Bruckmüller, S., Hegarty, P., & Abele, A.E. (2012). Framing gender differences: Linguistic normativity affects perceptions of gendered power and gender stereotypes. *European Journal of Social Psychology*, 42, 210-218.

ABSTRACT

When unknown groups and equal status groups are compared by contrasting one group ("the effect to be explained") against another ("the linguistic norm"), the group positioned as the norm is sometimes perceived as more powerful, more agentic, and as less communal. Such perceptions may contribute to status-linked stereotypes, as group differences are spontaneously described by positioning higher-status groups as the linguistic norm. Here, 103 participants considered gender differences in status to be larger and more legitimate and applied gender stereotypes more readily upon reading about gender differences in leadership that were framed around a male rather than a female linguistic norm. These effects did not generalize to 113 participants who read about gender differences in leisure time preferences framed around either norm. Jointly, these results suggest that the effects of linguistic framing on perceived group status and power and on group stereotypes generalize to domains where there are real differences in status, and contexts in which higher-status groups are the default standard for comparison.

AUTHOR NOTE

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When people describe or try to explain differences between social groups, they spontaneously position one group as "the effect to be explained" and the other group as the implicit norm for the comparison (Miller, Taylor, & Buck, 1991; Pratto, Hegarty, & Korchmaros, 2007). Previous research has mostly focused on perceived typicality for the overarching category as an important factor in influencing implicit normativity, revealing that (sub-) groups seen as non-prototypical are more likely to become the effect to be explained than (sub-) groups seen as prototypical, such as, for instance, majority groups (e.g., Hegarty & Pratto, 2001; Miller et al., 1991). As we discuss below, empirical findings also suggest the importance of group status as a determinant of normativity, such that lower-status groups tend to be compared to higher-status groups rather than vice versa. These effects are large, with an effect size of approximately 1.00 (Pratto, Hegarty, et al., 2007), and have been observed not only in the ways that people spontaneously explain intergroup differences in experiments but also in the discussion of gender differences in actual scientific publications (Hegarty & Buechel, 2006).

The main focus of the present research is on the consequences of linguistically rendering certain groups as the norm and others as the effect to be explained. Specifically, we investigated how the comparative framing of gender differences affects perceptions of women's and men's relative status and power as well as the endorsement of status-related gender stereotypes. To tap into the mechanisms by which framing affects group stereotypes, we tested these effects in two different contexts, a stereotypically male context as well as a more undifferentiated context.

DETERMINANTS OF THE COMPARATIVE FRAMING OF INTERGROUP DIFFERENCES

Research on implicit normativity has mostly been informed by Kahneman and Miller's (1986) norm theory (e.g., Hegarty & Pratto, 2001; Miller et al., 1991). According to this theory, mental category norms define what people see as characteristic for a (social) category. These implicit defaults for category members over-represent typical category members. As a result, the distinct attributes of less typical category members seem surprising and are more salient. Consequently, people focus on atypical members' attributes when they describe and explain differences within a category. Consistent with this theory, Miller and colleagues (1991) found that in a category such as college professors, for which people imagine the typical category member to be a man, participants focus spontaneous explanations of gender differences on women. However, explanations of differences among elementary school teachers (where the typical category member is imagined as a woman) focus roughly equally on women and on men.

In addition to such context-specific category norms, certain identities seem to be generally more normative than others. For example, Miller and colleagues (1991) found that most of their participants imagined the typical voter as a man and spontaneously explained gender differences in voting behaviour with a focus on women, even though neither women nor men represent a clear statistical majority in the category "voters." More generally, identities such as male gender (Eagly & Kite, 1987; Miller et al., 1991), Whiteness (e.g., Devos & Banaji, 2005; Smith & Zárate, 1992), and heterosexuality (Butler, 1990; Hegarty, Pratto, & Lemieux, 2004) represent "cultural default values" (Smith & Zárate, 1992, p. 15) that come to mind when we imagine a person in a context where no other distinguishing information is available (see also Pratto, Hegarty, et al., 2007; Pratto, Korchmaros, & Hegarty, 2007). Accordingly, these groups typically become the implicit norm in spontaneous explanations of intergroup differences (e.g., Miller et al., 1991; Pratto, Hegarty, et al., 2007).

What causes some social identities to appear more typical for the general category "people" than others? Besides numerical majority status (Miller et al., 1991; Smith & Zárate, 1992), an important factor may be a group's social status, that is, their relative social prestige and prominence (e.g., Keltner, Gruenfeld, & Anderson, 2003). High-status groups usually set the standard of culturally valued behavior against which others are defined and expected to define themselves, that is, they implicitly and explicitly determine what is deemed valuable or normal behaviour and what is not (Deschamps, 1982). This suggests that high status groups should tacitly appear as the norm for all people in a society and become culturally shared implicit default values of personhood (Goffman, 1963; Pratto, Hegarty, et al., 2007; Smith & Zárate, 1992). Although previous research on intergroup comparisons has not explicitly considered status as a factor, the patterns observed in these studies fit very well with this assumption. Identities that represent cultural default values (e.g., male gender, Whiteness, heterosexuality) are all characterized by higher social status than the groups that tend to become the effect to be explained.

EFFECTS OF COMPARATIVE FRAMING ON PERCEIVED GROUP STATUS

Implicitly rendering certain groups as the norm may be problematic not only because such frames reflect beliefs about status. Such habits of asymmetrically framing intergroup differences might also play a role in maintaining status (e.g., Hegarty & Buechel, 2006; Miller et al., 1991; Pratto, Hegarty, et al., 2007). In a recent set of studies (Bruckmüller & Abele, 2010), we asked participants to read a text that compared two outgroups of similar status, such as law and economics students or fictitious groups. Participants spontaneously attributed higher status and power to a group when it had been linguistically positioned as the norm rather than as the effect to be explained. Moreover, participants perceived groups presented as the norm as more agentic and less communal. Agency (e.g., competence, assertion, independence) and communion (e.g., warmth, cooperation, empathy) are

fundamental dimensions of social judgment (e.g., Abele & Wojciszke, 2007; Fiske, Cuddy, & Glick, 2007) that are closely related to status and power (Conway, Pizzamiglio, & Mount, 1996; Fiske, Cuddy, Glick, & Xu, 2002). In concert with earlier findings on the influence of group status on the framing of differences (e.g., Hegarty & Pratto, 2001; Miller et al., 1991; Pratto, Hegarty, et al., 2007), these recent findings suggest a dynamic process by which status differences and habits of linguistically framing intergroup comparisons mutually reinforce each other.

Group status appears to influence the comparative framing of differences, and this framing in turn appears to communicate relative group power and status-related group stereotypes. Although “power” is often defined by social psychologists as control over another’s resources and outcomes (e.g., Dépret & Fiske, 1993; Guinote, Judd, & Brauer, 2002; Keltner, Gruenfeld, & Anderson, 2003), a full understanding of the interplay of status, normativity, and social power requires the more inclusive conceptualization of power as the capacity to recruit others in the service of one’s agenda (Simon & Oakes, 2006). In this conceptualization, status is a state of being that is both the most important among several bases of power (which is more related to doing) and, jointly, the result of previous power struggles (see Simon & Oakes, 2006, for a detailed discussion). Because of this association of status and power, linguistic normativity should affect not only perceptions of relative status but also of group power.

POSSIBLE MECHANISMS

Why should the framing of group differences influence how we perceive a group’s status and power? One possibility is that because group differences are most often framed in terms of how lower-status groups differ from higher-status groups, people learn to implicitly associate comparative framing with beliefs about group status and use linguistic normativity as a heuristic cue to infer group status and power (Bruckmüller & Abele, 2010; see also Gleitman, Gleitman, Miller, & Ostrin, 1996). If such an association characterizes effects of an asymmetric framing of differences between groups known to differ in status such as gender groups, then positioning men as the linguistic norm should increase perceptions of men’s relative power, whereas positioning women as the linguistic norm should decrease perceptions of men’s power—irrespective of the comparative context. However, such a process may be most likely when people lack information about group status, as when comparing unknown or very similar groups. When important social groups that differ in status are compared, people presumably have a plethora of knowledge and stereotypic assumptions about the groups. In these situations, the framing of differences may affect perceptions of power and stereotypic attributes through context-dependent processes. Consistent with this latter possibility, the contents of category norms are themselves highly context dependent (e.g., Miller et al., 1991; Pratto, Korchmaros, et al., 2007). Therefore, the extent to which the comparative framing conveys information about the status of relevant social groups might depend on the comparative context.

Cultural psychologists emphasize how culturally grounded ways of communicating and interacting with our social environment permanently feed back into culturally shared beliefs by subtly confirming and reinforcing them for ourselves and others (Kim & Markus, 1999; Kitayama, Markus, Matsumoto, & Norasakkunkit, 1997; Shweder, 1995). Thus, the framing of group differences in a certain context may not only express how people perceive the groups’ status and their typicality in this context. A framing that is consistent with culturally shared category norms should also implicitly communicate the respective beliefs to others, facilitating an ongoing reproduction of associations between group status and normativity, even though these associations are not explicitly described (Kashima, Klein, & Clark, 2007). Rather than a domain-general association of linguistic framing and power, this cultural view suggests a more context-dependent association between linguistic normativity and perceived group power.

EFFECTS OF THE COMPARATIVE FRAMING OF GENDER DIFFERENCES

In the domain of gender, men represent a general cultural default value, but male gender is especially normative for high status occupational categories such as university professors (Miller et al., 1991) and managers (Schein, 1973, 2001), whereas in some contexts, neither gender is more normative than the other. If acting in line with culturally shared beliefs implicitly reinforces the respective ideas (Kitayama et al., 1997), then adhering to a conventional framing of gender differences in normatively male contexts such as leadership should subtly communicate and reinforce the associated beliefs about normativity and power. However, in a more undifferentiated context, the framing of differences may only have minimal effects on perceived group status and power—unless it is the only distinguishing information available (as in Bruckmüller & Abele, 2010). We hoped to tease apart this explanations of how comparative framing affects perceptions of group status and power from a domain-general association by manipulating the framing of gender differences in two different contexts: an androcentric context in which men represent the cultural default (leadership) and a more undifferentiated context (leisure time).

Comparative Framing and Gender Stereotypes

Focusing explanations of intergroup differences on certain groups more than on others renders stereotypes about non-normative groups particularly salient (Hegarty & Pratto, 2001). In addition, it may also create or reinforce stereotypes by making certain groups appear more or less agentic or communal (Bruckmüller & Abele, 2010)—stereotypes that may in turn be used to legitimize existing status inequalities (cf. Eagly, 1987; Rigdeway, 2001). We have recently shown that the comparative framing of differences between fictitious groups that participants have no prior knowledge or stereotypes about can affect the attribution of agency and communion to these groups (Bruckmüller & Abele, 2010). The present study tested whether the framing of differences can also affect the attribution of these status-linked traits in the domain of gender where robust stereotypes exist about how the groups differ along these two dimensions (Eagly & Steffen, 1984). Finding that despite these robust stereotypes, perceptions of women's and men's agency and communion are affected by the comparative framing of gender differences would further support our argument that linguistic practices such as an asymmetric framing of differences are part of a power and status-reproducing process.

Comparative Framing and the Perceived Legitimacy of Status Differences

The linguistic framing of gender differences may also have a more direct effect on how legitimate existing status differences between women and men appear to be than via the reinforcement of status-related stereotypes. People tend to communicate as if others shared their category norms (Pratto, Korchmaros, et al., 2007) and expect comparisons to be framed the same way as they would spontaneously frame them (Roese, Sherman, & Hur, 1998). When people cannot, or do not, obey these conventions, communication is impaired (Pratto, Korchmaros, et al., 2007) and cognitive attention is aroused (Holbrook, Krosnick, Carson, & Mitchell, 2000; Roese et al., 1998). Accordingly, comparisons that adhere to linguistic conventions for the respective context should communicate the impression that everything is normal and how it is supposed to be, whereas comparisons that violate these conventions should disrupt the usual flow of communication, including the subtle reinforcement of beliefs about gendered status and power resonating with a conventional framing. In an androcentric context such as leadership, a framing of differences with men as the implicit norm should therefore not only communicate men's higher status and power but also should make these differences appear normal and expected, whereas an unconventional framing might lead participants to examine these status differences more critically and to question their legitimacy. Of course, we would expect no such effects in a

more undifferentiated context where no shared expectations for the framing of differences exist.

OVERVIEW OF PRESENT RESEARCH

In the present research, we first pretested mental category norms for the contexts of leadership and leisure time. In the main study, participants read about gender differences in these two contexts, framed in terms of how women differ from men (rendering men the linguistic norm) or in terms of how men differ from women (rendering women the linguistic norm). Because leadership is a context where men represent the cultural default, we expected a higher perception of men's relative status and power (H1), a perception of status differences as more legitimate (H2), and a higher endorsement of gender stereotypes with regard to agency and communion (H3), when the leadership text compared women to men (consistent with culturally shared category norms) rather than men to women.

A critical question was whether these effects would generalize to a context in which men and women are equally normative (leisure time), suggesting that they are caused by a general heuristic association of linguistic normativity and power, or whether they are limited to contexts where men represent the cultural default, suggesting a dynamic, context-dependent interplay of normativity and gendered power.

METHOD

Previous research suggests that leadership is stereotypically tied to masculinity (e.g., Schein, 1973, 2001). Finding a context in which women and men are equally normative is more difficult because men represent a general cultural default (Smith & Zárate, 1992). Because status and normativity are closely intertwined (Deschamps, 1982; Pratto, Hegarty, et al., 2007), we decided to investigate a status-irrelevant context: leisure time activities that occur outside of status-defining professional roles (Eagly & Steffen, 1984). We expected that women and men would be equally normative within this important aspect of both women's and men's lives. A pretest assessed category norms for leadership and leisure time.

Pretest

Method Thirty-seven female and 26 male students of a German university (mean age = 23.68 years, standard deviation [SD] = 4.33) were asked to either imagine a typical manager [Note 1] or a typical person with leisure time and to write a few sentences about what this person does on a typical work day or on a typical day off, respectively. Participants then indicated the person's approximate age, home town, gender, and a possible name.

Results Five questionnaires were ambiguous with regard to the imagined person's gender. For the remaining participants, a logistic regression analysis regressing the imagined person's gender on context (leisure time, leadership), participant gender, and their interaction revealed significant effects of participant gender, Wald $\chi^2 = 5.44$, $p < .03$, and of context, Wald $\chi^2 = 6.89$, $p < .01$. Male participants were more likely to imagine a male person than were female participants. Participants in the leadership condition were more likely to imagine a man than were participants in the leisure condition; moreover, participants in the leadership condition were more likely to imagine a man than a woman, $\chi^2(1, 30) = 10.80$, $p < .001$, whereas participants in the leisure condition were equally likely to imagine a person of either gender, $\chi^2(1, 28) = 0.00$. The participant gender by context interaction was not significant, Wald $\chi^2 < 1$. However, the two main effects resulted in somewhat different leisure time category norms for female and male participants: female participants tended to imagine a woman and male participants tended to call a male exemplar to mind, $2s < 1.34$, $ps < .19$; in other words, participants' leisure time category norms were somewhat directed toward their own gender.

Main Study

Participants and Design A total of 131 female and 95 male German university students (mean age = 23.25; SD = 3.39) voluntarily completed the questionnaire that comprised the main study. The study had a 2 (context: leadership, leisure) x 2 (linguistic norm: male, female) x 2 (participant gender: female, male) design. Participants were randomly assigned to experimental conditions.

Procedure A (male or female) experimenter approached participants on campus and asked them to participate in a study on the perception of gender differences. Participants read a text about gender differences in either leadership styles or behaviors, or about gender differences in leisure time preferences. The next two pages contained the dependent measures as well as demographic questions. Upon completion of the survey, participants were probed for suspicion, informed about the fabricated nature of the text, and were offered to receive more detailed information about the study via email.

Materials In the leadership conditions, the text was titled “The gender question in boardrooms: Do men (women) lead differently than women (men)?” and discussed gender differences in leadership styles and behavior (see Appendix A). In the leisure conditions, the title read “After closing time they part: Men (women) have different leisure time preferences than women (men)” and covered gender differences in preferred leisure time activities (see Appendix B). In the female norm version, the text always compared men to women; in the male norm version, it always compared women to men. However, both versions of each text contained the same factual information.

Perceptions of Status and Power Differences. As dependent variables, we first assessed how participants perceived women’s and men’s relative status and power, and the legitimacy of that status/power distribution. Participants indicated their agreement with eight statements about gender relations in society (on a scale from 1 = do not agree at all to 7 = completely agree) that we adapted from Miron, Branscombe, and Schmitt (2006). Four items referred to perceived status and power differences (e.g., “women have just as many privileges as men do;” “our society has reached a point where men and women have equal opportunities for achievement;” Cronbach’s $\alpha = .84$). We recoded these items such that higher values indicate the perception of greater differences and thus a relatively higher status of men.

Four additional items referred to the legitimization of gender-based power differences (e.g., “men and women have different qualities that make them better suited for different jobs and roles;” “the existing wage gap between men and women is justified because they are doing different jobs;” Cronbach’s $\alpha = .82$). Miron et al. (2006) originally used all items of their scale to assess the legitimacy of power differences. However, a factor analysis confirmed two distinct factors in our sample: in a principal components factor analysis with varimax rotation, a first factor capturing 35% of variance comprised the four items referring to power differences between men and women, whereas the remaining four items that referred to the perceived legitimacy of status differences loaded on a second factor, explaining 33% of variance. The intercorrelation between subscales was significant but moderate in size, $r = .33$, $p < .001$, suggesting that the constructs they assessed were related but not identical.

Gender Stereotypes. Next, we asked participants to rate the extent to which they thought five agentic traits (self-confident, decisive, independent, active, determined) and five communal traits (understanding, emotional, compassionate, warm, considerate) applied to women in general (agency: Cronbach’s $\alpha = .63$; communion: $\alpha = .84$) and to men in general (agency: $\alpha = .74$; communion $\alpha = .70$) on a scale from 1 = not at all to 7 = completely. We counterbalanced which gender group participants rated first because temporal order can influence implied normativity such that first-mentioned events or groups tend to set the standard (Gernsbacher & Hargreaves, 1988).

RESULTS

Preliminary Analyses

Preliminary analyses revealed no systematic effects of experimenter gender on the dependent variables. This factor was therefore excluded from further analyses. We excluded 10 participants from the statistical analyses reported below. One noted a “focus on men” in the text; five participants in the leisure time and four participants in the leadership context had outlying scores on one of the dependent variables that were more than three standard deviations above or below the mean in the respective condition. An analysis of the results of the remaining 226 participants (127 women, 89 men) is presented below.

Perceptions of Status and Power

We conducted two parallel 2 (context: leadership, leisure) x 2 (linguistic norm: male, female) x 2 (participant gender: female, male) ANOVAs on the perceived magnitude of status and power differences between women and men and on the perceived legitimacy of these differences. Table 1 displays the respective means and standard deviations.

Perceived Status Differences

Recall that higher scores indicate a perception of men’s higher relative status. Female participants perceived greater differences favoring men than did male participants, $F(1, 208) = 14.56$, $p < .001$, $d = 0.55$. However, participant gender did not interact with context or linguistic norm, $F_s < 1.09$, $p_s > .29$. Most relevant to our hypotheses, we found a significant interaction between context and linguistic norm on perceived power differences, $F(1, 208) = 8.48$, $p < .01$. In accord with H1, participants in the leadership condition perceived greater status and power differences favoring men if they had read the male-norm text than if they had read the female-norm text, $t(98) = 2.17$, $p < .04$, $d = 0.43$. However, in the leisure time condition, linguistic framing had the opposite effect; participants perceived greater status and power differences favouring men when women were the implicit norm than when men were the norm, $t(110) = 2.39$, $p < .02$, $d = 0.44$. There were no other significant effects on perceived power differences, all $F_s < 2.80$, $p_s > .10$.

Perceived Legitimacy of Status Differences

Next, we tested whether the linguistic norm manipulation affected perceptions of legitimacy. Overall, participants perceived status inequalities based on gender as relatively illegitimate ($M = 2.06$; $SD = 1.16$, on a one to seven scale), and male participants perceived those differences as much more legitimate than female participants did, $F(1, 208) = 63.54$, $p < .001$, $d = 1.02$. The expected two-way interaction of context and linguistic norm was marginally significant, $F(1, 208) = 3.13$, $p < .08$. In the leadership condition, participants perceived power inequalities as significantly more legitimate, $F(1, 99) = 4.02$, $p < .05$, when gender differences were framed in accord with linguistic conventions, that is, when women were compared to men rather than vice versa, confirming H2. As expected, in the leisure condition, the perceived legitimacy of gender inequalities was not affected by the framing manipulation, $F < 1$. The ANOVA revealed no other significant effects or interactions, $F_s < 2.74$, $p_s > .10$.

In sum, the effects of the framing manipulation varied across contexts. In the leadership context, positioning men as the linguistic norm enhanced perceptions of both men’s relative status and power and the legitimacy of these status differences. However, in the leisure context, the framing manipulation had the opposite effect on perceived status and power differences and no effect on the perceived legitimacy of these differences. These results clearly speak against a general heuristic association of linguistic normativity and status and favor an explanation that incorporates the context-dependency of culturally grounded beliefs about normative default values, status, and power.

Gender Stereotypes

To test whether linguistic normativity affected the endorsement of gender stereotypes with regard to agency and communion, we conducted a 2 (context: leadership, leisure) $\times$ 2 (linguistic norm: male, female) $\times$ 2 (participant gender: female, male) $\times$ 2 (order of ratings: women first, men first) $\times$ 2 (rated gender: women, men) $\times$ 2 (trait content: agency, communion) ANOVA. The last two factors were within-subjects variables.

This revealed several significant effects. There were main effects of rated gender, $F(1, 199) = 82.63$, $p < .001$, and trait content, $F(1, 199) = 35.02$, $p < .001$, such that overall, participants attributed greater amounts of the listed traits to women than to men ($M_s = 4.76, 4.33$, respectively; $SD_s = 0.63, 0.49$, respectively) and greater amounts of the agency traits than of the communion traits ($M_s = 4.65, 4.44$, respectively; $SD_s = 0.56, 0.51$, respectively). Consistent with prevalent gender stereotypes (e.g., Eagly & Steffen, 1984), a highly significant interaction of rated gender group and trait content, $F(1, 199) = 286.25$, $p < .001$, emerged; participants perceived men as more agentic than women ($M_s = 4.98, 4.32$, respectively; $SD_s = 0.78, 0.73$, respectively) and women as more communal than men ($M_s = 5.19, 3.68$, respectively; $SD = 0.86, 0.66$, respectively), $t(214) > 9.60$, $p_s < .001$, $d_s > 0.87$. The ANOVA also revealed several additional significant interactions, which were qualified by a significant five-way interaction of all factors except order of ratings, $F(1, 199) = 4.85$, $p < .03$. To disentangle this interaction, we conducted two separate ANOVAs for the leadership and leisure conditions. Keep in mind that the rated gender by trait content interaction effect indicates the endorsement of gender stereotypes.

Table 1. Mean perceptions (standard deviations in parentheses) of gendered status and power depending on context, linguistic framing, and participant gender

	Leadership context		Leisure context	
	Men norm	Women norm	Men norm	Women norm
	<i>Perceived relative status of men</i>			
Female participants	4.73 (1.39)	4.04 (1.27)	4.31 (1.45)	4.81 (1.06)
Male participants	3.64 (1.42)	3.44 (1.25)	3.60 (1.50)	4.38 (1.20)
Total	4.32 (1.48)	3.73 (1.28)	4.05 (1.50)	4.64 (1.13)
	<i>Perceived legitimacy of status differences</i>			
Female participants	1.73 (0.74)	1.49 (0.53)	1.68 (0.81)	1.47 (0.76)
Male participants	3.20 (1.52)	2.60 (1.28)	2.37 (1.25)	2.75 (1.30)
Total	2.28 (1.30)	2.07 (1.13)	1.94 (1.04)	1.97 (1.18)

Leadership Condition

In the leadership condition, the interaction of linguistic norm, rated gender group, and trait content approached the conventional level of significance, $F(1, 94) = 3.78$, $p = .055$. As predicted in H3, the interaction between rated gender group and trait content was stronger, indicating higher stereotype endorsement, when gender differences were framed in a way that linguistically presented men as the norm, $F(1, 47) = 160.14$, $p < .001$, $r^2_{pm} = 0.77$ (see Figure 1, left panel) rather than women as the norm, $F(1, 47) = 72.82$, $p < .001$, $r^2_{pm} = 0.61$ (see Figure 1, right panel). Interestingly, linguistic normativity mostly affected the attribution of stereotype-consistent traits. Men were rated as more agentic when men rather than women were the linguistic norm ($M_s = 5.30$ and 4.88 ; $SD_s = 0.66$ and 0.79), $t(100) = 2.92$, $p < .01$, $d = 0.58$; women were rated as somewhat more communal when men rather than women were the linguistic norm ($M_s = 5.32$ and 5.04 ; $SD_s = 0.75$ and 0.82 , respectively), $t(100) = 1.77$, $p = .08$, $d = 0.36$. In contrast, linguistic normativity did not affect the attribution of the stereotype-inconsistent traits, that is, agency among women and communion among men, $t_s < 1$.

Figure 1. Endorsement of gender stereotypes (attribution of agency and communion to men and women in general) depending on linguistic norm in the leadership condition

Figure 2. Endorsement of gender stereotypes (attribution of agency and communion to men and women in general) depending on linguistic norm in the leisure condition

Leisure Condition

In the leisure context, a significant four-way interaction of linguistic norm, participant gender, rated gender group, and trait content emerged, $F(1, 105) = 4.55, p < .04$. When we recoded linguistic norm condition into whether participants own or the respective other gender group was the linguistic norm, this effect was reduced to a three-way interaction of linguistic norm, rated gender group, and trait content, $F(1, 109) = 4.01, p < .05$, which was not moderated by participant gender, $F < 1$. Participants in the leisure condition endorsed gender stereotypes more when their own gender group was the linguistic norm, $F(1, 52) = 86.77, p < .001, \eta_p^2 = 0.63$, than when the respective other gender group was the norm, $F(1, 57) = 32.92, p < .001, \eta_p^2 = 0.37$ (see Figure 2).

Remember that in the pretest, participants' leisure time category norms were somewhat directed toward their own gender group. Thus, participants in the leisure context of the main study endorsed gender stereotypes more when comparisons between women and men were framed the same way as they would most likely frame them. Although this pattern of results was not predicted, it parallels the findings in the leadership condition. However, it needs to be interpreted with caution because none of the individual comparisons between linguistic norm conditions reached statistical significance, $ts < 1.60, ps > .11$.

DISCUSSION

The present study tested whether, and when, linguistic normativity in the framing of gender differences can influence perceptions of gendered power and the endorsement of gender stereotypes. In the domain of leadership, framing differences in terms of how women (as the effect to be explained) differ from men (as the linguistic norm) enhanced beliefs about men's higher status and greater power in society; it led to greater acceptance of these inequalities as legitimate, and it caused participants to endorse gender stereotypes of men as agentic and women as communal more than when differences were framed in terms of how men differ from women.

Very different effects were observed in the leisure context. The pretest revealed that men were called to mind with equal ease, suggesting that category norms do not over-represent either gender group. Accordingly, framing did not affect the perceived legitimacy of status inequalities. However, participants perceived men to be relatively more powerful if women rather than men were the linguistic norm. This effect is exactly opposite of what Bruckmüller and Abele (2010) observed and strongly argues against a general heuristic association between linguistic frames and power. Instead, the present findings suggest a context-dependent interplay of normativity and status by which beliefs about status and communicative practices mutually reinforce and reproduce each other (cf. Kitayama et al., 1997).

Although somewhat post hoc, we can speculate that the unexpected effect of linguistic framing on perceptions of men's relative status and power in the leisure condition may be because of a salience effect. The leisure texts differed both from the leadership texts

and the texts used by Bruckmüller and Abele (2010) in that they did not merely describe what these groups are like in general or what they do in order to fulfill a social role. Instead, it focused on individual choices and preferences that should have made the choices and preferences of the group positioned as the effect to be explained particularly salient. Because choosing one's activities according to individual preferences is a luxury enjoyed only by highly powerful people (Galinsky, Magee, Gruenfeld, Whitson, & Liljenquist, 2008), this may have led to a perception of the focused gender group as somewhat more powerful. Obviously, future studies are needed to separate such salience effects from the communication of group status via implicit normativity.

In sum, the findings evidence that framing gender differences in androcentric domains such as leadership around a male linguistic norm—as most people would habitually frame them (Miller et al., 1991; Pratto, Hegarty et al., 2007)—can have the problematic consequence of subtly reinforcing gender stereotypes and the acceptance of existing status differences as legitimate. In other words, the ways that we habitually frame group differences appear to be part of power processes that reproduce stereotypes about differences between real groups that differ in status (Simon & Oakes, 2006). Breaking this habit may potentially disrupt the subtle cultural reproduction of stereotypes and beliefs about power that implicitly resonate with a conventional framing. The framing of gender differences in contexts in which neither gender represents a default standard (such as leisure time) does not appear to have these problematic consequences for the perception and legitimization of status inequalities to the same extent, although a framing that fits with implicit expectations may subtly reinforce gender stereotypes even in a gender-unspecific domain such as leisure time. Taken together with the observation that men are seen as particularly typical for high-status categories, the effects of linguistic normativity on group stereotypes suggest a dynamic, context-dependent process by which beliefs about status, normativity, and social power mutually reinforce each other. The present findings represent an important step toward understanding this dynamic interplay.

Implications for Scientific Practice

An important implication of these findings concerns the consequences of subtle androcentrism in (psychological) science and the question of how we should report our findings on intergroup differences. Scientists usually strive to communicate findings in a way that is most easily understandable and relying on culturally shared habits of linguistic framing facilitates understanding (cf. Pratto, Korchmaros, et al., 2007). However, the present study suggests that adherence to the linguistic rule to compare lower-status groups to higher-status groups might subtly contribute to the reproduction of unequal power-relations between the groups we study (cf. Hegarty & Buechel, 2006). This dilemma may be intensified for scientists who are themselves members of non-normative lower-status groups; as for them, linguistic conventions cause a double-bind between fluent communication and ingroup interest. Thus, the dynamic relationship between linguistic framing and status uncovered here may be one form of power that scientists do (Simon & Oakes, 2006) that subtly contributes to the inequality between social groups (see also Spears & Smith, 2001).

A possible first step toward solving this dilemma could be to adhere to another implicit linguistic convention: phrasing comparisons using a more than framing rather than a less than framing. People tend to spontaneously explain intergroup differences by focusing on a group that shows the behavior in question to a greater extent (cf. Miller et al., 1991, Study 3; Hegarty & Pratto, 2001), and readers tend to evaluate more than comparisons more positively than less than comparisons (Hoorens & Van Avermaet, 2009). Thus, framing intergroup similarities and differences by comparing the group with the higher mean to the group with the lower mean may be a viable, more balanced approach for reporting intergroup differences in scientific writing. Regardless of the solution, we hope that this research raises awareness of what we implicitly communicate when we frame intergroup differences in one way rather than another and that such awareness serves as a step toward representing group differences in a way that does not unintentionally reproduce stereotypes and status inequalities.

ACKNOWLEDGEMENT

The present research was partially supported by a grant from the German Research Foundation to the third author, AB 45/10-2.

NOTES

1. The German word we used was Führungskraft, which does not linguistically imply one gender more than another.

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APPENDIX A: COMPARATIVE TEXT IN THE LEADERSHIP CONTEXT (FEMALE NORM VERSION)

The gender question in board rooms: Do men lead differently than women?

What role does gender play on the managerial level? Are men's leadership styles comparable to those of women? The topic "gender differences in leadership behavior" has been present in research for decades now. Yet, some questions still remain unanswered.

Empirical studies have shown that men often lead more assertively and less democratically than women. In addition, male managers often have more difficulties with taking their subordinates' perspective than their female counterparts. However, male managers are often more task-focused and appear more confident than women holding leadership positions.

Moreover, a study found that men build hierarchies differently than women. "We know that men decide a lot faster than women—often within the first few minutes—who is on top and who is at the bottom of the hierarchy in a group," the researchers conclude.

However, more recent results suggest that men's leadership behavior might differ less from women's than previously suspected. Men may not lead much differently from women; they may mostly be perceived differently. For example, scientists have found that male managers are often evaluated less critically by their subordinates than female managers.

Therefore, the central question may not be whether men lead better or worse than women; instead, it may be most important for organizations to strive for leadership personnel that bring together different personalities, experiences, and perspectives.

APPENDIX B: COMPARATIVE TEXT IN THE LEISURE TIME CONTEXT (MALE NORM VERSION)

After closing time they part: Women have different leisure time preferences than men

What role does gender play for leisure time preferences? Are women's leisure time choices comparable to those of men? Recent studies have revealed similarities as well as differences.

Although both genders enjoy joint activities with friends, the kinds of activities that women choose differ from those of men. Going out to bars and restaurants ranks within the top 5 for both genders. However, compared to men who mention going to the cinema and sports events as their favourite activities with friends, women prefer to go out dancing or meeting with friends for a chat.

Classical board games have also regained popularity in recent years. However, women's preferences again differ somewhat from those of men. In a recent survey, women indicated that they enjoyed quizzes and communicative games more, and games of chance and strategic games less than men.

Moreover, women seem to choose different activities to relax than men. For example, women report enjoying meditation and yoga more and practical activities less than men.

However, there are also areas in which women only differ very little from men. According to representative polls, outdoor activities have similarly gained in popularity, whereas the preference for reading as a leisure time activity has been steadily decreasing for years among both genders—although women's reading preferences differ somewhat from those of men. Finally, the ever-increasing willingness to spend money for leisure time activities is similarly high for men and women—the differences only lie in what they prefer to spend their money on.