Anybody Can Be a Boss But Only Certain People Make Good Subordinates: Behavioral Impacts of Striving for Dominance and Dominance Aversion

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ABSTRACT The present study investigated whether people in assigned subordinate or dominant roles differ in their dominance behavior according to whether they initially wanted a subordinate or a dominant role. Sixty-six females and 72 males interacted twice for 8 mins in same-gender dyads. Prior to the interaction, participants could indicate

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whether they preferred to take a subordinate or a dominant role. Roles were then assigned randomly. Both interactions were videotaped and later coded for perceived dominance and speaking time. Results showed that for assigned subordinates, those who initially wanted to be in the dominant position were perceived as more dominant and behaved more dominantly than those who initially wanted to be in the subordinate role. For assigned high-dominance people, there was no difference in perceived dominance and behavioral dominance between those who initially wanted the dominant versus subordinate position.

Imagine a situation where two coworkers aspire for a job promotion, after which one becomes the supervisor of the other. Because both candidates initially wanted to occupy the high-dominance position, we might wonder whether the now-subordinate individual will show some behavioral signs of the initial wish to be in charge. Especially in the workplace, people often find themselves in a situation where they strive for a high-dominance position they don't currently possess. Personal experience tells us that these individuals often behave in a more dominant fashion than their coworkers who don't have aspirations for a higher-status position.

Of course, to be thwarted in one's desire for a high-dominance position is not the only kind of discrepancy between one's personal aspiration level and one's actual position. One can also imagine the reverse case of people who want to be in a low-dominance position but occupy a high-dominance position. For instance, think of a situation very common in former East Germany, where job promotions were not based on skills or personal ambition, but rather on years of service. People in this situation found themselves in a high-status position without wanting to be there. We might expect such individuals to show less dominance behavior than people in the same high status position who wanted to be there in the first place.

The aim of the present investigation was to find out whether people whose dominance[1] motive is thwarted indeed have a tendency to behave dominantly and whether individuals who occupy a high-dominance position without wanting to have a

1. Although many different definitions of dominance exist (Ellyson & Dovidio, 1985), dominance indicates more influence or control relative to an interaction partner. For convenience, *dominance* is used interchangeably with *power* and *status* in this article.

tendency to avoid behaving dominantly. In both of the these examples, the wished-for dominance position differs from the actual dominance position. Actual dominance (or state dominance) is defined as embodying a role of defined status, power, or influence and can either be a dominance position a person has achieved (e.g., being a manager, as compared to an employee) or an assigned dominance position, as in a psychological experiment. Everyday observation tells us that even if people occupy the same dominance position, they differ in how dominantly they behave. We posited that people in a low-dominance position who aspire for a higher-dominance position (striving for dominance) behave more dominantly than people in the same low-dominance position who are happy with it (fulfilled low dominance) and that people in a high-dominance position who aspire for a lower-dominance position (dominance aversion) behave less dominantly than people in the same high-dominance position who are happy with it (fulfilled high dominance).

Dominance behavior is a function of trait dominance and situational effects. Gender composition of the group has gained considerable attention as one such situational factor. In a study by Megargee (1969), for instance, high-dominance individuals were paired with low-dominance individuals in same- and mixed-gender dyads and were asked to negotiate which one would be the leader in a subsequent task. The dispositional tendencies predicted who assumed the leadership role except for high-dominance women paired with low-dominance men. In the latter case, low-dominance men were more likely to emerge as leaders. Even if the task was neutral, the same effect occurred (Megargee, 1969; Nyquist & Spence, 1986). Trait dominance predicted leadership across all groups only if the task was feminine (Carbonell, 1984) or if the dyad members interacted with each other previous to selecting the leader (Davis & Gilbert, 1989). In the same vein, Aries, Gold, and Weigel (1983) showed that trait dominance translates into dominance behavior more directly in same-gender interactions than in opposite-gender interactions. They tested how dispositional dominance and gender composition of the group influenced dominance behavior in five- or six-person group discussions. Results indicated that the overall pattern of dominance-oriented behaviors was related to trait dominance in same-gender groups only. In opposite-gender groups, no relation between dispositional dominance and dominance

behavior emerged. Also, a person might not show dominance behavior consistently with different partners. Moskowitz (1988) showed that coherence in dominance behavior was higher when interacting with friends than when interacting with strangers.

Also, a high-dominance person might not behave dominantly if he or she felt incompetent in the situation, was not familiar with the task (Fallon & Guo, 1994), or had determined—perhaps as a first impression (Kalma, 1991)—that the partner was more competent or dominant. These examples illustrate that situational factors such as gender of the interaction partner or topic to discuss can moderate how trait dominance is manifest in dominance behavior.

Another situational aspect influencing dominance behavior is state dominance. People occupy different dominance positions "in real life" (e.g., organizational rank) or are assigned to a high- or low-dominance role in psychological experiments. Hall and Friedman (1999) looked at the influence of actual rank differences on dominance behavior (speaking time). People of different organizational ranks interacted in dyads, and results showed that individuals holding higher-ranking jobs in the organization talked more than individuals lower down in the hierarchy. Studies in which participants were assigned to either a high- or low-dominance role yielded the same results. For example, Johnson (1994) had participants take over the roles of manager and subordinate in a simulated organizational context. A manager interacted with two employees. Results indicated that managers behaved more dominantly (they talked more) than subordinates.

There are many different ways to measure dominance in an interaction. Speaking time is one of the best-established behavioral measures of dominance in the literature (Schmid Mast, 2002a). Due to the relational aspect of dominance (dominance manifests in a social relationship or interaction), many agree that perceived dominance is the most comprehensive assessment of a person's dominance behavior. For instance, perceived dominance is key in explaining the formation of dominance hierarchies in homogeneous groups in Expectation States Theory (Ridgeway & Berger, 1986; Ridgeway, Diekema, & Johnson, 1995).

When people interact, they most likely do not form impressions about each other's dominance by attending to one behavioral cue alone; rather, they assess dominance as an integrated, "Gestalt"-like

quality. In the present study, we used multiple operations to capture behavioral dominance. We assessed individual speaking time as well as perceived dominance by uninvolved raters.

To date, no study has investigated how trait dominance affects a person's behavior in different dominance states. More specifically, when people take on different dominance positions (high and low), does the wished for dominance position "shine through" in dominance behavior? We predicted that striving-for-dominance individuals show more dominance behavior than fulfilled, low-dominance individuals and that dominance-aversive individuals show an aversion to dominance by behaving less dominantly than fulfilled, high-dominance individuals. Additionally, we wanted to know whether the expressed behavior corresponded to how people feel.

We made the following additional predictions: We expected that a) trait dominance would be correlated with the preference for a high- or low-dominance role, b) perceived dominance would be correlated with speaking time, c) individuals in a competitive interaction would be perceived as more dominant and speak more than when in a noncompetitive interaction, and d) individuals in assigned high-dominance roles would be perceived as more dominant and talk more than individuals in assigned low dominance roles.

METHOD

Participants

One hundred thirty-eight undergraduates from Northeastern University in Boston (majoring in various subjects) participated in this study for one-hour course credit. Thirty-three female and 36 male dyads were run. Although we did not assess age and ethnicity, this population typically is 18.8 years old, with about 84% European Americans, 6% Asian Americans, 4% African Americans, 4% Latino Americans, and 2% others.

Procedure

After signing an informed consent, participants were guided to a room where they sat face-to-face and completed two self-report personality dominance questionnaires. Participants were then separated and introduced to the first task. Each heard the same instructions from an audiotape while simultaneously reading the instructions typed on a sheet

of paper. Participants were informed that they would be asked to choose between taking on the role of the owner of an art gallery and taking on the role of the assistant to the owner for a subsequent interaction.[2] The owner and assistant roles were then described to the participants in order to make it clear that being the owner was the high-dominance role (represent the art gallery, tell assistant what to do, evaluate assistant) and being the assistant was the low-dominance role (fulfill requirements of owner).

For the first task, participants were informed that they would be asked to do a joint 2-min presentation about a piece of art (a painting) and that they would have 8 mins to prepare this presentation. They were also informed that the preparation phase would be videotaped as well as the 2-min presentation. Participants were asked to imagine how comfortable they would feel in either role and then to choose either the owner or the assistant role (role preference). Participants were asked not to discuss their role preference with the interaction partner, and after they were reunited, the roles were randomly assigned by flipping a coin. The assigned owner was given a color copy (enlarged from a postcard) of a painting by Marc Chagall (*The Red Horse,* 1938/1944) featuring an unrealistic, dreamlike collection of different people, animals, objects, and symbols, all very open to interpretation. Additionally, each participant received a sheet of paper with some hints about what should be discussed during the 8-min preparation phase. On these sheets, each participant's assigned role was marked on the top to keep the role salient at all times. Some were hints: ''Describe the painting in your own words (colors, atmosphere)''; ''The painting tells a story, try to invent what story.'' After the 8-min preparation and 2-min presentation, the owner had to evaluate the assistant on 10 questions such as: ''I think that he/she performed well in the role of the assistant,'' or ''The assistant showed good taste in art.'' (The assistant knew beforehand that there would be an evaluation of his/her qualities as an assistant, but did not know the specific questions.)

Participants were then introduced to the second task (competitive). They were told that the second task was about selecting a piece of art for exhibition in the art gallery and that they were to remain in their

2. We copied this role assignment from a study by Hall, Horgan, and Carter (2002) and changed the specifics according to our needs. We chose this ''art gallery task'' in order to ensure minimal competence differences among participants because we assumed that undergraduates have very limited knowledge about art. In our study, competence differences could have influenced role preference. However, because roles were randomly assigned to participants, this would not have systematically biased the results.

roles. They were separated so that each could choose from among 14 color photocopies of less well-known paintings[3] the one that he/she would like to have exhibited in the art gallery (they had 2 mins to pick). The experimenter made sure that both picked a different painting. If both selected the same painting, which occurred in four cases, both were asked to choose again (excluding their initial choice). In one of these dyads, both participants chose the same painting again, and the investigator made them choose a third time. Participants were then brought together again to debate for 8 mins about which of the two paintings in question should be chosen for exhibition in the art gallery, and they were instructed to reach a consensus decision. Again, a sheet with some hints was handed to each of the participants (this time their respective roles were not marked on the sheets). On the top of the page there was a sentence to remind them of the competitive nature of the setting: "Compare the two paintings and refer to the painting of your partner while defending your own choice." Hints included, for instance, "Why will your painting attract more people to the Art Gallery than your partner's choice?" After the second 8-min interaction, participants were asked to report how dominant they felt during the interactions, how much they liked their role, and why they initially chose the high- or low-dominance role. Participants were then debriefed and thanked for their participation.

Measures

Trait dominance. The FIRO-B (Schutz, 1958) consists of 9 items on a Guttman scale. Participants also indicated how much they agreed with 10 statements (6 items from the CPI dominance scale, Gough, 1975, and 4 additionally created items, 5 reversed) on a scale from 1 (I don't agree) to 6 (I strongly agree). The 10 items were reliable, $\alpha = .77$. Because the two measures were highly correlated, $r(138) = .54$, $p < .0001$, we combined them by z-transforming and averaging them (composite trait dominance measure).

3. The paintings were: Vassily Kandinsky, *Blue Painting*, 1924; J. M.W. Turner, *A Conflagration*, 1836; Egon Schiele, *Four Trees*, 1917; Giovanni Segantini, 1898; Vincent Van Gogh, *Blooming Garden with Path,* 1888; André Derain, *Vineyards in Spring,* 1906; Emil Nolde, *Houses of Friesen I,* 1910; Gustave Gourbet, *At the Village's Edge in Winter,* 1868; Caspar David Friedrich, *Swampy Beach,* 1822; Vincent Van Gogh, *Fields and Blue Sky,* 1890; Lovis Corinth, *Lake Walchen with Larch,* 1921; Vassily Kandinsky, *With Black Circle*, 1912; Jean-Baptiste Camille Corot, *The Pond at Ville-d'Avray,* 1871; Paul Cézanne, *Mont Sainte-Victoire,* 1888–90.

Role preference. Participants indicated whether they wanted to be in the high-dominance position (owner) or in the low-dominance position (assistant) prior to the interaction. Of the 138 participants, 76 indicated that they preferred the assistant role and 62 indicated that they preferred the owner role. There was no gender difference for role preference, $\chi^2(1, N = 138) = 2.54$, $p > .10$.

Role assignment. Regardless of the indicated role preference, high- and low-dominance roles were randomly assigned to participants. It was important for this study to convince participants that the random role assignment was not based on their self-reported personality dominance. We did not want to create a situation where participants might second-guess their personality dominance in light of the assigned role. This is the reason why the assignment process was made very transparent by flipping a coin under the participants' eyes. This procedure also avoided any animosities toward the experimenter that might have occurred had the experimenter simply stated who would be the owner and who would be the assistant.

Perceived dominance. Each participant was rated on dominance on a scale from 1 (low in dominance) to 6 (high in dominance) by 3 trained raters at the end of each min of the entire first and second interaction. Dominance ratings were averaged across the 8-min period within each interaction.[4] Each rater assessed perceived dominance of one-third of all the interactions. To establish reliability, all 3 raters coded the first and second interaction of 16 participants, average $r = .79$. Assessing participants' dominance was based on the videotaped interactions, one participant at a time, with the partner visible. Raters were told to base their ratings on behavioral characteristics of people high/low in dominance as shown in Table 1.

Speaking time. Speaking time was coded over the entire 8 mins of both interactions with a stopwatch. Speaking time included any vocalization that was at least a two-word sentence. Laughter was excluded. Three trained coders (average $r = .96$, based on 42 participants) each assessed speaking time of one-third of all the interactions.

4. We averaged the ratings over the 8-min periods because the dominance ratings tended to remain stable over time within one participant. Repeating the analyses with dominance ratings collapsed over the first 4 mins of the interactions and during the last 4 mins of the interactions separately yielded essentially the same results as collapsing over the entire 8-min period.

Table 1
Behavioral Characteristics of People High/Low in Dominance (Adapted from Kiesler, 1984)

Behavioral characteristics	
High-dominance person	Low-dominance person
• Is quick to take charge of the conversation or discussion, or to offer suggestions about what needs to be done	• Waits for or follows the partner's lead regarding topics or issues to discuss, directions or actions to pursue
• Dominates the flow of conversation, or changes topic, or interrupts and 'talks down'	• Finds it almost impossible to take the lead, or to initiate or change the topic of discussion
• Expresses firm, strong personal preferences, or stands up for own opinions or positions	• Claims he/she doesn't have an opinion, preference, or position, or that "it doesn't matter," "whatever you want," "I don't know," etc.
• States preferences, opinions, or positions in a dogmatic or unyielding manner	• Expresses own preferences hesitantly or weakly, or yields easily to the partner's viewpoints, or backs down quickly when the partner questions or disagrees; is quick to agree with the partner's opinions or to comply with the partner's directions or preferences
• Seizes opportunities to instruct or explain things, or to give advice; overwhelms or 'steamrolls' the partner by his/her arguments, positions, preferences, or actions	• Seems unable to assert what he/she wants, or to stand up to the partner, or to take any opposing position

Postexperimental questionnaire. For *felt dominance*, participants were asked to indicate how much they agreed with 9 statements (5 reversed) on a scale from 1 (I don't agree) to 6 (I strongly agree). Items were, for example, "I felt that I was the dominant one in the interaction." Inter-item reliability for felt dominance was $\alpha = .77$. Interspersed with the felt dominance items were 5 items (1 reversed) assessing participant's *role liking* (e.g., "I felt comfortable in my assigned role"). Inter-item reliability

for role liking was $\alpha = .78$. We found that people who could take on the role they wanted liked their role better than people who had to take on the role they did not prefer, $t(67) = 2.11$, $p < .05$, effect size $r = .25$; $t(67) = 2.62$, $p < .01$, effect size $r = .30$ (people in the assistant role and people in the owner role respectively).

The written reports about the *reasons for choosing the role* could contain "dominance-oriented" reasons, "subordination-oriented" reasons, reasons not related to dominance or subordination (unfamiliarity with partner, discussion topic, or experimental setting), or no reason at all. The latter two categories were so rare that for the analysis we focused on dominance-oriented and subordination-oriented reasons only. For each report, each category was coded as either yes (contains this type of reason) or no (does not contain this type of reason). The category dominance-oriented reasons encompassed indications of wanting to be the dominant one or not wanting to be in the subordinate position (e.g., "I like to be in control and get my opinions and ideas across" or "Because I really don't like being a follower of another person"). Reports were also coded with regard to subordination-oriented reasons. If participants wrote that they either did not want to dominate or that they wanted to be in the subordinate position (e.g., "I am not one that likes to be in charge" or "I am more used to following someone's lead"), this was a yes in the subordination-oriented reason category. Two trained raters each coded half of the verbal reports. Inter-rater reliability (based on 54 participants), calculated as a Kappa coefficient (raters rated yes or no), was $K = .84$ for dominance-oriented reasons and $K = .90$ for subordination-oriented reasons. Participants who wanted to be the owner indicated more dominance-oriented reasons for their choice than participants who wanted to be the assistant, $\chi^2(1, N = 138) = 90.64$, $p < .0001$. And, participants who wanted to be the assistant indicated more subordination-oriented reasons for their choice than participants who wanted to be the owner, $\chi^2(1, N = 138) = 83.37$, $p < .0001$. These analyses seem to suggest that participants understood well what the respective roles entailed and did not just randomly pick the roles.

RESULTS

All reported significance tests are two-tailed. Gender played a role in only one of the conducted analyses; however, the result was unrelated to our main question. This effect is reported in a footnote pertaining to that particular analysis. In none of the other analyses did gender of the dyad significantly influence the results, and therefore gender is not discussed further. In order to provide the

reader with an idea of the magnitude of the effects reported, we systematically report the effect size *r* (Rosenthal & Rosnow, 1991).

Effects of Role Assignment and Role Preference on Perceived Dominance

We conducted a 2 (owners' role preference) X 2 (assistants' role preference) X 2 (interaction type: first noncompetitive versus second competitive) X 2 (role assignment) mixed-model ANOVA with the first two variables as between factors and the last two variables as within factors and perceived dominance as the dependent measure. Results showed an interaction type main effect, $F(1, 65) = 18.27$, $p < .0001$, effect size $r = .47$, indicating that, as predicted, participants were perceived as more dominant during the second, competitive interaction ($M = 3.25$) than during the first, noncompetitive interaction ($M = 2.94$). Also, there was a role assignment main effect, $F(1, 65) = 16.45$, $p < .0001$, effect size $r = .45$, illustrating that, as predicted, owners were perceived as more dominant ($M = 3.24$) than assistants ($M = 2.94$). Furthermore, there was a significant Interaction Type X Role Assignment X Assistants' Preference interaction effect, $F(1, 65) = 7.34$, $p < .01$, effect size $r = .32$.[5]

To shed light on this three-way interaction, we ran a 2 (owners' role preference) X 2 (assistants' role preference) X 2 (role assignment) ANOVA for each interaction separately. In these ANOVAs, the first two variables were between factors, the third was a within factor, and perceived dominance was the dependent measure. Results for both interactions indicated again a main effect of role assignment: Interaction 1, $F(1, 65) = 22.26$, $p = .0001$, effect size $r = .51$; interaction 2, $F(1, 65) = 6.75$, $p < .05$, effect size $r = .31$, with owners being perceived as more dominant in each case (owners: $M = 3.13$, owners: $M = 3.35$; first and second interaction, respectively) than assistants (assistants: $M = 2.74$, assistants: $M = 3.14$;

5. There was a marginally significant main effect of assistants' preference, $F(1, 65) = 3.67$, $p < .06$, a marginally significant Role Assignment X Assistants' Preference interaction effect, $F(1, 65) = 3.12$, $p < .08$, a marginally significant Interaction Type X Role Assignment interaction, $F(1, 65) = 3.82$, $p < .06$. All these marginally significant results are contained within the reported significant three-way interaction (Interaction Type X Role Assignment X Assistants' Preference). All other main or interaction effects were non-significant (F's < 2.3, p's $> .14$).

first and second interaction, respectively).[6] Only for the second interaction a significant Role Assignment X Assistants' Preference interaction effect occurred, $F(1, 65) = 7.25$, $p < .01$, effect size $r = .32$.[7] To better understand this interaction effect, we conducted simple main effect analyses. Results showed that assistants who wanted to be the owner were perceived as more dominant than assistants who wanted to be the assistant, $t(65) = 2.46$, $p < .05$, effect size $r = .29$ (Table 2). On the other hand, owners who wanted to be the owner did not significantly differ in how dominantly they were perceived from owners who wanted to be the assistant, $t(65) = 1.11$, $p > .10$, effect size $r = .14$ (Table 2).

Effects of Role Assignment and Role Preference on Speaking Time

As predicted, for owners and assistants, speaking time and perceived dominance were correlated during the first interaction,

Table 2
Means for Second Interaction

Variable	Owner wants owner (fulfilled high)	Owner wants assistant (aversive)	Assistant wants assistant (fulfilled low)	Assistant wants owner (striving)
Perceived dominance	3.51	3.26	2.85	3.40
Speaking time	167.92	162.09	123.85	160.19
Felt dominance[1]	4.49	3.95	3.35	3.65

Note. [1]Felt dominance does not pertain to the first or second interaction but was rather assessed at the end of both interactions.

6. There was also a significant assistants' preference main effect, $F(1, 65) = 4.07$, $p < .05$, indicating that if the assigned assistant initially wanted to be the owner, both assigned assistants and assigned owners were perceived as more dominant than if the assigned assistant initially wanted to be the assistant. All other F's were < 2.54 and nonsignificant. The inclusion of gender of the dyad in this analysis revealed a significant Role Assignment X Assistant's Preference X Gender of the Dyad interaction effect, $F(1, 61) = 6.93$, $p < .05$, and a significant Role Assignment X Owners' Preference X Assistants' Preference X Gender of the Dyad interaction effect, $F(1, 61) = 6.92$, $p < .05$.

7. All other effects were nonsignificant (Fs < 2.59, ps $> .11$).

$r(69) = .58$, $p < .0001$, $r(69) = .65$, $p < .0001$ (owners and assistants, respectively) as well as during the second interaction, $r(69) = .60$, $p < .0001$, $r(69) = .68$, $p < .0001$ (owners and assistants, respectively).

For speaking time, we conducted the same analyses as for perceived dominance. The 2 (owners' role preference) X 2 (assistants' role preference) X 2 (interaction type) X 2 (role assignment) mixed-model ANOVA with speaking time as the dependent measure showed, analogous to the results for perceived dominance, an interaction type main effect, $F(1, 65) = 120.86$, $p < .0001$, effect size $r = .81$, indicating that, as predicted, participants talked more during the second interaction ($M = 152.38$) than during the first interaction ($M = 117.25$). Similar to the results of perceived dominance, there was a predicted role-assignment main effect, $F(1, 65) = 11.95$, $p = .001$, effect size $r = .39$, showing that owners talked more ($M = 147.51$) than assistants ($M = 122.12$).[8]

Based on the same ANOVAs for each interaction separately, we found that the role-assignment effect also emerged for each interaction separately: Interaction 1, $F(1, 65) = 18.87$, $p < .0001$, effect size $r = .47$; interaction 2, $F(1, 65) = 4.45$, $p < .05$, effect size $r = .25$ (owners: $M = 133.07$, assistants: $M = 101.44$; owners: $M = 161.94$, assistants: $M = 142.81$; first and second interaction, respectively).[9] For the second interaction, the Role Assignment X Assistants' Preference interaction effect was marginally significant, $F(1, 65) = 3.09$, $p < .10$, effect size $r = .21$,[10] whereas this interaction

8. Also, an Interaction Type X Assistants' Preference interaction effect emerged, $F(1, 65) = 4.30$, $p < .05$, and there was a marginally significant interaction effect between interaction type and role assignment, $F(1, 65) = 3.07$, $p < .09$, and between interaction type, owners' preference, and assistants' preference, $F(1, 65) = 2.98$, $p < .09$, and between interaction type, role and assistants' preference, $F(1, 65) = 2.83$, $p < .10$. All other F's were < 2.38 ($p > .13$).

9. All other effects of both 2 (owners' role preference) X 2 (assistants' role preference) X 2 (role assignment) ANOVAs were marginally significant or non-significant.

10. There was also a marginally significant assistants' preference main effect, $F(1, 65) = 3.87$, $p < .06$, which has to be qualified by the aforementioned Role Assignment X Assistants' Preference interaction effect. All other effects were non-significant (Fs < 1.37, ps $> .24$).

effect was nonsignificant for the first interaction (as was the case for perceived dominance).[11]

In order to test whether for speaking time we could replicate the same pattern of results as for perceived dominance, namely assistants behaving differently, according to their wish to be in a high- or low-dominance position, and owners behaving the same, regardless of their wish to be in a high- or low-dominance position, we again ran simple main effect analyses on the 2 (owners' role preference) X 2 (assistants' role preference) X 2 (role assignment) ANOVA pertaining to the second interaction. Results showed that assistants who wanted to be the owner spoke more than assistants who wanted to be the assistant, $t(65) = 2.81$, $p < .01$, effect size $r = .33$, but owners who wanted to be the owner did not significantly differ in how much they spoke from owners who wanted to be the assistant, $t(65) = 0.44$, $p > .10$, effect size $r = .05$ (Table 2).

Effects of Role Assignment and Role Preference on Felt Dominance

In order to test whether participants' feelings of dominance mapped onto the dominance behavior results, we conducted a 2 (owners' role preference) X2 (assistants' role preference) X 2 (role assignment) mixed-model ANOVA with role assignment as the repeated measure variable and felt dominance as the dependent measure (interaction type was not included since felt dominance was only measured once at the end of both interactions). A role-assignment main effect, $F(1, 65) = 34.21$, $p < .0001$, effect size $r = .59$, showed that owners

11. To address whether trait dominance and role preference are conceptually different, we repeated the ANOVAs for the second interaction with owner's and assistant's trait dominance as covariates. For perceived dominance, the role main effect remained significant, $F(1, 64) = 5.38$, $p < .05$ and the assistants' preference by role assignment interaction was marginally significant, $F(1, 64) = 3.82$, $p < .10$. For speaking time, the role assignment main effect was marginally significant, $F(1, 64) = 3.25$, $p < .10$, and the assistants' preference by role assignment interaction was non-significant, $F(1, 64) = 0.97$, $p > .10$. The interaction effect is of interest here and the results mean that on the one hand, trait dominance was responsible for the findings (all effects were weaker when controlled for trait dominance) but that on the other hand, the interaction effect (for perceived dominance) remained marginally significant even when controlling for trait dominance. It seems that role preference mostly but not entirely captures trait dominance.

reported feeling more dominant overall ($M = 4.15$) than assistants ($M = 3.50$). A significant Role Assignment X Owners' Preference interaction effect, $F(1, 65) = 11.27$, $p < .01$, effect size $r = .38$, and a marginally significant Role Assignment X Assistants' Preference interaction effect, $F(1, 65) = 3.93$, $p < .10$, effect size $r = .24$, occurred.[12] Simple main effect analyses showed that owners who preferred to be the owner felt more dominant than owners who preferred to be the assistant, $t(65) = 2.95$, $p < .01$, effect size $r = .34$, and assistants who preferred to be the owner felt marginally more dominant than assistants who preferred to be the assistant, $t(65) = 1.69$, $p < .10$, effect size $r = .21$ (Table 2).

Consensus at the End of the Second Interaction

At the end of the second interaction, participants had to come to a consensus about whether to exhibit the painting the owner initially chose or whether to exhibit the painting the assistant initially chose. In 51% of the dyads, the assistant's painting was selected; in 35% the owner's painting was selected; in 7% of the dyads the participants did not reach a conclusion; and in 6% of the dyads the videotape was stopped without recording the final decision. The difference between how many times the owner's painting was selected to exhibit in the art gallery as compared to how many times the assistant's painting was selected was not significant, $\chi^2(1, N = 59) = 0.86$, $p > .10$.

Assistants' role preference and selecting the assistant's painting for exhibition at the end of the competitive interaction were significantly related, $r(59) = .43$, $p < .001$, meaning that in dyads where assistants wanted to be the owner, their painting was selected for exhibition more often than in dyads where assistants wanted to be the assistant. This result bolsters the finding that striving-for-dominance individuals got their way more often than fulfilled, low-dominance individuals. Correlating owners' role preference with selecting the owner's painting for exhibition showed a marginally significant effect, $r(59) = .22$, $p < .10$, suggesting that for owners, their role preference did not matter much for selecting the painting to exhibit.

12. None of the other effects was significant (F's < 1.22, p's $> .27$).

Relationship Between Role Preference and Trait Dominance

We predicted that the wish to be in a high- or low-dominance position (role preference) would be related to personality-trait dominance. Indeed, trait dominance was indicative of role preference: for women $r(66) = .56$, $p < .0001$ and for men $r(72) = .35$, $p < .01$ (no gender difference, $Z = 1.55$).[13]

DISCUSSION

The present study sought to investigate whether people in high- or low-dominance positions differed in their dominance behavior according to whether they initially wanted to be in this position or not. We predicted that the wished-for dominance position would be manifest in dominance behavior when people were assigned a high- or low-dominance position. Our results showed that in a competitive interaction, people in a low-dominance position behaved more dominantly if they initially preferred a high-dominance position (striving-for-dominance individuals) than if they indicated a preference for a low-dominance position (fulfilled, low-dominance individuals). Striving-for-dominance individuals were perceived as more dominant, they spoke more, and they got their way more often in reaching a consensus decision than fulfilled, low-dominance individuals. The wished-for dominance position appears to have influenced the behavior of people in low-dominance positions.

Things were different, however, for people in high-dominance positions. There was no behavioral difference between people who did not want a high-dominance position (dominanc- aversive individuals) and people who indicated a preference for a high-dominance position (fulfilled, high-dominance individuals). Dominance-aversive individuals did not differ from fulfilled, high-dominance individuals in how dominant they were perceived or how much they spoke, and there was almost no difference in how many times they got their way in reaching a consensus. Thus, the wished-for dominance position did not affect the behavior of people in high-dominance positions. In sum, it can be stated that for people occupying low-dominance positions, the wished-for dominance position "shines through" in behavior, but not for people in high-dominance positions.

13. No gender difference in trait dominance, $t(136) = 0.75$, *ns*.

Why are the results asymmetrical for high- and low-dominance positions? Possibly, being refused a high-dominance position is less acceptable than being refused a low-dominance position because the former can be seen as a degradation and the latter as a promotion. Therefore, the easily acceptable upgrade to a high-dominance position motivated participants to display dominance behavior congruent with the high-dominance position. On the other hand, being degraded to a low-dominance position seems harder to accept. The initial wish to dominate lingers on. It might be easier to adapt upwards than downwards. This is in keeping with results stemming from research on equity theory showing that underbenefiting is associated with more negative outcomes than overbenefiting. For instance, in dating couples, underbenefited individuals were less satisfied, less committed, and more likely to break up than overbenefited individuals (Sprecher, 2001). Underbenefited individuals (like striving-for-dominance individuals) might be more willing to change their situation than overbenefited individuals (or dominance aversive individuals in our study).

Interestingly, how much dominance participants felt during the interactions was a function of their wished-for dominance position. This was true for people in high-dominance positions and marginally so for people in low-dominance positions. Striving-for-dominance people were not only behaving more dominantly, they were also feeling (marginally so, however) more dominant. Dominance-aversive people were not behaving less dominantly, but they were feeling less dominant. They might have made a cognitive decision to ''play'' dominant, which they did successfully, but their inner feelings still reflected their initial wish not to be in charge. We suspect that many people, and maybe especially women, are in this very situation. They occupy a high-status role without feeling that they actually belong there. Although it might be very beneficial to be able to know the rules of the game and act accordingly, we can speculate that there might be negative health outcomes due to the feeling of inadequacy in the long run.

The asymmetrical behavioral results are even more notable because they emerged against the background of strong behavioral effects produced by the role assignment. People in a high-dominance position were perceived as more dominant, spoke more, and felt more dominant than people in a low-dominance position. Results

for speaking time confirm findings available from the literature (Hall & Friedman, 1999; Johnson, 1994; Schmid Mast, 2002a) and suggest three alternative interpretations. First, there may have been a difference inherent to the two roles insofar as the high- and low-dominance role intrinsically required different amounts of talking. Second, normative role expectations may have influenced the participants to act as they believed high- and low-role occupants should act. Third, participants may have truly experienced feelings of high or low power as a function of their assigned roles and talked different amounts accordingly. This is consistent with the effect of role on felt dominance and is our preferred interpretation of the difference in speaking time. However, neither this nor previous studies can definitively set aside the two other interpretations.

We obviously succeeded in creating strong behavioral differences between assigned owners and assigned assistants, especially during the first interaction. The first interaction was intended to get participants used to their high- or low-dominance roles and can be seen as a rather cooperative setting, or at least not competitive. There was a strong emphasis on taking on the respective roles. During the second interaction, participants were instructed to remain in their roles but to engage in a competition. We expected that during the first encounter, participants would comply with the instructions, and because the roles were so prescriptive, hardly any leakage of wished-for dominance position would occur. During the competitive interaction, however, there was much more room to behave according to how dominant a person wanted to be. This distinction is reminiscent of the difference between "press" and "need," introduced by Murray (1936). Presses are situational constraints or demands responsible for behavior and needs are internal driving forces (such as personality dispositions) shaping behavior.

Because we planned the first interaction as the phase in which people would get used to their roles, the noncompetitive interaction always came first, followed by the competitive interaction. As a consequence, time and competition were confounded. It is therefore possible that the differences between the first and the second interaction were not due to differences in the competitiveness but to time. Maybe, striving-for-dominance individuals do not need a competitive interaction to allow their wish for a high-dominance position to influence their behavior; they might just need time to

gradually recover from the shock of having been assigned a low-dominance role. We have some evidence against this interpretation. The perceived dominance ratings were made every minute and did not show a gradual shift. In fact, they remained very stable during an interaction, but changed from one interaction to the next. We therefore favor the view that the differences between interactions one and two are due to differences in competitiveness of the setting and not to time.

It has to be noted that the present investigation focused on same-gender interactions only. The results might therefore not be generalizable to opposite-gender interactions. Aries et al. (1983), for instance, found that speaking time was related to trait dominance in same-gender interactions only. In opposite-gender interactions, gender role expectations (women in the subordinate positions and men in the dominant positions) could affect the results reported here. Being promoted to a high-dominance position without wanting to be there (dominance aversion) might be more difficult to accept if the partner is male than if the partner is female. Therefore, dominance-aversive women might behave less dominantly than fulfilled, high-dominance women only when paired with a man, but not when paired with a woman (as was the case in the present study).

Also, we investigated strangers meeting for the first time and cannot therefore draw inferences about whether the same results would emerge if we observed dyads for more extended periods of time. For instance, previous research has shown that at the beginning of an interaction among strangers (first 8 mins), all-men groups tended to form more hierarchically organized structures than all-women groups; however, this gender difference disappeared with ongoing interaction time (Schmid Mast, 2001; 2002b). It might be possible that striving-for-dominance individuals would settle into their low-dominance position over time.

Although we state that anybody can be a boss, we, of course, do not want to imply that anybody can be promoted to a higher job position and do just fine. Our results only show that people can behave like bosses even if they do not want to be a boss. We did not investigate how good a job they were doing, and whether over time they would be able to maintain their dominance position. In fact, we found that dominance-aversive people still felt less dominant. It would be interesting to see whether, over time, their dominance

feeling would increase because they got used to their high-dominance role or whether their dominance behavior would decrease. Because, in our study, striving-for-dominance individuals behaved equally dominantly as fulfilled, high-dominant individuals (Table 1), it would be interesting to tease apart more microscopically how these two types of people differ with respect to, for instance, leadership style, job satisfaction, or problem solving.

Our results show that dominance positions in a hierarchy are not symmetrical. Being in a high-dominance position is not the opposite of being in a low-dominance position. To step up in the hierarchy seems to be easier than to step down.

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