereotyping for *social identification* is moderated by the clarity of a group's identity content. In addition, we investigate whether self-anchoring can enhance a group's perceived unity, in the sense that it is associated with 'groupiness' or *entitativity* (Campbell, 1958), even if group clarity is low.

Group clarity and social identification

So far, group clarity has mainly been investigated in for its impact on cognitive process pertaining to the *intergroup* context, such as in-group projection, intergroup differentiation, and out-group attitudes (e.g., Machunsky, Meiser, & Mummendey, 2009; Waldzus, Mummendey, Wenzel, & Weber, 2003). We adopt a definition of group clarity based on this work. We define a group identity as unclear if there is no clear-cut knowledge available about the meaning of its identity content. In contrast, we define a clear group identity as a group having unequivocal available knowledge about its content.

Intragroup research on group clarity and cognitive projection processes is relatively scarce. Within the self-anchoring domain Robbins and Krueger (2005), who compared minimal with real groups in a meta-analysis, suggested that *ill-defined* group representations may foster a focus on the self as a source of projection. Conversely, within the self-stereotyping domain it is argued that a social category should be meaningful in order for people to attain a depersonalized self-perception (e.g., Simon, Hastedt, & Aufderheide, 1997). Thus, in both research domains there is indirect support for the notion that self-anchoring may have a more important role in unclear groups, while self-stereotyping is more relevant in clear groups. Yet a direct comparison of self-anchoring and self-stereotyping in both types of groups to investigate their differential impact on social identification has, to our knowledge, not been done before.

According to the social judgeability approach (Yzerbyt, Schradon, Leyens, & Rocher, 1994), people need to believe that they have diagnostic information before they feel entitled to make social judgments. Therefore, when a group is unclearly defined, we argue that self-knowledge should be far more reliable and readily available compared to group knowledge (see also Machunsky *et al.*, 2009; Otten, 2002). In unclear groups, the self should serve as an anchor to create a mental bond with the group. Therefore, we hypothesize that self-anchoring most strongly predicts social identification in unclear

rather than clear groups (Hypothesis 1a). In contrast, in a clearly defined group, knowledge about the group is clear, informative, and readily available (e.g., Dijksterhuis & van Knippenberg, 1999). As such, the group provides diagnostic information, which is needed to assimilate the self to. Therefore, we hypothesize that self-stereotyping is a stronger predictor of social identification in clear compared to unclear groups (Hypothesis 1b).

Group clarity and entitativity

When thinking about unclear groups the question arises: To what extent can a group identity that lacks a clear picture on its content still be called a group? Especially if we assume that in unclear groups self-anchoring is the process accounting for social identification, is the group not merely a loose bundle of separate individuals identifying via a mental projection of themselves, without any sense of 'groupiness'? In order to gain more insight, not only in how people *identify with* unclear groups, but also in how people *perceive* these groups, we are also interested in *entitativity*, or the perceived unity of a group (Campbell, 1958). In this respect, our question is as follows: Can self-anchoring account for the level of perceived entitativity in an unclear group, just as it is assumed to account for social identification?

In early research, entitativity was mainly described as the similarity between group members (Brewer & Harasty, 1996; Campbell, 1958). More specifically, entitativity was seen as the extent to which a group is organized (Hamilton, Sherman, & Lickel, 1998) has a clear cognitive representation (Brewer & Harasty, 1996) or has common goals or features (Yzerbyt, Rocher, & Schadron, 1997). Thus, highly entitative groups were seen as groups represented in terms of a clear group-member prototype, and therefore associated with clarity about a group's identity.

More recent research however, suggests that perceived entitativity may not merely be based on the properties of the group itself, but also on the relationship between the self and the group: the subjective relevance of a group to the individual self is also a strong predictor of perceived entitativity (Lickel *et al.*, 2000; Rutchick, Hamilton, & Sack, 2008). Moreover, Krueger, Acevedo, and Robbins (2006) suggest that self-anchoring may facilitate entitativity in absence of group stereotypes, based on empirical evidence showing that self-anchoring increases consensus estimates. Hence, these findings suggest that different groups may attain their entitativity in different ways. On the one hand, perceived entitativity can be based on the assimilation to clearly defined group prototypes. On the other hand, in absence of such group clarity, entitativity can also stem from other sources, namely the projection of personal attributes onto the in-group. In this latter case, we may assume that a stronger projection of the personal self onto the group (i.e., self-anchoring) can account for perceived entitativity in unclearly defined groups.

Thus, we expect that entitativity will be higher in clear compared to unclear groups. However, we assume that perceived entitativity can also be obtained in unclear groups, namely via self-anchoring. We hypothesize that individuals who strongly self-anchor in unclear groups, will perceive their group as more entitative compared to those who do not or only weakly self-anchor (Hypothesis 2a). For self-stereotyping we expect the reverse pattern; self-stereotyping should have no or only a weak impact on entitativity in unclear groups, considering there are no well-defined group characteristics accessible. However, in clear groups we do expect self-stereotyping to positively impact on entitativity (Hypothesis 2b).

The present research

People identify with groups, irrespective of the clarity of their identity content. Yet, *how* people identify with both groups in terms of the cognitive process is still unknown. We aim to shed more light on this matter by demonstrating that self-anchoring accounts for social identification in unclear groups (Studies 1 and 2), while self-stereotyping does so in clear groups (Study 2). Moreover, we test the hypothesis that in an unclear group, self-anchoring may substantially raise perceptions of entitativity (Studies 1 and 2). In Study 1, we relied on a minimal group setting and focused exclusively on the predictive value of self-anchoring on identification and entitativity depending on group clarity. In Study 2, we employed a realistic group context and measured both self-anchoring and self-stereotyping, thereby allowing the investigation of the interplay and relative impact of both processes as a function of group clarity.

STUDY 1

Method

We manipulated clarity of group identity by taking advantage of the MGP. Normally, a minimal group setting is used to strip off all information available about the content of a group's identity. However, research has shown that in some cases, already subtle information given about the group, for example, based on group labels, is used by participants to give meaning to the group (Spears, 2002). In that respect, minimal groups can be either clear or unclear depending on the associative content of group labels. If associative meaning is present, people may form consistent group stereotypes, merely based on the category labels provided to them. If this is not present, it remains completely unclear what a group identity comprises. Based on this reasoning, we manipulated group clarity by differentiating between group labels *with* and *without* associative meaning.

Participants and design

One hundred and two university students participated in the study. Eight participants were excluded from the analysis because they failed to fill out all the questions to construct a self-anchoring score or because they indicated being suspicious about the manipulation. The remaining 94 participants (72 females; $M_{\text{age}} = 20.10$, $SD = 1.87$) were randomly assigned to a two-factor design with group clarity (manipulated: clear/unclear) and self-anchoring (measured) as predictor variables, and identification and entitativity as dependent variables.

Procedure and materials

Participants were told that they would participate in a study on personality and perception style. They were seated in separate cubicles and filled out questionnaires on a computer. They received study credits in return.

Self-ratings

After the general introduction, all participants first rated 16 traits, ambiguously defined for the group (see construction self-anchoring score) on their applicability to the *self* on a 9-point Likert scale (1 = *not at all applicable*; 9 = *completely applicable*). The

traits were selected from a pilot study in order to measure self-anchoring within the manipulated group context.

Group clarity manipulation.

Next, participants were randomly assigned to a clear or unclear group condition. All participants read that in general, there are two perception styles. In the *clear* group condition, we stated that these were 'detailists' and 'globalists' while in the *unclear* group condition we stated that these were 'Type A' and 'Type B' perceivers. Based on pilot testing, we know that the labels 'detailist' and 'globalist' carry meaning and therefore activate certain stereotypes. For example, detailists are associated with the characteristics 'perfectionist' and 'punctual', while globalists are associated with 'being flexible' and 'generalizing' (see also Spears, 2002). In contrast, the labels Type A and Type B perception style carry no meaning, thereby leaving it completely unclear what the content of the group is.

We further strengthened our manipulation by stating in the *clear* group that research has already provided us with a clear and reliable picture of who detailists and globalists are. In contrast, in the *unclear* group we stated that previous research has provided us with a very vague picture of what it means to have a Type A or Type B perception style.

Participants in the clear group were all categorized as detailists based on a dot estimation task. In the unclear group, participants were all categorized as Type A based on their choices from a series of pairs of paintings (Kandinsky or Klee).²

Group ratings

After the group manipulation, participants again rated the 16 ambiguously defined traits, on a 9-point Likert scale (1 = *not at all applicable*; 9 = *completely applicable*), but this time on the applicability to their group.

Entitativity

After the group ratings, perceived entitativity was assessed with two items adopted from Brooke, Postmes, Jetten, and Dyson (2009). The items were 'There is great togetherness among detailists/Type A perceivers' and 'Detailists/Type A perceivers are a unit', $r(94) = .76, p < .001$, rated on a Likert scale ranging from 1 (*not at all*) to 7 (*very much*).

Social identification

Subsequently, social identification was assessed with nine items [e.g., 'I feel connected to the people with my perception style', $\alpha = .82$; items were adapted from the multi-component identification scale by Leach *et al.* (2008). We incorporated one or two items from each subscale, to have a broad and inclusive measure of identification with high internal consistency. All items were again rated on a 7-point Likert scale.

Manipulation check

Finally, participants completed three items (adopted from Waldzus *et al.*, 2003) measuring how clear or unclear participants perceived their group identity to be (e.g.

²We adapted the task for the unclear group identity condition to a subjective one (i.e., liking of paintings) in order to make sure that participants could not make inferences about the meaning of their group based on the task. While this difference in tasks may be a methodological limitation in Study 1, the validity of our approach is confirmed by the replication of our findings in Study 2 where the two conditions are exactly the same besides group clarity.

'It is possible to say with certainty what the characteristics of detailists/Type A are'; $\alpha = .62$) on a Likert scale ranging from 1 (*not at all*) to 7 (*completely*).

Construction of self-anchoring score

We calculated a self-anchoring score based on the overlap between self and group on the 16 trait ratings (Van Veelen *et al.*, 2011). In minimal groups, it is generally assumed that group identities cannot be derived from pre-existing knowledge of the group (e.g., Gramzow *et al.*, 2001). Based on this assumption, self-group overlap in a minimal group should automatically be interpreted as self-anchoring. However, as stated before, some group labels used in MGP's, such as 'detailist' and 'globalist'; already contain group stereotypical information. Therefore, we must consider that specifically in the clear group condition, overlap between self and group can not only be inferred from knowledge of the self (i.e., self-anchoring), but also from the group (i.e., self-stereotyping). This latter knowledge might interfere with the diagnostic value of the self.

Therefore, to measure self-anchoring (and not self-stereotyping), we included traits that were – according to a pilot study – non-stereotypical for detailists and globalists, and relatively neutral in valence (around the midpoint of a 7-point scale; 1 = *very negative*; 7 = *very positive*). By focusing on traits clearly defined for the self but ambiguous with respect to their applicability to the group, self-anchoring can be measured most accurately. Also, self-ratings were measured *prior* to making the minimal group category salient, to avoid any influence of the group label on self-ratings (Otten & Epstude, 2006; Van Veelen *et al.*, 2011; see Appendix for the trait list).

We calculated a self-anchoring score using intra-individual profile correlations (e.g., Otten & Wentura, 2001; Van Veelen *et al.*, 2011). For each participant, we calculated the correlation between self and group ratings, while controlling for popularity of each trait. Item popularity is the general tendency to endorse an item, for example, due to social desirability or valence effects. It is important to control for item popularity when calculating the strength of association between self and group ratings, because without it a self-group correlation might not only stem from self-group projection, but also from the general popularity of the item. Hence, to rule out the variation explained by item popularity, and further control for slight variations in valence of the traits, we calculated a partial correlation controlling for popularity. For each trait, popularity was calculated as the proportion of participants positively endorsing a trait (i.e., 6–9 on the Likert scale; De la Haye, 2000; Krueger & Clement, 1994). Higher scores indicated higher self-anchoring.³

Results

Manipulation check

An analysis of variance (ANOVA) with group clarity (clear/unclear) as the independent variable and the manipulation check as dependent variable showed more perceived clarity about the group's identity in the clear ($M = 3.55$, $SD = .89$) compared to the

³Zero-order profile correlations of self-anchoring and self-stereotyping are also included in Table 1 to provide insight in its relation with the dependent variables. The table reveals that the mean zero-order correlations are somewhat higher compared to the partial correlations, because the partial correlations are not obscured by item popularity (see De la Haye, 2000; Krueger & Clement, 1994).

Figure 1. The positive effect of self-anchoring on social identification (left panel) and entitativity (right panel) as a function of group clarity (Study 1). Error bars represent standard errors.

unclear group ($M = 3.07$, $SD = 1.12$), $F(1, 92) = 5.54$, $p = .02$, $\eta^2 = .06$. Thus, we successfully manipulated the clarity of the group.

Descriptives

Self-anchoring scores were based on profile correlations, ranging from -1 to $+1$. The general level of self-anchoring was significantly above zero ($M = .50$, $SD = .34$), $t(93) = 14.34$, $p < .001$, indicating a positive association between the self and the group across conditions. Moreover, the level of self-anchoring was higher in the unclear ($M = .67$, $SD = .21$) compared to the clear ($M = .34$, $SD = .35$) group, $F(1, 92) = 30.54$, $p < .001$, $\eta^2 = .25$. We further inspected the correlations between self-anchoring and the dependent variables for each group condition separately (see Table 1). As expected, self-anchoring was positively related to social identification and entitativity in the unclear, but not in the clear group condition.

Social identification

We conducted a regression analysis with group clarity (dummy coded: 0 = *clear*; 1 = *unclear*), the Z-transformed self-anchoring score, and their interaction term as predictor variables, and social identification as dependent variable. Overall, 16% of the variance in *social identification* was explained, $F(3, 90) = 5.80$, $p < .01$. Group clarity significantly predicted social identification, such that it was higher in the clear compared to the unclear group, $B = -.45$, $SE = .10$, $t = -3.82$, $p < .001$. Second, self-anchoring significantly and positively predicted social identification, $B = .45$, $SE = .11$, $t = 3.49$, $p < .01$. Importantly, the interaction term between self-anchoring and group clarity was also significant, $B = .25$, $SE = .11$, $t = 2.22$, $p = .03$ (Figure 1). Simple slope analysis revealed that in the clear group self-anchoring was not associated with social identification ($p > .10$). In the unclear group, however, social identification was significantly higher for those who did self-anchor ($+1$ SD), compared to those who did not (-1 SD), $B = .73$, $SE = .20$, $t = 3.28$, $p < .01$.

Table 1. Descriptives, partial correlations, and zero-order correlations between self-anchoring, self-stereotyping and the dependent variables in Study 1 (N = 94) and Study 2 (N = 113)

		Study 1				Study 2			
		M	SD	Social Identification	Entitativity	M	SD	Social Identification	Entitativity
Self-anchoring	Clear	<i>pr</i> <i>r</i>	.34 .44	.18 .27	-.00 .06	.10 .22	.43 .39	-.18 -.04	-.05 .14
	Unclear	<i>pr</i> <i>r</i>	.67 .71	.41** .42**	.41** .29*	.20 .22	.50 .50	.37* .32**	.27* .30**
	Total	<i>pr</i> <i>r</i>	.50 .58	.34 .30	.06 .08	.15 .22	.47 .44	.12 .17	.07 .21*
Self-stereotyping	Clear	<i>pr</i> <i>r</i>	— —	— —	— —	.08 .18	.40 .38	.36* .34**	.32* .44**
	Unclear	<i>pr</i> <i>r</i>	— —	— —	— —	.19 .25	.45 .42	.19 .20	.12 .29*
	Total	<i>pr</i> <i>r</i>	— —	— —	— —	.13 .21	.42 .40	.23* .33**	.15 .21*

Note. * $p < .05$ (two-tailed); ** $p < .01$ (two-tailed). Projection scores based on partial correlations are in boldface. Projection scores based on zero-order correlations are in normal font-style.

Entitativity

Regression analysis on entitativity revealed that overall, 8% of the variance was explained by group clarity, self-anchoring and their interaction, $F(3, 90) = 2.54$, $p = .06$. In line with our expectations, group clarity significantly predicted perceived entitativity, such that it was higher in the clear compared to the unclear group, $B = -.26$, $SE = .10$, $t = -3.82$, $p = .04$. Second, self-anchoring significantly and positively predicted perceived entitativity, $B = .30$, $SE = .18$, $t = 2.27$, $p = .03$. Importantly, the interaction term between self-anchoring and group clarity was significant, $B = .27$, $SE = .18$, $t = 2.25$, $p = .03$ (Figure 1). Simple slope analysis revealed that in the clear group self-anchoring was not associated with entitativity ($p > .10$). In the unclear group however, perceived entitativity was higher for those that did self-anchor ($+1 SD$), compared to those who did not ($-1 SD$), $B = .61$, $SE = .31$, $t = 2.58$, $p = .01$.

Discussion

The results of Study 1 supported our predictions. First, self-anchoring significantly accounted for the level of social identification in the unclear group, while in the clear group no such effects occurred (Hypothesis 1a). Second, as expected, the clear group was seen as more entitative compared to the unclear group. However, in the unclear group perceived entitativity was significantly enhanced as a function of self-anchoring (Hypothesis 2a).

Previous research revealing that self-stereotyping may account for identification (e.g., Hogg, Sherman, Dierselhuis, Maitner, & Moffit, 2007; Jetten *et al.*, 2000) rests upon what we consider clearly defined groups. But how about the self-stereotyping-identification link in unclearly defined groups? In Study 1, we employed a minimal group setting that did not allow us to measure and compare self-stereotyping with self-anchoring across group conditions, due to the absence of group information, specifically in the unclear group condition. This is different when referring to a real-group context. Here, despite the fact that there can be substantial lack of clarity about the group's identity content, to a certain extent, information about this identity is always available. As such, a replication of Study 1 in a real-group context enables us to directly measure self-stereotyping and compare it to self-anchoring, as predictors of social identification across group conditions. Furthermore, such replication also provides more insight in whether people deal in a similar way with unclear group identities in both real and minimal groups.

STUDY 2

Method

As a real-group context, we referred to the Dutch identity. As stated in the introduction, recently the Dutch identity has been heavily debated and characterized as unclear. While some still claim the relevance of national stereotypes such as 'Dutch tolerance' and 'down-to-earth mentality', others are in search for the meaning of the Dutch identity. This ambiguity allowed us to manipulate group clarity in a real group.

Participants and design

Participants in the experiment were 126 Dutch students. Thirteen participants were excluded from the analysis; seven did not have the Dutch nationality and five indicated being suspicious about the manipulation. The remaining 113 participants (90 females, $M_{\text{age}} = 19.57$, $SD = 3.26$) were included for analysis. The study had a mixed design with group clarity (manipulated; clear/unclear), self-anchoring and self-stereotyping (measured) as predictor variables, and social identification and entitativity as dependent variables.

Procedure and materials

We told participants that they would participate in a study about perceptions on societal issues. Participants were seated in separate cubicles and filled out questionnaires on a computer. They received study credits or 5 euro in return.

Self-ratings I

As in Study 1, participants first rated seven traits on their applicability to the self on a 9-point Likert scale (1 = *not at all applicable*; 9 = *completely applicable*). According to a pilot study, these traits were neither stereotypical nor counter-stereotypical for the Dutch identity, in order to guarantee self-in-group overlap on these, trait dimensions is based on self-anchoring, and not self-stereotyping.

Group clarity manipulation

Participants were then asked to read an article about a survey study on the Dutch identity, ostensibly published on a website from one of the largest research institutes in the Netherlands. They were randomly assigned to a clear or unclear group condition. In the *clear* group, participants read that the survey study showed that the Dutch have a clear idea about the meaning of being Dutch and they are very well able to name typically Dutch characteristics. In contrast, in the *unclear* group condition participants read that according to the survey the Dutch have no clear idea about the meaning of being Dutch and that they are unable to name typically Dutch characteristics.

We pilot-tested this group clarity manipulation carefully to ensure its effectiveness, but also to ensure that the conditions would not differ in perceived group threat. In the pilot study, we measured group threat based on 13 items by Stephan and Stephan (1985; $\alpha = .83$) and found no differences in perceived threat between the two conditions, $F(1, 45) < .01$.

Group ratings

After the group manipulation, participants rated the same seven traits as initially rated for the self, but this time on their applicability to the group (the Dutch) on a 9-point Likert scale (1 = *not at all applicable*; 9 = *completely applicable*). In addition, participants also rated seven traits that were – based on a pilot study – stereotypical or counter-stereotypical for the Dutch, and again the valence of traits relatively neutral (i.e., around the midpoint of the scale; 1 = *very negative*; 7 = *very positive*). Importantly, the average valence of the ambiguous traits to measure self-anchoring ($M = 4.44$; $SD = .57$) did not

significantly differ from the average valence of the stereotypical traits to measure self-stereotyping ($M = 4.69$; $SD = .40$), $F(1, 17) = 2.72$; $p > .10$. The 14 traits were offered in random order (see Appendix).

Self-ratings 2

After the group ratings, participants filled out some filler questions and rated another seven traits on their applicability to the self, again on a 9-point Likert scale. Importantly, this time the seven *stereotypical* traits for the Dutch were rated (self-rating/time 2). Based on group and self-ratings (time 2) on stereotypical trait dimensions, we calculated self-stereotyping (see construction projection scores).

Entitativity

Subsequently, as in Study 1, perceived entitativity was assessed with two items adopted from Brooke *et al.* (2009) on a 7-point Likert scale, $r(113) = .52$, $p < .001$.

Social identification

Next, as in Study 1, national identification was based on seven items adapted for the Dutch nationality from Leach *et al.* (2008; for example, I feel connected with the Dutch, $\alpha = .88$) rated on a 7-point Likert scale.

Manipulation checks

Finally, the manipulation check of our group clarity manipulation in the Dutch context was measured with one item ('The Netherlands has a clearly defined group identity'; Waldzus *et al.*, 2003) on a Likert scale from 1 (*I do not agree*) to 7 (*I completely agree*).

To check whether participants read the manipulation thoroughly, we asked: 'What are the results of the survey study?' (1 = *the Dutch identity does not exist*; 7 = *the Dutch identity clearly exists*). Finally, to check whether the survey results in both conditions were perceived as equally realistic we asked 'Are the results of the survey study in line with your expectations about the Dutch identity?' and 'According to you, were the results of the survey study realistic?' (1 = *not at all*; 7 = *completely*), $r(113) = .69$, $p < .001$.

Construction of projection scores

The procedure to construct a self-anchoring score was the same as in Study 1. For self-stereotyping we followed a similar procedure, only this time we used the seven group ratings and self-ratings (time 2) on the traits *stereotypical* for the group. Self-ratings on stereotypical traits were deliberately measured *after* the group category was made salient, in order to make sure that the group was readily available as a heuristic to define the self (Van Veelen *et al.*, 2011). Again, we calculated profile correlations, controlling for item popularity. This procedure allowed us to measure the extent to which participants project stereotypical group characteristics on the self. For both self-anchoring and self-stereotyping, higher scores indicate higher levels of projection.

Results

Manipulation checks

An ANOVA on the item 'What were the results of the survey study?' showed that participants in the unclear group condition indicated that the Dutch identity does not exist ($M = 1.80$, $SD = .85$) while participants in the clear group condition indicated that the Dutch identity does exist ($M = 6.28$, $SD = .79$), $F(1, 111) = 843.91$, $p < .001$. Thus, the participants read and remembered the article properly.

Furthermore, the survey results were perceived as equally realistic in the clear and unclear condition, $F(1, 111) = .19$, $p = .67$, $\eta^2 = .002$. Moreover, means in both group conditions were significantly above the midpoint of the scale on this measure ($M = 4.93$, $SD = 1.37$, $t(112) = 7.92$, $p < .001$, test value = 4); hence, both survey reports on the Dutch identity were perceived as highly and equally realistic.

Finally, as expected, perceived group clarity was higher in the clear group ($M = 5.36$, $SD = 1.15$) compared to the unclear group condition ($M = 2.16$, $SD = 1.21$), $F(1, 111) = 206.91$, $p < .001$, $\eta^2 = .65$. In sum, we were able to show that our implementation of either a clear or unclear Dutch identity was successful and strongly affected perceived group clarity.

Descriptives

We investigated the level of self-anchoring and self-stereotyping within the Dutch context. Both the level of self-anchoring ($M = .15$, $SD = .47$), $t(111) = 3.35$, $p < .01$, and self-stereotyping ($M = .13$, $SD = .43$), $t(111) = 3.23$, $p < .01$, were significantly above zero, indicating that the association between the self and the group was generally positive.

Next, we inspected correlations between projection measures and the dependent variables separately for each group condition (see Table 1). In line with Study 1, self-anchoring was significantly positively correlated with social identification in the unclear, but not in the clear group. Conversely, self-stereotyping was significantly positively correlated with social identification in the clear, but not in the unclear group. Again, we found that self-anchoring was significantly positively correlated with entitativity in the unclear, but not in the clear group, while the opposite pattern applied to self-stereotyping.

Social identification

We conducted a regression analysis with group clarity (dummy coded: 0 = *clear*; 1 = *unclear*), the Z-transformed self-anchoring and self-stereotyping scores and all possible interaction terms as predictors, to investigate the effect on social identification. Overall, 23% of the variance in social identification was explained by the model, $F(7, 103) = 4.26$, $p < .001$. Self-stereotyping significantly and positively predicted social identification, $B = .25$, $SE = .09$, $t = 2.75$, $p < .01$. No main effects were found for self-anchoring or group clarity. However, the interaction term between self-anchoring and group condition was significant, $B = .26$, $SE = .09$, $t = 2.96$, $p < .01$ and the three-way interaction term was marginally significant, $B = -.17$, $SE = .08$, -1.87 , $p = .06$. We broke this three-way interaction down by looking at the effect of self-anchoring and self-stereotyping and their interaction on identification, separately for both group conditions.

In the *clear group* condition, 18% of the variance in social identification was explained, $F(1, 53) = 3.98$, $p = .01$. We found that only self-stereotyping significantly

Figure 2. The effects of self-anchoring and self-stereotyping on social identification in the clear (left panel) and the unclear (right panel) group condition (Study 2). Error bars represent standard errors.

and positively predicted the level of identification, $B = .40$, $SE = .11$, $t = 3.13$, $p < .01$. No effects were found for self-anchoring ($p > .10$), nor for its interaction with self-stereotyping ($p > .10$). Thus, as expected, in a clearly defined group, self-stereotyping is positively associated with social identification, but self-anchoring is not (Figure 2).

For the *unclear group* condition, we found the opposite pattern. In total, 20% of the variance in social identification was explained by the model, $F(3, 50) = 4.18$, $p = .01$. This time, only self-anchoring significantly and positively predicted the level of identification, $B = .36$, $SE = .14$, $t = 2.81$, $p < .01$. No effects were found for self-stereotyping ($p > .10$), nor for its interaction with self-anchoring ($p > .10$). Again, in line with our hypothesis, in an unclearly defined group self-anchoring is positively associated with identification, but self-stereotyping is not (Figure 2).

Entitativity

Overall, 24% of the variance in entitativity was explained by the model, $F(7, 103) = 4.68$, $p < .001$. Self-stereotyping significantly and positively predicted perceived entitativity; $B = .18$, $SE = .09$, $t = 2.00$, $p = .05$. As expected, group clarity also significantly predicted perceived entitativity, such that it was higher in the clear group compared the unclear group, $B = .38$, $SE = .89$, $t = -4.37$, $p < .001$. Moreover, a marginal two-way interaction of self-anchoring and group clarity emerged, $B = .16$, $SE = .09$, $t = .86$, $p = .07$. The three-way interaction of self-anchoring, self-stereotyping and group clarity was not significant ($p > .10$), indicating no differential effect of self-stereotyping on entitativity depending on group clarity.

We further investigated the simple slopes of the two-way interaction between group clarity and self-anchoring, to test whether the same pattern between self-anchoring, clarity of group identity, and entitativity would emerge as in Study 1. The results confirmed that in the clear group, self-anchoring was unrelated to perceived entitativity ($p > .10$). In the unclear group however, perceived entitativity was higher for those who did self-anchor (+1 SD), compared to those who did not (-1 SD), $B = .25$, $SE = .13$, $t = 2.01$, $p = .05$ (Figure 3). This again supports our hypothesis that in unclearly defined groups, substantial perceptions of entitativity can be obtained via self-anchoring.

Figure 3. The positive effect of self-anchoring on entitativity as a function of group clarity (Study 2). Error bars represent standard errors.

Discussion

Study 2 replicated our findings in a real-group setting. In addition, we investigated the interplay between self-anchoring and self-stereotyping, and showed that while self-anchoring is positively associated with identification in unclear groups, self-stereotyping is in clear groups. Moreover, we again demonstrate that in unclear groups, self-anchoring enhances perceived entitativity.

It is noteworthy to mention that we only find a main effect for self-stereotyping on entitativity and not the expected interaction effect indicating that self-stereotyping predicts entitativity only in the clear group. Even though our correlational data seems to hint towards such interaction pattern, the regression analysis does not confirm this. This suggests that self-stereotyping may also still play a role in unclear groups when dealing with a firmly established group identity such as nationality. It could be that participants in the unclear group not only use the self, but also the available group stereotypes in search for ways to give meaning to the unclear group (Spears, 2002). Moreover, the fact that we *explicitly offered* Dutch stereotypes (to be able to measure self-stereotyping) may have amplified this tendency to also project group stereotypes onto the self in unclear groups, to restore entitativity levels. Nonetheless, we still find self-anchoring to be most strongly associated with social identification and entitativity in unclear groups, even when taking into account self-stereotyping processes.

GENERAL DISCUSSION

The current research shows that *how* we identify with groups depends on the clarity of a group's identity content. We provided empirical support for the traditional assumption that self-stereotyping is a cognitive route to social identification (Tajfel & Turner, 1979; SCT, Turner *et al.*, 1987). However, we found its predictive value to be limited to clearly defined groups; self-stereotyping did not convincingly account for the level of identification in unclearly defined groups. Alternatively, we demonstrated that

the cognitive process explaining identification with unclearly defined groups is self-anchoring. The use of the personal self helps to create a meaningful mental picture of the group and hence to identify.

Furthermore, self-anchoring is associated with an increase in perceived entitativity in unclear groups, up to equal levels as in clear groups. This finding corroborates research showing that the relation between personal self and group image is important for perceived entitativity (Lickel *et al.*, 2000; Rutchick *et al.*, 2008; Krueger *et al.*, 2006). Also, it fits the idea that not only commonality, but also individuality can be a building block for crafting group identities (Postmes, Spears, Lee, & Novak, 2005).

Interestingly, aside from demonstrating the positive association between self-anchoring and both identification and entitativity in unclear groups, we also find in both studies that the absolute level of self-anchoring *decreases* as a function of group clarity (see Table 1; minimal group: unclear $M = .67$, clear $M = .34$; real group: unclear $M = .20$, clear $M = .10$). This is in line with previous meta-analyses showing that the absolute level of self-anchoring is generally higher in minimal compared to real groups (DiDonato, Ulrich, & Krueger, 2011; Robbins & Krueger, 2005); the higher the lack of clarity on a group's identity content, the higher self-anchoring levels.

Self-anchoring versus self-stereotyping

There are some controversies in the literature regarding the importance of self-anchoring versus self-stereotyping. Some authors argue for higher importance of self-anchoring compared to self-stereotyping (DiDonato *et al.*, 2011; Krueger, 2007; Robbins & Krueger, 2005), while others claim the opposite (Guimond, Chatard, Martinot, Crisp, & Redersdorff, 2006; Latrofa, Vaes, Cadinu, & Carnaghi, 2010). At first glance, this seems contradictory. However, based on our research the differences in the reported relative impact of self-anchoring and self-stereotyping might be caused by differences in group clarity. Indeed, research on self-stereotyping is mainly conducted in groups with clear and prescriptive group norms, while research on self-anchoring mainly relies on minimal groups, with very little available group knowledge. Thus, we conclude that self-anchoring and self-stereotyping need not necessarily be antagonistic, but can be seen as two simultaneously operating mechanisms both underlying social identification levels, depending on group clarity.

Limitations and further research

We want to point to one caveat regarding our studies. Both self-anchoring and self-stereotyping were *measured* rather than manipulated in our research design. Even though previous research suggests that mental overlap is a *precondition* for social identification (e.g., Tropp & Wright, 2001), and we find compelling evidence for this causal relationship in our regression models, we cannot rule out a possible reversed causal path. Yet specifically in the case of self-anchoring in unclear groups, a causal path from identification to self-anchoring seems highly unlikely; it would imply that one would first identify with a group without content, to subsequently provide its content based on self-anchoring.

For self-stereotyping, the causality issue might be more complex. Following our assumption that self-stereotyping predicts social identification, we measured self-stereotyping *prior* to social identification. In contrast, Latrofa and coworkers (Latrofa *et al.*, 2009, 2010) claim the reverse causal path and measured self-stereotyping *after*

social identification. Yet both studies are correlational, and therefore both do not provide solid evidence for causality on this topic. In future research, a direct empirical test should provide more insight in the causal relationship between self-stereotyping and identification.

Finally, one could consider that lack of clarity does not only pertain to the *group level* but also to the *personal level*. While some have a very clear picture of who they are as a person, others do not. This impacts on the cognitive projection processes, as those with high self-concept stability tend to self-anchor more (Van Veelen *et al.*, 2011). In future research, it might be interesting to simultaneously investigate clarity at the personal and group level for its impact on self-anchoring and self-stereotyping. This could make the picture on how different people identify with different groups still more complete.

Conclusion

People identify with groups even when they are unclearly defined. In these groups, the use of the personal self as an anchor is crucial for social identification. Thus, if Princess Maxima indeed believes that the Dutch identity is unclear or even non-existent, self-anchoring principles explain how she could still identify strongly with the Netherlands.

References

- Brewer, M. B., & Harasty, A. S. (1996). Seeing groups as entities: The role of perceiver motivation. In E. T. Higgins (Ed.), *Handbook of motivation and cognition, vol. 3: The interpersonal context* (pp. 347–370). New York, NY: Guilford Press.
- Brooke, D., Postmes, T., Jetten, J., & Dyson, S. (2009). *Can we put "I" in "team"? How the group dynamics of social identity formation influence team performance*. Unpublished manuscript.
- Cadinu, M. R., & Rothbart, M. (1996). Self-anchoring and differentiation processes in the minimal group setting. *Journal of Personality and Social Psychology*, 70, 661–677. doi:10.1037/0022-3514.70.4.661
- Campbell, D. T. (1958). Common fate, similarity, and other indices of the status of aggregates of persons as social entities. *Behavioral Science*, 3, 14–25. doi:10.1002/bs.3830030103
- Clement, R. W., & Krueger, J. (2002). Social categorization moderates social projection. *Journal of Experimental Social Psychology*, 38, 219–231. doi:10.1006/jesp.2001.1503
- Coats, S., Smith, E. R., Claypool, H. M., & Banner, M. J. (2000). Overlapping mental representations of self and in-group: Reaction time evidence and its relationship with explicit measures of group identification. *Journal of Experimental Social Psychology*, 36, 304–315. doi:10.1006/jesp.1999.1416
- De la Haye, A. (2000). A methodological note about the measurement of the false-consensus effect. *European Journal of Social Psychology*, 30, 569–581. doi:10.1002/1099-0992(200007/08)30:4(569::AID-EJSP8)3.0.CO;2-V
- DiDonato, T. E., Ullrich, J., & Krueger, J. I. (2011). Social perception as induction and inference: An integrative model of intergroup differentiation, ingroup favoritism, and differential accuracy. *Journal of Personality and Social Psychology*, 100, 66–83. doi:10.1037/a0021051
- Dijksterhuis, A., & van Knippenberg, A. (1999). On the parameters of associative strength: Central tendency and variability as determinants of stereotype accessibility. *Personality and Social Psychology Bulletin*, 25, 527–536. doi:10.1177/0146167299025004010
- Dotinga, A., & van der Zee, K. I. (2010). *Wie is de PVV-stemmer? Identiteit en Diversiteit [Who is voting for the PVV? Identity and diversity]*. Groningen: ISW-rapport.
- Gramzow, R. H., Gaertner, L., & Sedikides, C. (2001). Memory for in-group and out-group information in a minimal group context: The self as an informational base. *Journal of Personality and Social Psychology*, 80, 188–205. doi:10.1037/0022-3514.80.2.188

- Guimond, S., Chatard, A., Martinot, D., Crisp, R. J., & Redersdorff, S. (2006). Social comparison, self-stereotyping, and gender differences in self-construals. *Journal of Personality and Social Psychology*, 90, 221–242. doi:10.1037/0022-3514.90.2.221
- Hamilton, D. L., Sherman, S. J., & Lickel, B. (1998). Perceiving social groups: The importance of the entitativity continuum. In C. A. Insko (Ed.), *Intergroup cognition and intergroup behavior* (pp. 47–74). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- Hogg, M. A., Sherman, D. K., Dierselhuis, J., Maitner, A. T., & Moffitt, G. (2007). Uncertainty, entitativity, and group identification. *Journal of Experimental Social Psychology*, 43, 135–142. doi:10.1016/j.jesp.2005.12.008
- Hogg, M. A., & Turner, J. C. (1987). Intergroup behaviour, self-stereotyping and the salience of social categories. *British Journal of Social Psychology*, 26, 325–340. doi:10.1111/j.2044-8309.1987.tb00795.x
- Jetten, J., Hogg, M. A., & Mullin, B. A. (2000). In-group variability and motivation to reduce subjective uncertainty. *Group Dynamics: Theory, Research, and Practice*, 4, 184–198. doi:10.1037/1089-2699.4.2.184
- Krueger, J. I. (2007). From social projection to social behaviour. *European Review of Social Psychology*, 18, 1–35. doi:10.1080/10463280701284645
- Krueger, J. I., Acevedo, M., & Robbins, J. M. (2006). Self as sample. In K. Fiedler, P. Juslin, K. Fiedler, & P. Juslin (Eds.), *Information sampling and adaptive cognition* (pp. 353–377). New York, NY: Cambridge University Press.
- Krueger, J., & Clement, R. W. (1994). The truly false consensus effect: An ineradicable and egocentric bias in social perception. *Journal of Personality and Social Psychology*, 67, 596–610. doi:10.1037/0022-3514.67.4.596
- Latrofa, M., Vaes, J., Cadinu, M., & Carnaghi, A. (2010). The cognitive representation of self-stereotyping. *Personality and Social Psychology Bulletin*, 36, 911–922. doi:10.1177/0146167210373907
- Latrofa, M., Vaes, J., Pastore, M., & Cadinu, M. (2009). 'United we stand, divided we fall!' The protective function of self-stereotyping for stigmatized members' psychological well-being. *Applied Psychology: An International Review*, 58, 84–104. doi:10.1111/j.1464-0597.2008.00383.x
- Leach, C. W., van Zomeren, M., Zebel, S., Vliek, M. L. W., Pennekamp, S. F., Doosje, B., . . . Spears, R. (2008). Group-level self-definition and self-investment: A hierarchical (multicomponent) model of in-group identification. *Journal of Personality and Social Psychology*, 95, 144–165. doi:10.1037/0022-3514.95.1.144
- Lickel, B., Hamilton, D. L., Wierzchowska, G., Lewis, A., Sherman, S. J., & Uhles, A. N. (2000). Varieties of groups and the perception of group entitativity. *Journal of Personality and Social Psychology*, 78, 223–246. doi:10.1037/0022-3514.78.2.223
- Lorenzi-Cioldi, F. (1991). Self-stereotyping and self-enhancement in gender groups. *European Journal of Social Psychology*, 21, 403–417. doi:10.1002/ejsp.2420210504
- Machunsky, M., Meiser, T., & Mummendey, A. (2009). On the crucial role of mental ingroup representation for ingroup bias and the ingroup prototypicality-ingroup bias link. *Experimental Psychology*, 56, 156–164. doi:10.1027/1618-3169.56.3.156
- Otten, S. (2002). 'Me and us' or 'us and them'? the self as a heuristic for defining minimal ingroups. In W. Stroebe & M. Hewstone (Eds.), *European Review of Social Psychology* (Vol. 13, pp. 1–33). Hove, England: Psychology Press/Taylor & Francis. doi:10.1080/10463280240000028
- Otten, S. (2004). Self-anchoring as predictor of in-group favoritism: Is it applicable to real group contexts? *Cahiers De Psychologie Cognitive/Current Psychology of Cognition*, 22, 427–443.
- Otten, S., & Epstude, K. (2006). Overlapping mental representations of self, ingroup, and outgroup: Unraveling self-stereotyping and self-anchoring. *Personality and Social Psychology Bulletin*, 32, 957–969. doi:10.1177/0146167206287254
- Otten, S., & Wentura, D. (2001). Self-anchoring and in-group favoritism: An individual profiles analysis. *Journal of Experimental Social Psychology*, 37, 525–532. doi:10.1006/jesp.2001.1479

- Peker, M., Crisp, R. J., & Hogg, M. A. (2010). Predictors of ingroup projection: The roles of superordinate category coherence and complexity. *Group Processes & Intergroup Relations*, 13, 525–542. doi:10.1177/1368430209360205
- Postmes, T., Spears, R., Lee, A. T., & Novak, R. J. (2005). Individuality and social influence in groups: Inductive and deductive routes to group identity. *Journal of Personality and Social Psychology*, 89, 747–763. doi:10.1037/0022-3514.89.5.747
- Robbins, J. M., & Krueger, J. I. (2005). Social projection to ingroups and outgroups: A review and meta-analysis. *Personality and Social Psychology Review*, 9, 32–47. doi:10.1207/s15327957pspr0901_3
- Rutchick, A. M., Hamilton, D. L., & Sack, J. D. (2008). Antecedents of entitativity in categorically and dynamically construed groups. *European Journal of Social Psychology*, 38, 905–921. doi:10.1002/ejsp.555
- Simon, B., & Hamilton, D. L. (1994). Self-stereotyping and social context: The effects of relative in-group size and in-group status. *Journal of Personality and Social Psychology*, 66, 699–711. doi:10.1037/0022-3514.66.4.699
- Simon, B., Hastedt, C., & Aufderheide, B. (1997). When self-categorization makes sense: The role of meaningful social categorization in minority and majority members' self-perception. *Journal of Personality and Social Psychology*, 73, 310–320. doi:10.1037/0022-3514.73.2.310
- Smith, E. R., & Henry, S. (1996). An in-group becomes part of the self: Response time evidence. *Personality and Social Psychology Bulletin*, 22, 635–642. doi:10.1177/0146167296226008
- Spears, R. (2002). Four degrees of stereotype formation: Differentiation by any means necessary. In R. Spears (Ed.), *Stereotypes as explanations: The formation of meaningful beliefs about social groups* (pp. 127–156). New York, NY: Cambridge University Press. doi:10.1017/CBO9780511489877.008
- Stephan, W. G., & Stephan, C. W. (1985). Intergroup anxiety. *Journal Of Social Issues*, 41, 157–175. doi:10.1111/j.1540-4560.1985.tb01134.x
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In S. Worchel & W. G. Austin (Eds.), *The social psychology of intergroup relations* (pp. 33–47). Monterey, CA: Brooks/Cole.
- Tropp, L. R., & Wright, S. C. (2001). Ingroup identification as the inclusion of ingroup in the self. *Personality and Social Psychology Bulletin*, 27, 585–600. doi:10.1177/0146167201275007
- Tropp, L. R., & Wright, S. C. (2003). Evaluations and perceptions of self, ingroup, and outgroup: Comparisons between Mexican-American and European-American children. *Self and Identity*, 2, 203–221. doi:10.1080/15298860309028
- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory*. Cambridge, MA: Basil Blackwell.
- Van Veelen, R., Otten, S., & Hansen, N. (2011). Linking self and ingroup: Self-anchoring as distinctive cognitive route to social identification. *European Journal of Social Psychology*, 41, 628–637. doi:10.1002/ejsp.792
- Waldzus, S., Mummendey, A., Wenzel, M., & Weber, U. (2003). Towards tolerance: Representations of superordinate categories and perceived ingroup prototypicality. *Journal of Experimental Social Psychology*, 39, 31–47. doi:10.1016/S0022-1031(02)00507-3
- Wetenschappelijke Raad voor het Regeringsbeleid (WVR). (2007). *Identificatie met Nederland [Identification with the Netherlands]*. The Hague, Netherlands: Scientific Council of Government Policies in the Netherlands.
- Yzerbyt, V., Rocher, S., & Schadron, G. (1997). Stereotypes as explanations: A subjective essentialistic view of group perception. In R. Spears, P. J. Oakes, N. Ellemers, & S. A. Haslam (Eds.), *The social psychology of stereotyping and group life* (pp. 20–50). Oxford: Basic Blackwell.
- Yzerbyt, V. Y., Schadron, G., Leyens, J., & Rocher, S. (1994). Social judgeability: The impact of meta-informational cues on the use of stereotypes. *Journal of Personality and Social Psychology*, 66, 48–55. doi:10.1037/0022-3514.66.1.48

Appendix

Table A1. Trait list ambiguous and (counter) stereotypical traits in Studies 1 and 2

Study 1	Study 2	
Ambiguous traits	Ambiguous traits	(Counter-) stereotypical traits ^a
Fashionable	Musical	Work-shy (counter)
Environmentally conscious	Vulnerable	Down-to-earth
Jealous	Modest	Planned social life
Businesslike	Creative	Hard worker
Musical	Introverted	Thrifty
Naïve	Flexible	Tolerant towards drugs
Complimentary	Environmentally conscious	Emotional (counter)
Sensitive		
Athletic		
Sportily		
Religious		
Fond of travelling		
Politically involved		
Romantic		
Proud		
Vain		

^aTo ensure an equal amount of variance on both the ambiguous and the stereotypical traits, we also included counter-stereotypical Dutch traits (i.e., traits typically not applicable to the Dutch). Those are referred to as 'counter' in the third column.