University of Groningen

A personal touch to diversity

van Veelen, Ruth; Otten, Sabine; Hansen, Nina

Published in:
Group Processes & Intergroup Relations

DOI:
[10.1177/1368430212473167](https://doi.org/10.1177/1368430212473167)

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
2013

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

van Veelen, R., Otten, S., & Hansen, N. (2013). A personal touch to diversity: Self-anchoring increases minority members' identification in a diverse group. *Group Processes & Intergroup Relations*, 16(6), 671-683. <https://doi.org/10.1177/1368430212473167>

Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

A personal touch to diversity: Self-anchoring increases minority members' identification in a diverse group

Group Processes & Intergroup Relations

16(6) 671–683

© The Author(s) 2013

Reprints and permissions:

sagepub.co.uk/journalsPermissions.nav

DOI: 10.1177/1368430212473167

gpir.sagepub.com

Ruth van Veelen,¹ Sabine Otten,¹ and Nina Hansen¹**Abstract**

In diverse groups, minority members often indicate lower levels of identification and perceived acceptance than majority members. To date, we know relatively little about how the cognitive definition of the *self* may impact on identification with a diverse group. In this research, we argue that when minority members shape a cognitive group bond based on the personal self (i.e., *self-anchoring*) rather than the social self (i.e., *self-stereotyping*) this may boost their level of identification and perceived value in diversity. To test this, we assigned participants to a majority or minority position in a diverse group and manipulated self-anchoring and self-stereotyping via mindset priming (plus a control condition). As expected, only minority, but not majority members' self-anchoring led to higher identification and value in diversity compared to self-stereotyping (and the control condition). Thus, a focus on the personal self in shaping a cognitive relation with a group enables minority members to belong while being different.

Keywords

self-anchoring, self-stereotyping, social identification, value in diversity, minority, majority

Paper received 4 July 2012; revised version accepted 3 December 2012.

Western societies are increasingly diverse. Developments in globalization, international mobilization, and emancipation have led to a rapid influx of cultural, ethnic, and gender minority groups within majority-dominated work floors, schools and neighborhoods. To facilitate minority members' inclusion in diverse groups, researchers and policy makers have put great effort in implementing pro-diversity programs. Yet, despite such efforts, research shows that minority members

identify less with diverse groups compared to majority members (Guillaume, Brodbeck, & Riketta, 2012), have lower levels of self-esteem

¹University of Groningen, The Netherlands**Corresponding author:**

Ruth van Veelen, Department of Social Psychology,
University of Groningen, Grote Kruisstraat 2/1, 9712 TS
Groningen, The Netherlands.

Email: r.van.veelen@rug.nl

regarding their group memberships (Schmader, Major, & Gramzow, 2001), and have less positive expectations about whether diversity will be valued (Tropp & Bianchi, 2006). Therefore, research aiming to improve minority members' sense of inclusion in diverse groups is highly important.

A cognitive perspective on how people adapt to social diversity provides valuable insight into why identification with a diverse group can be a challenge. Specifically, people have a natural preference for homogeneity and simplicity (Caporael, 1997). This preference manifests itself in people's automatic tendency to divide the world into simple "us" and "them" categories (Allport, 1954; Tajfel, 1974; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). Within a matter of milliseconds people are able to differentiate between those who are similar, and those who are different (Stangor, Lynch, Duan, & Glass, 1992). While advantageous in ancient monocultures in order to rapidly distinguish friend from foe, this similarity-based categorization is clearly disadvantageous in today's Western societies where diversity is omnipresent (Crisp & Meleady, 2012).

Prior research has already extensively investigated how cognitive redefinitions of diverse *groups* may decrease subgroup salience and increase minority members' sense of inclusion, for example based on a common (Dovidio, Gaertner, & Saguy, 2009), complex (Wenzel, Mummendey, & Waldzus, 2007) or dual ingroup identity (Dovidio, Gaertner, Shnabel, Saguy, & Johnson, 2010). Surprisingly, relatively little is known about the cognitive definition of the *self* in relation to diverse groups (see also Bodenhausen, 2010). Therefore, the aim of the current research is to investigate how cognitive definitions of the *self* in relation to a diverse group may impact on minority and majority members' *social identification* and *perceived value in diversity*. Importantly, these two factors form key determinants for successful functioning in diverse groups (e.g., Haslam, van Knippenberg, Platow, & Ellemers, 2003; van Knippenberg, Haslam, & Platow, 2007).

The psychological basis for social identification is rooted in the strength of the cognitive relationship between the self and the group (Tropp &

Wright, 2001). This relationship can either be inferred from the *personal self* or the *social self* (van Veelen, Otten, & Hansen, 2011). We will argue that using the personal self as an anchor to create a relation with a diverse group (i.e., self-anchoring; Cadinu & Rothbart, 1996), rather than using the social self (i.e., self-stereotyping; Turner et al., 1987) will benefit minority members' identification with diverse groups and their perceptions that diversity will be valued in the group, while for majority members both processes will work equally well.

Cognitive Definitions of Self in Relation to a Group

According to self-categorization theory (SCT; Turner et al., 1987), *self-stereotyping* is the cognitive process that links the self to an ingroup. SCT argues that people's self-concept comprises a social self (i.e., the prototypical features of the groups one belongs to) and a personal self (i.e., the unique individual, different from others), both existing at opposite ends of the same continuum. When people self-stereotype, their social self becomes salient and their personal self shifts to the background, or *depersonalizes*. Consequently, people come to describe themselves in terms of prototypical group characteristics. Thus, self-stereotyping implies self-group overlap based on assimilation to ingroup prototypes.

In contrast, *self-anchoring*¹, implies the projection of *personal* characteristics onto the ingroup (Cadinu & Rothbart, 1996). Therefore, self-anchoring is the exact opposite process from self-stereotyping. For example, if I perceive myself as a "creative" person, I may project this onto my ingroup and come to perceive the ingroup to be "creative" as well. Importantly, with self-anchoring the personal self plays a central role in shaping a cognitive self-group relation (e.g., Cadinu & Rothbart, 1996; Krueger, 2007; Otten, 2002; Otten & Wentura, 2001).

In recent research, self-anchoring and self-stereotyping have been investigated simultaneously for their distinct impact on *social identification* (van Veelen et al., 2011). Evidence was provided

that social identification can rely on both the projection of group prototypes onto the self (i.e., self-stereotyping), as well as the projection of personal characteristics onto the group (i.e., self-anchoring). Building on this research, we apply self-stereotyping and self-anchoring to a more complex group context, comprising a minority and a majority subgroup, and investigate the impact on *social identification*. Additionally, we investigate the impact on *perceived value in diversity*. Research showed that how people define the self in relation to a group does not only impact on social identification, but may also shape perceptions of what the group's identity is like (van Veelen, Otten, & Hansen, 2012). Therefore, in the context of diverse groups, self-anchoring and self-stereotyping may affect minority and majority members' perceptions of whether diversity is seen as a valuable asset to the group's identity (van Knippenberg et al., 2007). Importantly, the projection processes we investigate always pertain to the *self* in relation to the *superordinate* group as our aim is to investigate identification and value in diversity with a diverse group as a whole.

Self-Anchoring and Self-Stereotyping in Diverse Groups

When subcategories within diverse groups are highly cognitively accessible (e.g., gender or ethnicity) this leads to an accentuation of differences between subgroups, relative to differences between individuals (i.e., principle of metacontrast; e.g., Oakes, Haslam, & Turner, 1994; van Knippenberg, De Dreu, & Homan, 2004; Wittenbrink, Hilton, & Gist, 1998). Self-stereotyping can be assumed to contribute to this tendency, because it has been shown to increase intergroup differentiation and bias (e.g., Simon, Hastedt, & Aufderheide, 1997; Guimond, Chatard, Martinot, Crisp, & Redersdorff, 2006). In contrast, self-anchoring likely contributes to the perception that in diverse groups, individuals are just as different (or similar) from each other as subgroups are. Indeed, research shows that in inclusive groups, people can project personal attributes to the higher order inclusive category almost as strongly as they project to the

local subcategory (Krueger & Clement, 1996; Krueger & Zeiger, 1993; Riketta & Sacramento, 2008).

Hence, we assume that the extent to which group members perceive subgroup categories as diagnostic for the diverse group depends on the activation of either the social or the personal self (cf. Turner & Oakes, 1989). While self-stereotyping seems to emphasize similarity-based subgroup boundaries (Oakes et al., 1994), self-anchoring seems to de-emphasize such boundaries and focus on the individual in the group instead (Krueger & DiDonato, 2008). What consequences does this have for majority and minority members' social identification and perceived value in diversity in diverse groups?

Social identification. For *majority members*, we expect self-stereotyping to be an effective way to identify with a diverse group. Specifically, in a diverse group the characteristics prototypical for a majority subgroup are generally also considered to be prototypical for the diverse group as a whole (Wenzel et al., 2007). Consequently, there is a fit between the prototypes of the majority subgroup and the overarching identity, which allows for a cognitive definition of the self in a diverse group based on assimilation to group prototypes. At the same time, reliance on self-anchoring should also lead to successful identification for majority members, because each individual has a personal self at his/her disposal which can be used to cognitively define the self in relation to an inclusive, diverse group (Krueger & DiDonato, 2008) and to identify with the group (van Veelen et al., 2011).

In contrast, *minority members* are typically not seen as prototypical group members in diverse groups, nor do they perceive themselves as such (Waldzus, Mummendey, Wenzel, & Boettcher, 2004). Hence, there is a misfit between the minority subgroup and the prototypes of the overarching identity. Consequently, it can be expected that minority members' tendency to assimilate to group prototypes is unlikely (Sarason et al., 1991) and possibly also undesirable as it implies nonacknowledgement of the minority identity in the

diverse group. Hence, *self-stereotyping* likely hinders identification with a diverse group, as it emphasizes that minority members deviate from group prototypes. With *self-anchoring* however, a cognitive self-group relation can be inferred independently from conformity to group prototypes. Instead, the personal self can be used to directly infer a link with the diverse group (e.g., Krueger & DiDonato, 2008; Krueger & Zeiger, 1993). Consequently, minority members may recognize the arbitrariness of social subcategories and identify with the diverse group based on who they are as individual group members.

Taken together, we hypothesize that for minority members in diverse groups self-anchoring will lead to higher identification compared to self-stereotyping, while for majority members no differences will emerge in the level of identification depending on the type of projection process (Hypothesis 1).

Value in diversity. Additionally, we investigate the impact of self-anchoring and self-stereotyping on minority and majority members' perceptions of the group's identity representation (van Veelen et al., 2012), specifically on their *perceived value in diversity*. Prior research on diversity in organizations has shown that a focus on (category-based) similarity hinders the perception that diversity can be a valuable asset to a group's identity (van Knippenberg et al., 2007), while a focus on individual qualities of group members bolsters perceived value in diversity (Homan, Greer, Jehn, & Koning, 2010). Based on this research, we assume self-stereotyping to hinder perceived value in diversity, because it accentuates similarity-based categorizations (e.g., Turner et al., 1987). In contrast, we assume self-anchoring to foster perceived value in diversity because it accentuates the role of the individual, and decreases the relevance of similarity-based subgroup categorizations within diverse groups (Krueger & DiDonato, 2008). Considering that minority members are typically more aware of their relative position in a diverse group (Major & O'Brien, 2005) and generally indicate lower expectations about value in diversity

than majority members (Tropp & Bianchi, 2006), we hypothesize that the positive effect of self-anchoring (compared to self-stereotyping) on value in diversity is especially pronounced among minority members, while less so among majority members (Hypothesis 2).

The Present Study

In the present study we investigate how self-stereotyping and self-anchoring impact on minority and majority members' identification and perceived value in diversity in a diverse group. We will focus on a *numerical* minority or majority position in a newly formed diverse team based on gender. Moreover, instead of measuring self-anchoring and self-stereotyping, as has been done in previous studies (e.g., van Veelen et al., 2012), we *manipulate* both projection processes based on mindset priming. Mindset priming has proven to be an effective tool to impact on inter- and intra-group perceptions and attitudes (e.g., Corcoran, Hundhammer, & Mussweiler, 2009). To our knowledge, we are the first to apply this method to prime the directional route to self-group overlap, and to experimentally test the differential impact of self-anchoring versus self-stereotyping on minority and majority members.

In addition, in order to locate a base-rate level of identification and value in diversity among minority and majority members in a diverse team, we also included a control condition. Research has shown that in newly formed diverse teams—as is the focus of our study—the most obvious social subcategories (such as gender) automatically shape perceptions of category similarity (Zellmer-Bruhn, Maloney, Bhappu, & Salvador, 2008). Therefore, it is a plausible assumption that in our study self-stereotyping, as a similarity-based inference process, forms the default to create self-group overlap. If so, then self-anchoring may facilitate minority group members' identification and value in diversity relative to *both* a self-stereotyping *and* a control condition. Although this is not an essential part of our hypotheses, we additionally tested this assumption.

Method

Participants and Design

One hundred and sixty native Dutch students ($M_{age} = 20.78$; $SD = 2.58$; 110 women) participated in our study and received study credits or 6.00 Euros in return. The study had a 2 x 3 between-subjects design in which we manipulated relative *group size* (minority vs. majority) based on gender, and *projection* (self-anchoring vs. self-stereotyping vs. control condition). Our dependent measures were social identification and perceived value in diversity within the group.

Procedure

Upon arrival in the laboratory, participants were placed in separate cubicles and the experimenter told them they would participate in a study on “first impressions and team effectiveness in virtual teams.” Furthermore, they were told that they would be connected to five other team members currently participating in the lab via the computer. A picture was taken of each participant, ostensibly to be able to form an impression about the team members. The experimenter left the cubicle while participants read that the aim of the study was to investigate first impressions and gender differences in virtual teams engaging in an online brainstorming task. Participants were then connected to the team network and waited until the experimenter returned with a sheet with six printed pictures: one of the participant, and five of the alleged other team members. In fact, the other pictures were from the Radboud Faces Database (Langner et al., 2010).

Manipulation minority/majority position. We manipulated a minority or majority position in the diverse team based on relative subgroup size, by assigning participants to either a numerical minority or majority position in the diverse group based on gender. Participants were shown their relative position in the team, based on the sheet with pictures of the six team members. In the minority condition there was only one other team member

with the same sex and four team members of the opposite sex, while in the majority condition there were three other team members with the same sex, and only two team members with the opposite sex. This sheet with pictures of the team remained on participants’ desk during the entire experiment, to ensure its salience. As a manipulation check we asked each participant to indicate whether he or she belonged to a numerical majority or minority. In fact, all participants correctly identified being either a minority or majority member.

Manipulation projection. After the manipulation of the minority/majority position, projection was manipulated. Building on prior methodological procedures, our projection manipulation included an *order* variation of self-group salience (i.e., self first vs. group first; e.g., Cadinu & Rothbart, 1996; Otten & Wentura, 2001), and a *content* variation of the projected traits (i.e., personal vs. stereotypical traits; Latrofa, Vaes, Cadinu, & Carnaghi, 2010; van Veelen et al., 2011, 2012). Importantly, and different from prior research, the direction of the emergence of self-group overlap was explicitly primed. Participants were randomly assigned to a projection condition. In the *self-anchoring* condition, in order to make the personal self salient, participants were first asked to write down five traits that would typically characterize them as an individual. Next, we asked them to write about how the five personal traits would be applicable to the team they were just introduced to. By letting participants think about how personal characteristics are applicable to the team, we aimed to create a link between the self and the group, based on personal attributes.

In the *self-stereotyping* condition, in order to make group prototypes salient, participants were first asked to write down five traits that would typically characterize their team. Subsequently, we asked them to write about how the five team traits would be applicable to them as an individual. By letting participants think about how group characteristics would be applicable to themselves,

we aimed to create a link between the self and the group, based on prototypical group attributes.

In the *control* condition there was no mindset prime between the group size manipulation and administering the dependent variables.

Dependent variables. After the projection manipulation participants were told that in a few moments they would start brainstorming. However, we also stated that beforehand, we were interested in their first impressions about the team. Actually, at this point participants filled out the questions concerning our dependent measures.

First, *social identification* with the diverse team was measured based on the membership subscale of collective self-esteem scale by Luhtanen and Crocker (1992; four items; e.g., "I think that I am a valuable member of this team," "I don't think I have much to offer to this team" [reverse coded]; $\alpha = .58^2$) on a 7-point Likert scale (1 = *I completely disagree*; 7 = *I totally agree*). We specifically focused on this conceptualization of identification as, according to a meta-analysis by Leach et al. (2008) it grasps a "sense of belonging and psychological commitment to the ingroup" (2008, p. 147), which is exactly what we consider crucial in diverse groups. Overall, the level of identification was significantly above the midpoint of the scale ($M = 5.30$; $SD = 0.75$), $t(159) = 21.94$, $p < .001$, indicating that participants substantially identified with the online team.

Subsequently, we measured the expectations about *value in diversity* in the team, based on six items adapted from van Knippenberg et al. (2007) and Tropp and Bianchi (2006) on a 7-point Likert scale (1 = *I completely disagree*; 7 = *I totally agree*). We formulated the items such that they were focused on expectations about the team identity during the upcoming brainstorm task (e.g., "I expect our team to be understanding and respectful if men and women have different ways of working together," "I think the collaboration in this team would be better if it were to consist of only [men/women]"; reversed item; $\alpha = .71$).

At the end of the questionnaire, we explained that the brainstorming task would actually not

take place and that the other team members were fictional. We thanked and carefully debriefed participants.

Results

The Projection Manipulation

The implicit nature of our projection manipulation did not allow for an explicit manipulation check. However, we could take advantage of the traits participants wrote down to describe both the self and the team, in order to check whether our manipulation was successful. We evaluated these traits regarding their *content* and *valence*.

The *content* of projected traits should be different across conditions; self-stereotyping should be associated with projection of team traits on the self, whereas self-anchoring should not. To test this, two independent raters rated all the projected traits on whether they explicitly referred to socially shared aspects of the team, such as being related to "male," "female," and "students."³ We called these "team traits." We created a variable indicating whether "team traits" were projected (yes/no). As expected, the number of participants projecting "team traits" was significantly higher in the self-stereotyping ($N_{yes} = 33$; $N_{no} = 21$) compared to the self-anchoring condition ($N_{yes} = 3$; $N_{no} = 51$; $\chi^2 = 37.50$, $p < .001$).

Moreover, the *valence* of projected traits should be similar across projection conditions. To check this, the same raters also rated the valence of all traits as positive, negative or neutral⁴. The number of positive and negative traits projected by each participant was counted. Two analyses of variance (ANOVAs) with *projection* and *minority/majority position* as predictors revealed no significant main or interaction effects on both the number of positive and negative traits projected (all $ps > .50$).

Taken together, the analyses on projected traits indicate that our projection manipulation was successful: The content of projected traits was related to team characteristics in the self-stereotyping condition, while much less so in the

self-anchoring condition. Moreover, trait valence was the same across conditions, rendering an interpretation of mindset effects in terms of differentially primed valence implausible.

Social Identification

We conducted an analysis of variance (ANOVA) with *projection* (self-anchoring vs. self-stereotyping vs. control) and *minority/majority position* as independent variables and social identification as dependent variable. This revealed a marginal main effect of projection $F(2, 154) = 2.67, p = .07, \eta^2 = .03$, which was further qualified by the expected interaction effect, $F(2, 154) = 4.47, p = .013, \eta^2 = .06$ (see Figure 1). To examine the differences in social identification between our three-level projection variable among minority and majority group members, we conducted a simple main effects analysis by calculating dummy-coded contrasts based on LMATRIX in SPSS (Siero, Huisman, & Kiers, 2009). This simple main analysis revealed that for minority members social identification was significantly higher in the self-anchoring condition ($M = 5.63; SD = 0.65$) compared to both the self-stereotyping ($M = 4.93; SD = 0.82$), $F(1, 154) = 11.59, p = .001, \eta^2 = .07$, and the control condition ($M = 5.02; SD = 0.57$), $F(1, 154) = 4.07, p = .045, \eta^2 = .03$. For majority members, no significant differences were found in the level of identification between the projection conditions (all $ps > .15$).

Value in Diversity

An ANOVA on perceived value in diversity revealed a significant main effect of minority/majority position, $F(1, 154) = 9.37, p = .003, \eta^2 = .06$, indicating that majority members compared to minority members have more positive expectations about value in diversity in the team. This main effect was further qualified by the expected interaction effect, $F(2, 154) = 3.94, p = .021, \eta^2 = .05$ (see Figure 2). Simple main effects analysis revealed that for minority members perceived value in diversity was significantly higher in the

self-anchoring condition ($M = 5.29; SD = 0.74$) compared to both the self-stereotyping ($M = 4.76; SD = 0.79$), $F(1, 154) = 5.40, p = .021, \eta^2 = .03$, and the control condition ($M = 4.70; SD = 0.93$), $F(1, 154) = 6.48, p = .012, \eta^2 = .04$. For majority members, no significant differences were found in the level of identification between the projection conditions (all $ps > .25$)⁵.

Discussion

In the present research we showed that the cognitive definition of the *self* in relation to a diverse group plays an important role in minority and majority members' identification with diverse groups. Specifically, for minority members *self-anchoring* led to higher levels of identification compared to *self-stereotyping*. Moreover, minority members' self-anchoring also resulted in more positive expectations about value in diversity. Thus, self-anchoring, as opposed to self-stereotyping, allowed minority members in diverse groups to belong, while being different. Importantly, the positive effect of self-anchoring for minority members did not go at the expense of majority members' identification. For them, both cognitive pathways towards self-group overlap provided equally successful approaches to identification. This is important considering that majority members increasingly feel excluded in groups where pro-diversity initiatives are implemented (Plaut, Garnett, Buffardi, & Sanchez-Burks, 2011).

Theoretical Implications

Our findings on self-anchoring contribute to a recently growing literature demonstrating that not only a focus on similarity-based group conformity (Tajfel & Turner, 1979; Turner et al., 1987), but also a focus on the individual in the group facilitates group identification (see for reviews Hornsey & Jetten, 2004; Postmes & Jetten, 2006). The lion share of this literature focuses on strategies related to the *structural properties* of a group that render room for the individual.

Figure 1. The Effect of Projection (control vs. self-anchoring vs. self-stereotyping) x Group Position (minority versus. majority) on social identification. Error bars represent 95% confidence intervals.

Figure 2. The Effect of Projection (control vs. self-anchoring vs. self-stereotyping) x Group Position (minority vs. majority) on perceived value in diversity. Error bars represent 95% confidence intervals.

It demonstrates people's ability to identify with groups in which individuality is normative. Prominent examples are groups with individualist cultural norms (Hornsey, Jetten, McAuliffe, & Hogg, 2006; Jetten, Postmes, & McAuliffe, 2002), and inductively formed groups (Jans, Postmes, & van der Zee, 2011; Postmes, Spears, Lee, & Novak, 2005).

Our findings on the impact of self-anchoring and self-stereotyping in diverse groups focus on *perceptual framing*, or the idea that self-perception can be tailored such that the self as a unique individual can become relevant for group identification (Hornsey & Jetten, 2004, 2005). Thus far, such perceptual strategies have received little attention in the literature. Therefore, we believe our findings form an innovative and valuable contribution to how cognitive shifts in perceptual framing of the self in relation to a group can affect identification with diverse groups. In this context, we provide a cognitive account as to *how* (i.e., via self-anchoring) a mental relationship between self and group can best be formed in a diverse group, and for *whom* (i.e., minority members) such strategy is most important to achieve a sense of belonging while being different.

At first glance, it may seem as though our results on self-stereotyping contradict earlier results on the protective function of self-stereotyping for low-status minority members' well-being (Latrofa, Vaes, Pastore, & Cadinu, 2009). Here, self-stereotyping benefits instead of hinders minority members. However, Latrofa et al. (2009) investigated self-stereotyping at the *subgroup* level, showing that strong assimilation to minority stereotypes may create a sense of safety and belonging within the own *subgroup*. Yet, when the goal is to create a sense of inclusion for minority members within a *superordinate* group, our results indicate that self-stereotyping hinders minority members. In such situation, stereotypes do no longer reflect the minority subgroup's stereotypes, but more likely the majority's stereotypes. Therefore it is important to disentangle cognitive definitions of the self in relation to the subgroup, or rather the superordinate group when investigating the effects of self-stereotyping in diverse groups.

Other Implications and Further Research

In the present research, we argue that the effects we find on our projection prime are driven by a cognitive process, such that self-anchoring activates individuating self-knowledge, while self-stereotyping activates category-based group information as a source of self-group overlap (Gramzow, Gaertner, & Sedikides, 2001; Krueger, 2007). However, an evaluative process might also play a role, such that self-anchoring allows people to reaffirm the positive self in the group after being confronted with their minority position (cf. Derks, van Laar, & Ellemers, 2009; Gramzow & Gaertner, 2005). Future research should provide more insight into the relevance of these accounts for the effect of self-anchoring and self-stereotyping primes on social identification.

We have employed a subtle manipulation of cognitive projection processes. Of course, we do not expect that this manipulation directly translates into optimal group functioning among minority members—how we function in groups is not only determined by our thoughts, but also by our experiences. Nevertheless, repetitive exposure to a priming manipulation fostering self-anchoring may increase the likelihood that over time the individual self will be used as a standard to define the ingroup (Herr, 1986), thereby facilitating minority members' sense of belonging. For example, in newly formed diverse teams, where the most obvious social subcategories (e.g., gender, ethnicity) typically shape perceptions of category similarity within the team (Zellmer-Bruhn et al., 2008), minority members may be prone to perceive a pressure to assimilate to group prototypes and, hence, identify less. Yet, organizational policies encouraging minority members to redefine their cognitive perceptions and think about how their *personal* self defines the team as a whole may elevate identification levels and expectancies about value in diversity.

It is important to note that our diversity manipulation based on gender refers specifically to *social category diversity* (i.e., differentiation based on readily detectable, demographic attributes such as gender, age, and ethnicity) and not *informational*

diversity (i.e., differentiation based on less visible attributes such as educational background; e.g., van Knippenberg et al., 2004). Moreover, aside from the horizontal aspect of diversity (i.e., division in social subcategories), there are also vertical aspects to consider, such as relative subgroup size, status, and power over resources (Harrison & Klein, 2007). In our numerical diversity manipulation, vertical aspects are only represented in the *asymmetrical* division in subgroup size, and not in status or power differences between sexes.

Following from this, our study results do not tap into potential status differences between men and women in our sample population (see also Chattopadhyay, George, & Shulman, 2008). Yet one could argue that such status differences may exist: On the one hand, men generally still have higher status in society than women, specifically in team settings (Chattopadhyay et al., 2008). This implies that experimental teams composed of a female minority may have felt more “natural” to participants. On the other hand, in our student sample most participants study a social science. This implies that for female participants it may be more “natural” to outnumber men in a team, than vice versa. Both cases can be made, and therefore it is important to note that our study results were solely attributable to our experimentally induced manipulation of the ratio of sexes in the team. Hence, potential *a priori* differences between male and female participants did not impact on our results (see also Endnote 5).

This is not to say however, that our findings may not generalize to other forms of diversity. In our view, self-anchoring may not only facilitate minority members’ level of group identification when minority/majority subgroup salience is based on numbers, but also when it is based on status, power, or a combination of those. In essence, group diversity based on the salience and accessibility of asymmetrical subgroup categories (Tajfel & Wilkes, 1963) likely signals majority members’ ability, and minority members’ inability to infer a group bond based on being a prototypical group member (i.e., self-stereotyping). The stronger asymmetrical subcategories are, the stronger the applicability of similarity-based models to inclusion and exclusion (Lau & Murnighan,

1998; Turner et al., 1987), but also the more likely it may be that self-anchoring may help overcome negative consequences for minority members’ sense of belongingness. Further research should provide more evidence for the generalizability of our findings to other types of diversity.

As expected, majority members’ perceived value in diversity was generally high (above midpoint of the scale) and unaffected by the projection manipulation in our study. This is in line with research stating that because majority members are mostly unaffected by potential problems associated with diversity, they tend to strongly endorse value in diversity (e.g., Tropp & Bianchi, 2006). An interesting question is whether this finding applies to majority members in any demographically diverse group. Possibly, in diverse groups in which majority members openly discard diversity and stigmatize minority members, there is something to gain from self-anchoring, as it may shift majority members’ focus from prototypical group characteristics to the group members’ individual merits. Further research should provide more insight into this matter.

To conclude, how people cognitively define the self in a diverse group significantly impacts on their identification and sense of inclusion. Specifically, a simple mindset prime, focusing on the personal self instead of the social self, already enhances minority members’ identification and their perception that each individual forms a valuable part of a diverse group.

Acknowledgement

The authors would like to thank Ana Goessens for her help with the data collection of this study.

Notes

1. The terms self-anchoring and social projection are generally used interchangeably in the literature, referring to the self as a heuristic to make group judgments (e.g., Krueger, 1998). For ease of readability we only use the term self-anchoring.
2. The relatively low Cronbach’s alpha for social identification was likely caused by the negatively phrased items within each measure (Schriesheim, Eisenbach, & Hill, 1991). Importantly, the pattern of results was similar when analyzing all items separately.

3. The interrater reliability on “team traits” indicated substantial agreement ($Kappa = .75, p < .001$; Landis & Koch, 1977). In case of disagreement, we took a conservative approach and did not indicate a trait as being a “team trait.”
4. On *valence* interrater reliability indicated almost perfect agreement ($Kappa = .85, p < .001$; Landis & Koch, 1977). In case of disagreement, traits were indicated as neutral.
5. We also conducted our analyses including gender of the participant as a covariate in our design. The covariate did not show a main effect on both our dependent variables (both $ps > .50$) and importantly, inclusion of this covariate yielded a similar pattern of results for both social identification and perceived value in diversity.

References

- Allport, G. W. (1954). *The nature of prejudice*. Oxford, UK: Addison-Wesley.
- Bodenhausen, G. V. (2010). Diversity in the person, diversity in the group: Challenges of identity complexity for social perception and social interaction. *European Journal of Social Psychology, 40*, 1–16. doi: 10.1002/ejsp.647
- 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
- Caporael, L. R. (1997). The evolution of truly social cognition: The core configurations model. *Personality and Social Psychology Review, 1*, 276–298. doi: 10.1207/s15327957pspr0104_1
- Chattopadhyay, P., George, E., & Shulman, A. D. (2008). The asymmetrical influence of sex dissimilarity in distributive vs. collated workgroups. *Organization Science, 19*, 581–593. doi: 10.1287/orsc.1070.0324
- Corcoran, K., Hundhammer, T., & Mussweiler, T. (2009). A tool for thought! When comparative thinking reduces stereotyping effects. *Journal of Experimental Social Psychology, 45*, 1008–1011. doi: 10.1016/j.jesp.2009.04.015
- Crisp, R. J., & Meleady, R. (2012). Adapting to a multicultural future. *Science, 336*, 853–855. doi: 10.1126/science.129009
- Derks, B., van Laar, C., & Ellemers, N. (2009). Working for the self or working for the group: How self- versus group affirmation affects collective behavior in low-status groups. *Journal of Personality and Social Psychology, 96*, 183–202. doi: 10.1037/a0013068
- Dovidio, J. F., Gaertner, S. L., & Saguy, T. (2009). Commonality and the complexity of “we”: Social attitudes and social change. *Personality and Social Psychology Review, 13*, 3–20. doi: 10.1177/1088868308326751
- Dovidio, J. F., Gaertner, S. L., Shnabel, N., Saguy, T., & Johnson, J. (2010). Recategorization and prosocial behavior: Common in-group identity and a dual identity. In S. Stürmer & M. Snyder (Eds.), *The psychology of prosocial behavior: Group processes, intergroup relations, and helping* (pp. 191–207). Chichester, UK: Wiley-Blackwell.
- Gramzow, R. H., & Gaertner, L. (2005). Self-esteem and favoritism toward novel in-groups: The self as an evaluative base. *Journal of Personality and Social Psychology, 88*, 801–815. doi: 10.1037/0022-3514.88.5.801
- 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
- Guillaume, Y. F., Brodbeck, F. C., & Riketta, M. (2012). Surface- and deep-level dissimilarity effects on social integration and individual effectiveness related outcomes in work groups: A meta-analytic integration. *Journal of Occupational and Organizational Psychology, 85*, 80–115. doi: 10.1111/j.2044-8325.2010.02005.x
- 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
- Harrison, D. A., & Klein, K. J. (2007). What’s the difference? Diversity constructs as separation, variety, or disparity in organizations. *Academy of Management Review, 32*, 1199–1228. doi: 10.2307/20159363
- Haslam, S. A., van Knippenberg, D., Platow, M. J., & Ellemers, N. (2003). *Social identity at work: Developing theory for organizational practice*. New York, NY: Psychology Press.
- Herr, P. M. (1986). Consequences of priming: Judgment and behavior. *Journal of Personality and Social Psychology, 51*, 1106–1115. doi: 10.1037/0022-3514.51.6.1106
- Homan, A. C., Greer, L. L., Jehn, K. A., & Koning, L. (2010). Believing shapes seeing: The impact of diversity beliefs on the construal of group composition. *Group Processes & Intergroup Relations, 13*, 477–493. doi: 10.1177/1368430209350747
- Hornsey, M. J., & Jetten, J. (2004). The individual within the group: Balancing the need to belong with the need to be different. *Personality and Social Psychology Review, 8*, 248–264. doi: 10.1207/s15327957pspr0803_2

- Hornsey, M. J., & Jetten, J. (2005). Loyalty without conformity: Tailoring self-perception as a means of balancing belonging and differentiation. *Self and Identity*, 4, 81–95. doi: 10.1080/13576500444000236
- Hornsey, M. J., Jetten, J., McAuliffe, B. J., & Hogg, M. A. (2006). The impact of individualist and collectivist group norms on evaluations of dissenting group members. *Journal of Experimental Social Psychology*, 42, 57–68. doi: 10.1016/j.jesp.2005.01.006
- Jans, L., Postmes, T., & van der Zee, K. I. (2011). The induction of shared identity: The positive role of individual distinctiveness for groups. *Personality and Social Psychology Bulletin*, 37, 1130–1141. doi: 10.1177/0146167211407342
- Jetten, J., Postmes, T., & McAuliffe, B. J. (2002). “We’re all individuals”: Group norms of individualism and collectivism, levels of identification and identity threat. *European Journal of Social Psychology*, 32, 189–207. doi: 10.1002/ejsp.65
- Krueger, J. (1998). Enhancement bias in descriptions of self and others. *Personality and Social Psychology Bulletin*, 24, 505–516. doi: 10.1177/0146167298245006
- Krueger, J., & Clement, R. W. (1996). Inferring category characteristics from sample characteristics: Inductive reasoning and social projection. *Journal of Experimental Psychology: General*, 125, 52–68. doi: 10.1037/0096-3445.125.1.52
- Krueger, J., & Zeiger, J. S. (1993). Social categorization and the truly false consensus effect. *Journal of Personality and Social Psychology*, 65, 670–680. doi: 10.1037/0022-3514.65.4.670
- 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., & DiDonato, T. E. (2008). Social categorization and the perception of groups and group differences. *Social and Personality Psychology Compass*, 2, 733–750. doi: 10.1111/j.1751-9004.2008.00083.x
- Landis, R. J., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics*, 33, 159–174.
- Langner, O., Dotsch, R., Bijlstra, G., Wigboldus, D. H. J., Hawk, S. T., & van Knippenberg, A. (2010). Presentation and validation of the Radboud Faces database. *Cognition and Emotion*, 24, 1377–1388. doi: 10.1080/02699930903485076
- 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 stigmatised members’ psychological well-being. *Applied Psychology: An International Review*, 58, 84–104. doi: 10.1111/j.1464-0597.2008.00383.x
- Lau, D., & Murnighan, J. K. (1998). Demographic diversity and faultlines: The compositional dynamics of organizational groups. *Academy of Management*, 23, 325–340. doi: 10.5465/AMJ.2005.17843943
- 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
- Luhtanen, R., & Crocker, J. (1992). A collective self-esteem scale: Self-evaluation of one’s social identity. *Personality and Social Psychology Bulletin*, 18, 302–318. doi: 10.1177/0146167292183006
- Major, B., & O’Brien, L. T. (2005). The social psychology of stigma. *Annual Review of Psychology*, 56, 393–421. doi: 10.1146/annurev.psych.56.091103.070137
- Oakes, P. J., Haslam, S. A., & Turner, J. C. (1994). *Stereotyping and social reality*. Malden, MA: Blackwell.
- Otten, S. (2002). “Me and us” or “us and them”? The self as a heuristic for defining minimal ingroups. In W. Stroebe, M. Hewstone, W. Stroebe, & M. Hewstone (Eds.), *European review of social psychology* (Vol. 13, pp. 1–33). Hove, UK: Psychology Press/Taylor & Francis.
- 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
- Plaut, V. C., Garnett, F. G., Buffardi, L. E., & Sanchez-Burks, J. (2011). “What about me?” Perceptions of exclusion and Whites’ reactions to multiculturalism. *Journal of Personality and Social Psychology*, 101, 337–353. doi: 10.1037/a0022832
- Postmes, T., & Jetten, J. (2006). *Individuality and the group: Advances in social identity*. London, UK: Sage.
- 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
- Riketta, M., & Sacramento, C. A. (2008). “They cooperate with us, so they are like me”: Perceived intergroup relationship moderates projection from self

- to outgroups. *Group Processes & Intergroup Relations*, 11, 115–131. doi: 10.1177/1368430207084849
- Sarason, B. R., Pierce, G. R., Shearin, E. N., Sarason, I. G., Waltz, J. A., & Poppe, L. (1991). Perceived social support and working models of self and actual others. *Journal of Personality and Social Psychology*, 60, 273–287. doi: 10.1037/0022-3514.60.2.273
- Schmader, T., Major, B., & Gramzow, R. H. (2001). Coping with ethnic stereotypes in the academic domain: Perceived injustice and psychological disengagement. *Journal of Social Issues*, 57, 93–111. doi: 10.1111/0022-4537.00203
- Schriesheim, C. A., Eisenbach, R. J., & Hill, K. D. (1991). The effect of negation and polar opposite item reversals on questionnaire reliability and validity: An experimental investigation. *Educational and Psychological Measurement*, 51, 67–78. doi: 10.1177/0013164491511005
- Siero, F. W., Huisman, M., & Kiers, H. A. I. (2009). *Voortgezetteregressie- en variantieanalyse* [Advanced regression analyses and analyses of variance]. Houten, the Netherlands: Bohn Stafleu van Loghum.
- 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
- Stangor, C., Lynch, L., Duan, C., & Glas, B. (1992). Categorization of individuals on the basis of multiple social features. *Journal of Personality and Social Psychology*, 62, 207–218. doi: 10.1037/0022-3514.62.2.207
- Tajfel, H. (1974). Social identity and intergroup behaviour. *Social Science Information*, 13, 65–93. doi: 10.1177/053901847401300204
- 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.
- Tajfel, H., & Wilkes, A. L. (1963). Salience of attributes and commitment to extreme judgments in the perception of people. *British Journal of Social & Clinical Psychology*, 3(1), 40–49. doi: 10.1111/j.2044-8260.1964.tb00403.x
- Tropp, L. R., & Bianchi, R. A. (2006). Valuing diversity and interest in intergroup contact. *Journal of Social Issues*, 62, 533–551. doi: 10.1111/j.1540-4560.2006.00472.x
- Tropp, L. R., & Wright, S. C. (2001). Ingroup identification as the inclusion of ingroup in the self. *Personality and Social Psychology Bulletin*, 27(5), 585–600. doi: 10.1177/0146167201275007
- 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.
- Turner, J. C., & Oakes, P. J. (1989). Self-categorization theory and social influence. In P. B. Paulus (Ed.), *Psychology of group influence* (2nd ed., pp. 233–275). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Van Knippenberg, D., De Dreu, C. K. W., & Homan, A. C. (2004). Work group diversity and group performance: An integrative model and research agenda. *Journal of Applied Psychology*, 89, 1008–1022. doi: 10.1037/0021-9010.89.6.1008
- Van Knippenberg, D., Haslam, S. A., & Platow, M. J. (2007). Unity through diversity: Value-in-diversity beliefs, work group diversity, and group identification. *Group Dynamics: Theory, Research, and Practice*, 11, 207–222. doi: 10.1037/1089-2699.11.3.207
- 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
- Van Veelen, R., Otten, S., & Hansen, N. (2012). Social identification when an ingroup identity is unclear: The role of self-anchoring and self-stereotyping. *British Journal of Social Psychology*. Advance online publication. doi: 10.1111/j.2044-8309.2012.02110.x
- Waldzus, S., Mummendey, A., Wenzel, M., & Boettcher, F. (2004). Of bikers, teachers and germans: Groups' diverging views about their prototypicality. *British Journal of Social Psychology*, 43, 385–400. doi: 10.1348/0144666042037944
- Wenzel, M., Mummendey, A., & Waldzus, S. (2007). Superordinate identities and intergroup conflict: The ingroup projection model. *European Review of Social Psychology*, 18, 331–372. doi: 10.1080/10463280701728302
- Wittenbrink, B., Hilton, J. L., & Gist, P. L. (1998). In search of similarity: Stereotypes as naive theories in social categorization. *Social Cognition*, 16, 31–55. doi: 10.1521/soco.1998.16.1.31
- Zellmer-Bruhn, M., Maloney, M. M., Bhappu, A. D., & Salvador, R. (2008). When and how do differences matter? An exploration of perceived similarity in teams. *Organizational Behavior and Human Decision Processes*, 107, 41–59. doi: 10.1016/j.obhdp.2008.01.004