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# On Keeping Your Enemies Close: Powerful Leaders Seek Proximity to Ingroup Power Threats

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Throughout history, humans have had to detect and deflect myriad threats from their social and physical environment in order to survive and flourish. When people detect a threat, the most common response is avoidance. In the present research, the authors provide evidence that ingroup power threats elicit a very different response. Three experiments supported the hypothesis that dominant leaders seek proximity to ingroup members who pose a threat to their power, as a way to control and downregulate the threat that those members pose. In each experiment, leaders high (but not low) in dominance motivation sought proximity to an ingroup member who threatened their power. Consistent with the hypothesis that increased proximity was designed to help leaders protect their own power, the proximity effect was apparent only under conditions of unstable power (not stable power), only in the absence of intergroup competition (not when a rival outgroup was present), and only toward a threatening group member (not a neutral group member). Moreover, the effect was mediated by perceptions of threat (Experiment 1) and the desire to monitor the threatening group member (Experiment 3). These results shed new light on one key strategy through which dominant leaders try to maintain control over valuable yet potentially threatening group members. Findings have implications for theories of power, leadership, and group behavior.

*Keywords:* power, leadership, motivation, dominance, threat

Keep your friends close, but your enemies closer.—Sun-tzu

People consistently face forms of peril. From diseases that inflict illness, to physically aggressive individuals who wish to injure, to sources of rejection or ostracism, the social environment presents myriad challenges that threaten people's physical, interpersonal, and psychological well-being. Consequently, people possess a variety of self-protective mechanisms designed to ward off and defend against sources of threat. Typically, threat responses take the form of agonistic behavior, involving some combination of fight (attack) or flight (avoidance) (e.g., Blanchard & Blanchard, 1988; Blanchard, Hynd, Minke, Minemoto, & Blanchard, 2001; Griskevicius et al., 2009; Öhman & Mineka, 2001; Park, Faulkner, & Schaller, 2003; Schaller, Park, & Faulkner, 2003). In the present work, we investigated a very different type of threat response, one that may seem intuitively surprising: a desire for proximity to the threat.

In the context of hierarchically arranged groups, some people possess greater power than others (e.g., group leaders often enjoy

control over group resources; see Keltner, Gruenfeld, & Anderson, 2003; Magee & Galinsky, 2008). Because social hierarchies tend to be malleable (Sapolsky, 2005), the potential loss of personal power sometimes causes dominant leaders to perceive talented group members as threats to their power (Maner & Mead, 2010; Van Vugt, Hogan, & Kaiser, 2008). Rather than avoid such ingroup power threats, we hypothesize that powerful leaders seek proximity to ingroup competitors, as a way to control and downregulate the threat that those ingroup members pose. Indeed, as the opening quotation implies, the fear of losing their power may cause leaders to “keep their enemies close.”

## Agonistic Responses to Threat

Throughout history, humans have had to escape or ward off a wide range of social and physical threats. They have protected themselves against threats posed by pathogens and contagious diseases (Schaller & Park, 2011), hostile members of other groups (Baer & McEachron, 1982), dangerous members of their own group (Cosmides & Tooby, 1992), and perilous aspects of the natural environment, such as predators (Öhman, Dimberg, & Öst, 1985).

As a result of having consistently faced these kinds of threats, people possess a powerful set of psychological mechanisms designed to protect themselves from specific types of threat. Most self-protective mechanisms in humans and other species reflect an initial tendency toward withdrawal. Although “fight” may be pursued if “flight” is not an option, the perception of threat typically evokes a fundamental orientation toward escape and avoidance (e.g., Archer, 1979; Blanchard & Blanchard, 1988; Blanchard et al., 2001; Epstein, 1972).

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In daily life, one of the most pervasive sources of threat is other people, including members of one's own social group (Wilson & Daly, 1985). When responding to interpersonal threats, avoidance is again the general rule. For example, when confronted with physically threatening individuals, most people display strong feelings of fear and a pronounced tendency toward avoidant behavior (e.g., Maner et al., 2005; Schaller et al., 2003). Similar responses are observed when people encounter individuals who display signs of contagious disease (Park et al., 2003). People even regularly avoid those who threaten their level of social belonging (Allen & Badcock, 2003). Taken together, previous work has resoundingly shown that people's initial response to social threat reflects a clear orientation toward avoidance.

### Responses to Power Threats

Given the predominant human tendency to avoid or attack perceived threats, one might expect that leaders would use their power to treat ingroup competitors in a similar fashion. Evidence for such agonistic power-protection strategies is prevalent in the primate literature. For example, high-ranking animals often maintain dominance over subordinates through direct aggression (e.g., ring-tailed lemurs; African wild dogs) and intimidation (e.g., baboons, mice, rats; Sapolsky, 2005). Humans display similar tendencies toward those beneath them in the group hierarchy. Individuals endowed with power sometimes derogate their subordinates (Georgeson & Harris, 1998, Georgeson & Harris, 2006) and exclude them from the group (Maner & Mead, 2010).

Although powerholders sometimes attack or avoid ingroup competitors, such agonistic responses may not be the most common response. Functionalist evolutionary theories of leadership (Boehm, 1999; de Waal, 1982; Van Vugt, 2006) stress the existence of an implicit social contract between leaders and followers, whereby group members give up resources in exchange for a leader who acts in the best interest of the group. Using their power to harm or wantonly expel valuable group members would betray this implicit contract, and could thus increase the chance that leaders are stripped of their power and privilege.

So how might powerful leaders deal with valuable yet threatening group members? One strategy would be to keep close contact with such individuals. Proximity would enable the leader to monitor and control potential power threats, thereby reducing the chance that those individuals overthrow the leader and seize power. In contrast, distancing themselves from ingroup competitors might give those competitors enough autonomy to outshine or overthrow the leader. Consider, for example, a high-level corporate manager and an up-and-coming employee, just below the manager in the corporate hierarchy. Keeping close tabs on the subordinate would presumably afford the manager some ability to prevent the subordinate from outshining him or her. Conversely, pushing away or avoiding the subordinate might give the subordinate enough freedom to outperform and unseat the manager. Thus, the most common response to social threats—avoidance—could increase the chances that leaders lose their power, whereas the opposite response—proximity—could increase leaders' ability to maintain their power.

### Hypothesized Moderating Variables

Our main hypothesis was that fear of losing one's power would cause individuals to seek proximity to ingroup power threats. In testing this hypothesis, we sought to identify moderating variables that would clarify the putative mechanism underlying the hypothesized effects (i.e., the desire to protect one's power by monitoring and controlling the ingroup competitor). To this end, we examined variables within both the person and the situation known to influence the extent to which individuals seek to protect their power (Maner & Mead, 2010). Specifically, we examined in the present investigation (a) individual differences in power-related motives, (b) the stability of the group hierarchy, and (c) the presence of intergroup rivalry.

### Individual Differences in Power-Related Motives

People vary greatly in the degree to which their approach to power and leadership is motivated by a desire for dominance or prestige (Henrich & Gil-White, 2001). Dominance reflects a strategy wherein individuals attain influence through force and the selfish manipulation of group resources. In contrast, prestige reflects a strategy wherein people attain influence by garnering the respect of group members. The distinction between dominance and prestige motivation is similar to the distinction between using power for personalized gain (personal power) and using power to benefit others (social power) (e.g., Chen, Lee-Chai, & Bargh, 2001; Lammers, Stoker, & Stapel, 2009; Magee & Langner, 2008; McClelland, 1970, McClelland, 1975; Winter, 1973; see also French & Raven, 1959).

Most empirical investigations endow powerful leaders with the capacity for both dominance and prestige. However, it is important to distinguish between the two, because they have distinct implications for how leaders respond to power. Whereas leaders high in dominance motivation are interested in maintaining their power over others, regardless of whether that power is freely conferred by subordinates (Barkow, 1989; Ellis, 1995; Fodor, 1985; Henrich & Gil-White, 2001), leaders high in prestige motivation are more interested in being respected and appreciated than in dominating others (Henrich & Gil-White, 2001). Indeed, leaders high in dominance motivation attempted to protect their power at the expense of group success, whereas leaders high in prestige motivation tended to display behaviors that facilitated group success (Maner & Mead, 2010). In the present investigation, proximity to an ingroup competitor was hypothesized to serve as a power-protection strategy. We therefore expected that seeking proximity to the threat would be observed primarily among leaders high in dominance motivation, but not among leaders high in prestige motivation.

Compared with individuals high in dominance motivation, individuals low in dominance motivation are not especially interested in having power. Rather than wielding power for personal or selfish purposes, leaders low in dominance motivation (like those high in prestige motivation) tend to use their power in ways that could enhance the group's welfare (Maner & Mead, 2010; Van Vugt et al., 2008). Thus, we did not expect that individuals low in dominance would respond to ingroup power threats with a strong desire for proximity.

### Instability Within the Group Hierarchy

The hypothesis that dominant leaders seek proximity to an ingroup competitor hinges on the notion that proximity-seeking is a response to threatened power. Thus, we expected proximity-seeking to emerge primarily when leaders' power was in jeopardy of being lost. One key signal of potential power loss is instability within the group hierarchy, a prevalent feature of social hierarchies in humans and other primates (e.g., Sapolsky, 2005; Van Vugt et al., 2008). When the hierarchy is unstable and dominant leaders' power can be revoked, they come to see highly skilled group members as threats, and they take actions toward protecting their power (Maner & Mead, 2010). In contrast, when the hierarchy is stable, leaders do not perceive group members—even those who are highly skilled—as particularly threatening. Hence, there is little reason to expect that leaders who occupy a position of stable power will seek proximity to ingroup competitors. Thus, we expected to observe proximity-seeking among leaders within an unstable group hierarchy, but not within a stable hierarchy.

### Intergroup Competition

Intergroup competition substantially changes people's goals and behaviors. In the absence of intergroup rivalry, people's actions often reflect a desire to maximize individual goals (i.e., maintaining status within the group). However, in the presence of intergroup rivalry, people's actions instead tend to reflect a prioritization of group goals (i.e., competing successfully against the other group; e.g., Ellemers, van Knippenberg, de Vries, & Wilke, 1988; Ellemers, Wilke, & van Knippenberg, 1993). Indeed, intergroup competition causes ingroup members to band together and cooperate, rather than competing with one another over status (Kramer & Brewer, 1984; Van Vugt, De Cremer, & Janssen, 2007). The impact of intergroup competition on goal pursuit is evident in even the most power-hungry leaders: When intergroup rivalry was present, leaders who otherwise selfishly prioritized their own power shifted to enacting behaviors designed to enhance group well-being (even at the cost of their own power; Maner & Mead, 2010).

Taken together, extant research indicates that intergroup competition stimulates a prioritization of group needs over personal desires, ingroup cooperation rather than ingroup competition, and a focus on facilitating group success rather than maintaining one's own power. In the present work, we therefore expected that intergroup competition would decrease the extent to which power-hungry leaders would view ingroup members as power threats, implying that even highly dominant leaders would release their grip over subordinates.

### Overview of the Present Studies

In the present research, we tested the primary hypothesis that powerful leaders seek proximity to ingroup members who threaten their experience of power. Whereas the typical response to social threats is one of avoidance, we expected that leaders would try to minimize rather than maximize the amount of distance between themselves and a power threat. To demonstrate the psychological process underlying the hypothesized effect (i.e., leaders' desire to maintain their personal power by controlling the threat), we tested

whether the proximity effect was mediated by the degree to which participants saw their partner as a threat (Experiment 1) and the degree to which they wanted to monitor the power threat (Experiment 3). Additionally, we examined whether the proximity effect was moderated by three factors that determine whether leaders take actions toward solidifying their power: individual differences in dominance motivation, instability in the group hierarchy, and the presence of intergroup competition.

In Experiment 1, we used an implicit behavioral measure of desire for proximity: the amount of physical distance participants put between themselves and their partner. In Experiment 2, we pit group performance against physical proximity, hypothesizing that powerholders would prefer a threatening partner to work in the same room (rather than in a different room), even though doing so would jeopardize group performance. In Experiment 3, we tested whether proximity-seeking would be observed only in an unstable hierarchy (not a stable hierarchy). In all three experiments, we predicted that proximity-seeking would be limited to leaders high in dominance motivation and would be observed only in the absence of intergroup competition (not when there was a rival outgroup).

### Experiment 1

Experiment 1 served as an initial test of the hypothesis that dominance-focused leaders would seek proximity to an ingroup power threat. Participants were led to believe they would complete a dyadic task with an alleged partner and were then assigned to a position of leadership or equal authority (control condition). To create a context in which the partner could pose a realistic and an immediate threat to leaders' power, we made participants' leadership position unstable (roles could be reassigned depending on performance) and described the partner as being highly skilled. After assignment to condition within a 2 (unstable leadership vs. equal authority)  $\times$  2 (intergroup competition vs. no competition) factorial design, participants were asked to set up two chairs for the dyadic task—one for themselves and one for their partner (Macrae, Bodenhausen, Milne, & Jetten, 1994). The distance between the two chairs served as our dependent measure of desire for physical proximity. Whereas humans predominately try to avoid social threats, we hypothesized that unstable leadership would cause high-dominance individuals to seek proximity to the power threat, but only in the absence of intergroup competition. Additionally, we sought to test whether proximity-seeking was mediated by the degree to which participants perceived the partner as a threat.

### Method

**Participants and procedure.** Seventy-seven undergraduates (48 women) participated in exchange for partial course credit. Upon arrival to the laboratory, participants were told that communication and group performance would be examined in the study. They were also informed they would complete a task with a partner who was ostensibly in a different room down the hall. (In all the present experiments, participants were led to believe they would complete the experiment with same-sex partners.)

Participants completed two measures at the beginning of the study, which were described as measures of leadership ability. The

first measure was the remote associates task (RAT; Mednick, 1968). This task requires participants to select one word that ties together a set of three other words. For example, if the word set was “white, scramble, and shell,” the fourth word would be “egg.” Participants were given 5 min to complete as many as possible. The second measure consisted of the Dominance and Prestige subscales from the Achievement Motivation Scale (AMS; Cassidy & Lynn, 1989). The Dominance subscale is composed of seven items that assess desire for power (e.g., “I like to give orders and get things going”; 1 = *Strongly Disagree*, 5 = *Strongly Agree*;  $\alpha = .77$ ;  $M = 3.08$ ,  $SD = 0.39$ ). The Prestige subscale is composed of seven items that assess people’s desire for respect and admiration (e.g., “I would like an important job where people look up to me”; 1 = *Strongly Disagree*, 5 = *Strongly Agree*;  $\alpha = .74$ ;  $M = 3.83$ ,  $SD = 0.58$ ). The two measures were moderately correlated,  $r(76) = .31$ ,  $p = .007$ .

After participants finished both measures, the experimenter scored the measures and gave participants a detailed (bogus) assessment of their performance as well as the performance of their partner. This feedback was designed so that all participants received the highest combined score (RAT plus AMS). However, participants were led to believe their partner achieved a higher score on the RAT than they did. Thus, the partner could be perceived as either a skilled ally or a power threat, given that the dyadic task would consist of another RAT (see Maner & Mead, 2010, for a similar procedure).

Participants assigned to the unstable leadership condition were told that, because they had achieved the highest combined score, they would serve as leader of the dyadic task. A description of their role was provided. Leaders were told that their primary job was to help the dyad perform as well as it could on the task in order to maximize performance and monetary rewards associated with the task. Duties also included structuring the task, evaluating their subordinate, and deciding how to allocate the monetary rewards (see Galinsky, Gruenfeld, & Magee, 2003). Crucially, leaders were told that roles for the dyadic task could change depending on each person’s performance during the task. Thus, participants’ position of leadership was unstable and susceptible to being threatened by the skilled ingroup member.

Although participants in the control condition were given identical feedback about their performance and the performance of the partner, they were told that each person would have equal authority over the task. Moreover, they were told that the monetary rewards associated with the task would be divided equally. Thus, participants in the control condition were not given power over the task or rewards. As such, they should not perceive the skilled partner as a threat.

All participants were then given additional information about the dyadic task, which ostensibly consisted of another RAT. Participants were told that the goal was to complete as many word associations as possible in 5 min and that the dyad would earn \$2 for every correct word association. Because all participants were led to believe that the partner was especially skilled at the RAT, the partner could be perceived either as an ally (because he or she possessed a skill likely to boost group performance) or as a threat (because superior performance would challenge participants’ position of unstable leadership).

The intergroup competition manipulation was then delivered. Participants assigned to the intergroup competition condition were

told their group was competing against a different group down the hall (although each group would get to keep the money they earned on the task regardless of whether they won). Those assigned to the no-competition condition were simply told that there was another group down the hall completing the same experiment; no competition was implied. Thus, a 2 (unstable leader vs. equal authority)  $\times$  2 (intergroup competition vs. no competition) between-subjects factorial design was used in this experiment.

Next, the degree to which participants perceived the partner as a threat (i.e., the putative mediator) was measured. Specifically, participants indicated how worried they were about being outperformed by their partner (1 = *Not at all*, 7 = *Very much so*). To disguise our interest in this variable, participants completed other filler questions that assessed their understanding of the dyadic task. Participants also completed the Positive and Negative Affect Schedule (Watson, Clark, & Tellegen, 1988) to assess possible differences in affect across conditions.

The main dependent variable was an implicit measure of participants’ desire for proximity to the partner. Participants were brought to a new laboratory room containing a table with two workstations side-by-side, at which the participant and the partner would complete the dyadic task. The room was devoid of chairs, so the experimenter asked participants to take two chairs from just outside of the room and set them up for the task. The participant did this while the experimenter left, ostensibly to retrieve the partner. After 1 min, the experimenter reappeared and asked participants to return to their original room because a different experimenter needed the group room. (The experimenter placed her hand on the participant’s chair so that the chair did not move when the participant rose to leave the room.)

After participants were escorted back to their room, a second experimenter blind to condition measured the distance between the two chairs using a standard tape measure. The distance between the two chairs served as an implicit measure of participants’ desire for physical proximity to the partner.

## Results

No effects associated with participant gender were found in any of the present experiments. We therefore collapsed across gender in all primary analyses. No effects associated with positive or negative affect were found, either. Consistent with hypotheses, no significant effects associated with prestige motivation were observed in any of our analyses. These variables are not discussed further.

**Desired proximity.** The primary hypotheses were that (a) being assigned to a position of unstable leadership (vs. equal authority) would increase participants’ desire for proximity to the partner; (b) this effect would be moderated by participants’ level of dominance motivation (i.e., more pronounced among those high in dominance motivation than those low in dominance motivation); (c) this effect would be eliminated by the presence of intergroup competition. We did not expect level of prestige motivation to moderate participants’ responses.

To test these hypotheses, we regressed the distance between the two chairs ( $M = 19.99$  in.,  $SD = 9.58$ ) on level of dominance motivation, level of prestige motivation, leadership condition, intergroup competition condition, and all two- and three-way interactions. All lower order variables were centered. As predicted,

there was a three-way interaction between dominance motivation, leadership condition, and intergroup competition condition ( $\beta = .31$ ),  $t(66) = 2.55$ ,  $p = .01$  (see Figure 1). No other significant effects were observed.

We decomposed the three-way interaction by examining the two-way interaction between dominance motivation and unstable leadership (vs. control) in the presence versus absence of intergroup competition. The predicted two-way interaction between dominance motivation and leadership condition was observed in the absence of intergroup competition ( $\beta = -.58$ ),  $t(66) = 2.17$ ,  $p = .03$ ; partial  $r = -.26$  (see Figure 1, left panel). We decomposed this two-way interaction in two ways. First, we examined the effect of unstable leadership (vs. control) among high- and low-dominance individuals (1 *SD* above and below the mean). As predicted, assignment to unstable leadership (vs. control) caused high-dominance individuals to move closer to the partner ( $\beta = -.89$ ),  $t(66) = 2.38$ ,  $p = .02$ ; partial  $r = -.28$ ; also as expected, this effect was not observed among individuals low in dominance motivation ( $\beta = .47$ ),  $t(66) = 1.38$ ,  $p = .17$ ; partial  $r = .17$ . Second, we examined the relationship between dominance motivation and proximity within each leadership condition. Also consistent with predictions, increased dominance motivation was associated with decreased space placed between the self and the partner in the unstable leadership condition ( $\beta = -.68$ ),  $t(66) = 2.03$ ,  $p = .05$ ; partial  $r = -.24$ , but not in the control condition ( $\beta = .41$ ,  $t < 1$ ).

Consistent with hypotheses, the predicted proximity pattern was observed only in the absence of intergroup competition. In the presence of intergroup competition, the pattern was actually reversed ( $\beta = .82$ ),  $t(66) = 3.28$ ,  $p = .002$ ; partial  $r = .38$  (see

Figure 1, right panel). Assignment to unstable leadership (vs. control) caused participants high in dominance motivation to increase the amount of distance between themselves and the partner ( $\beta = .52$ ),  $t(66) = 2.23$ ,  $p = .03$ ; partial  $r = .36$ . One possible explanation for this unpredicted finding is that leaders were giving the skilled partner increased autonomy, potentially as a way to bolster performance and win the competition. As in the no-competition condition, the unstable leadership position did not have a significant effect on desire for proximity among participants low in dominance motivation ( $\beta = -.59$ ),  $t(66) = 1.57$ ,  $p = .12$ ; partial  $r = -.19$ . We also assessed the relationship between dominance motivation and proximity within each leadership condition. As expected, dominance motivation was unrelated to proximity within the leadership condition ( $\beta = .48$ ),  $t(66) = 1.32$ ,  $p = .19$ ; partial  $r = .16$ . However, dominance motivation was positively associated with desire for proximity in the control condition ( $\beta = -.93$ ),  $t(66) = 2.54$ ,  $p = .01$ ; partial  $r = -.30$ . Given that intergroup competition promotes a tendency for individuals to try to band together to cooperate (e.g., Kramer & Brewer, 1984; Van Vugt et al., 2007), it is possible that proximity in this case was motivated by a desire to connect with team members rather than out of a motivation to control and monitor the partner.

**Mediational analyses: Perception of threat.** Our theoretical framework called for mediated moderation; we tested this with three models (Müller, Judd, & Yzerbyt, 2005). In the first model, we examined the predicted effects of dominance motivation, leadership condition, and intergroup competition on the dependent variable (distance); as previously mentioned, this three-way interaction was significant when predicting proximity.

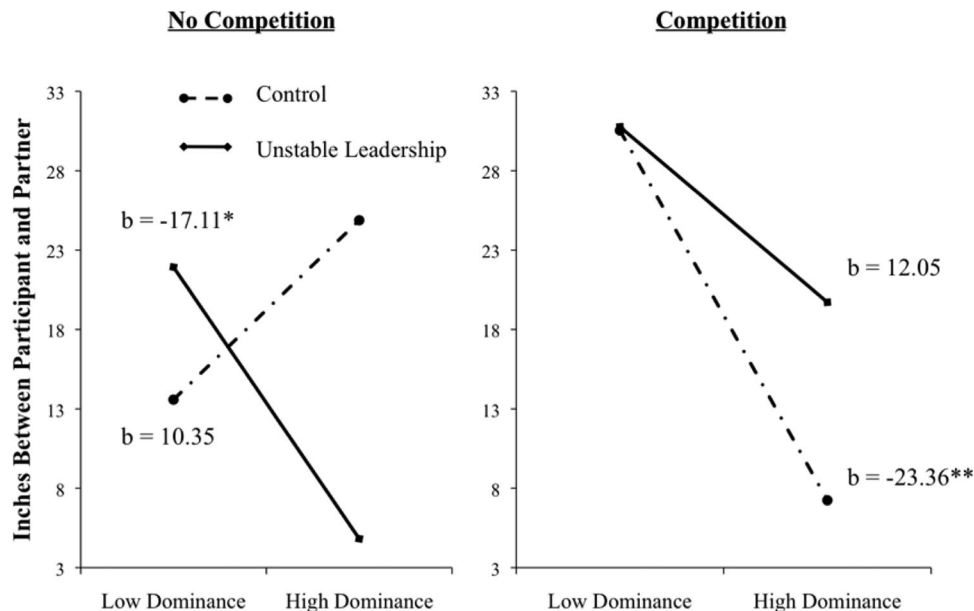


Figure 1. Experiment 1: In the absence of intergroup competition (left panel), increases in dominance motivation corresponded to heightened desire for proximity to the partner, but only in the unstable leadership condition. In the presence of intergroup competition (right panel), the relationship between dominance and proximity was eliminated among leaders. Lower numbers reflect heightened desire for proximity to the partner. Unstandardized regression coefficients reflect the slope of dominance motivation within each leadership condition. \*  $p < .05$ . \*\*  $p < .01$ .

In the second model, we examined the interactive effect of our three independent variables on the mediator (concern about being outperformed by the partner); again, the three-way interaction was significant ( $\beta = -.27$ ,  $t(66) = 2.55$ ,  $p = .01$ ; partial  $r = -.30$ ). The pattern of the three-way interaction predicting the hypothesized mediator mirrored the pattern of the primary dependent measure (proximity). For example, in the absence of intergroup competition, concern about being outperformed increased when high-dominance leaders were assigned to a position of unstable leadership (vs. control;  $\beta = 1.40$ ),  $t(66) = 4.29$ ,  $p < .001$ ; partial  $r = .47$ ; this effect was not apparent among low-dominance participants ( $\beta = .54$ ),  $t(66) = 1.67$ ,  $p = .10$ ; partial  $r = .20$ . In the presence of competition, concern about being outperformed by the partner diminished when high-dominance individuals were assigned to unstable leadership ( $\beta = -.75$ ),  $t(66) = 2.30$ ,  $p = .03$ ; partial  $r = -.27$ ; again, this effect was not apparent among low-dominance participants ( $\beta = .35$ ),  $t(66) = 1.06$ ,  $p = .30$ ; partial  $r = .13$ .

Given that the pattern of the three-way interaction for the putative mediator (perception of threat) mirrored the pattern for the dependent measure (i.e., proximity), we tested the third model, in which we added the proposed mediator to the original model predicting distance between the participant and the partner. When the putative mediator was added to the original model, the mediator remained a significant predictor ( $\beta = -.46$ ),  $t(65) = 3.57$ ,  $p = .001$ ; partial  $r = -.41$ , whereas the three-way interaction between dominance motivation, leadership condition, and competition condition was reduced to nonsignificance ( $\beta = .18$ ),  $t(65) = 1.57$ ,  $p = .12$ ; partial  $r = .19$ . A Sobel test (Baron & Kenny, 1986) confirmed that the mediation was significant ( $z = 2.07$ ,  $p = .03$ ) (see Figure 2).

## Discussion

Leaders high in dominance motivation sought to be close to a skilled yet threatening partner, suggesting a desire to monitor and maintain control over the partner. This desire for proximity to the power threat reflects a meaningful exception to the abundance of research showing that the primary human response to social threat is avoidance (e.g., Archer, 1979; Blanchard & Blanchard, 1988; Blanchard et al., 2001; Epstein, 1972).

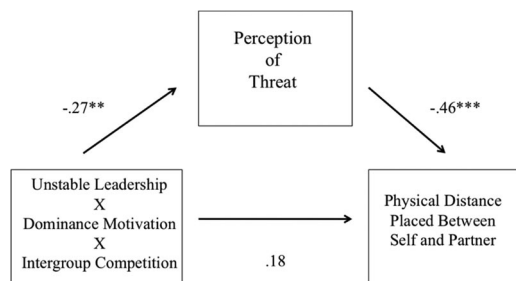


Figure 2. Experiment 1: The three-way interaction between leadership (vs. control), level of dominance motivation, and intergroup competition (vs. no competition) on the amount of physical distance that participants placed between themselves and their partner was mediated by concern about being outperformed on the group task. Numbers refer to standardized regression weights. \*\*  $p < .01$ . \*\*\*  $p < .001$ .

Several pieces of evidence support our hypothesis that proximity to the partner was determined by the degree to which the partner was perceived as a power threat. First, a desire to be near the partner was observed primarily among leaders high in dominance motivation, those for whom protecting their power is a focal goal. Second, when intergroup rivalry was present, leaders high in dominance motivation relaxed their grip over the partner. This is consistent with previous evidence that intergroup rivalry causes even dominance-motivated leaders to prioritize group success rather than personal power and to perceive skilled ingroup members as allies rather than threats (Maner & Mead, 2010). Third, distance between the self and the partner was mediated by participants' concern about being outperformed by the partner. This highlights the counterintuitive nature of the finding—the more threatened participants felt, the closer they wanted to be to the partner. Taken together, these results suggest that power caused dominance-motivated leaders to keep a threatening ingroup member close, potentially as a way to downregulate the level of threat they posed.

## Experiment 2

In Experiment 2, we sought to replicate the findings from Experiment 1 with a different dependent variable: Participants chose whether the partner would work in the same or in a different room. Additionally, we pit participants' hypothesized desire for proximity against any desire to enhance group performance: To incentivize letting the partner work in a different room, participants were told that group performance would be maximized when the group members worked independently in different rooms. Nevertheless, we predicted that placing dominance-motivated participants into a position of unstable leadership would decrease their willingness to let the partner work in a different room, thereby potentially hampering performance but ensuring some level of control over the power threat. As in Experiment 1, we expected the predicted proximity pattern to be eliminated by the presence of intergroup competition.

## Method

**Participants and procedure.** Eighty-seven students (43 women) participated in exchange for a small monetary payment (€7; about U. S. \$9). Participants were told that group performance would be examined in the experiment; they were led to believe they would complete a dyadic task with another participant who was currently residing in a different room down the hall.

Participants first completed the AMS (Cassidy & Lynn, 1989). As in Experiment 1, this measure served two purposes. First, it served as justification for assignment to the leadership position. Second, in addition to supporting the cover story, the AMS provided measures of dominance motivation ( $\alpha = .71$ ,  $M = 3.62$ ,  $SD = 0.41$ ) and prestige motivation ( $\alpha = .70$ ,  $M = 3.58$ ,  $SD = 0.41$ ). Consistent with Experiment 1, the measures were moderately correlated,  $r(86) = .34$ ,  $p = .001$ .

Upon completion of the AMS, the computer ostensibly scored the questionnaires of both the participant and the partner. Across all conditions, participants were led to believe they achieved the highest score on the leadership measure. As in Experiment 1, only participants randomly assigned to the leadership condition were



given control over the subsequent task and the partner. Leaders were told that their primary job was to maximize performance on the dyadic task. They were also given the responsibility of structuring the dyadic task, evaluating their subordinate, and deciding how to allocate the monetary rewards associated with the experiment. As in Experiment 1, the leadership condition entailed an unstable hierarchy; participants were told that roles could be reassigned depending on each person's performance during the session. Because instability in the group hierarchy implies that the other group member could potentially take the leader's power, leaders might therefore come to see the other group member as a potential threat to their power.

Participants in the control condition were given the same feedback concerning their performance. However, participants in the control condition were simply led to believe that both partners would have equal authority over the task and that monetary rewards would be distributed equally.

Participants were then given information about the dyadic task, which consisted of building a series of virtual structures out of geometric blocks on the computer. An example was given to help elucidate the task. At this time, the presence of intergroup competition was manipulated (using the same procedure as in Experiment 1). Participants assigned to the intergroup competition condition were told that their group would be competing with another group; whichever group built the most structures in 5 min would win the competition. (Receipt of the monetary reward did not hinge on winning the competition.) Participants assigned to the no-competition condition were simply told that there was another group completing the same task down the hall; there was no mention of any competition. Thus, the experiment consisted of a 2 (unstable leadership vs. control)  $\times$  2 (intergroup competition vs. no competition) between-subjects factorial design.

Next, the partner was framed as being highly skilled at the dyadic task. Participants were given the opportunity to exchange messages with their partner on the computer. After participants sent their message, they received the same (fabricated) message from their ostensible partner. This message stated that he or she was an engineer and was very good at building virtual structures. Participants were then asked to help decide whether they and their partner would work jointly in the same room or independently in different rooms. Leaders were led to believe the decision was the leader's responsibility; control participants were led to believe they had been randomly chosen to make the decision. To incentivize working separately, participants were informed that, on average, group members working separately tended to substantially outperform group members working together. Thus, in this experiment, we pit against one another the desire for proximity-seeking and the desire to enhance group performance. Desire for proximity, the key dependent measure, was then assessed: Participants indicated the extent to which they wanted the partner to work in the same room (1 = *Not at all*, 7 = *Very much so*).

## Results

As in Experiment 1, the primary hypotheses were that (a) being assigned to a position of unstable leadership (vs. control) would increase participants' desire to work in the same room as the partner; (b) this effect would be moderated by level of dominance motivation (i.e., more pronounced among those high in dominance motivation

than those low in dominance motivation); (c) this effect would be eliminated by the presence of intergroup competition. We did not expect level of prestige motivation to moderate participants' responses.

To test these hypotheses, we first regressed desire to work in the same room on dominance motivation, prestige motivation, leadership condition, intergroup competition condition, and all two- and three-way interactions (all lower order variables were centered). In addition to a main effect of intergroup competition ( $\beta = -.39$ ),  $t(74) = 3.60$ ,  $p = .001$ , and a two-way interaction between dominance motivation and intergroup competition ( $\beta = .22$ ),  $t(74) = 2.09$ ,  $p = .04$ , we observed the predicted three-way interaction between dominance motivation, leadership condition, and intergroup competition ( $\beta = -.22$ ),  $t(74) = 2.07$ ,  $p = .04$  (see Figure 3). No other significant effects were observed.

As in Experiment 1, we decomposed the three-way interaction by examining the two-way interaction between dominance motivation and leadership condition in the presence versus absence of intergroup competition. Replicating the pattern from Experiment 1, in the absence of intergroup competition, we observed a significant two-way interaction between dominance motivation and leadership condition ( $\beta = .45$ ),  $t(74) = 1.96$ ,  $p = .05$ ; partial  $r = .22$  (see Figure 3, left panel). When assigned to a position of unstable leadership (vs. equal authority), participants high in dominance motivation (1 *SD* above the mean) sought to work in the same room as the partner ( $\beta = .75$ ),  $t(74) = 2.10$ ,  $p = .04$ ; partial  $r = .24$ ; this effect was not observed among individuals low in dominance motivation (1 *SD* below the mean),  $t(74) < 1$ . Consistent with the results of Experiment 1, dominance motivation was positively related to desired proximity among leaders ( $\beta = 1.01$ ),  $t(74) = 2.02$ ,  $p = .05$ ; partial  $r = .23$ , but not among control participants ( $\beta = -.59$ ),  $t(74) < 1.04$ . Hence, even though working independently was presented as the best strategy for enhancing group success (the main responsibility of leaders), highly dominant leaders sought to work closely with their partner.

Also in line with predictions, this pattern emerged only in the absence of intergroup competition. When participants were led to believe they were competing against a rival group (see Figure 3, right panel), the two-way interaction between dominance motivation and leadership (vs. control) was not significant ( $\beta = -.37$ ),  $t(74) = 1.59$ ,  $p = .12$ ; partial  $r = -.18$ . Indeed, no significant effect of leadership condition was observed among participants high in dominance motivation,  $t(74) < 1$ , or low in dominance motivation,  $t(74) < 1.50$ ,  $p > .16$ . Moreover, dominance motivation was not significantly related to desire for proximity in either the control condition ( $\beta = .77$ ),  $t(74) = 1.64$ ,  $p = .11$ ; partial  $r = .19$ , or the leadership condition ( $\beta = -.17$ ),  $t(74) < 1$ .

Finally, across these analyses, no effects were observed for individual differences in prestige motivation. Thus, effects were specific to those with a strong desire for dominance and power.

## Discussion

Results of Experiment 2 provide additional support for the hypothesis that leaders high in dominance motivation seek proximity to ingroup competitors. This proximity effect was observed even in the presence of strong incentives to distance the self from the partner: Leaders high in dominance motivation sought to work closely with the partner even though doing so was likely to impair

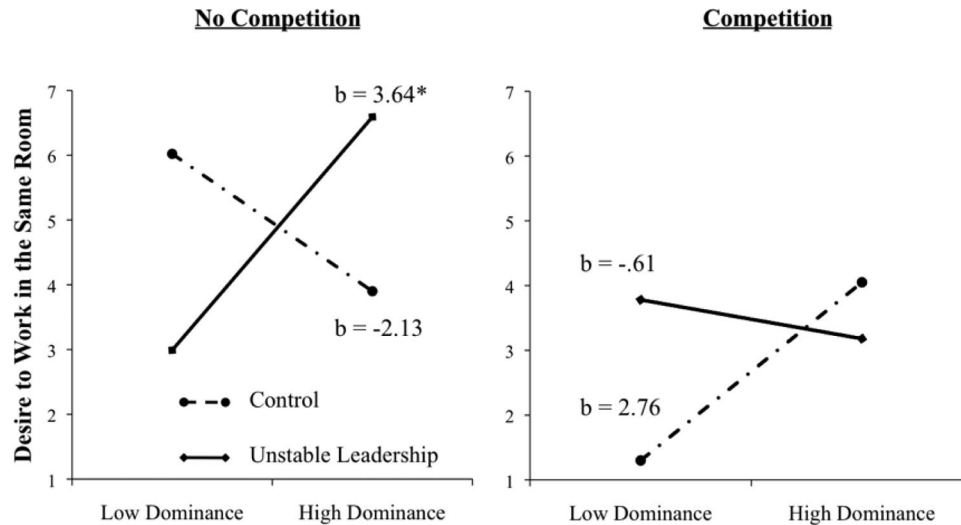


Figure 3. Experiment 2: In the absence of intergroup competition (left panel), dominance motivation was positively associated with desire to work in the same room as the skilled partner, even though working independently was presented as the best strategy for maximizing group performance. This tendency was eliminated by the presence of intergroup competition (right panel). Higher numbers reflect heightened desire for proximity. Unstandardized regression coefficients reflect the slope of dominance motivation within each leadership condition. \*  $p < .05$ .

group performance. Consistent with our theoretical framework, the proximity effect was moderated by factors linked to people's desire to protect their power from others. First, the effect was found only among individuals high in dominance motivation—those individuals with a strong desire to maintain their level of power and influence. Second, desire for proximity was found only in the absence of intergroup competition; desire for proximity was eliminated by intergroup competition, a situational factor that causes leaders high in dominance motivation to prioritize group success over personal power. Taken together, these results replicate findings from Experiment 1 and indicate that dominance-motivated leaders seek proximity to an ingroup competitor who poses an immediate threat to the leader's power.

### Experiment 3

Although the results of Experiments 1 and 2 supported our main hypotheses, the designs of those experiments leave several questions unanswered. First, our theory suggests that powerful leaders should seek proximity to ingroup power threats only when their position of leadership is in jeopardy of being lost (i.e., under conditions of group instability). However, because Experiments 1 and 2 did not include a stable leadership condition, those experiments leave open the possibility that merely assigning individuals to any position of leadership is sufficient to elicit the proximity effect. To address this limitation, we varied the stability of the group hierarchy in the present experiment, assigning some leaders to a position of unstable and revocable leadership and others to a position of stable and irrevocable leadership. (Participants assigned to the control condition were again given equal authority over the task.) If proximity is a method through which threatened leaders seek to protect their position of power, then heightened

desire for proximity to the power threat should be found only within an unstable group hierarchy.

Second, although we hypothesize that leaders seek proximity to a skilled yet threatening group member in particular (to monitor the ingroup competitor), Experiments 1 and 2 leave open the possibility that leaders seek proximity to any ingroup member, threatening or not. Hence, in Experiment 3, we enlarged the size of the group by including a neutral, nonthreatening group member, enabling us to test whether leaders' desire for proximity is specific to the skilled ingroup competitor. An additional enhancement of Experiment 3 was directly testing whether participants' desire for proximity was mediated by their desire to monitor the skilled group member.

To measure desire for proximity, we gave participants the opportunity to select one of three seating arrangements for the group task. The seating arrangements were designed to vary participants' distance from and potential oversight over the other group members (see Figure 4). To indicate their selection, participants reported their desire to sit (a) closely to the threat and distant from the nontreat, (b) closely to the nontreat and distant from the threat, and (c) equidistant from each group member. Participants were led to believe that their ratings would determine which seating arrangement would be implemented for the entire group task. We hypothesized that assignment to a position of unstable power (but not stable power) would cause dominance-motivated individuals to seek proximity to the skilled yet threatening group member. As in Experiments 1 and 2, we expected this effect to be eliminated by the presence of intergroup competition.

### Method

**Participants and procedure.** One hundred twenty-four students (60 women) participated in exchange for monetary compen-

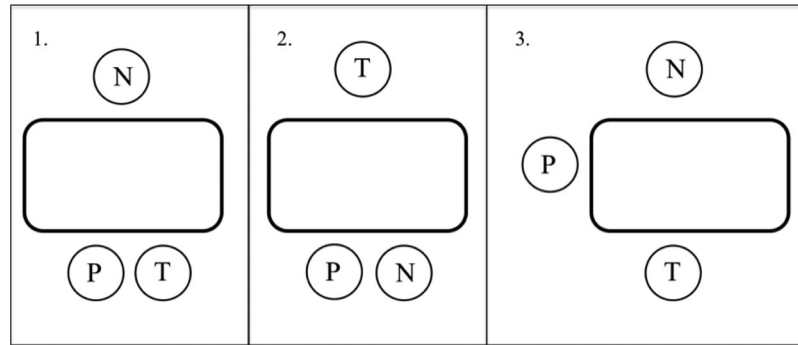


Figure 4. Experiment 3: To assess desired proximity to the highly skilled group member, participants were asked to state their preferences for three possible seating arrangements. They were led to believe their highest rated choice would be implemented for the duration of the group task. P = Participant; N = Neutral Partner; T = Threatening Partner.

sation (€7). Participants were told the study was investigating group performance and that they would complete the study with two other participants, both of whom were ostensibly down the hall.

As in Experiments 1 and 2, participants began by completing the Dominance Motivation ( $\alpha = .83$ ,  $M = 3.46$ ,  $SD = 0.59$ ) and Prestige Motivation ( $\alpha = .71$ ,  $M = 3.51$ ,  $SD = 0.53$ ) subscales of the AMS (Cassidy & Lynn, 1989). These measures were significantly correlated,  $r(123) = .50$ ,  $p < .001$ . After the computer ostensibly scored the “leadership measure,” participants were given their score as well as the scores of the two other group members. As in Experiments 1 and 2, participants across all conditions were informed they achieved the highest score on the leadership measure.

Participants randomly assigned to the stable and unstable leadership conditions were led to believe that, because of their high leadership score, they would serve as leader of the group task. The basic instructions given to leaders in the stable and unstable leadership conditions were identical to those in Experiments 1 and 2. However, in the present experiment, the instructions given to participants in the stable and unstable leadership conditions differed in one important respect. Participants assigned to the unstable leadership condition were told that the position of leader could be reassigned depending on everyone’s performance during the group task (as in the previous experiments). In contrast, participants assigned to the stable leadership condition were told they would hold the position of leader throughout the entire experiment.

Participants in the control condition were also given positive feedback about their score. However, unlike the leadership conditions, participants in the control condition were informed that all group members would have equal authority over the group task and that the monetary rewards earned during the experiment would be split equally across group members.

Participants were then given information about the group task, which ostensibly consisted of building a Lego structure called a Tanagram (see Galinsky et al., 2003). The goal of the Tanagram task was to build the structure as quickly as possible. At this time, the presence of intergroup competition was manipulated. Participants randomly assigned to the intergroup competition condition were told that their group would be competing against another group; whichever group built the best structure in the least amount

of time would win the competition. Those participants assigned to the no-competition condition were told that there was another group completing the task in a laboratory down the hall; there was no mention of any competition. (As in Experiments 1 and 2, receipt of monetary reward was not dependent upon winning the competition.) Thus, the experimental design was a 3 (unstable leadership vs. stable leadership vs. control)  $\times$  2 (intergroup competition vs. no competition) between-subjects factorial design.

Next, one of the two group members was framed as being highly skilled at the group task. As in Experiment 2, participants were asked to exchange a short message with their group members. After participants sent their message, they received a (fabricated) message from one ostensible group member stating that he or she had completed the Tanagram in a previous experiment and had performed exceptionally well on the task. This person could therefore be seen as a threat to participants’ power (when power was unstable). Participants also received a (fabricated) message from the ostensible second group member stating that this individual had never before completed such a task.

The main dependent measure reflected participants’ desire to sit closely to the skilled group member. Under the guise that the experiment was investigating how different group formations influence performance, participants were asked to express their preferences for three possible seating arrangements for the Tanagram task (see Figure 4). They were led to believe that their preferences would determine which seating arrangement would be implemented for the group task. Desire to use each arrangement was indicated on a 7-point scale ranging from 1 (*Not at all*) to 7 (*Very much so*). The main dependent variable was participants’ preference for the seating arrangement in which they sat immediately next to the skilled group member (see Figure 4, Panel 1).

To gain further insight into participants’ preferences, participants provided open-ended responses as to why they rated the seating arrangements as they did. These responses were coded later by two independent raters (masked to condition and hypotheses) for the extent to which participants indicated (a) a desire to monitor and oversee the skilled group member (e.g., “This way I can keep close contact with Martin, distribute his knowledge to Sander, and generally oversee the task”); (b) a desire to cooperate with the other group members (e.g., “Because Martin has completed the task before, he should sit at the head of the table. The

other two of us can learn from him and help where needed”); (c) a desire for equality (e.g., “This way no one in particular is leader; equal status is given to each group member”); and (d) a desire to help the group succeed (e.g., “This seating arrangement will help us build the Tanagram quickly because we can all look each other in the eyes and communicate openly”). Coders rated participants’ responses on each of these dimensions using a 7-point scale ranging from 1 (*Not at all*) to 7 (*Very much so*). Reliability between the two raters was good (ICCs > .78). The raters’ responses were therefore averaged to form indices of (a) desire to monitor the skilled group member; (b) desire to cooperate with the other group members; (c) desire for equality; (d) desire to enhance group performance.

## Results

**Preliminary analyses.** We examined preferences for each of the three seating arrangements across conditions using preliminary analyses. These analyses indicated that participants generally preferred being equidistant from the two other group members ( $M = 5.27$ ,  $SD = 1.51$ ) rather than sitting next to the skilled group member ( $M = 3.41$ ,  $SD = 1.70$ ) or the neutral group member ( $M = 4.38$ ,  $SD = 1.64$ ).

**Proximity to the skilled group member.** In the present experiment, the primary hypotheses were that (a) being assigned to a position of unstable leadership (vs. stable leadership and equal authority) would increase participants’ desire to sit near the skilled group member; (b) this effect would be moderated by level of dominance motivation (i.e., more pronounced among those high in dominance motivation than those low in dominance motivation); (c) this effect would be eliminated by the presence of intergroup competition. As in Experiments 1 and 2, we did not expect level of prestige motivation to moderate participants’ responses.

To test these hypotheses, we regressed participants’ desire to sit next to the skilled group member on dominance motivation (centered), prestige motivation (centered), leadership condition

(dummy coded to compare the unstable leadership condition with each of the other two conditions), intergroup competition condition, and all two- and three-way interactions. See Table 1 for all regression results. Regardless of the comparison condition (i.e., stable leadership or control), unstable leadership interacted with dominance motivation ( $\beta_s > -.31$ ),  $t(106) > 2.20$ ,  $ps < .03$ . Moreover, as predicted, these effects were moderated by intergroup competition, that is, three-way interactions between unstable leadership (vs. stable leadership and vs. control), dominance motivation, and intergroup competition ( $\beta_s > .35$ ),  $t(106) > 2.38$ ,  $ps < .02$  (see Figure 5). We thus evaluated the two-way interaction between dominance motivation and unstable leadership in the presence versus absence of intergroup competition.

As predicted, in the absence of intergroup competition (see Figure 5, left panel), the interaction between unstable leadership and dominance motivation was significant, regardless of comparison condition (stable leadership or control condition;  $\beta_s > -1.17$ ),  $t(106) = 3.23$ ,  $ps < .01$ . Examining the effect of unstable leadership (vs. the other two conditions) among participants high and low in dominance motivation (1  $SD$  above or below the mean) revealed results consistent with Experiments 1 and 2: Unstable leadership increased desire for proximity to the skilled group member among participants high in dominance motivation ( $\beta_s > -.92$ ),  $t(106) > 2.83$ ,  $ps < .01$ ; partial  $r_s > -.25$ ; no effect was observed among individuals low in dominance motivation,  $t(106) < 1$ .

Analyses examining the relationship between dominance and proximity within each leadership condition also yielded results consistent with predictions. In the absence of intergroup competition, dominance was positively related to proximity in the unstable leadership condition ( $\beta = .96$ ),  $t(106) = 2.65$ ,  $p = .009$ ; partial  $r = .24$ . In contrast, when leadership was stable and therefore not susceptible to threat from ingroup members, dominance was not related to proximity ( $\beta = -.69$ ),  $t(106) = 1.41$ ,  $p = .16$ ; partial  $r = -.13$ . This was also the case among participants in the equal

Table 1  
Results of Multiple Regression Analyses for Experiment 3

Variable	Desire to sit next to the skilled group member		
	$\beta$	$p$	Partial $r$
Dominance motivation	.29	.08	.17
Prestige motivation	-.14	.53	-.06
Intergroup competition vs. No competition	-.26	.18	-.13
Unstable Leadership (UL) vs. Control (C)	-.12	.31	-.19
Unstable Leadership vs. Stable Leadership (SL)	-.22	.06	-.19
Dominance Motivation $\times$ UL vs. C	-.32	.03	-.21
Dominance Motivation $\times$ UL vs. SL	-.48	.002	-.30
Dominance Motivation $\times$ Competition	-.61	.001	-.35
Prestige Motivation $\times$ UL vs. C	.07	.65	.04
Prestige Motivation $\times$ UL vs. SL	.18	.30	.10
Prestige Motivation $\times$ Competition	.25	.22	.12
UL vs. C $\times$ Competition	.17	.27	.11
UL vs. SL $\times$ Competition	.06	.64	.05
Dominance Motivation $\times$ UL vs. C $\times$ Competition	.45	.001	.30
Dominance Motivation $\times$ UL vs. SL $\times$ Competition	.36	.02	.23
Prestige Motivation $\times$ UL vs. C $\times$ Competition	-.11	.47	-.07
Prestige Motivation $\times$ UL vs. SL $\times$ Competition	-.15	.38	-.09

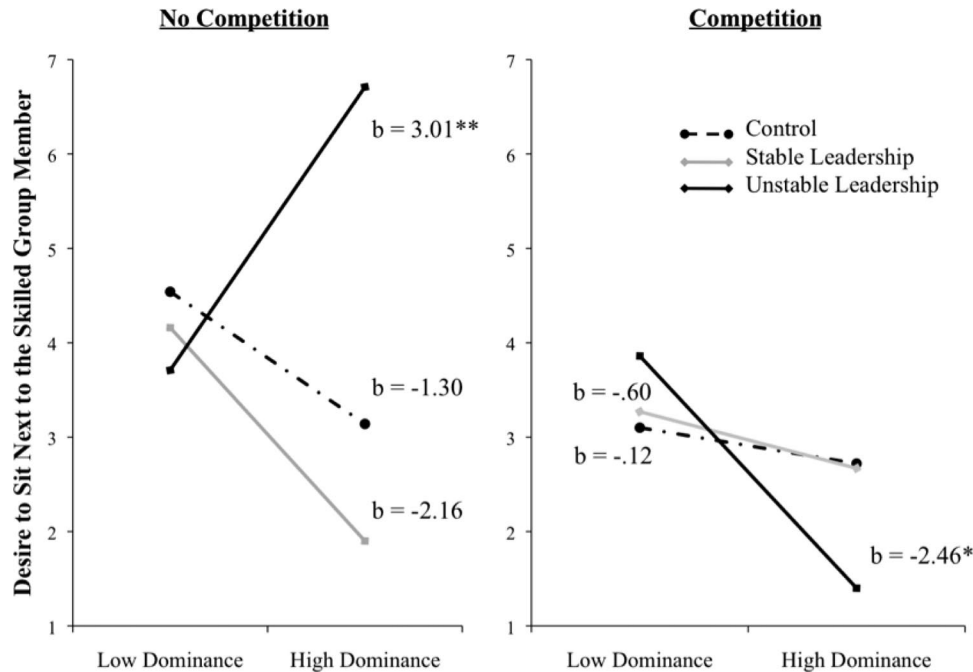


Figure 5. Experiment 3: In the absence of intergroup competition (left panel), dominance motivation was positively associated with desire for proximity to the skilled yet threatening group member, but only when participants were given a position of unstable power. This tendency was reversed by the presence of intergroup competition (right panel). Higher numbers reflect heightened desire for proximity to the skilled group member. Unstandardized regression coefficients reflect the slope of dominance motivation within each leadership condition. \*  $p < .05$ . \*\*  $p < .01$ .

authority, control condition ( $\beta = -.42$ ),  $t(106) < 1.16$ . Taken together, results indicate that leaders high in dominance motivation wanted to sit near the skilled group member, but only when their power was unstable and could be jeopardized by the skilled group member.

To gauge participants' preference to sit next to the skilled group member, relative to the two other seating arrangements (sitting next to the neutral group member or sitting equidistant from both), we generated regression-estimated preferences for the three seating patterns in the key condition (high-dominance participants with unstable leadership in the absence of intergroup competition). These analyses revealed that high-dominance leaders who were assigned to a position of unstable leadership overwhelmingly preferred to sit next to the skilled group member (6.71), relative to being seated next to the neutral group member (2.93) or sitting equidistant from both group members (3.77).

A very different pattern of results was observed in the presence of intergroup competition (see Figure 5, right panel). Dominance motivation did not interact with leadership condition (both  $\beta$ s  $< .59$ ),  $t_s(106) < 1.64$ ,  $p$ s  $> .11$ . When participants expected to face a rival outgroup, assignment to an unstable leadership position had no effect on participants' desire for proximity to the skilled group member; this was the case for both participants high in dominance motivation,  $t_s(106) < 1.05$ , and participants low in dominance motivation,  $t_s(106) < 1$ . Dominance was unrelated to desire for proximity in the stable leadership condition ( $\beta = -.19$ ),  $t(106) < 1$ , and the control condition ( $\beta = -.12$ ),  $t(106) < 1$ . However, dominance motivation was *negatively* associated with desire for

proximity in the unstable leadership condition ( $\beta = -.79$ ),  $t(106) = 2.11$ ,  $p = .04$ ; partial  $r = -.19$ . Indeed, high-dominance participants assigned to a position of unstable leadership seemed to prefer to sit next to the neutral group member (4.94) or equidistant from both group members (4.64) rather than sit next to the skilled group member (1.38). Thus, although dominant participants responded to unstable leadership by seeking proximity to the skilled group member in the absence of intergroup competition, the same did not hold true in the presence of intergroup competition. These results replicate the moderating effect of intergroup competition observed in Experiments 1 and 2.

Consistent with our theoretical framework and the results of Experiments 1 and 2, no effects were observed for individual differences in prestige motivation. Effects were moderated only by individual differences in dominance motivation. Additionally, ancillary analyses confirmed that there were no significant differences between the stable leadership condition and the control condition. Thus, consistent with theorizing, the pattern of results reflected an increased desire among high-dominance individuals to seek proximity to the talented ingroup member when they were assigned to a position of unstable leadership (not stable leadership) and only when intergroup rivalry was absent (not when intergroup rivalry was present).

**Mediational analyses: Desire to monitor the skilled group member.** As in Experiment 1, we conducted a mediated moderation analysis (Müller et al., 2005) to examine whether the observed pattern was mediated by participants' desire to monitor and oversee the skilled group member. Participants' open-ended

responses—coded in terms of how much their seating arrangement preference was driven by their desire to monitor the skilled group member—served as the putative mediator.

As mentioned previously, in predicting the dependent measure—desire for physical proximity to the talented group member—we observed the predicted three-way interaction between dominance motivation, leadership condition (dummy coded to compare unstable leadership with the control condition and stable leadership competition), and intergroup competition. Next, we tested whether that same three-way interaction predicted the proposed mediator (desire to monitor the skilled group member) ( $\beta_s > .40$ ),  $t(106) > 2.63$ ,  $ps < .01$ . We then confirmed that the interactive pattern was the same. In the absence of intergroup competition, desire to monitor the threat increased among high-dominance individuals assigned to a position of unstable leadership, regardless of comparison condition ( $\beta_s > -.76$ ),  $t(106) > 2.25$ ,  $ps < .05$ ; partial  $r_s > -.21$ . Moreover, this effect was eliminated by intergroup competition (unstable vs. stable leadership:  $\beta = .34$ ),  $t(106) < 1$  (unstable leadership vs. control:  $\beta = .90$ );  $t(106) = 1.81$ ,  $p = .07$ ; partial  $r = -.17$ . No effects were found among low-dominance participants ( $\beta_s < -.46$ ),  $t(106) < 1$ .

Given that the mediator followed the same pattern as the dependent measure, we tested for mediation by including the proposed mediator (desire to monitor the skilled group member) to the original model predicting desired proximity to the skilled group member. When desire to monitor the talented group member was added as a predictor, it remained a significant predictor ( $\beta = .30$ ),  $t(105) = 3.23$ ,  $p = .002$ ; partial  $r = .30$ , whereas the three-way interaction between dominance motivation, leadership condition, and intergroup competition condition was driven from significance ( $\beta_s < .25$ ),  $t(105) < 1.70$ ,  $ps > .09$ ; partial  $r_s < .17$ . Sobel tests confirmed that the pattern was mediated by participants' desire to monitor the skilled group member ( $z_s > 2.04$ ,  $ps < .05$ ).

Ancillary analyses tested the possibility that effects were mediated by a desire to cooperate with the other group members, a desire for equality, or a desire to help the group succeed. There was no evidence that any of these factors mediated the observed pattern.

**Supplemental analyses.** To rule out the possibility that effects generalized to the nonthreatening group member, we performed an additional analysis treating preference for proximity to the neutral group member (preference for Panel 2 in Figure 4) as the dependent variable (using the same model as that used to predict desire for proximity to the skilled group member). This analysis yielded no significant results.

We also performed an analysis treating desire to be equidistant from the two group members as the dependent variable (preference for Panel 3 in Figure 4). Dominance motivation emerged as a negative predictor ( $\beta = -.38$ ),  $t(106) = 2.19$ ,  $p = .03$ , whereas prestige motivation was a positive predictor ( $\beta = .59$ ),  $t(106) = 2.56$ ,  $p = .01$ . No other significant predictors were found in the model.

## Discussion

When there was instability in the group hierarchy, leaders high in dominance motivation sought to position themselves as closely as possible to the skilled group member, an individual who posed

a realistic threat to their continued experience of power. Several pieces of evidence confirm that participants wanted to be close to their partner as a way of protecting their own power. First, as in the previous experiments, proximity-seeking was observed only among those high in dominance motivation—those for whom the protection of power is a focal goal. Second, increased desire to be close to the threat was apparent only when leadership was unstable and could be lost, not when leadership was stable and irrevocable. Third, dominance-motivated leaders with unstable power sought proximity to the power threat specifically rather than to both group members generally. Fourth, desire to be near the threat was mediated by participants' desire to monitor the skilled group member. Fifth, as in the previous experiments, the proximity effect was eliminated by the presence of intergroup competition—a variable that has been shown in previous research to reduce power-protection strategies (Maner & Mead, 2010). Taken together, results provide convergent evidence for the hypothesis that power-hungry leaders seek proximity to ingroup members who, because of their valuable skills, pose a realistic and immediate threat to leaders' continued experience of power.

## General Discussion

Power and leadership are fundamental aspects of human social life. The way leaders navigate the power dynamics within their group has profound implications for personal, interpersonal, and group processes. Hence, understanding the way leaders respond to other people who threaten their power is a critical goal for research.

When confronted with an ingroup member who poses an immediate and a realistic threat to leaders' continued experience of power, how do leaders react? Do they display avoidance—the most common response to perceived threat? Or, do they instead seek to be near the power threat? Results from three experiments support the theory that dominance-oriented leaders seek proximity to ingroup competitors, as a way to monitor and downregulate the threat posed by such individuals. These findings identify an important strategy through which leaders try to protect and solidify their power. In doing so, the present research also provides one of the first systematic demonstrations of a social threat response that runs counter to the typical threat response of avoidance.

In Experiment 1, leaders within an unstable hierarchy sought to reduce the distance between themselves and the ingroup competitor, thus bringing the threat closer to them. Experiment 2 incentivized social and physical distance by telling participants that independence would enhance group performance. Nevertheless, leaders again sought proximity to the power threat, rather than letting the ingroup competitor work alone. In Experiment 3, leaders within an unstable hierarchy arranged their group so that the ingroup competitor would be seated as closely as possible to them. In each case, participants' actions were consistent with a desire to monitor—and thus to downregulate—the threat posed by the ingroup competitor. Indeed, mediational analyses confirmed that leaders' desire for proximity to the threatening group member was caused by perception of threat (Experiment 1) and, in turn, their desire to closely monitor the ingroup competitor (Experiment 3).

In addition to providing evidence that leaders seek to keep ingroup competitors close, we also identified in the present experiments three key moderators that determined whether leaders

sought proximity to ingroup threats. These moderators not only highlight theoretically meaningful boundary conditions but also help illuminate the mechanism underlying the observed effects (i.e., the desire to protect one's power).

The first moderator was individual differences in dominance motivation. Proximity to the power threat was observed only among leaders high in dominance motivation, those individuals who are particularly motivated to maintain personal control over others (e.g., Barkow, 1989; Ellis, 1995; Fodor, 1985). We observed no evidence to suggest that individuals lacking a strong desire for dominance wanted to keep an ingroup competitor close. Moreover, the desire to be close to the threat was specific to dominance motivation; there was no evidence that prestige motivation elicited a desire for proximity to the ingroup competitor. These results corroborate extant work highlighting the important differences between prosocial (prestige) and antisocial (dominance) facets of power and leadership (Henrich & Gil-White, 2001; Lammers et al., 2009; Maner & Mead, 2010; McClelland, 1970; Van Vugt, 2006; Winter, 1973).

The second moderator was the stability of the group hierarchy. Consistent with the hypothesis that proximity-seeking is a strategy designed to help leaders protect their power, dominant leaders sought proximity to an ingroup competitor only when the hierarchy was unstable and their position of leadership was susceptible to being threatened. When their power was stable, even dominance-oriented leaders gave the highly skilled partner the room necessary to help the group succeed. These findings dovetail nicely with work showing that dominance-motivated leaders enact tactics aimed at solidifying their power primarily when they perceive instability within the group (Maner & Mead, 2010; Maner, Gailliot, Butz, & Peruche, 2007). This pattern has been observed even in high-status nonhuman primates, who display behaviors aimed at subjugating other group members particularly when there is instability within the group hierarchy (Sapolsky, 2005).

The third moderator was the presence of intergroup competition. Historically, one of the key factors that resulted in the emergence of leadership was intergroup competition, as leaders were needed to help coordinate group efforts so as to ward off threats from the outgroup (Van Vugt, 2006). As such, the presence of intergroup competition should stimulate in leaders a desire to ensure that their group competes successfully against rival groups (Van Vugt et al., 2007). Consistent with this notion, leaders in the present experiments released their grip over the ingroup rival when the group faced a competing outgroup. These findings fit with previous evidence suggesting that intergroup competition reduces the corrupting effects of power (Maner & Mead, 2010).

Taken together, results of three experiments suggest that, when the social hierarchy is unstable, dominant leaders perceive ingroup members as potential threats to their power. In turn, dominant leaders seek proximity to such ingroup competitors, as a way of monitoring and downregulating the threat those individuals pose. It is worth noting that, in the present experiments, the skilled ingroup member never voiced an explicit desire to seize the leader's power. Rather, merely possessing a valuable skill was enough for the ingroup rival to be perceived as a threat, and for leaders to draw that rival close to them.

The present experiments demonstrate a threat response that is quite different from the avoidant and agonistic responses typically observed in response to social threats. Indeed, if we had shown that

leaders sought to distance themselves from an ingroup rival—to push that person away—some might have dismissed this finding as intuitively obvious; after all, avoidance of threat is a well-documented social psychological phenomenon. Yet, we hypothesized and found just the opposite.

One could speculate that wanting to be close to a threat is a response that is unique to power-related situations. Power affords control, not just over resources, but also over other people, including people who threaten one's power. The ability to control potentially threatening group members means that bringing those individuals closer increases one's ability to monitor and control them. Conversely, avoiding the threat—as people do to most other kinds of threats—could bring about the very loss of power that dominant leaders fear.

The present findings are in some ways consistent with research suggesting that power promotes a general orientation toward approaching aspects of the environment (e.g., Galinsky et al., 2003; Keltner et al., 2003; Maner, Kaschak, & Jones, 2010; Smith & Bargh, 2008). Yet, it seems unlikely that the present findings can be explained by theories of power and approach. Evidence for proximity-seeking was observed only by dominance-motivated individuals, only toward threatening ingroup rivals, and only under very specific circumstances. Thus, the present findings are more easily explained by participants' strategic desire to protect and maintain their power than by a general orientation toward approach.

### Implications of the Present Research

The present findings have potentially important implications for theories of power, leadership, and group behavior. Previous theories of leadership imply that leaders maintain an implicit contract with followers, wherein followers agree to give up some of their control over group resources and decision making, and leaders agree to prioritize the best interests of the group (Boehm, 1999; de Waal, 1982; Van Vugt, 2006). Yet, power affords a variety of important personal benefits, and therefore leaders may be tempted to abuse their power in service of personal gain. Thus, a tension exists between leaders and followers (Maner & Mead, 2010; Van Vugt et al., 2008). The present studies provide new evidence for one way in which this tension manifests itself: Leaders interested in selfishly protecting their power seek to bring threatening group members close, as a way of monitoring them and reducing the threat those people pose. These studies shed new light on one strategy through which dominance-oriented leaders seek to protect their own positions of power and privilege.

The present studies also advance researchers' understanding of the distinction between dominance and prestige. Leadership positions afford the ability to influence others through resource control, intimidation, reward, and punishment (dominance), but those positions also afford a high degree of respect and admiration (prestige). The present studies demonstrate that the desires for dominance versus prestige have very different implications for leadership behavior. The desire for dominance, but not prestige, led participants to protect their power, even at the expense of group performance. Thus, these studies help to disentangle two closely connected but distinct aspects of leadership. At a practical level, they also point to benefits of bestowing leadership on those with a desire for respect, but not a desire to dominate.

The present findings also have implications for group behavior. We found that, even when giving subordinates independence and autonomy was ostensibly beneficial for group performance, dominance-oriented leaders instead sought to keep subordinates under their thumb. It is not difficult to imagine how this scenario might play out in real-world contexts. Rather than giving individuals the ability to shine by voicing new and innovative ideas, for example, a leader might instead seek to constrain and control the actions of those perceived to threaten him. Moreover, taking away the independence of innovative thinkers could prove demoralizing, leading to a sort of learned helplessness, in which subordinates fail to voice new ideas as a way of avoiding negative attention from leaders. Future research would benefit from examining the implications of the present findings for performance within extant social groups.

### Limitations and Future Directions

Limitations of the present experiments provide valuable avenues for future research. The overarching goal of the present work was to provide rigorous tests of our hypotheses, and, as such, our experiments were conducted in a highly controlled laboratory environment. As mentioned earlier, future studies would benefit from extending the conceptual framework presented in the present investigation to examine the behavior of leaders and subordinates within extant social groups.

In the present experiments, leaders believed they had earned their position legitimately because the choice of leader was ostensibly based on a pretest measure of leadership ability. However, just as power varies in its stability, power can also vary in its legitimacy. A growing body of research demonstrates that the legitimacy of power has substantial implications for the way leaders behave. For example, illegitimate power does not activate the well-established link between power and disinhibition (Lammers, Galinsky, Gordijn, & Otten, 2008), and it causes people to become stricter about the moral standards they impose on themselves than the standards they impose on others (Lammers, Stapel, & Galinsky, 2010). Given these findings, it is reasonable to hypothesize that a lack of legitimacy could reduce or eliminate power-protection strategies of the sort investigated in the present research. Future studies would benefit from examining the extent to which legitimacy—and other situational factors—shape the strategies leaders are willing to use to maintain their position in the hierarchy.

As we described earlier, the tendency for leaders to seek proximity to ingroup threats represents a meaningful break from an abundance of work demonstrating avoidance from or aggression toward social threats (e.g., Archer, 1979; Blanchard & Blanchard, 1988; Blanchard et al., 2001; Epstein, 1972). Yet, it is important to note that these types of agonistic responses are sometimes also observed among corrupt leaders. There is no shortage of instances in which powerful and corrupt leaders seek to expel or react violently toward individuals who threaten their power. Our studies did not present participants with explicit opportunities to exclude or lash out against their subordinates. Instead, we tried to create contexts that would realistically mirror common social groups in which rejecting or aggressing against group members is not an immediate or appropriate option. As such, the present studies demonstrate that, when direct aggression or ostracism against

group members is not feasible or desirable, dominance-oriented leaders instead respond by seeking proximity to ingroup threats. Future research should seek to delineate the conditions under which threatened leaders adopt strategies characterized by aggression, ostracism, and/or proximity-seeking.

Although the present findings are likely to have implications for group performance, they are limited by the fact that the logistics of the experimental situations prevented us from measuring actual group performance. Future research would benefit from examining whether increased proximity to and control over a threatening but talented group member hinders performance at the level of the overall group. Conversely, studies might profitably investigate whether affording group members heightened independence and autonomy enhances group performance.

### Conclusion

In the opening of this article, we mentioned an often-cited piece of wisdom—that one should keep one's friends close, but one's enemies closer. Although that piece of wisdom has most often been attributed to the Chinese military strategist Sun-Tzu, it has also occasionally been attributed to Niccoló Machiavelli. Given the present findings, it should come as no surprise that Machiavelli—well known as an architect of manipulative despotism—would have sought to keep his enemies close. Indeed, the present experiments demonstrate that keeping one's "enemies" close reflects a strategy used by dominance-oriented leaders to maintain and protect their power over others. Rather than seeking to avoid threats—as people and other organisms most commonly do when they perceive a form of danger—dominance-oriented leaders instead sought to bring ingroup threats closer. Leaders with a strong desire for power came to see valuable group members as threats, and, in turn, they took actions intimated at ensuring that those threats stayed under their thumb. Ironically, in seeking closeness to potential rivals, power-hungry leaders may take a seemingly soft-hearted route to ruling with an iron fist.

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