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# Non-stereotype-based threat in gender-imbalanced work groups: Mismatched self-construal erodes self-esteem and promotes performance-avoidance goals

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## Abstract

The present studies investigated whether the gender composition of a group represents a sufficient situational cue for creating a mismatch between situationally accessible and ideal self-views. A longitudinal study of 333 employees revealed that being in the numerical minority implied a mismatch with ideal self-views among those who de-emphasized independence in their chronic self-construal, whereas being in the numerical majority constituted a mismatch with ideal self-views among those who emphasized independence. Both types of employees suffered a drop in self-esteem and adopted maladaptive motivational states, namely performance-avoidance goals. The observed deleterious effect of mismatched self-construal on goal pursuit was fully mediated by a perceived lack of acceptance (low social self-esteem). We replicated these findings in a laboratory study with 268 unacquainted individuals who collaborated in small groups on a non-gender-typed group task.

## Keywords

achievement goals, gender dissimilarity, person–environment fit, self-construal, self-esteem

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Organizations strive hard to increase the diversity of their workforce for many reasons. By building a reputation for valuing differences, organizations may attract talented employees from an increasingly diverse working population. This in turn can enable organizations to better understand the customers they serve by being representative of them. Yet, diverse workforces not only reflect the needs of increasingly diverse working populations, they also matter for the performance of organizations. Illustrating this, there is evidence that gender diversity in top management teams is

positively related to organizations' innovation performance and creativity (Ruiz-Jimenez et al., 2016; Paulus & van der Zee, 2015), overall firm performance (Perryman et al., 2016), greater corporate

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social responsibility (Rao & Tilt, 2016), and lower propensity to take risks (Perryman et al., 2016).

However, diversity in organizations poses both opportunities and threats (e.g., Guillaume et al., 2017). Mismanaged diversity can impair optimal functioning because of miscommunication, intragroup conflict, low cohesion, and distrust (Joshi & Roh, 2009). Unwanted effects like these damage the social environment in which employees work, affecting minority and majority members alike. Still, minority members are relatively more likely to be adversely affected and suffer disadvantages that are peculiar to being underrepresented, such as biased promotion and salary decisions (Koch et al., 2015), heightened turnover rates (Hofhuis et al., 2012), and underperformance (Inzlicht & Ben-Zeev, 2000; Keller & Sekaquaptewa, 2008).

To explain why being in the numerical minority has adverse effects, research has examined the experience of stereotype threat, such as women's concerns about fulfilling the stereotype of performing poorly in math and science (Steele et al., 2002). Yet the performance-impinging effects of being underrepresented occur also in domains where the ability of minorities is not negatively stereotyped (Sekaquaptewa & Thompson, 2002). Why this occurs is comparatively less well understood. Which psychological processes explain such group-based threats? Does a situational cue like the gender composition of a work group create group-based threats other than stereotype-based threats that affect group members' performance and well-being?

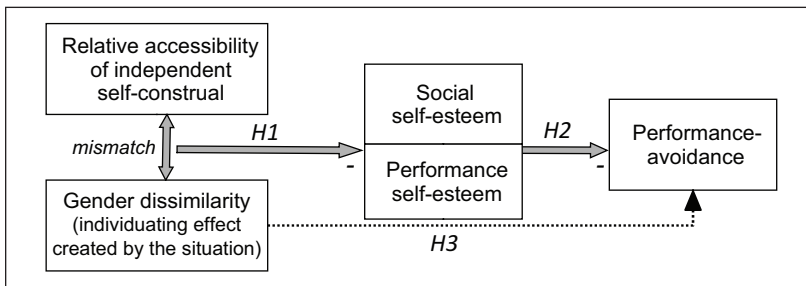
To address these questions, we conducted two studies that were designed to assess person–environment mismatch effects that may emanate from group members' chronically dominant self-construal. We propose that these mismatch effects have negative consequences for performance and well-being because they create threat to self-esteem. To substantiate this proposition, we aim to show that mismatched self-construal creates a threat to self-esteem that is apt to promote maladaptive motivational states, namely the pursuit of performance-avoidance goals.

Performance-approach goals represent a focus on demonstrating competence relative to others. Performance-avoidance goals represent the same focus and additionally signify that individuals are concerned with avoiding failure. That is, those who adopt performance-avoidance goals are extrinsically motivated by a fear of performing poorly compared to others. Engaging in achievement situations in such an avoidance-oriented motivational state represents a stressful psychological situation, and is maladaptive for well-being and performance (Elliot & Murayama, 2008; Oertig et al., 2013; Payne et al., 2007). Illustrating this, meta-analytic findings indicate that the adoption of performance-avoidance goals is associated with lower self-efficacy, lower self-set goal level, negative affect and anxiety, reduced help-seeking, and impaired performance (Baranik et al., 2010; Payne et al., 2007). In view of these many negative consequences, investigating whether a group's gender-composition can affect individual goal pursuit is of both theoretical and practical relevance.

### **Non-Stereotype-Based Threat within Groups: Mismatched Self-Construal**

We propose that gender dissimilarity (i.e., the degree to which a person's gender is underrepresented and thus dissimilar to the typical group member) can also influence members through mechanisms other than stereotyping, because it can produce mismatches between person and environment: these mismatches may occur if the self-construals that are made situationally accessible by a group's gender composition diverge from group members' chronic self-construals. Our research model, outlined in Figure 1, posits that this form of person–environment mismatch produces threat to self-esteem, as demonstrated by feelings of being less socially accepted and/or less competent compared to other group members. These feelings, in turn, may act as mediating states that make the pursuit of maladaptive achievement goals more likely. Below, we discuss

Figure 1. Research model.



the mechanisms underlying the negative effects of mismatched self-construal and the hypotheses implied by our model in a step-by-step manner.

## Research Model

### *Individual Differences in Chronic Self-Construal*

Chronic self-construal reflects consistent individual differences in the relative accessibility of interdependent and independent self-construal (Markus & Kitayama, 1991). During identity formation, the process of differentiation or individuation involves the forming of independent self-definitions that are specific, separate from context, and stable over time. These self-definitions are adaptive for psychosocial functioning because they enable an agentic self that comprises an internally consistent set of life commitments, goals, behaviors, and self-perceptions (Voyer & Bradley, 2014; Woike, 1994). Interdependent self-definitions, by comparison, are associated with the process of assimilation and integration: they are centered on similarities with others and comprise context-dependent knowledge about the self, which implies the notion that behavior is variable across contexts (Kühnen et al., 2001; van Baaren et al., 2003). These self-views, too, have an adaptive function in that they help people satisfy the need for belonging. To meet such universal human needs as individuation and affiliation, people thus develop both forms of self-construal. The relative strength and accessibility of these two forms

of self-construal are, however, specific to the individual (Cross & Madson, 1997; Markus & Kitayama, 1991; Stephens et al., 2012; Watkins et al., 2003).

### *Work Group Gender Composition as a Situational Cue*

Although there are consistent individual differences in chronic self-construal, the degree to which certain self-definitions and self-categorizations are situationally accessible is fleeting, and varies as a function of context (Gaertner et al., 1999). In gender-diverse teams, individuals may switch from a mental representation of their team as one group to a representation of their team at the level of sub-groups, or both identities can be salient at the same time (i.e., dual identification, e.g., Gaertner et al., 1999). In either case, the degree of being prototypical for the group becomes situationally relevant for construing the self. For majority group members, similarity to the group prototype fosters identification with the group and reduces the situational accessibility of independent self-construal (Hogg & Turner, 1987). By contrast, for those who are in the numerical minority, dissimilarity to the group prototype lowers identification with the group (Veldman et al., 2017) and increases the situational accessibility of independent self-construal (Hogg & Turner, 1987; Keller & Sekaquaptewa, 2008). In support of this notion, there is evidence from laboratory research that people respond to being in the numerical minority with individuating tendencies, that is, with a greater tendency to

access independent self-construals than non-minority individuals (Keller & Sekaquaptewa, 2008). A work group's gender composition may thus increase or decrease the situational accessibility of independent and interdependent self-construals among its members, depending on whether group members belong to the under- or the overrepresented gender.

### *Mismatched Self-Construal*

Self-knowledge is an important basis for self-regulation. To the degree that self-knowledge is central to the self (i.e., highly accessible), it serves as a reference standard in self-regulation: people compare actual self-states with these standards when evaluating the self. An outcome of these self-evaluation processes is self-esteem (Higgins, 1987). People experience threat to self-esteem to the degree that actual self-states diverge from their ideal self-views, that is, to the degree that situationally accessible self-views diverge from chronically accessible self-views. In the same manner, the relative accessibility of independent versus interdependent self-construal reflects differing standards or ideals that people seek to meet in the interpersonal domain (Hannover et al., 2006). More precisely, the relative accessibility of the two forms of self-construal reflect an individual's idealized balance between independence and interdependence. To the degree that a social environment does not offer interpersonal relations that match with this idealized balance, mismatch occurs, which entails threat to self-esteem.

In this way, individual differences in chronic self-construal may explain why individual group members react differently to being either similar or dissimilar to others within a group. Being in the numerical minority may undermine self-esteem among minority individuals who de-emphasize independence in their chronic self-construal, but not among those with strong independent self-construal. That is, depending on the degree to which they would ideally view the self as autonomous and distinct, underrepresented group members may be more or less comfortable with actually being individuated due to a

high degree of distinctiveness. Conversely, being in the numerical majority may undermine self-esteem among majority individuals who de-emphasize interdependence in their chronic self-construal, but not among those for whom the relative accessibility of interdependent self-construal is high. High similarity to the typical group member (i.e., deindividuation) may imply a discrepancy between actual and ideal self-views among overrepresented group members who would prefer to construe the self as distinct and autonomous rather than as part of a group.

Group membership may produce the hypothesized mismatch effects, since people keep monitoring their chances to satisfy basic human needs for individuation and deindividuation (Vignoles et al., 2008). For this purpose, people implicitly observe social categories like gender and process information about their similarity to others. Such automatic categorical cognition processes may, for instance, explain why Keller and Sekaquaptewa (2008) found that being underrepresented increased the accessibility of independent self-construals. Further, it has been shown that notable effects on self-esteem can be created when people access self-knowledge that affirms or diverges from their ideal self-views for as little as three minutes (Hannover et al., 2006; Kinias & Sim, 2016). Hannover et al. (2006), for example, measured chronic self-construal using self-report scales, and then led participants to access self-knowledge that was either consistent with an interdependent self-construal (i.e., social and context-dependent self-knowledge) or an independent self-construal (i.e., autonomous and context-independent self-knowledge) by asking participants to take three minutes of time to write about how they are similar or dissimilar from others. Results showed that mismatches between chronically and situationally accessible self-construals were associated with lower values on measures of implicit and explicit self-esteem. In real-world settings, too, there is evidence showing that elements in the culture of a social environment can produce mismatch effects that affect self-esteem (Cross & Vick, 2001; Stephens et al., 2012). Cross and Vick (2001), for example,

found that students with a highly interdependent self-construal suffered from low self-esteem in highly competitive environments (i.e., in environments that are incompatible with their ideal self-views).

In conclusion, we hypothesize that dissimilarity to others with regard to salient demographic characteristics is sufficiently relevant to a person's identity and underlying psychological needs that it can create self-construal-related mismatches that entail threat to self-esteem. To capture the hypothesized negative effects of mismatched self-construal on self-evaluation, we assessed two aspects of self-esteem, namely feelings of being less socially accepted (i.e., social self-esteem) and of being inferior to others in terms of competence (i.e., performance self-esteem). Since interdependent and independent self-construal reflect aspects of identity that pertain to a person's interpersonal relations and interpersonal behavior, mismatched self-construal may primarily affect social self-esteem. However, to put this assumption to test, and because not living up to one's ideals may have negative effects on feelings of self-worth more generally, we also investigated whether mismatched self-construal affects performance self-esteem.

*Hypothesis 1:* Mismatched self-construal erodes self-esteem. Being in the numerical minority undermines self-esteem to the degree that individuals emphasize interdependence in their chronic self-views; whereas being in the numerical majority undermines self-esteem to the degree that individuals emphasize independence in their chronic self-views.

### *Threat to Self-Esteem and Goal Pursuit*

Furthermore, we hypothesize that threat to self-esteem (i.e., low social and/or low performance self-esteem) acts as a mediating state that links mismatched self-construal to the adoption of performance-avoidance goals. The expectation that threat to self-esteem promotes this maladaptive class of goals is based on meta-analytic evidence (cf. Payne

et al., 2007) showing that low self-esteem is a causal antecedent of performance-avoidance goals ( $r = .39$ ) and, to a much lesser degree, of performance-approach goals ( $r = .11$ ). Both low performance self-esteem and low social self-esteem may foster a preoccupation among concerned group members with how their competence compares to that of others; a preoccupation that is more likely to invoke avoidance-oriented than approach-oriented motivational states. Evidence that ego-involving, competitive contexts promote performance goals stems from research on ability-focused classrooms (Ames, 1992; Church et al., 2001) and on motivational climate in sports (Harwood et al., 2015; Newton & Duda, 1999). Besides, research on adult attachment has demonstrated that feelings of being inadequately accepted by others inhibit cognitive exploration, which is associated with a greater tendency to endorse performance-avoidance goals (Elliot & Reis, 2003; Green & Campbell, 2000). Building on this evidence, we hypothesize that group-based threat to self-esteem encourages the pursuit of performance-avoidance goals. More specifically, we hypothesize:

*Hypothesis 2:* Low self-esteem is associated with a greater tendency to adopt performance-avoidance goals.

*Hypothesis 3:* Low self-esteem mediates the interactive effect of chronic self-construal and work group gender composition on the adoption of performance-avoidance goals.

In summary, the goal of the present studies is to show that mismatch between chronic and situational self-construal constitutes a form of group-based threat that can be delimited from stereotype-based threat. To attain this goal, we aim to demonstrate that the expected effects are found in members of both genders, in under- and overrepresented group members, and in the absence of task- or role-based gender stereotypes. That is, our findings may extend previous research by highlighting that mismatched self-construal represents a source of group-based threat that originates neither from concerns

about confirming negative gender stereotypes, nor from concerns about being dissimilar to the positively stereotyped group prototype.

We will bear in mind, however, that gender stereotypes are commonplace in the workplace; and likely operate in the present sample of working adults. In both educational and work settings, the fact that members of one gender are in the numerical minority reflects the influence of *gender stereotypes* (Koenig, 2018). Descriptive gender stereotypes pertain to beliefs about how men and women typically act. Prescriptive stereotypes pertain to beliefs about what members of a gender should do. Violations of both descriptive and prescriptive stereotypes can lead to backlash against female or male targets (e.g., dislike or not being hired for a position; Heilman, 2001). In addition to concerns about confirming negative gender stereotypes (i.e., stereotype threat; Steele & Aronson, 1995), *dissimilarity to the positively stereotyped group prototype* represents a distinct source of stereotype-based threat in groups (Keller & Sekaquaptewa, 2008; Sekaquaptewa & Thompson, 2002). Individuals in groups compare their own demographic characteristics (e.g., gender and race) with those of other group members (Mowday & Sutton, 1993; Riordan & Shore, 1997). An important result of these intra-group comparisons is perceived similarity. Perceived similarity is positively related to social attraction and identification, as well as perceptions that the typical group member has positive qualities, such as higher status and competence (Blader & Tyler, 2009; Grover et al., 2017; Hogg et al., 1993; Hogg & Terry, 2000; Inzlicht & Ben-Zeev, 2000; Mummendey & Wenzel, 1999; Tajfel & Turner, 1986).

## Overview of Studies

To test our hypotheses, we conducted two studies. In a longitudinal examination of working adults, Study 1 investigated whether gender dissimilarity and chronic self-construal interact as expected, producing a mismatch effect as evidenced by decreased self-esteem and an increased tendency to adopt performance-avoidance goals

(Hypotheses 1 and 2). In addition, Study 1 served two more purposes. First, we used its three-wave design to assess mediational processes, namely the assumed mediating role of self-esteem in the relationship between mismatched self-construal and goal pursuit (Hypothesis 3). Second, we split this sample of working adults into male and female subsamples to test whether our findings replicate across the two genders. Study 2 aimed to provide a replication of our findings in a sample of unacquainted adults who worked on a non-gender-typed group task in the laboratory.

## Study 1: A Three-Wave Longitudinal Study of Working Adults

### *Sample and Design*

Participants were members of an online panel at <https://www.wisopanel.net> (Göritz, 2014). These panelists were informed that the purpose of the study was to examine how interpersonal relations in the workplace affect well-being and motivation. Participation was voluntary and was encouraged by a small financial reward that respondents received if they participated in each of three waves of data collection that were administered with a lag of two months (Göritz & Birnbaum, 2005). In this manner, data from 598 working adults were collected. Out of these, we selected 333 participants for the final sample, namely those who reported that they worked within a work group or department (“I work in a group or department consisting of several colleagues.”). Participants were asked to report the number of male and female colleagues who work in their group or department. The final sample consisted of 47% women. The participants’ average age was 48 years ( $SD = 10$ ). In terms of education, fewer than 1% of the participants had no high school degree, 8% possessed a general high school degree, 33% a trade or technical high school degree, 20% a Bachelor’s degree, and 38% a Master’s degree or higher. The occupations represented within our sample reflected various degrees of gender stereotyping (e.g., engineer,

human resources manager, high school teacher, nurse, etc.).

Since we examined mediational processes, we used a three-wave design that allowed for temporally separating predictor, mediator, and outcome measures. Individual dispositions (i.e., self-construal) and contextual factors (i.e., the proportion of women in the group, group size, and task interdependence) were assessed at Time 1. The hypothesized mediator variables (i.e., social and performance self-esteem) were assessed two months later, at Time 2, and the outcome measure (i.e., achievement goal endorsement) at Time 3, two months later still. All endogenous variables were regressed onto statistical controls (i.e., age, level of education, group size, and task interdependence). In addition, at Time 1, we measured the initial level of social and performance self-esteem, as well as the initial level of achievement goal endorsement. That is, self-esteem and achievement goals were repeatedly assessed using identical measures. In this way, we examined whether mismatched self-construal was associated with change in self-esteem; and whether change in self-esteem was related to subsequent change in achievement goal endorsement. We used this approach since it provided much stronger evidence that the observed effects might be causal than would analyzing simple correlations between predictor and outcome measures.

### Measures

*Gender dissimilarity.* In our sample, the proportion of members belonging to the opposite gender in a group ranged from 0.06 to 0.95 ( $M = 0.41$ ,  $SD = 0.22$ ). To capture the degree of dissimilarity of each team member to his or her team members with respect to gender, we used a Euclidean distance measure. That is, we calculated the square root of the proportion of individuals who were members of the opposite gender.

*Chronic self-construal.* We measured two dimensions of self-construal, interdependent and independent. The scales that we used for that purpose were developed and validated by Gollwitzer et al.

(2006) to improve the psychometric properties of earlier German adaptations of Singelis' (1994) Self-Construal-Scale. The interdependent self-construal scale captured the significance of other people for a person's well-being and the degree to which a person emphasizes similarities with others (example items are: "My family is important in my life," "Having something in common with others has always been important to me;"  $\alpha = .71$ ). The independent self-construal scale captured the significance of individuality to a person's well-being and the degree to which a person emphasizes differences between the self and others (example items are: "Individuality is important for my life," "I value aspects of myself that make me be different from others;"  $\alpha = .77$ ). Ratings were made on 5-point scales (1 = not true of me, 5 = very true of me). From these two scales, we determined participants' chronic self-construal by calculating the difference between individuals' standardized scale scores on independent and interdependent self-construal. Using a difference score was a straightforward implementation of the concept of "relative accessibility." Furthermore, by using a difference score we followed an approach taken in prior studies that are central to our hypotheses (cf. Hannover et al., 2006). That is, we created a continuous individual difference variable that we allowed to interact with a contextual factor that was also represented by a continuous variable, namely "degree of gender dissimilarity."

*Workplace achievement goals.* We used the four 3-item scales that have been developed by Elliot and Murayama (2008) to assess the  $2 \times 2$  framework of achievement goals. According to this framework goals differ on two dimensions, their definition as learning or performance goals (i.e., aiming to develop competence through effort vs. aiming to outperform others), and their valence (approach vs. avoidance). Example items are: "My goal is to learn as much as possible" (learning-approach;  $\alpha$  T1/T3 = .80/.83), "My aim is to avoid learning less than I possibly could" (learning-avoidance;  $\alpha$  T1/T3 = .70/.73), "My aim is to perform well relative to others"



(performance-approach;  $\alpha T1/T3 = .84/86$ ), and “My goal is to avoid performing poorly compared to others” (performance-avoidance;  $\alpha T1/T3 = .70/73$ ). Participants responded on 5-point Likert-type scales (1 = strongly disagree, 5 = strongly agree). A heading at the top of the page instructed participants to think of the work context when responding.

*State self-esteem.* We measured two facets of state self-esteem, performance self-esteem (e.g., “I feel confident about my abilities,” “I feel frustrated or rattled about my performance,” “I feel as smart as others;”  $\alpha T1/T2 = .69/.71$ ) and social self-esteem (e.g., “I am worried about what other people think of me,” “I feel displeased with myself,” “I feel inferior to others at this moment,” “I feel self-conscious;”  $\alpha T1/T2 = .70/.77$ ), using two scales that were developed by Heatterton and Polivy (1991). Participants rated the degree to which the scales’ statements were true of them when at work (1 = not at all, 5 = extremely). To ensure that participants took notice of the items’ situational reference, a heading in the questionnaire emphasized that the items referred to participants’ experiences at work. The eigenvalues calculated by an exploratory factor analysis supported a two-factor solution, suggesting that performance and social self-esteem could be treated as distinguishable dimensions.

*Statistical controls.* We included *group size* and *task interdependence* into our model, because both variables likely affect the extent to which employees are influenced by their membership in the group. Group size ranged from 3 to 90, with a median value of 9 ( $M = 15.5$ ;  $SD = 19.8$ ). To assess the degree of task interdependence that participants experienced at work, we used three items that were developed by Pearce and Gregersen (1991). Participants rated how frequently they worked closely with others, needed to coordinate their work with others, and were dependent on receiving information from others (1 = very rarely, 5 = very frequently;  $\alpha = .71$ ). Finally, we included participants’ *level of education* (1 = no high school

degree, 2 = general high school degree, 3 = trade or technical high school degree, 4 = Bachelor’s degree, and 5 = Master’s degree or higher), age and gender in our model as covariates.

### Results Study 1

Table 1 presents descriptive statistics and bivariate correlations for all study variables. Bivariate correlations indicated that women scored slightly lower on the relative accessibility of independent self-construal than men. Gender dissimilarity (i.e., the proportion of individuals who are members of the opposite gender) was, by itself, unrelated to goal pursuit and the two facets of self-esteem. The latter aligns with the assumption that the effects of gender dissimilarity result from a mismatch with individual differences in self-construal rather than from group-based threats that originate from gender dissimilarity per se. State measures of social and performance self-esteem were correlated (.51 and .55 at T1 and T2 respectively), indicating that the two measures captured facets of self-esteem that were closely related, and yet varied independently to a substantial degree.

To test our hypotheses, we set up a multivariate structural equation model using the Mplus software (Muthén & Muthén, 1998–2018). In this model, we allowed the interactive effect of chronic self-construal and gender dissimilarity to have both direct and indirect effects on goal pursuit, with the indirect effect being mediated by state self-esteem. Our primary hypothesis was that mismatched self-construal promotes the adoption of performance-avoidance goals. Nevertheless, to test whether the effects of mismatched self-construal on motivation are specific to this extent, we repeated our analyses for each of the four classes of achievement goals. Results showed that the adoption of performance-avoidance goals, but not of any other class of goals, was explained by the interactive effect of gender composition and chronic self-construal. (Detailed results of the regression models calculated for the other three classes of goals can be found in Supplement 1 in the online Supplemental Material). In the

**Table 1.** Descriptive statistics and bivariate correlations (Study 1).

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1. Age	48.41	10.2																				
2. Education (T1)	1.92	1.07	-.15**																			
3. Task interdep. (T1)	3.57	0.87	.00	-.05	(.71)																	
4. Gender (female)	0.47	0.50	-.08	-.05	-.10																	
5. PAV (T1)	3.05	0.73	-.19**	-.05	.07	-.02	(.70)															
6. PAV (T3)	3.09	0.78	-.18**	-.01	.07	.04	.66**	(.73)														
7. PAP (T1)	3.29	0.96	-.11*	.04	.11	-.17**	.54**	.45**	(.84)													
8. PAP (T3)	3.36	0.93	-.13*	.02	.12*	-.04	.40**	.61**	.65**	(.86)												
9. LAP (T1)	4.17	0.71	-.03	.13*	.10	.09	.23**	.17**	.41**	.38**	(.80)											
10. LAP (T3)	4.19	0.71	-.02	.14*	.09	.13	.13*	.22**	.31**	.46**	.61**	(.83)										
11. LAV (T1)	3.86	0.78	-.07	.08	.10	-.03	.38**	.28**	.56**	.41**	.64**	.39**	(.70)									
12. LAV (T3)	3.95	0.80	-.05	.06	.07	.11	.24**	.40**	.38**	.58**	.54**	.72**	.52**	(.73)								
13. SSE (T1)	3.56	0.89	.29**	-.05	.00	-.15**	-.48**	-.42**	-.06	-.16**	.11*	.03	.06	.01	(.70)							
14. SSE (T2)	3.59	0.93	.27**	.00	-.03	-.09	-.46**	-.45**	-.09	-.18**	.11*	.05	.03	-.07	.78**	(.77)						
15. PSE (T1)	3.95	0.67	.15**	.05	.05	-.02	-.20**	-.17**	.16**	.14*	.42**	.25**	.29**	.27**	.51**	.45**	(.69)					
16. PSE (T2)	4.01	0.65	.17**	.09	.08	.02	-.16**	-.20**	.18**	.08	.40**	.28**	.34**	.22**	.54**	.55**	.66**	(.71)				
17. Indep. SC (T1)	3.33	0.73	-.04	-.02	.20**	-.14*	.28**	.29**	.52**	.45**	.25**	.27**	.32**	.27**	.01	-.03	.10	.14*	(.77)			
18. Indep. SC (T1)	3.71	0.70	-.04	-.03	.17**	.08	.17**	.15**	.09	.14*	.25**	.22**	.14*	.17**	-.13*	-.13*	.11	.12*	.20**	(.71)		
19. Accessibility (T1)	0.00	1.00	.00	.01	.02	-.18**	.09	.11	.34**	.25**	.00	.03	.14*	.08	.11	.08	-.01	.01	.67**	-.67**		
20. Dissimilarity (T1)	0.41	0.23	.06	-.08	.03	.04	-.03	.03	.06	.08	-.03	.00	.03	.02	-.02	-.04	-.09	-.09	-.04	.01	-.04	
21. Group size (T1)	15.62	19.78	.05	-.14**	.11	.05	.06	.02	.06	.01	-.10	-.04	.01	-.06	.02	.06	-.08	-.01	.06	-.03	.07	.18**

Note. P-AP = performance-approach; P-AV = performance-avoidance; L-AP = learning-approach; L-AV = learning-avoidance; SSE = social self-esteem; PSE = performance self-esteem; VC = self-construal; Accessibility = Relative accessibility of independent self-construal.  
\* $p < .05$ . \*\* $p < .01$ .

**Table 2.** Mismatched self-construal predicts change in self-esteem and the adoption of performance-avoidance goals (fully mediated model; Study 1).

Performance-avoidance (T3)	$\beta$	SE	p			
Social self-esteem (T2)	-.17	.06	< .01**			
Performance self-esteem (T2)	-.03	.05	.61			
Performance-avoidance (T1)	.58	.04	< .01**			
Age	-.02	.05	.61			
Educational level	.04	.05	.43			
Task interdependence	.04	.04	.38			
Group size	-.01	.04	.90			
Gender (female = 1, male = 0)	.04	.04	.36			
	Social self-esteem (T2)			Performance self-esteem (T2)		
	$\beta$	SE	p	$\beta$	SE	p
Age	.07	.04	.05*	.09	.04	.03*
Educational level	.07	.04	.07	.09	.04	.05*
Task interdependence	-.06	.04	.09	.06	.04	.18
Social/Perf. self-esteem (T1)	.76	.03	< .01**	.62	.03	< .01**
Group size	.06	.04	.08	.06	.04	.17
Gender (female = 1, male = 0)	.01	.04	.76	.05	.04	.25
Accessibility independent SC	.01	.04	.92	.01	.04	.75
Gender dissimilarity	-.03	.04	.36	-.07	.04	.09
Accessibility $\times$ Dissimilarity	.11	.04	< .01**	-.02	.04	.57

Note. Structural equation modelling with maximum likelihood estimation.  $\beta$  = fully standardized coefficient; SC = self-construal; SE = standard error of the beta coefficient;  $p$  = two-tailed  $p$ -value. The amount of variance explained in the dependent variables was 45% (performance-avoidance goal), 62% (social self-esteem), and 44% (performance self-esteem).

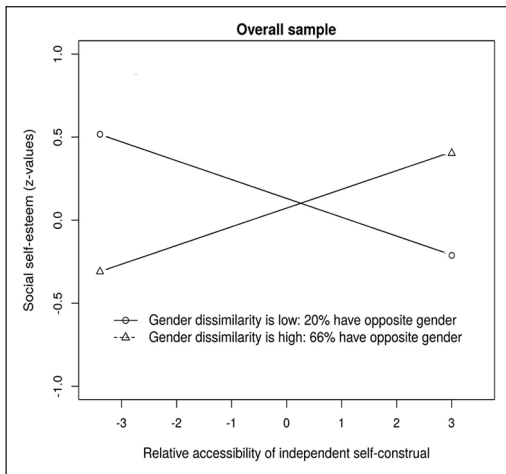
following, we present results of a model in which the endorsement of performance-avoidance goals is the dependent variable.

To assess whether the interactive effect of chronic self-construal and gender dissimilarity had significant direct and/or indirect effects on the adoption of performance-avoidance goals, we compared three models, namely a model that included only the direct effects with the mediating path being constrained to zero (alternative model 1; Bayesian Information Criterion ( $BIC$ ) = 2219, sample size adjusted  $BIC$  = 2114), a model that included both the direct and indirect effects of mismatched self-construal (alternative model 2;  $BIC$  = 2216,  $saBIC$  = 2105), and, finally, a fully mediated model that included the indirect effects of mismatched self-construal on goal pursuit with the direct effect being constrained to zero (alternative model 3;  $BIC$  = 2206,  $saBIC$  = 2104).

The fully mediated model fit the data best. Moreover, the path coefficients representing the direct effects of mismatch on goal pursuit were insignificant.

Table 2 presents the path coefficients of the best-fitting, fully mediated model. Results indicate that mismatch between chronic and situational self-construal was associated with a drop in social self-esteem ( $\beta$  = .11,  $SE$  = .04,  $p$  < .01), but not in performance self-esteem ( $\beta$  = -.02,  $SE$  = .04,  $p$  < .57). A drop in social self-esteem, in turn, was associated with an increased tendency to adopt performance-avoidance goals. Using the “rock-chalk” package that is provided within the R environment for statistical computing (Johnson, 2019), we calculated the values of gender dissimilarity for which the effect of chronic self-construal on self-esteem was significant. Results show that the simple slope of chronic self-construal was

**Figure 2.** The interactive effect of gender dissimilarity and chronic self-construal on social self-esteem (Study 1, overall sample).



*Note.* To generate a model-based interaction plot, we selected two values of gender dissimilarity (i.e., the proportion of group members with the opposite gender) that were roughly one standard deviation below/above the mean.

significant at values of gender dissimilarity that are 0.82 standard deviation units above the mean (59% or more group members are of the opposite gender), and at values that are 0.99 standard deviation units below the mean (18% or fewer members are of the opposite gender). A model-based plot of the relationship between chronic self-construal and self-esteem, at low and high values of gender dissimilarity, appears in Figure 2.

Moreover, splitting the sample by gender, we were able to replicate our findings across subsamples of male and female employees (see Table 3). For both genders, chronic self-construal interacted with the gender composition of the group as expected. Being in the numerical minority undermined self-esteem and promoted performance-avoidance goals to the extent that minority individuals had low values on the relative accessibility of independent self-construal. Conversely, those who were in the gender majority within their group profited from construing the self as less independent—majority individuals reported higher social self-esteem to the extent they scored lower on the relative accessibility of independent self-construal.

### Discussion Study 1

Study 1 provides evidence that work group gender composition represents a sufficient situational cue to elicit a group-based threat that results from a mismatch between group members' chronically dominant self-construal and the self-definitions that are made accessible by their being more or less dissimilar to the typical group member. Chronically dominant construal of the self as independent produced a mismatch effect (i.e., threat to self-esteem) if employees were members of the overrepresented gender within a group, that is, if they found themselves in a situation that impedes individuation (Hogg & Turner, 1987; Keller & Sekaquaptewa, 2008) and frustrates the distinctiveness motive in identity construction (Vignoles et al., 2008). In the same manner, chronically weak construal of the self as independent produced threat to self-esteem if employees were underrepresented within their group, that is, if they found themselves in a situation that impedes assimilation of the self and others (van Baaren et al., 2003), which can frustrate the need to belong (Vignoles et al., 2008). Those who experienced mismatch between chronic and situational self-construal suffered a drop in social (but not performance) self-esteem. This in turn, was associated with an increasing tendency to adopt performance-avoidance goals. The latter underscores that self-construal-related mismatch is likely to undermine both well-being and performance (Payne et al., 2007). Moreover, our results support the conclusion that the detrimental effects of mismatched self-construal do not reflect stereotype-based threat. Replicating our findings in male and female subsamples, we found that men suffered a drop in social self-esteem similar to women, even though men are less likely to be exposed to negative stereotypes about their ability or personality.

### Study 2: Collaborating on a Gender-Neutral Group Task

An important goal of the present article is to show that experiencing a mismatch between chronic and situational self-construal represents a

**Table 3.** Replication in male and female subsamples (fully mediated model; Study 1).

<i>Performance-avoidance (T3)</i>	Females			Males		
	$\beta$	<i>SE</i>	<i>P</i>	$\beta$	<i>SE</i>	<i>p</i>
Social self-esteem (T2)	-.27	.07	< .01**	-.14	.07	.05*
Performance-avoidance (T1)	.54	.06	< .01**	.60	.07	< .01**
Age	.01	.06	.93	-.03	.07	.59
Educational level	-.04	.07	.57	.07	.07	.25
Task interdependence	.01	.06	.97	.04	.06	.50
Group size	.07	.06	.29	-.10	.06	.08
<i>Social self-esteem (T2)</i>						
Age	.05	.05	.34	.08	.05	.12
Educational level	.04	.05	.41	.09	.05	.07
Task interdependence	-.10	.05	.03*	.01	.05	.96
Social self-esteem (T1)	.77	.04	< .01**	.74	.04	< .01**
Group size	.02	.05	.70	.12	.05	.02*
Accessibility independent SC	.02	.05	.66	.01	.05	.87
Gender dissimilarity	-.06	.05	.28	-.03	.05	.61
Accessibility * Dissimilarity	.11	.05	.03*	.12	.05	.02*

*Note.* Structural equation modeling with maximum likelihood estimation. The non-significant indirect effect involving performance self-esteem as a mediator was dropped from the model to reduce the number of parameters estimated in the two subsamples.  $\beta$  = fully standardized coefficient; SC = self-construal; SE = standard error of the beta coefficient; *p* = two-tailed *p*-value.

source of psychological threat within groups that is distinct from stereotype-based threat. However, in naturalistic work settings, isolating the effects of belonging to the underrepresented gender from the effects of being exposed to role-based gender stereotypes is possible only to a limited extent. To address this concern, we conducted a second study that tested our hypotheses in groups of unacquainted adults who worked together on a group task in the laboratory. The task that we asked group members to work on was designed to remind participants of job roles that pertain to the field of human resources management. In this field, women are slightly overrepresented. According to a report of the national assembly of personnel managers, for example, 65% of HR managers are women (BPM, 2014). Thus, we hoped to have identified a task for which neither females nor males are negatively stereotyped. More importantly, by studying mismatch effects in the laboratory, we aimed to minimize any systematic covariation between being underrepresented and being negatively stereotyped: both

men and women experienced being under- and overrepresented when working on an identical group task. In this way, Study 2 aimed to replicate results from Study 1, according to which both underrepresentation and overrepresentation within a group can produce mismatch effects. Specifically, Study 2 was designed to demonstrate that varying degrees of being overrepresented create varying degrees of risk to experience deleterious mismatch effects. If we find support for this expectation, this would further support the conclusion that the observed effect does not originate from participants' dissimilarity to a positively stereotyped group prototype.

### *Sample and Design*

A total of 268 graduate and undergraduate students participated in this study in exchange for €10: 174 (65%) of the participants were women; 94 (35%) were men. Participants were invited to participate in a study, the purpose of which was to examine "effects of personality on behavior in

groups.” To ensure that participants were unlikely to know each other, participants were recruited from a large pool of students from various disciplines within a large German university. In addition, when registering for a time slot, students were instructed to join a group of people they did not know. Although we cannot rule out that some participants knew each other, we would like to point out that the effect of participants knowing each other would confound the effect of gender composition in ways that would make finding support for our hypotheses less likely. Only native speakers of German were encouraged to participate.

Upon arriving at the laboratory in groups of four, participants were asked to work on a group task. They were informed that they had 15 minutes to decide on the most suitable candidate to fill an open position as board member of a student organization. Each participant was given a sheet of paper with information about one of four applicants. To decide on a candidate, participants had to share this information with the other group members. Shortly before the 15 minutes were up, the experimenter reminded participants that they should reach an agreement and write down the name of the selected applicant. Finally, participants completed a web-based questionnaire in the laboratory. This questionnaire was designed to capture sociodemographic information, participants’ perceptions of their own and other group members’ behavior during the group discussion, mood states, and measures of personality (i.e., chronic self-construal and self-esteem, as well as a few scales that were not used in the present studies, namely Big Five traits, dark triad traits of personality, and attachment behavior). To capture the hypothesized mismatch effect, we assessed the extent to which group members rate themselves as likable, following the completion of the group task. In this way we created a situation-specific indicator of state social self-esteem (Brockner & Lloyd, 1986; Murray et al., 2003; Srivastava & Beer, 2005).

### Measures

*Gender dissimilarity.* In our sample of 67 groups of four, the degree of gender dissimilarity had four

levels, 0% (no group members are of the opposite gender; 88 participants), 25% (one member is of the opposite gender; 69 participants), 50% (two members are of the opposite gender; 88 participants), and 75% (three members are of the opposite gender; 23 participants). Using the same approach as in Study 1, we determined the degree of gender dissimilarity by calculating a Euclidean distance measure (i.e., the square root of the proportion of group members who belonged to the opposite gender; that is, the number of group members who belonged to the opposite gender divided by the group size of four, for each participant). The uneven distribution of participants across the four levels of dissimilarity resulted from the fact that we examined naturalistic social interactions rather than assigning participants to experimental conditions. In these groups, a larger number of individuals experienced being over-represented than being underrepresented: for every person who was a solo, three others experienced being in a numerical majority of three. However, it is worth noting that we wanted to test a hypothesis that can be tested with unbalanced data, namely the hypothesis that the effect of gender dissimilarity depends on the relative accessibility of independent self-construal. We were not interested in calculating contrasts between different levels of gender dissimilarity nor in allowing slopes to differ at the four levels of gender dissimilarity. Accordingly, as in Study 1, the degree of gender dissimilarity was represented by a continuous variable that we allowed to interact with a continuous individual difference variable, namely chronic self-construal.

*Chronic self-construal.* Interdependent and independent self-construal was measured by the same two self-report scales that we used in Study 1 (Gollwitzer et al., 2006; coefficient alpha = .84 and .66; for more details see the method section of Study 1). Also as before, we determined participants’ chronic self-construal by calculating the difference between participants standardized scale scores on independent and interdependent self-construal. Low scores thus reflect a weak relative accessibility of independent self-construal, whereas high scores

imply that the relative accessibility of an independent self-construal is high.

*Achievement goals.* We used the 3-item scales developed by Elliot and Murayama (2008) to assess the goals that participants pursued during the group task (see Study 1 for more detailed information). Three of the four classes of goals were measured: performance-approach ( $\alpha = .69$ ), performance-avoidance ( $\alpha = .74$ ), and learning-approach ( $\alpha = .71$ ). We did not assess learning-avoidance goals because on a one-time task it is difficult to make comparisons with relevant previous experience. A heading in the questionnaire emphasized that participants should report the goals they pursued during the group discussion.

*Feeling liked (situation-related social self-esteem).* To assess the degree to which participants felt liked during the group discussion, we asked them to report the degree to which they believed that each of the other three group members liked them (1 = very little, 5 = very much;  $\alpha = .74$ ). For that purpose participants were prompted to think of the person who sat on the left side / on the right side / opposite to them during the group discussion. The three ratings were averaged to arrive at a summary score that captured feelings of being liked. We used this score as a situation-related indicator of *state social self-esteem* (Murray et al., 2003; Srivastava & Beer, 2005). Situation-related performance self-esteem was not assessed.

*Statistical controls.* With self-perceptions of likability and goal pursuit being the dependent variables, we controlled for *trait self-esteem* using Heatherton and Polivy's (1991) scales. As before, we measured two facets of self-esteem, namely social and performance self-esteem. Participants rated the degree to which the scales' statements were true of them on a 5-point scale (1 = not at all, 5 = extremely; coefficient  $\alpha = .73$  and  $.71$ ). Finally, we administered the two 10-item scales of the Positive and Negative Affect Schedule (Krohne et al., 1996) to measure the extent to

which participants experienced *positive and negative mood states* during the group discussion (1 = very slightly or not at all, 5 = extremely; coefficient  $\alpha = .86$  and  $.93$ ).

## Results and Discussion Study 2

Table 4 presents descriptive statistics and bivariate correlations. Bivariate correlations confirmed that including mood and the two facets of trait self-esteem into our model as statistical controls was appropriate: we obtained significant correlations between social self-esteem and interdependent self-construal, as well as positive correlations of positive affect and performance self-esteem with feelings of being liked.

To test our hypotheses, we evaluated a multi-level structural equation model. As in Study 1, a model that included the indirect effect on mismatched self-construal on goal pursuit ( $BIC = 1293$ ;  $saBIC = 1227$ ) fit the data better than a model that included both direct and indirect effects ( $BIC = 1309$ ;  $saBIC = 1233$ ). Also as before, the path coefficients representing the direct effect of mismatch on goal pursuit were not significant, and were thus dropped from the final model that appears in Table 5. Results show that the interactive effect of gender dissimilarity and chronic self-construal on feelings of being liked was significant, controlling for trait self-esteem, positive/negative affect, age, and gender. A plot of the observed interactive effect appears in Figure 3: chronically dominant independent self-construal was positively related to feelings of being liked if a majority of group members (75%) were of the opposite gender, whereas it was negatively related to perceived likability if only a minority (25%) or none of the fellow group members belonged to the opposite gender. This finding supports the conclusion that mismatched self-construal leads people to believe that they are less socially accepted than other group members. Feelings of being liked acted as a mediating state that accounted for a significant proportion of variation in the endorsement of performance-avoidance goals.

In the work-like setting that we examined, holding a positive view of their abilities helped

**Table 4.** Descriptive statistics and bivariate correlations for all variables in Study 2.

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13
1. PAV	2.85	0.9	(.74)												
2. PAP	2.93	0.93	.46**	(.69)											
3. LAP	3.37	0.79	-.01	-.03	(.71)										
4. Feeling liked (state SSE)	3.62	0.69	-.10	.02	.16*	(.74)									
5. Gender (1: male, 0: female)	0.35	0.48	-.12	.01	.01	-.07									
6. Age	23.63	3.22	-.19*	-.08	.07	.03	.22**								
7. Positive affect	3.30	0.63	.17*	.19*	.26**	.23**	-.02	.02	(.86)						
8. Negative affect	1.41	0.64	.01	-.10	.01	-.15*	.17*	-.02	-.21**	(.93)					
9. Trait SSE	3.77	0.74	-.20**	-.03	.01	.01	.06	.16**	.13*	-.15*	(.73)				
10. Trait PSE	3.91	0.67	.01	.18*	-.01	.15	-.04	.07	.28**	-.24**	.55**	(.71)			
11. Dissimilarity	0.44	0.32	.04	.03	.11	-.05	.40**	.13*	.05	.01	.04	-.07			
12. Independent SC	5.08	0.68	.07	.08	.10	.19**	-.06	-.03	.23**	-.15*	.03	.11	-.04	(.66)	
13. Interdependent SC	3.97	1.04	.05	.09	.13	-.03	.03	-.04	.19**	.05	.20**	.15**	-.02	.01	(.84)
14. Accessibility indep. SC	0.00	1.00	.01	-.01	.02	.14*	-.08	.01	.04	-.16*	-.09	-.08	-.01	.70**	-.70**

*Note.* Dissimilarity = Euclidean distance; *PAP* = performance-approach; *PAV* = performance-avoidance; *LAP* = learning-approach; *SSE* = social self-esteem; *PSE* = performance self-esteem; *SC* = self-construal.

\**p* < .05. \*\**p* < .01.



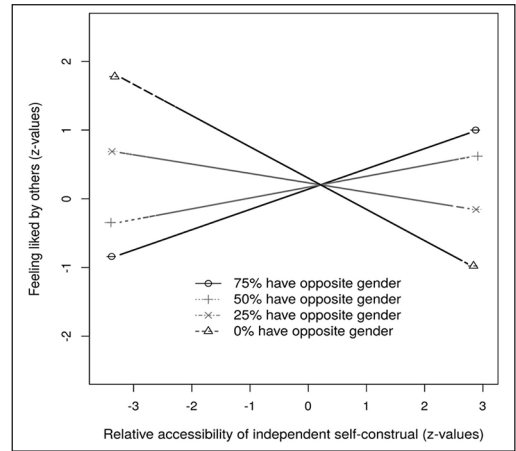
**Table 5.** Mismatched self-construal, feeling liked, and performance-avoidance goal pursuit (Study 2).

Performance-avoidance	<i>B</i>	<i>SE</i>	<i>p</i>
Feeling liked	-.16	.08	.04*
Gender (male)	-.06	.08	.40
Age	-.14	.08	.06
Positive affect	.19	.08	.01*
Negative affect	.02	.07	.80
Trait social self-esteem	-.22	.08	< .01**
Trait performance self-esteem	.13	.09	.17
Feeling liked			
Gender (male)	.01	.07	.97
Age	.02	.06	.73
Positive affect	.18	.06	< .01**
Negative affect	-.07	.06	.25
Trait social self-esteem	-.07	.07	.32
Trait performance self-esteem	.15	.07	.04*
Gender dissimilarity	-.06	.06	.37
Accessibility independent SC	-.08	.09	.45
Accessibility * Dissimilarity	.28	.09	< .01**

*Note.* Multilevel structural equation modelling with individual data being nested within groups. *β*: fully standardized coefficient; *SC* = self-construal; *SE*: standard error of the coefficient; *n* = 268. The proportion of variance explained in the two dependent variables was significant (*R*<sup>2</sup> likability = .12, *SE* = .04, *p* < .01; *R*<sup>2</sup> performance-avoidance = .12, *SE* = .04, *p* < .01). \**p* < .05. \*\**p* < .01.

participants to develop feelings of being liked by other group members: trait performance self-esteem rather than trait social self-esteem was positively related to feelings of being liked. As expected, however, trait social self-esteem and feelings of being liked explained the adoption of performance-avoidance goals. Whereas the first of these two findings may raise doubt as to whether “feeling liked” was a state measure of social self-esteem, the latter finding is consistent with this notion. In either case, observed correlations may reflect meaningful psychological processes that exist besides the link between trait and state measures of social self-esteem. In view of the measure’s high face validity, we would like to conclude that “feeling liked” can be conceived of as a straightforward operationalization of the situation-related belief to be socially accepted by

**Figure 3.** The interactive effect of gender dissimilarity and chronic self-construal on perceived likability (Study 2).



*Note.* The simple slope was significant at three of the four levels of gender dissimilarity, namely at 75% dissimilarity (*coef.* = .29, *SE* = .08, *p* < .01), at 50% dissimilarity (*coef.* = .16, *SE* = .06, *p* < .01), and at 0% dissimilarity (*coef.* = -.44, *SE* = .22, *p* < .05), but not at 25% dissimilarity (*coef.* = -.13, *SE* = .12, *p* = .27).

other group members; and that this belief may be well suited for capturing the consequences of mismatched self-construal.

### Overall Discussion

Two studies in different contexts consistently showed that gender dissimilarity can create mismatches between chronic and situational self-construal among the members of a group. Underrepresented individuals suffered a drop in social self-esteem if they emphasized interdependence more than independence in their chronic self-construal; overrepresented individuals experienced a drop in social self-esteem if they emphasized independence more than interdependence. Threat to self-esteem, in turn, jeopardized the welfare of individuals in that it promoted the adoption of maladaptive motivational states, namely performance-avoidance achievement goals.

The latter is an indication that we identified a significant source of psychological threat in groups,

since maintaining a focus on performance-avoidance goals represents a marked self-regulatory vulnerability (Baranik et al., 2010; Payne et al., 2007). For a number of reasons, individuals who adopt a performance-avoidance orientation become less well equipped to cope with challenging situations (Darnon et al., 2007). Coping with fearful negative emotions and suppressing the impulse to avoid fear-eliciting situations consumes regulatory resources, which has a depleting effect (Oertig et al., 2013). In addition, focusing on social reference standards for performance creates self-protective concerns and heightened physiological arousal. Those concerned construe competence-related challenges as a threat, which stirs distracting, self-focused thoughts (Cadinu et al., 2005; Elliot & Reis, 2003; Green & Campbell, 2000). In this context, it is worth noting that goals are motivational variables that do not reflect feelings of worry. Rather, goals contribute to explaining the experience of distracting thoughts in challenging situations. Our findings thus indicate that mismatched self-construal induced motivational states that lead to increased cognitive load, which is known to have a key mediating role in the relationship between group-based threat and underperformance (e.g., Schmader & Johns, 2003; Sekaquaptewa & Thompson, 2002, 2003). Below, we discuss the theoretical and practical implications of our findings in more detail.

### *Theoretical Implications*

The present studies may extend previous knowledge about the theoretical foundations of group-based threat. We found that mismatches between chronic and situational self-construal entailed threat to self-esteem among both disadvantaged (e.g., women) and privileged group members, as well as members of both underrepresented and overrepresented subgroups. These findings suggest that the observed drop in social self-esteem originated from other sources of psychological threat than negative gender stereotypes or dissimilarity to the group prototype. Depending on an individual's chronic self-construal, overly low or high degrees of dissimilarity created a form of person-environment mismatch that was

associated with feelings of being insufficiently accepted.

One explanation of this finding is that people feel they can find satisfying interpersonal relations and social acceptance in social environments that meet their own ideals with regard to the relative satisfaction of the two opposing needs, inclusion and individuation. Within a group, being similar to others facilitates satisfaction of the need for inclusion, that is, of concerns for relatedness, harmony, and intimacy (Woike, 1994). At the same time, however, low individual distinctiveness within a group constrains the expression of individuation needs, such as concerns for individuality, agency, and power (e.g., expressing and acting in accordance with one's personal attitudes, making independent decisions, striving for personal achievement, choosing whom to work with). Due to the opposing nature of these two motives, people seek to maintain a satisfying trade-off between the two, which, according to optimal distinctiveness theory, they are most likely to achieve at moderate levels of distinctiveness (Brewer, 1991). Extending this principle, the present article highlights the moderating role of individual differences: our findings support the conclusion that the relative accessibility of interdependent and independent self-construals reflects an individual's idealized balance between the two opposing motives, inclusion and individuation (cf. Brewer & Gardner, 1996; Hornsey & Jetten, 2004). This idealized balance may explain why individuals feel valued and accepted in different social environments.

Furthermore, our findings support the conclusion that self-esteem has a monitoring function in a regulatory system that motivates people to maintain a personally satisfying trade-off between the two opposing motives, inclusion and individuation (Hornsey & Jetten, 2004; Moretti & Higgins, 1990). According to sociometer theory, low self-esteem alerts individuals whenever their social acceptance is jeopardized (Leary et al., 1995). Viewed from this perspective, the present findings indicate that, depending on self-construal, different ideals have to be met for an individual to experience a satisfactory level of acceptance in interpersonal relationships (i.e.,

social self-esteem). In this system, threat to self-esteem may also have an activation function. For example, research in academic settings has found that person–culture mismatch motivates people to withdraw from a social environment that disconfirms their self-identities (e.g., Cross & Vick, 2001; Stephens et al., 2012). In the same manner, threat to self-esteem may motivate people to avoid groups in which their own demographic characteristics (such as their gender, race, or age) are strongly under- or overrepresented, unless they construe the self at the extreme ends of independence or interdependence. A person feeling overly dissimilar or unique, for example, might achieve a greater level of assimilation by joining a group where more others are similar to the self. A member of an overly inclusive and cohesive group, by comparison, might achieve a greater level of autonomy by joining a more heterogeneous group. This notion expands optimal distinctiveness theory from the group level to the level of individual distinctiveness (cf. Brewer & Gardner, 1996; Brewer & Roccas, 2001). When construing a social identity from group membership, the trade-off that people seek to optimize is between inclusiveness on the one hand, and distinctiveness on the other: a group is most likely to become a defining element in a person's self-concept if it is moderately distinctive/inclusive (Brewer, 1991). At the individual level, the trade-off that is being optimized is between the need to experience belonging and the need to feel like a differentiated individual—a process that is essential in attaining autonomy (Hornsey & Jetten, 2004; Vignoles et al., 2000).

### *Practical Implications*

The present results confirm that the gender composition of a group is a relevant factor to consider in diversifying organizations. Organizations would be well advised to consider that both overly high and overly low degrees of gender dissimilarity can create social environments that threaten the self-identities and underlying psychological needs of individual group members. Nevertheless, there is reason to believe that

underrepresentation is a more problematic issue for employees than overrepresentation. First, the degree of underrepresentation that makes self-construal a relevant factor for well-being may be relatively closer to an equal gender ratio than the respective degree of overrepresentation. Our findings indicate that self-construal is a significant predictor of self-esteem among the underrepresented, if about 60% or more individuals have the opposite gender. By comparison, self-construal may become a significant predictor of self-esteem among the overrepresented, only if less than 20% group members are of the opposite gender.

Second, being underrepresented has potentially more problematic consequences because it combines the deleterious effects of mismatched self-construal with stereotype-based threats (i.e., negative gender stereotypes and/or threat due to low similarity to the positively stereotyped group prototype; cf. Veldman et al., 2017). Our findings thus underscore the necessity to have higher proportions of women in male-dominated professions, and vice versa, to disrupt the vicious cycle that may otherwise evolve: those who belong to the underrepresented gender select out of contexts that, in subtle ways, impair their well-being and effective functioning, which in turn contributes to the underrepresentation of their gender in these contexts. However, it may be comparatively more difficult for women to overcome their underrepresentation in male-dominated contexts than for men to overcome their underrepresentation in female-dominated occupations: women are not only more likely than men to be exposed to negative stereotypes about their ability and personality, they are also less likely than men to possess chronic self-construals that would facilitate adjustment to being underrepresented (Cross & Madson, 1991). In this connection, it would be interesting to investigate whether women who work in contexts where they are underrepresented for prolonged periods of time alter their self-construal towards greater independence. Concerned women may find out that activating independent self-construals improves their work adjustment. Alternatively, they might alter their

self-construal to match their experience, which in turn, may quite unintentionally improve their work adjustment.

Furthermore, the present findings may inform those who develop interventions designed to promote the success of underrepresented employees in diverse work settings. To make such interventions more beneficial, it helps to identify underlying mechanisms, as well as protective factors of personality, such as chronic self-construal. Chronic self-construal is an ideal-like component of the self-concept, which people are reluctant to modify. Accordingly, rather than attempting to modify peoples' chronic self-views, interventions might aim to make individuals aware of their values, and might encourage the use of self-affirmative strategies (Kinias & Sim, 2016; Koole et al., 1999). Likewise, making the respective group members aware of their higher risk to adopt maladaptive motivational states can be part of useful interventions, since achievement goals are domain-specific thinking patterns that can be influenced through training (Godwin, Neck, & Houghton, 1999; Neck & Manz, 1992).

### *Limitations and Directions for Future Research*

Previous research has demonstrated that ego-involving contexts have an impact on goal pursuit and self-regulation in competence domains. Most of the evidence to support this notion stems from research on competitive settings, such as competitive classrooms (e.g., Ames, 1992) or work teams (Heidemeier & Bittner, 2012). It is thus noteworthy that the effects of gender composition on goal pursuit documented in the present research were more specific than those of competition. Competitive settings tend to promote both performance-approach and performance-avoidance goals. That is, they foster both challenge appraisals (i.e., the perception that an achievement context offers an opportunity for growth or gain) and threat appraisals (i.e., a perceived risk of harm or loss; Elliot & McGregor, 2001). By comparison, self-construal mismatch made participants in the present research feel

insecure about their social acceptance within a group, which facilitated the adoption of avoidance-oriented performance goals more than the adoption of performance-approach goals, indicating that our participants construed the achievement situation they were in as a threat. However, delineating the psychological processes that connect a perceived lack of social acceptance with goal pursuit and achievement behavior was beyond the scope of the present article. To fill this gap, future research may investigate mediational processes, such as competence valuation (i.e., the belief that being accepted by others is conditional on performance), the perceived availability of support when facing difficulties, or the level of psychological risk involved in making mistakes. After all, gaining insight into underlying psychological processes is of practical relevance for providing the right kinds of support to those who work in demographically diverse groups.

Future research may further investigate which personal characteristics create perceptions of dissimilarity or distinctiveness that are apt to produce mismatches with chronic self-construal. Major contributing factors to a person's identity (e.g., gender, race) may have such effects, whereas superficial attributes that are of little relevance to a person's identity (e.g., departmental affiliation, dress) may neither trigger nor undo these effects. To be the most relevant to a person's self-construal, distinguishing attributes likely have to be visible, invariable, and automatically processed, as are basic social categories like gender and race. Gender and race may thus have a particularly strong potential to produce the observed mismatch effects. More research is needed to tell whether other forms of distinctiveness, such as separateness (e.g., nationality, language) and position (e.g., hierarchy) have similar effects on identity and well-being (cf. Vignoles et al., 2002). Future investigations might also examine shared competences in groups. Since competences are important elements of a person's self-concept, the degree to which group members share (do not share) their competences with others around them may trigger the process of assimilation (differentiation), which may induce ego-involving

motivational states among those who emphasize independence (interdependence). In concluding, we hope that the present article extends the literature on sources of group-based threat by highlighting the relevance of a person's identity expression for well-being and performance when working in a group.

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### Supplemental material

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