Divide and Conquer: When and Why Leaders Undermine the Cohesive Fabric of Their Group

Charleen R. Case Northwestern University and Florida State University Jon K. Maner Northwestern University

Cohesion, cooperation, and the formation of positive bonds among group members are key processes that facilitate effective group functioning. Consequently, group leaders usually work to enhance the positive social bonds among group members to facilitate cooperation and group cohesion. The present research suggests, however, that leaders sometimes are motivated to generate divisions—not cooperation—among their subordinates. Although such divisions may undermine group functioning, they can also serve as a means of protecting the leader's own power. Four experiments supported the hypothesis that, when they perceive their power to be threatened, leaders create divisions among their subordinates in order to protect their power and reduce threats posed by potential alliances among those subordinates. Leaders restricted the amount of communication among subordinates (Experiment 1), physically sequestered subordinates (Experiment 2), and prevented subordinates from bonding with one another interpersonally (Experiments 3 and 4). Those behaviors were observed only among dominance-motivated leaders (not prestige-motivated leaders), and were directed only toward highly skilled (and thus highly threatening) subordinates. Consistent with the hypothesis that leaders' behavior was driven by a desire to protect their power, the tendency to prevent in-group bonding was eliminated when leaders were assured that their power could not be lost (Experiment 4). These results shed light on factors that may undermine positive social processes within groups.

Keywords: leadership, power, dominance, prestige, evolutionary psychology, organizational behavior

Divide et impera [Divide and conquer].

—Niccolò Machiavelli

Positive forms of cooperation and social cohesion are essential for the success and well-being of most human groups. Consequently, to help their groups succeed, leaders typically work hard to enhance the positive social bonds among group members. Indeed, facilitating group cooperation and cohesion is one of the fundamental functions served by group leaders (Van Vugt, 2006). Nevertheless, instances abound in which leaders appear to generate social divisions—not cooperation—among their subordinates. If leaders do, in fact, seek to divide their subordinates, what factors might give rise to such apparently counterproductive behavior?

The strategy of dividing one's subordinates to prevent social bonding may have ancient origins. Although the maxim "divide and conquer" is ascribed primarily to the infamous political strategist Niccolò Machiavelli, it has also been attributed to several before him, including Roman general Julius Caesar (100BCE – 44BCE) and the father of Alexander the Great, King Philip II of Macedon (382BCE – 336BCE). This subordinate-dividing strategy may even have been employed by our last common ancestor with

chimpanzees. Indeed, alpha male chimpanzees (*Pan troglodytes*) sometimes divide their subordinates, apparently to prevent their subordinates from forming coalitions. In this way, the alpha males are able to maintain their dominant rank in the group (de Waal, 1982; Nishida, 1983; Nishida & Hosaka, 1996).

We propose that some human leaders might similarly seek to suppress positive relationships among group members even though, in so doing, they also undermine the cooperative fabric of the group. Little systematic research has been conducted on this topic, and thus the factors that might cause leaders to divide their subordinates remain unclear. In the present work, we investigated how, when, and why human leaders might divide subordinates to suppress cooperative relationships among those subordinates. More specifically, the current research aims to a) test the hypothesis that, when they think their power is being threatened, leaders divide subordinates in order to protect their own power; b) specify the types of leaders who are most likely to socially divide subordinates; c) identify specific dividing tactics leaders use to suppress alliance-formation among subordinates; and d) determine the specific situations in which those tactics are employed by leaders.

The Importance of Cooperation and Cohesion in Groups

The success of many groups depends on how well group members work together and coordinate their actions. Indeed, cooperation and social cohesion play a critical role in group behavior and exert positive effects on group performance (Jehn & Shah, 1997; Peng & Hsieh, 2012). Consequently, facilitating cooperation and

Correspondence concerning this article should be addressed to Charleen R. Case, 2001 Sheridan Road, Evanston, IL 60208. E-mail: charleenrcase@gmail.com

Charleen R. Case, Kellogg School of Management, Northwestern University and Department of Psychology, Florida State University; Jon K. Maner, Kellogg School of Management, Northwestern University.

cohesion among group members is a key function played by leaders (De Cremer, van Dijke, & Mayer, 2010; De Cremer & Van Vugt, 2002; Tyler & Degoey, 1995; Van Vugt & De Cremer, 1999).

When group members feel closely connected with one another, they tend to be more committed to their group's goals (De Cremer, 2002). Consequently, fostering cooperation and cohesive, positive relationships among group members increases commitment to and investment in the group, thereby enhancing group well-being (De Cremer & van Knippenberg, 2002). Indeed, research has shown that social closeness among group members promotes improved performance through increasing both cooperation and group commitment (Jehn & Shah, 1997).

Another way closeness among group members leads to increased performance is through the development of interpersonal trust. Close social bonds and intimacy between individuals promote trust (McAllister, 1995; Seppänen et al., 2007; cf. Ohtsubo et al., 2014), which, in turn, increases cooperation among group members (Dirks, 1999; Mayer, Davis, & Schoorman, 1995; McAllister, 1995; cf. De Jong & Elfring, 2010; Ohtsubo et al., 2014). Leaders can promote positive, trusting relationships among their subordinates by enhancing communication (Das & Teng, 1998; Seppänen, Blomqvist, & Sundqvist, 2007; cf. Dumas, Phillips, & Rothbard, 2013) and promoting close, interpersonal interactions (McAllister, 1995; van Thiel & Yesilkagit, 2011; cf. Dumas et al., 2013). By encouraging those processes, leaders can ultimately enhance group performance (De Jong & Elfring, 2010; Dirks, 1999).

Nevertheless, it may be the case that not all leaders are inclined to enhance cooperation and social cohesion among group members and some might even try to undermine those positive group processes. We suggest that, even if it means undermining the cooperative fabric within the group, some leaders may suppress positive relationships among subordinates if doing so enables them to protect their own power within the hierarchy.

When Leaders Protect Their Power

To help their group achieve its goals, leaders are often endowed with power. Power—operationally defined in terms of asymmetric control over group resources—affords the capacity to influence others by providing or withholding resources and administering punishments (Keltner, Gruenfeld, & Anderson, 2003; Magee & Galinsky, 2008). Because power comes with many personal benefits (Archer, 1988; Keltner et al., 2003; Kifer, Heller, Perunovic, & Galinsky, 2013; see also Anderson, Kraus, Galinsky, & Keltner, 2012) some leaders display a tremendous taste for power and are more concerned with preserving their own power than with fostering their group's goals (Maner & Mead, 2010; Van Vugt, 2006; see also Anderson, Willer, Kilduff, & Brown, 2012). Such violations can lead to corruption, exploitation, and conflict (e.g., Kipnis, 1972, 1976).

Indeed, within groups that are arranged hierarchically, there often exists a fundamental conflict between the motivations of leaders and followers (Boehm, 1999; Van Vugt, Hogan, & Kaiser, 2008; see also van Dijk & De Cremer, 2006; Van Lange, De Cremer, van Dijk, & Van Vugt, 2007). Because virtually all hierarchies are at least somewhat malleable (Sapolsky, 2005; Van Vugt et al., 2008; see also Ellemers, Wilke, & Van Knippenberg,

1993), followers sometimes are able to decrease the power gap between themselves and leaders in order to avoid exploitation (Boehm, 1999). Conversely, leaders sometimes try to maintain or increase the power gap to protect their privileged position within the group (Maner & Mead, 2010; Mead & Maner, 2012; McClelland, 1975; Tiedens, Unzueta, & Young, 2007; Van Vugt et al., 2008). Moreover, when leaders perceive that their position of power is threatened by one or more subordinates, those leaders may behave in ways designed to minimize the potential threat.

A variety of strategies can help leaders prevent subordinates from usurping their position of power. In the nonhuman primate literature, high-ranking individuals use intimidation and direct aggression to maintain their power over subordinates (Sapolsky, 2005). In fact, those agonistic behaviors are extremely characteristic of our closest extant relative, the chimpanzee. Alpha male chimpanzees, those at the top of the group hierarchy, often behave in hostile ways toward beta males (de Waal, 1982; Nishida, 1983; Nishida & Hosaka, 1996). Such behaviors are motivated by the fact that a beta, as second in rank, poses the greatest threat to an alpha's position of power.

In humans, highly talented subordinates are similar to beta male chimpanzees. Subordinates who possess skills that are valuable to the group are likely to receive respect and deference from other group members that, in turn, can increase the subordinates' status and power. Subordinates with potential for increased status and power can be threatening to their group's current leader, particularly if that leader is concerned about maintaining his or her position atop the hierarchy (Van Vugt et al., 2008). As such, human leaders may act agonistically toward subordinates, just as alpha male chimpanzees act toward beta males. However, unlike chimpanzees, human leaders typically cannot act in openly hostile ways toward their subordinates. Such behavior is often perceived as breaking their social contract with the group and, thus, leaders who wish to suppress a talented subordinate often rely on subtler tactics. For example, some leaders try to closely monitor and control power-threatening individuals (Mead & Maner, 2012), derogate them (Georgesen & Harris, 1998; Georgesen & Harris, 2006), or ostracize them from the group when it can be done clandestinely (Maner & Mead, 2010).

Divide and Conquer: Preventing Subordinates From Forming Alliances

Although interpersonal closeness and cooperation are generally a boon to group functioning, leaders interested in protecting their power may seek to undermine—rather than facilitate—those positive group processes. Although an individual subordinate can threaten a leader's power, that subordinate would be much better equipped to appropriate a leader's power with the support of other group members. That certainly is the case in chimpanzees. Chimpanzee beta males become particularly threatening when they enlist the support of another group male, such as a gamma male (the third-ranking male). Although an alpha male can often hold his own against a beta male who attempts to claim alpha status, his prospects of maintaining power drop dramatically when he must combat two males at once (de Waal, 1982; Nishida, 1983; Nishida & Hosaka, 1996). As such, alpha males sometimes employ a preventive strategy known as a separating intervention (de Waal, 1982). Specifically, alpha males thwart instances of beta-gamma bonding: they direct elaborate, threatening displays of their physical strength toward the two males and charge them when they are caught allo-grooming and sometimes even when they are just sitting beside one another. That sends the males fleeing, and helps the alpha keep the beta male from bonding and forming a strategic alliance with the gamma male (de Waal, 1982).

The chimpanzee separating intervention strategy appears analogous (if not homologous) to tactics historically employed by human rulers as a means to prevent alliance formation among those they ruled. Because an ambitious subordinate is best able to seize a leader's power with the help of other group members, leaders who aim to protect their power should be wary of alliance formation among subordinates. Such leaders should be motivated to prevent highly skilled and respected subordinates, in particular, from establishing alliances with other group members.

Thus, the overarching hypothesis guiding the current research is that, when leaders are motivated to protect their position of power from a talented subordinate, those leaders will adopt dividing strategies aimed at preventing the subordinate from bonding or forming cooperative relationships with other group members. In addition to testing this main hypothesis, we also aim to identify variables within both the person and the situation that moderate leaders' tendency to divide their subordinates. Identifying moderating variables is meant not only to highlight the boundary conditions of the phenomenon, but also to clarify the underlying motives served by dividing one's subordinates. We examine moderating effects of individual differences in power-related motives, the nature of the group's hierarchy, and aspects of the subordinate.

Individual Differences in Dominance Versus Prestige

Research from evolutionary psychology suggests the presence of two distinct routes to attaining status and influence within any group (Cheng, Tracy, Foulsham, Kingstone, & Henrich, 2013; Halevy, Chou, Cohen, & Livingston, 2012; Henrich & Gil-White, 2001; see also Magee & Langner, 2008). The first route—dominance—represents a strategy by which people attain and maintain high-status positions through coercion, intimidation, and the self-ish manipulation of group resources. Dominance, although certainly present in humans, is even more characteristic of nonhuman primates such as chimpanzees. Dominance is a fundamental characteristic of primate social groups and reflects the fact that social rank in many species, including humans, is determined in part by direct conflicts among individuals attempting to rise through the hierarchy.

The second route—prestige—represents a strategy through which people attain high status by garnering respect, admiration, and appreciation from group members. Unlike dominance, prestige appears to be a uniquely human component of social groups. Prestige reflects the fact that human cultures have come to value particular traits and skills and reward deference and respect to individuals who possess those traits and skills. In humans, both dominance and prestige reflect viable routes to attaining status, power and influence within the group (Chen et al., 2013; Henrich & Gil-White, 2001).

Although dominance and prestige are perhaps best considered strategies that people adopt in response to current circumstances within the group, they can also be conceptualized as individual differences (e.g., Chen, Tracy, & Henrich, 2010; Maner & Mead,

2010). That is, some people tend to adopt a more dominance-motivated strategy, whereas others tend to adopt a more prestige-motivated strategy. Whereas dominance-motivated leaders are motivated primarily by the desire for power and authority over others, prestige-motivated individuals are motivated instead by a desire for respect and admiration.

Many leadership positions afford the capacity for both prestige and dominance. Nevertheless, the two motivations are characteristically different with regard to how people respond to situations that threaten their role in the group. Leaders high in dominance motivation are primarily interested in having power, because power affords high rank regardless of whether that rank has been freely granted to them by their group (Barkow, 1989; Ellis, 1995; Fodor, 1985; Henrich & Gil-White, 2001). Indeed, powerful leaders high in dominance motivation sometimes sacrifice their group's success in order to maintain their leadership position (e.g., Mead & Maner, 2012). In the current studies, therefore, we predicted that the strategy of preventing positive and cohesive relationships among subordinates would be observed primarily among leaders who are high in dominance motivation.

In contrast to people high in dominance motivation, people high in prestige motivation are more devoted to obtaining the respect and appreciation of group members, rather than controlling them against their will. Indeed, leaders typically are given power under the (often implicit) social contract that they will use that power to pursue actions that benefit the group (Boehm, 1999; Van Vugt, 2006). Behaving in ways that damage the group would undermine the respect and trust afforded to prestigious leaders. Consequently, highly prestige-motivated leaders may respond to a potential loss of rank by engaging in behaviors aimed at maintaining or enhancing their good standing with subordinates. They are not expected to protect their high social rank if it means undercutting the group's well-being. Hence, we did not expect leaders high in prestige motivation to prevent their subordinates from forming cooperative relationships. If anything, they would be expected to enhance rather than hinder positive, cohesive relationships among group members, because doing so would presumably increase the appreciation and respect they receive from group members.

The Nature of the Group Hierarchy

Our hypotheses are predicated on the idea that negative leadership behaviors are caused in part by a desire to protect one's place in the social hierarchy. Most hierarchies are malleable, insofar as there is some potential for upward or downward mobility in rank (Sapolsky, 2005; Van Vugt et al., 2008; see also Ellemers et al., 1993). As such, top-ranking individuals may display chronic concerns about falling in rank (Maner, Gailliot, Butz, & Peruche, 2007; Tetlock, 2002). Indeed, across primate species, high-ranking individuals often show physiological signs of stress caused by the persistent possibility of losing their high rank (Sapolsky, 2005).

The current studies included design characteristics intended to hone in on the claim that attempts at thwarting cooperative alliances among group members are caused by a desire to protect one's rank from subordinates. We assessed this in two ways. First, in addition to "standard" power conditions in which people were given power over a group of subordinates, we included conditions in which the potential for losing one's rank was explicitly highlighted and made salient to participants. This would not be unlike

an election cycle in which groups are tasked with making new decisions about leadership roles and in which the potential threat to a leader's rank is likely to become especially salient and immediate (Tetlock, 1981). If suppressing the formation of cooperative alliances is motivated by a desire to protect one's rank from subordinates who could rise through the hierarchy, then making salient the potential for movement through the hierarchy should amplify participants' tendency to thwart those alliances. That is, although we might see evidence for negative leadership behaviors whenever dominance-motivated people perceive that their high rank could be at risk, those behaviors should become even more likely when explicit threats to their power are made especially salient.

Second, we included (in Experiment 4) a condition in which the leader's power was explicitly described as permanent and irrevocable. Such assurances should eliminate any concerns a leader has about losing his or her social rank to subordinates who may be in a position to assume leadership. If there is no perceived threat to a leader's position of power, there should be little need to safeguard that power. Thus, if dividing subordinates to suppress alliance formation is caused by leaders' desire to protect their power, that behavior should be reduced by assuring leaders that their position is permanent and mobility in the group ranks is not possible.

Thus, in these studies we documented changes in leadership behavior resulting from changes in the nature of the hierarchy. In addition to a control condition in which all group members had equal power, the first three experiments included a power condition in which participants were given power over their group, but the extent to which changes in the group hierarchy were possible was left ambiguous. This standard power condition allowed us to assess leadership behavior in the absence of any explicit information about whether mobility in the ranks of the group hierarchy was possible. Because many group hierarchies are neither obviously malleable nor obviously stable, the standard power condition conforms well to the nature of hierarchies outside the psychological laboratory. Moreover, the standard power condition is similar to many power manipulations in the scientific literature because such manipulations tend not to include explicit information about the stability versus instability of the hierarchy (e.g., Galinsky, Gruenfeld, & Magee, 2003; Lammers, Gordijn, & Otten, 2008). Under such circumstances, one might expect that chronic concerns about losing their power would cause dominance-motivated leaders to suppress cooperative relationships among subordinates.

Although dominance-motivated leaders may suppress positive relationships among their subordinates under circumstances of ambiguous stability, that tendency should be amplified when threats to their power are made salient. Therefore, in addition to a standard power condition, we also included an "unstable" power condition in which the potential for loss of rank was made explicit and salient (Experiments 1–4). We expected that the tendency for dominant leaders to divide their subordinates would be strongest in the unstable power conditions.

In contrast, the tendency to suppress positive relationships among group members should be reduced or eliminated when leaders are assured that their power is permanent. We tested that hypothesis in Experiment 4, by including a "stable" power condition—one in which the permanence of the leadership role was assured.

Qualities of the Subordinate

When dominance-motivated leaders are concerned about losing their power, they are likely to perceive some subordinates, more than others, as threats to their power. As we explained earlier, threatened leaders are likely to view highly skilled subordinates, in particular, as posing potential threats (Maner & Mead, 2010; Van Vugt et al., 2008). Talented subordinates may pose a particular threat because they are more capable than other group members of gaining support from others. Such individuals are thus in a particularly strong position to take over the leader's role, and that threat is amplified when they are able to enlist the support of other subordinates. Consider again the example of the alpha male chimpanzee: he tends not to be particularly threatened by subordinates at the bottom of the hierarchy, but rather by the second-rank beta male who is most able to usurp his position of power by forming a coalition with another subordinate male. Similarly, in human groups, a subordinate who is highly skilled and who possesses traits that are valuable to the group could threaten the incumbent leader. Thus, we predicted that leaders' dividing strategies would be aimed specifically toward preventing highly skilled subordinates from bonding with other group members and would not be directed at dividing subordinates who exhibit lower levels of skill. It is worth noting the irony in this predicted pattern of behavior: although highly skilled group members are best equipped to help their group succeed and achieve its goals, it is precisely those group members who might be suppressed and sequestered from other group members by their power-hungry leaders.

Overview of Current Studies

The current research tested the primary hypothesis that, as a means of protecting their own power, dominant leaders will try to prevent highly skilled subordinates from bonding and forming cooperative, close relationships with other subordinates. We conducted four experiments in which we investigated specific strategies leaders might employ to undermine a talented subordinate's ability to build alliances with other group members. We examined whether leaders might (1) limit communication among group members (Experiment 1), (2) prevent a talented group member from engaging in close, face-to-face interactions with other group members (Experiment 2), and (3) prevent social bonding among group members (Experiments 3–4).

Additionally, by identifying moderating variables, we sought to determine the specific conditions under which leaders might employ dividing strategies. We investigated whether dividing strategies would be directed selectively toward highly skilled subordinates, as opposed to just any subordinate. We also tested whether dividing strategies would be employed primarily by leaders high (relative to low) in dominance motivation, rather than those high in prestige motivation. Finally, in each experiment we also assessed whether the use of dividing strategies would be especially pronounced in groups characterized by overt instability in the hierarchy (unstable power). In Experiment 4, we examined whether the use of dividing strategies would be eliminated by telling leaders that their power was permanent and irrevocable (stable power).

Experiment 1

In Experiment 1, we tested the hypothesis that dominant leaders would try to reduce a skilled subordinate's ability to form alliances with other group members. The experiment focused on one strategy leaders might use to prevent alliance formation: limiting a skilled subordinate's ability to communicate with other subordinates. Participants were placed in positions of (1) standard power, (2) explicitly unstable power or (3) egalitarian control and were given the opportunity to determine the level of communication among group members. We expected those in power to limit communication among subordinates, an effect that we expected would be particularly apparent in the unstable power condition. Moreover, because only highly skilled subordinates should be viewed as threatening to the leader's power, we predicted that leaders would limit communication only with the skilled subordinate. Finally, we predicted that only those high in dominance motivation would limit communication with the skilled subordinate. We also measured prestige motivation—the desire for status and respect (as opposed to power); we did not expect leaders high in prestige motivation to undermine communication among their subordinates.

Method

Participants. Seventy-two introductory psychology students (50 female) participated in exchange for partial course credit. Four participants voiced substantial suspicion during debriefing and were excluded from analyses. This left 68 participants (47 female).

Design and procedure. Participants arrived individually for a study ostensibly investigating group communication and verbal performance. Participants were randomly assigned to a position of standard power, unstable power, or control (details below). They were told that they would be working with three group members who were in other rooms completing the initial study measures. (No other participants were actually present.) Experimenters then explained that, based on their group's performance on a number of collaborative word tasks, participants had the potential to earn cash prizes in a raffle drawing.

Participants then completed an abbreviated version of the Achievement Motivation Scale (AMS; Cassidy & Lynn, 1989), which was described as a measure of natural leadership ability.¹ The AMS served two functions in the study. First, it provided justification for the role assignment in both the power conditions. Because feelings of illegitimacy might reduce or eliminate powerprotection strategies (Lammers, Galinsky, Gordijn, & Otten, 2008), participants in both power conditions were told that their role assignment was determined in part by responses on the AMS. In the control condition, participants were simply informed that the measure assessed leadership ability. Second, in addition to supporting the cover story, the AMS provided individual difference measures of dominance and prestige motivation. The dominance subscale consisted of four items assessing a person's desire for power and authority (e.g., "I enjoy planning things and deciding what other people should do," "I think I would enjoy having authority over other people"; 1 = strongly disagree, 5 = strongly agree)($\alpha = .80 M = 3.66$, SD = 0.63). Desire for prestige was measured with four items assessing participants' desire for respect and admiration (e.g., "I would like an important job where people look up to me," "I like to be admired for my achievements")($\alpha =$

.62, M = 3.83, SD = 0.53). Measures of dominance motivation and prestige motivation were moderately correlated, r = .42, p < 0.01

Participants also completed a 10-item multiple choice version of the Remote Associates Task (RAT; Mednick, 1968), which purportedly assessed general verbal ability. The RAT required participants to select one word (from a list of four) that tied together a set of three other words. For clarification, the following example was provided: If the word set consisted of *sea*, *table* and *lick*, the fourth word would be *salt*. Once the participants completed the AMS and RAT, the experimenters asked them to wait, purportedly while the other participants finished.

After ostensibly scoring the AMS and the initial RAT, experimenters delivered the power manipulation, which was adapted from previous power research (e.g., Galinsky et al., 2003; Maner & Mead, 2010). In both the standard power and unstable power conditions, participants were told that they had earned the highest combined score on the leadership and verbal ability scales and were thus the most qualified to lead their group on the next word task (also a RAT). Participants were told that, as leader, they would make important decisions for the group: they would (ostensibly) evaluate their subordinates at the end of the second RAT and would determine how to divide the rewards their group earned on the task. Thus, in the two power conditions, participants were given alleged control over the second RAT and associated rewards.

In the egalitarian (no power) control condition, experimenters explained that the group members would have equal authority and all rewards would be split evenly among members. So that all conditions contained equivalent levels of positive feedback, participants in the control condition were also told they had earned the highest combined score on the AMS and RAT.

Next, all participants were told they would begin the second, more difficult word task. As before, this task would be completed individually, but each group member's score (number of correct answers out of 10) would be combined to create a total group score. That total score would determine how many raffle tickets the group earned. Once participants completed this second RAT, experimenters pretended to score it and told participants that their group had earned a total of 25 raffle tickets. The second RAT provided us with an opportunity to describe one of the group members as particularly skilled at the task: participants were told that one of their group members had scored 90% on the second RAT; this person might thus be perceived as a threat to the participant's power (particularly in the unstable power condition).

All participants were then told that they would soon be completing a third and final RAT. Participants in all three conditions were informed that before the final word task, they would take a short break during which they and their group members would have an opportunity to chat with each other by sending instant messages (IMs) on the computer. Individuals in both the unstable and standard power conditions were informed that, as leader, they would decide how many IMs each group member was able to exchange with each of the other three members. Control partici-

¹ Because of experimenter error, participants received an abbreviated version of the AMS (four of seven items for each scale). Nevertheless, measures of dominance and prestige motivation both displayed adequate reliability.

pants were ostensibly selected at random to decide how many IMs group members would exchange.

At this point, the unstable power manipulation was delivered. Participants in the unstable power condition were told that after the IM exchange session, the group would get to collectively decide who would serve as leader for the final RAT; thus, participants were told explicitly that they might lose their powerful role in the group. In contrast, leaders in the standard power condition were not provided any information about the stability of their role. Thus, the stability of their role was left ambiguous.

Next, the dependent variable was introduced. Participants in all three conditions completed a communication flowchart that included the same-sex names and scores of the other ostensible group members; this chart designated the number of messages each pair of group members would be allowed to exchange with each other. Participants indicated how many IMs should be exchanged between each pair of group members. The only constraint for the communication flowchart was that the total number of IMs had to be between 10 and 25. This allowed us to assess the degree of communication participants allowed to take place among all group members. More importantly, it allowed us to test the hypothesis that dominance-motivated leaders would seek to limit communication specifically between the skilled subordinate and the other subordinates. Once participants completed the dependent measure, they were carefully probed for suspicion and debriefed.

Results

Preliminary analyses showed that, across the whole sample, participants allotted an average of 22 IMs (M=21.84, SD=3.98, range=10 to 25) out of the available 25. Multiple regression was used to evaluate effects of power on the extent to which participants allowed subordinates to communicate with the skilled but potentially threatening group member. Experimental conditions were first dummy coded to compare both the standard power and unstable power conditions with the egalitarian control condition. A secondary analysis directly compared the standard power condition against the unstable power condition. To assess moderating effects of dominance motivation and prestige motivation, those measures were included simultaneously in all regression models, in addition to their centered interactions with experimental condition. All results for the primary analyses can be found in Table 1.

Primary analyses. Our primary prediction was that dominant leaders in an unstable hierarchy would limit communication between the skilled subordinate and other subordinates. In line with our predictions, we observed an interaction between unstable power (vs. control) and level of dominance motivation. In response to unstable power, higher levels of dominance motivation were associated with an increased tendency to restrict communication between the skilled group member and other subordinates (see Figure 1). The interaction was probed following procedures recommended by Hayes & Matthes (2009; see also Johnson & Neyman, 1936). We identified the region of the dominance distribution beyond which the simple effect of unstable power (vs. control) became statistically significant. For dominance scores at or above 4.44 (+1.24 SD), participants assigned to unstable power permitted significantly (i.e., $p \le .05$) fewer IMs than those in the egalitarian control condition.

Notably, this interactive pattern was not observed for communication between the two nonskilled subordinates ($\beta = -.20$, p = .36, semipartial r(sr) = -.12) (see Figure 1), between the participant and the skilled subordinate ($\beta = -.02$, p = .93, sr = -.01), or between the participant and the nonskilled subordinates ($\beta = -.14$, p = .49, sr = -.08). Thus, the pattern was highly specific: dominance-motivated participants sought to limit communication only between the highly skilled subordinate and other group members.

In addition to effects associated with dominance motivation, we also observed a marginally significant interaction between unstable power (vs. control) and prestige motivation ($\beta = .36$, p = .08, sr = .22). The pattern was opposite that observed for dominance motivation: in response to unstable power, lower (not higher) levels of prestige motivation were associated with an increased tendency to limit communication between the skilled group member and other subordinates. For participants at the bottom end of the prestige distribution (2.75 on a 5-point scale), individuals assigned to a position of unstable power allowed marginally fewer messages than those in egalitarian control (p = .07). At the upper end of the prestige distribution (5 on a 5-point scale), there was a trend such that participants assigned to unstable power permitted more messages than those in control (p = .13).

Effects were observed only in response to unstable power (vs. control); no significant main effects or interactions associated with

Table 1
Primary Analyses: Experiments 1–3

	Experiment 1 Talented Subordinate Communication				Experiment 2		Experiment 3 Work Style Orientation for Talented Subordinate				
					Selection of Room Arrangement 3						
Outcome Variable	β	t	p	sr	b	Wald	p	β	t	p	sr
Unstable Power vs. Control	04	23	.82	07	2.61	1.25	.26	12	98	.33	10
Standard Power vs. Control	08	56	.58	03	2.68	1.37	.24	01	11	.91	01
Dominance Motivation	.26	1.27	.21	.16	-5.37	2.33	.13	.45	1.75	.08	.18
Prestige Motivation	10	50	.62	06	7.97	2.60	.11	.002	.006	.995	.001
Unstable vs. Control × Dominance	48	-2.26	.03	28	6.80	3.17	.08	47	-2.29	.02	23
Unstable vs. Control × Prestige	.36	1.79	.08	.22	-13.91	4.99	.03	.11	.50	.62	.05
Standard vs. Control × Dominance	22	-1.34	.19	17	5.70	1.99	.16	36	-1.75	.08	18
Standard vs. Control \times Prestige	.09	.53	.60	.07	-8.33	2.42	.12	.08	.36	.72	.04

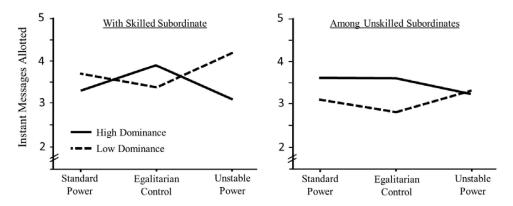


Figure 1. Experiment 1: For subordinate communication that included the skilled group member (left panel), unstable power (vs. control) led highly dominance-motivated people to restrict communication among subordinates. That pattern did not emerge when communication was between subordinates of relatively lower skill (right panel). Higher numbers reflect a greater average number of IMs permitted between subordinates by the participant. For ease of explication, simple regression slopes are depicted at ± 1 SD.

the standard power condition (vs. control) were observed for communication between the talented subordinate and other group members. Additionally, there was no interaction between standard power (vs. control) and dominance motivation for communication among unskilled subordinates ($\beta = -.06$, p = .79, sr = -.03), between the participant and the skilled subordinate ($\beta = .13$, p = .44, sr = .10), or between the participant and the unskilled subordinates ($\beta = .04$, p = .80, sr = .03). As was the case for dominance motivation, interactive effects of standard power (vs. control) and prestige motivation were not observed for communication between any other group members (ps < .19).

Secondary analyses. Secondary analyses directly compared the standard power condition with the unstable power condition. There were no significant effects. We found no interaction between unstable power (vs. standard power) and dominance motivation on the number of IMs permitted among the threatening group member and other subordinates ($\beta = -.17$, p = .37, sr = -.11). We also did not find any significant interaction between unstable power (vs. standard power) and prestige motivation ($\beta = .34$, p = .18, sr = .17). Thus, although unstable power differed from control whereas standard power did not, the two power conditions did not differ significantly from one another.

Discussion

Communication among group members is critical for facilitating the development of cooperative and cohesive relationships among group members and it enhances group functioning (Das & Teng, 1998; Seppänen et al., 2007). Consequently, leaders who limit such communication may undermine their group's performance. Nevertheless, Experiment 1 demonstrated that leaders high in dominance motivation and in an unstable hierarchy limited the extent to which a skilled subordinate could communicate with other subordinates. This pattern of findings is consistent with our hypothesis that dominant leaders would perceive the skilled subordinate as a threat and would seek to prevent that subordinate from interacting closely with—and potentially building alliances with—other group members.

Several pieces of evidence support the interpretation that leaders' attempts at restricting communication were caused by a desire to protect their power from the skilled subordinate. First, those attempts were observed only among leaders high in dominance motivation—individuals who tend to prioritize their own power over group goals. The same tendency was not observed among individuals high in prestige motivation—those who seek freely conferred deference and respect from the group. Indeed, among prestige-motivated individuals, there was some (albeit relatively weaker and nonsignificant) evidence for trying to increase the level of communication between the skilled subordinate and other group members. Second, attempts at restricting communication were most pronounced among leaders in an unstable hierarchythose who knew they could lose their position of power. When their power was ambiguous with respect to whether it could be lost (i.e., the standard power condition), dominance-motivated participants displayed a nonsignificant trend in the same direction, but this effect was more apparent when instability within the hierarchy was made explicit. This suggests that, although chronic concerns about loss of power might cause dominant leaders to protect their position, the presence of overt instability is especially motivating. Third, dominant leaders restricted the lines of communication only between the highly skilled subordinate and other group members; leaders did not limit the number of IMs that could be exchanged among the nonthreatening group members or between themselves and subordinates. In sum, the effect we observed was highly specific and suggests that a desire to protect their power caused dominance-motivated leaders to prevent a skilled group member from communicating closely and potentially building alliances with other subordinates.

Experiment 2

In Experiment 2, we sought to replicate and extend the findings from Experiment 1 with a different dependent variable. Rather than assessing the degree to which participants restricted a skilled subordinate's ability to communicate with others, we assessed whether participants might physically isolate the skilled subordi-

nate: participants chose whether the skilled subordinate would work in the same or a different room than the other subordinates. Moreover, participants were told that being in the same room would facilitate cooperation and enhance task performance, thus creating clear incentives for assigning participants to work in the same room. Nevertheless, despite the negative influence isolation might have on cooperation and group performance, we predicted that dominance-motivated participants in a position of unstable power would prefer to isolate the skilled subordinate, so as to prevent that subordinate from bonding with or forming alliances with other group members.

Method

Participants. Seventy introductory psychology students (39 women, 1 gender not reported) participated in exchange for partial course credit. Five participants were excluded from analyses because they reported high levels of suspicion. Of the remaining 65 participants, 35 were women and 1 did not report his or her gender.

Design and procedure. Participants arrived individually and were randomly assigned to a position of unstable power, standard power, or control, each under the guise that they were working with three other group members to earn rewards for their performance. Following the same procedures as in Experiment 1, participants first completed the AMS and the RAT. Seven-item measures of dominance motivation ($\alpha = .84$, M = 3.63, SD = 0.54) and prestige motivation ($\alpha = .76$, M = 3.83, SD = 0.48) were highly correlated, r = .65, p < .001. The power manipulation was then delivered. All participants were told that they had earned the highest combined score on the AMS and RAT. Additionally, participants in the power conditions were told they would evaluate their subordinates on the next RAT and would be able to divvy the rewards among group members. (Neither of these actually took place). Control participants were informed that all group members would work equally on the next RAT and would split the rewards evenly.

After completing the second RAT, all participants were given feedback indicating that one group member was exceptionally skilled at the task. As in the previous experiment, that high-scoring group member could be perceived as a threat, especially in the unstable power condition. Participants were then told that three group members would work on a different verbal task and then all group members would perform the last RAT. For this interstitial task, participants were told that they would decide how the other group members would work; leaders were told the decision was part of their role as leader and control participants were ostensibly selected at random to make this decision. Before participants made their decision, the stability of the hierarchy was manipulated as in Experiment 1: participants in the unstable power condition were told explicitly that their role could be reassigned whereas those in the standard power condition were provided no information regarding the stability or instability of their role.

Next, the dependent variable was introduced. Participants were asked to select their favorite of five potential room arrangements for their group members (See Figure 2). Participants were told that group members in the same room would be able to cooperate during the task whereas group members in different rooms would not be able to cooperate. Participants were also told that cooperation among group members could improve task performance.

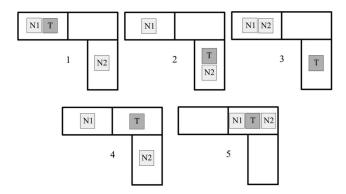


Figure 2. Experiment 3: To assess desired proximity between the highly talented individual and other group members, participants stated their preferences for five possible rooming arrangements. Only Arrangement 3 specifically isolated the talented group member from the other two, neutral group members. Although participants saw only the initials and RAT scores of their ostensible group members in each of the three boxes, the following labeling scheme is employed in the figure for illustrative purposes: N1 = Neutral Group Member 1; N2 = Neutral Group Member 2; T = Talented Group Member.

Thus, there was clear incentive for leaders to choose room arrangements that allowed group members to cooperate and communicate closely with one another. Each arrangement had three separate rooms available for group members to work in, and all possible combinations of work arrangements were present: group members could work all together, all individually, or a mixture of two together with only one member isolated. Only one of the five room arrangements (Arrangement 3) isolated *only* the highly skilled (and thus potentially threatening) group member. As such, participants worried about the skilled group member bonding with others should be especially likely to select Arrangement 3. Thus, whether or not participants chose Arrangement 3 served as the dependent variable.

Results

Logistic regression was used to evaluate the effects of unstable power and standard power (each vs. control) on whether leaders selected the room arrangement that isolated the highly skilled but threatening group member. In all analyses, the outcome variable was coded 1 for participants who chose Arrangement 3 and 0 for those who chose one of the other 4 possible arrangements.² These choices were predicted from power condition (dummy coded to compare each of the two power conditions with control), levels of dominance motiva-

 $^{^2}$ Arrangement 3 most clearly mapped on to our conceptualization of the subordinate dividing strategy because it isolated only the talented subordinate and no other group members. However, because Arrangement 4 isolated all subordinates, we also examined the extent to which dominant leaders in unstable power (vs. control) selected *either* Arrangement 3 or 4 for their group members (vs. one of the other arrangements). The interaction between unstable power (vs. control) and dominance motivation was marginally significant ($b=6.47, Wald \ \chi^2=2.95, \ p=.086$). Similar to selection of Arrangement 3, the interaction between unstable power (vs. control) and prestige motivation for selection of either Arrangement 3 or 4 was also significant ($b=-13.11\ Wald\ \chi^2=5.05,\ p=.03$).

tion, levels of prestige motivation, and their centered interactions with experimental condition. A secondary analysis directly compared unstable power with standard power. See Table 1 for all primary results.

Primary analyses. Conceptually replicating the pattern from Experiment 1, we observed an interaction between unstable power (vs. control) and level of dominance motivation that approached significance (see Figure 3). At the upper end of the dominance distribution (5 on the 5-point scale), participants assigned to unstable power (vs. control) were (marginally) more likely to select Arrangement 3 (p=.09). The interaction between dominance and unstable power did not approach significance for any of the other four room arrangements (all ps>.63). Thus, dominant leaders responded to unstable power by seeking to isolate the highly skilled subordinate, but not any other group members. The effect was also limited to the unstable power condition (vs. control). No such interaction was observed in the standard power condition (vs. control).

Despite the relatively strong positive correlation between dominance and prestige motivation, we found that unstable power (vs. control) also interacted with prestige, but in the opposite direction: prestige-motivated leaders in an unstable hierarchy were significantly less likely to isolate the highly skilled subordinate. (As with dominance, this pattern was specific to the room arrangement that isolated the skilled subordinate.) For prestige scores at or above 4.63 (+1.72 SD), participants assigned to unstable power (vs. control) were significantly less likely to choose Arrangement

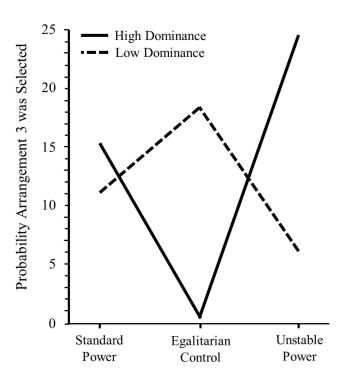


Figure 3. Experiment 2: Among leaders with unstable power, high dominance motivation was associated with a greater probability of selecting the room arrangement that only isolated the skilled subordinate (Arrangement 3). Higher numbers reflect a greater probability that Arrangement 3 was selected. For ease of explication, simple regression slopes are depicted at ± 1 SD.

3—the arrangement that isolated the skilled subordinate. As with dominance, this effect was limited to responses to unstable power; no interaction was observed between prestige motivation and standard power (vs. control).

Secondary analyses. Secondary analyses compared unstable power with standard power. No significant effects were observed. We observed no interaction between unstable (vs. standard) power and dominance motivation (b = 1.10, $Wald \chi^2 = .20$, p = .66) for selecting the room arrangement that isolated the talented subordinate. We also found no interaction between unstable power (vs. standard power) and prestige motivation (b = -5.57, $Wald \chi^2 = 1.67$, p = .20).

Discussion

Leaders high in dominance motivation who were in an unstable hierarchy selected the room arrangement that isolated the highly skilled subordinate. Moreover, they did so even though cooperation among group members was described as a good strategy for enhancing task performance. As in the previous experiment, the pattern was highly specific; those same dominant leaders did not isolate any of the other subordinates. The pattern was also specific to the unstable power condition; participants isolated the skilled subordinate only when participants knew their power could be lost. These findings provide evidence supporting the hypothesis that dominant leaders concerned about losing their power employ tactics aimed at keeping a threatening subordinate from cooperating and potentially allying themselves with other group members.

In contrast to those high in dominance motivation, leaders high in prestige motivation responded to a position of unstable power by trying to ensure that the skilled subordinate was paired with—not isolated from—other group members. This tendency could reflect the different approaches prestigemotivated and dominance-motivated individuals take to leadership. Although dominance-motivated people tend to seek leadership roles to attain power and control, prestige-motivated people aim to achieve the status and respect that often comes with leadership. As such, it is possible that prestige-motivated leaders work to protect their status by promoting group cooperation, which they were told was an effective strategy for achieving success.

Although the results of Experiment 2 corroborated those of Experiment 1 and provided further support for the "divide and conquer" tactic, they are not without limitation. Whereas Experiments 1 and 2 showed that dominant leaders in unstable hierarchies sought to isolate and deter communication and cooperation with a skilled subordinate, those studies fell short of directly examining whether dominant leaders wish to prevent skilled subordinates from socially bonding or forming personal alliances with other group members. To address this limitation, we conducted two additional experiments to more directly assess the extent to which leaders might seek to prevent a skilled subordinate from bonding with other group members.

Experiment 3

In Experiment 3, we assessed whether dominant leaders would try to prevent a skilled subordinate from bonding with others. To accomplish this, we replicated the methods of Experiments 1 and 2, but altered the dependent variable to directly assess participants'

desire to prevent social bonding among subordinates, as opposed to merely preventing social interaction. Participants indicated whether they wanted the group's work style to be strictly taskoriented versus more interpersonally oriented. Both types of work styles would involve face-to-face interaction among subordinates, but only the interpersonally oriented work style would facilitate social bonding and the formation of friendships and cooperative alliances. Our theoretical framework implies that leaders concerned about their subordinates forming alliances should view social bonding among subordinates as especially threatening. Consequently, we predicted that dominance-motivated (but not prestige-motivated) leaders would prefer a task-oriented work style over an interpersonally oriented work style for their group, and that this would be the case especially when the hierarchy was explicitly unstable. Furthermore, we predicted that those leaders would prefer task-oriented communication among subordinates only when a highly talented group member was present.

Method

Participants. Ninety-six introductory psychology students (71 women) participated in exchange for partial course credit.

Design and procedure. Participants arrived individually for a study under the pretense that they would be working with four other group members. Each participant was randomly assigned to a position of unstable power, standard power, or control. The study procedures were identical to those of Experiments 1 and 2: participants first completed the AMS and the RAT. Measures of dominance motivation ($\alpha = .75$, M = 3.64, SD = 0.50) and prestige motivation ($\alpha = .74$, M = 3.83, SD = 0.50) were highly correlated r = .68, p < .001. Then, the power manipulation was delivered; that manipulation was identical to that used in Experiments 1 and 2.

Upon completion of the next RAT, all participants were provided feedback indicating that one group member was exceptionally skilled at the task. As in Experiments 1 and 2, we reasoned that the high-scoring group member would be viewed as a threat by dominant leaders, especially in the unstable power condition. At this point, participants were informed that two pairs of group members would work on a different verbal task. Following that task, all five group members would (ostensibly) perform the final RAT. All participants were told that, for the paired verbal task, they would select how the other four group members would work.

After the manipulation of standard versus unstable power (which was identical to that used in the previous studies), participants completed the dependent variable. All participants were asked to indicate the extent to which they wanted each pair of group members to use a task-oriented versus interpersonally oriented work style on a four-point Likert scale (1 = certainly task-oriented, 2 = probably task-oriented, 3 = probably interpersonally oriented, 4 = certainly interpersonally oriented). The interpersonally oriented work style was described as one in which the pair would be able to socialize and get to know one another well while they worked. Thus, this work style could facilitate social bonding and the formation of personal alliances. Conversely, the task-oriented work style was described as being strictly limited to the verbal task. Participants were told that, in this work style, pairs of group members would not be able to socialize or to get to know one another personally. Participants were assured

that the two work styles were equivalent in terms of the likely performance outcomes. Thus, the only difference was whether or not the partners would get to socialize and bond with one another.

Participants were asked to indicate how much they desired a task-oriented versus interpersonally oriented work style for both pairs of group members. We devised this setup so that we could further examine the specificity of leaders' responses: the first pair of group members included the highly skilled (and thus potentially threatening) group member, whereas the second pair included two nonthreatening individuals. Our primary hypothesis was that dominant leaders in unstable hierarchies would prefer the task-oriented work style only for the pair that included the skilled subordinate. We did not expect this same response for the other pair (the two nonthreatening subordinates).

Results

Multiple regression was used to evaluate effects of unstable power and standard power (each vs. control) on the extent to which participants preferred each pair of subordinates to work in a task-or interpersonally oriented fashion. As in previous experiments, conditions were first dummy coded to compare both unstable and standard power with the egalitarian control condition. They were subsequently coded to compare unstable power with standard power. To evaluate moderating effects of dominance and prestige motivation, those measures were included in the regression models, in addition to their centered interactions with experimental condition. See Table 1 for results of the primary analyses.

Primary analyses. We predicted that dominant leaders in unstable hierarchies would prefer a task-orientation work style for the pair of subordinates that included the highly skilled group member. In line with our predictions, and consistent with findings from the previous studies, we observed an interaction between unstable power (vs. control) and level of dominance motivation. In response to unstable power, higher levels of dominance motivation were associated with an increased tendency to choose task orientation for the pair of subordinates that included the highly skilled group member (see Figure 4). For dominance scores at or above 3.86 (+.44 SD), participants assigned to unstable power (vs. control) significantly preferred a task-oriented work style for the pair that included the highly skilled subordinate. Dominant leaders in unstable power did not show any preference for task- versus interpersonally oriented work styles for the other pair of (nonthreatening) subordinates ($\beta = .01, p = .95, sr = .007$) (see Figure 4). Thus, in line with our hypotheses, those leaders only sought to prevent the highly skilled subordinate from socializing and potentially bonding with another group member.

Although it did not reach significance, there was also an interaction whereby dominance-motivated leaders in standard power (vs. control) also preferred task orientation for the subordinate pair with the talented group member. However, the simple effect of standard power did not reach significance even at the extreme upper end of the dominance distribution. Leaders in standard power at the upper end of dominance motivation (highest score in the sample was 4.86 out of 5) only trended toward preferring task orientation for the pair of subordinates with the highly skilled group member (p=.10). Thus, although the pattern for standard power took the same form as that for unstable power, the pattern for unstable power was considerably stronger.

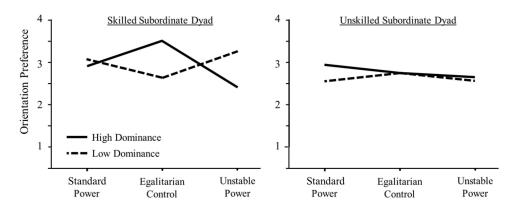


Figure 4. Experiment 3: When one of the individuals in the pair was a skilled group member (left panel), high dominance motivation was associated with greater desire for task over interpersonally oriented work style, but only when participants were in a position of unstable power. That pattern did not emerge when participants selected work styles for a pair of group members of relatively lower skill (right panel). Higher numbers reflect a greater desire for an interpersonally oriented work style, whereas lower numbers reflect a preference for a task-oriented work style. For ease of explication, simple regression slopes are depicted at ± 1 SD.

Moderating effects in this study were limited to individual differences in dominance motivation; no effects were found for prestige motivation. In Experiments 1 and 2, leaders with unstable power who were high in prestige motivation showed the opposite pattern of results when compared with those high in dominance motivation. This effect was not replicated in Experiment 3. There was no interaction between prestige motivation and either power condition on work style preference for either of the subordinate pairs (ps > .62).

Secondary analyses. As in Experiments 1 and 2, there was no interaction between unstable (vs. standard) power and dominance motivation on whether participants preferred an interpersonal versus task-oriented work style for the pair of group members with the talented subordinates ($\beta = -.19$, p = .39 sr = -.09). We also did not find a significant interaction between unstable power (vs. standard power) and prestige ($\beta = .04$, p = .84, sr = .02). (No significant effects were found either when analyzing work style preferences for the two nonthreatening subordinates; ps > .63.) Therefore, although unstable power differed from control whereas standard power did not, the two power conditions did not differ from one another when directly compared.

Discussion

Dominant leaders in an unstable hierarchy sought to prevent a talented subordinate from working with a partner in a context that would facilitate social bonding and the possible formation of alliances. As in the previous two experiments, that effect was highly specific; those same dominant leaders did not try to prevent the less talented pair of subordinates from being able to bond interpersonally. The results of Experiment 3 corroborated those of Experiments 1 and 2 and thus provide additional support for use of the "divide and conquer" strategy.

However, because each of the first three studies did not include a truly stable power condition in which leaders' power was irrevocable, they preclude a direct comparison between the behavior of leaders with tenuous power and those whose power is explicitly secure and cannot be lost. Experiment 4 provided such a comparison by including a stable power condition and comparing it with the unstable power condition.

Supplemental Study

Before moving on to Experiment 4, we first report a supplemental study aimed at providing further insight into participants' perceptions of instability in each of the power conditions. Experiments 1-3 demonstrated that although dominant leaders with power that was explicitly tenuous sought to divide their subordinates, dominant leaders for whom power stability was ambiguous (those in the standard power condition) were not more likely than control participants to divide members of their group. However, in none of those studies did the unstable power condition and the standard power condition differ from one another. This is consistent with the possibility that, in the absence of any explicit information about the stability of the hierarchy, some leaders might still worry about their ability to maintain power and thus might display a general vigilance toward other group members who could threaten their power. Indeed, many real-world hierarchies involve the potential for perpetual changes in the hierarchy and thus people may develop a general expectation that no position of power is permanent.

To test these ideas, we conducted a supplemental MTurk study (n=122) in which participants imagined themselves in charge of three subordinates in one of three conditions of power (between-subjects): (1) unstable power, (2) standard power, or (3) stable power. The first two conditions mirrored the power conditions of Experiments 1–3. In the new stable power condition, participants were explicitly informed that their role as leader was permanent and could not be lost. Participants in all three conditions completed a perceived stability scale, which consisted of five items assessing their perceptions of leadership role stability (e.g., "My role as project manager would be permanent," "It would be possible for me to lose my role as manager" (reverse-scored); 1 = strongly disagree, 7 = strongly agree)($\alpha = .91 M = 4.15$, SD = 1.74). In addition to the perceived stability scale, we also included a measure of role-loss anxiety, which included five items to assess how

anxious participants would feel about the possibility of losing their role (e.g., "I would be concerned about the possibility of losing my role as manager," "I would not be nervous about losing my position as project manager" (reverse-scored); 1 = strongly disagree, 7 = strongly agree)($\alpha = .83 \ M = 3.71, \ SD = 1.48$). Measures of perceived stability and anxiety were negatively correlated, $r = -.55, \ p < .001$.

Analyses revealed that leaders in stable power perceived greater stability (M=5.74, SD=1.39) than those in standard power (M=3.83, SD=1.15), $\beta=.52$, p<.001, sr=.45. In turn, leaders in standard power perceived their positions as more stable than those in unstable power (M=2.93, SD=1.36), $\beta=.25$, p=.002, sr=.21. Thus, leaders in standard power perceived a moderate amount of role instability, at a level that was in between that of the explicitly unstable and explicitly stable power conditions

Additional analyses were performed for measures of role-loss anxiety. Leaders in standard power reported greater anxiety about losing their role (M=3.72, SD=0.95) than did those in stable power (M=2.92, SD=1.51), $\beta=.26$, p<.01, sr=.22. In turn, leaders in unstable power reported greater anxiety about losing their position (M=4.47, SD=1.52) than those in standard power, $\beta=.24$, p=.02, sr=.21. Thus, leaders in standard power reported moderate levels of role-loss anxiety, in between that of explicitly unstable and explicitly stable power conditions.

Results of the supplemental study provide additional support for the assertion that leaders with standard power in Experiments 1–3 responded to power threats in ways that were similar to (albeit weaker than) leaders with unstable power because they perceived their role as somewhat pervious to change and worried about the possibility of losing it. Because the supplemental study demonstrated that leaders with explicitly stable power did not believe their position could be lost, that condition was included in Experiment 4 to further elucidate the role of perceived stability in leaders' tendency to thwart cooperative relationships among their subordinates.

Experiment 4

Experiment 4 included an explicitly stable power condition in which power was permanent, and thus provided another important test of our conceptual framework. We expected that, once they were assured that their power could not be lost, participants in the stable power condition would display the same behavior as those in the control condition and would differ substantially from those in the unstable power condition.

In addition to this design change, Experiment 4 also afforded another opportunity to test whether the behavior of dominant leaders is aimed specifically at preventing a talented subordinate from bonding with another group member. Participants were given the opportunity to pair a talented subordinate with another group member who was described as having a personality style that was either matched or mismatched with that of the talented subordinate. Although the design of the study left participants with no choice but to pair the talented subordinate with another group member, they were able to choose whether they wanted that skilled group member to work with someone who had the same or opposite personality type. People with similar personality types were described as being most likely to form close interpersonal

relationships. People with opposite personality types were described as being unlikely to form a friendship. As such, both options would involve face-to-face interaction between the talented subordinate and another group member, but whereas subordinate pairs with matching personality types would allow for social bonding, mismatched personality types would discourage social bonding. Because our theoretical framework implies that leaders concerned about their subordinates forming alliances should be threatened by social bonding among talented subordinates, we predicted that dominance-motivated (but not prestige-motivated) leaders in unstable power (but not stable power) would pair the talented subordinate with a group member of a mismatched personality type.

Method

Participants. Eighty-nine introductory psychology students (65 women) participated in exchange for partial course credit.³

Design and procedure. Participants arrived individually for a study under the pretense that they would be working with three other group members. Each participant was randomly assigned to a position of unstable power, stable power, or control. The unstable power and control conditions were the same as in Experiments 1-3. The stable power condition was new and differed from standard power in that participants were explicitly told that, regardless of what occurred during the study, they would maintain their current role as leader of their group for the remainder of the study. As in Experiments 1-3, participants first completed the AMS and the RAT. Measures of dominance motivation ($\alpha = .82$, M = 3.46, SD = 0.62) and prestige motivation ($\alpha = .74$, M =3.76, SD = 0.51) were highly correlated r = .69, p < .001. In addition to completing the AMS and RAT, participants also completed a bogus personality questionnaire (an unscored version of the TIPI; Gosling, Rentfrow, & Swann, 2003) for the purpose of providing participants with feedback about the personality types of the group members. Then, the power manipulation was delivered. All participants were informed that they had achieved the highest combined score on the AMS and RAT, but only leaders were told that they would (ostensibly) evaluate their subordinates on the next RAT and would choose how to allocate the rewards earned by the group among members. Control participants were told that each group member would work as equals on the second RAT and that the rewards would be evenly divided.

Upon completion of the next RAT, all participants were provided feedback indicating that one group member was exceptionally skilled at the task. As in Experiments 1–3, we reasoned that the high scoring group member would be viewed as a threat by dominant leaders in the unstable power condition. Participants were also given information about the ostensible personality types of their group members (participants were told they would not learn their own personality type until the end of the study). The experimenter explained that there were two general personality

³ Because of abundant procedural errors by one research assistant, data from an additional 15 participants collected by that research assistant were excluded from analyses. Because those procedural errors were caught midway through the study, the research assistant who was delivering the protocol incorrectly was promptly removed from the research team and the decision was made to exclude her data. No other participants were excluded from data analysis.

types ("Red" and "Blue"). The talented subordinate was described as having a Red personality type. One of the less skilled group members was described as having a Red personality type and the other had a Blue personality type. No information was given about what the personality types meant, other than that there was no difference in task ability between Red and Blue personality types.

Participants were then told that a pair of subordinates would work on a verbal task. One was the skilled subordinate and participants were asked to select a second person to work with the skilled subordinate. Before completing this measure, it was explained to participants that people with the same personality type often get along, cooperate well, and form close bonds, whereas those with different personality types do not tend to like one another as much and tend not to form close bonds.

Because the skilled subordinate had a Red personality type, the participant was tasked with pairing that individual with a second subordinate who either had the same (Red) or opposite (Blue) personality type. All participants were asked to indicate the extent to which they wanted the talented group member to work with Group Member 2 (Red personality) or Group Member 4 (Blue Personality) on a four-point Likert scale, where higher numbers indicated a greater desire for the personality-mismatched partner. Participants were assured that the two personality types were identical in terms of the likely verbal task performance outcomes, so the only difference was whether or not the partners would be likely to form a close social bond. Our primary hypothesis was that dominant leaders in unstable hierarchies would be more likely than those in stable hierarchies (and egalitarian control) to pair the skilled subordinate with the mismatched partner in order to prevent them from bonding or forming an alliance.

Results

Multiple regression was used to evaluate effects of unstable power and stable power (vs. control) on the extent to which participants preferred the talented subordinate to work with the personality-mismatched group member, and to directly compare the stable and unstable power conditions. As in the previous experiments, experimental conditions were first dummy coded to compare both unstable and stable power with the egalitarian control condition. Then, they were dummy coded to compare the stable power with the unstable power condition. To evaluate moderating effects of dominance and prestige motivation, those measures were included in the regression models, in addition to their centered interactions with experimental condition. The main results for this study can be found in Table 2.

Primary analyses. We predicted that dominant leaders in unstable hierarchies (vs. control) would be more inclined to want the talented subordinate to work with the mismatched personality group member. In line with our predictions, and consistent with findings from the previous three studies, we observed an interaction between unstable power (vs. control) and level of dominance motivation. In response to unstable power (vs. control), higher levels of dominance motivation were associated with an increased tendency to choose the personality-mismatched subordinate as a partner for the talented group member (see Figure 5). At the upper end of the dominance distribution (5 on the 5-point scale), participants assigned to unstable power (vs. control) had a (marginally) greater desire for the talented group member to work with a

Table 2
Primary Analyses: Experiment 4

		Experiment 4					
	Sel	Selection of Mismatched Personality Type					
	β	t	p	sr			
Unstable vs. Control	01	07	.94	01			
Stable vs. Control	13	-1.03	.31	11			
Dominance	16	67	.50	07			
Prestige	.50	2.09	.04	.22			
Unstable vs. Control × Dominance	.46	2.01	.05	.21			
Unstable vs. Control × Prestige	52	-2.25	.03	23			
Stable vs. Control × Dominance	07	39	.69	04			
Stable vs. Control × Prestige	21	-1.19	.24	12			
Stable vs. Unstable × Dominance	43	-2.33	.02	24			
Stable vs. Unstable \times Prestige	.12	.73	.47	.08			

personality-mismatched subordinate (p=.06). At the lower end of the dominance distribution (1.86 on the 5-point scale), participants in unstable power (vs. control) had a (marginally) lower desire for the talented subordinate to work with the mismatched group member (p=.06). The results are consistent with the prediction that dominant leaders with unstable power (vs. control) would be more likely to prevent a highly skilled subordinate from forming a close interpersonal bond with another group member.

We also observed a significant interaction between unstable power (vs. control) and prestige motivation. In response to unstable power (vs. control), higher levels of prestige motivation were associated with a decreased tendency to choose the personality-mismatched subordinate as a partner for the talented group member. For participants with prestige scores at or above $4.48 \ (+1.41 \ SD)$, being assigned to unstable power led to a significant (p=.05) decrease in desire to mismatch the subordinate personality types. Conversely, for prestige scores at or below $3.04 \ (-1.41 \ SD)$, participants assigned to unstable power (vs. control) displayed a significantly greater desire for the talented subordinate to work with a personality-mismatched group member. Those effects of prestige motivation when comparing unstable power with egalitarian control are consistent with the pattern exhibited in Experiments 1 and 2.

We then compared leaders in stable power with control participants to determine whether there was any difference in their preference for having the skilled subordinate working with a partner mismatched to him or her in personality type. Because leaders with stable power have no need to safeguard that power, we did not predict a difference between dominant leaders in stable power and egalitarian control. Consistent with our theoretical framework, there was no main effect of stable power when compared with control, nor was there an interaction between stable power (vs. control) and dominance motivation (see Table 2). Additionally, there was no interaction between stable power (vs. control) and prestige motivation. Thus, the stable power condition was equivalent to the control condition and did not elicit negative leadership behavior.

Comparing unstable power with stable power. Next, we compared leaders in unstable versus stable positions of power. We predicted that dominant leaders in unstable power (vs. stable power) would be more inclined to want the talented subordinate to

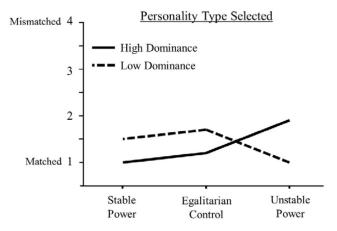


Figure 5. Experiment 4: Among leaders with unstable power, high dominance motivation was associated with relatively greater desire to pair the talented subordinate with a group member who had a mismatched (vs. matched) personality type. That pattern did not emerge for leaders with stable power. Higher numbers reflect a greater desire for the talented group member to work with a personality-mismatched partner. For ease of explication, simple regression slopes are depicted at $\pm 1~SD$.

work with the personality-mismatched group member. In line with that prediction, we observed an interaction between unstable power (vs. stable power) and level of dominance motivation. In response to unstable power (vs. stable power), higher levels of dominance motivation were associated with a greater tendency to choose the personality-mismatched subordinate as a partner for the talented group member (see Figure 5). For dominance scores at or above 3.66 (\pm .32 SD), participants assigned to unstable power (vs. stable power) displayed a significantly greater desire to pair the talented subordinate with a mismatched personality type. At the bottom of the dominance distribution (1.86 on the 5-point scale), there was a (marginally) lower tendency for unstable leaders (vs. stable power) to want the group member with the mismatched personality to work with the talented subordinate (p = .06). There was no interaction between unstable power (vs. stable power) and prestige motivation.

Meta-Analysis

The similar design of Experiments 1–4 allowed us to conduct a meta-analysis to assess the overall reliability of the key dominance motivation X unstable power (vs. control) interaction, as well as the relevant simple effects. Because Experiments 1–3 each had a condition of standard power, we were also able to assess the overall reliability of the dominance motivation X standard power (vs. control) interaction. We also assessed the overall reliability of the prestige motivation interactions (particularly its interaction with unstable power vs. control), as we saw some inconsistent evidence for an interactive effect opposite in direction from dominance motivation.

We used the Stouffer method (Mosteller & Bush, 1954) advocated by Rosenthal and Rosnow (1991). One-tailed *p* values for each effect (weighted by the study's corresponding degrees of freedom) were used to calculate the effect's overall reliability across experiments (see Rosenthal & Rosnow, 1991, p. 504).

The interaction between unstable power (vs. control) and dominance motivation was highly reliable when meta-analyzed across Experiments 1–4, z=4.08, p<.001. Decomposing the interaction confirmed that placing individuals relatively high in dominance motivation (+1 SD) into a position of unstable power (vs. control) led them to employ dividing strategies against talented subordinates, z=3.75, p<.001. Conversely, we saw evidence suggesting that leaders low in dominance motivation (-1 SD) responded to unstable power by ensuring that the talented group member interacted closely with other subordinates, z=-2.63, p=.009.

The interaction between prestige motivation and unstable power (vs. control) reached significance when meta-analyzed across the four experiments, z=-3.13, p=.002. The interaction was in the opposite direction of that between dominance motivation and unstable power (vs. control). Prestige-motivated leaders (+1 SD) in unstable power facilitated bonding among subordinates, z=-2.05, p=.04. However, like highly dominance-motivated leaders, leaders low in prestige motivation (-1 SD)—those who do not care much about whether they are respected and looked up to by their group—responded to unstable power (vs. control) by employing dividing strategies toward talented subordinates, z=3.03, p=.002.

Although it did not reach statistical significance in any of the individual experiments, the interaction between dominance motivation and standard power (vs. control) was significant when meta-analyzed across Experiments 1–3, z=2.58, p=.02. Participants high in dominance motivation (+1 SD) employed dividing strategies against skilled subordinates when placed in standard power (vs. control), z=2.41, p=.03. No effect was observed among participants low in dominance motivation (-1 SD), z=-1.41, p=.16. Prestige motivation did not interact with standard power (vs. control) when meta-analyzed across Experiments 1–3, z=-1.25, p=.21.

General Discussion

The presence of positive cohesive relationships among group members is a key ingredient for group success (Jehn & Shah, 1997). Groups also work better when their members cooperate and bond with one another so as to satisfy one another's need for social belonging (De Cremer, 2002). Consequently, facilitating cooperation and the formation of positive social bonds is a critical function served by group leaders (Van Vugt, 2006). To help their group achieve its goals, leaders are charged with encouraging group members to bond and cooperate with one another—to see themselves as a team.

However, despite the fact that leaders typically are expected to promote positive relationships among subordinates, some leaders may instead create divisions among their followers. Dominance-motivated leaders in these studies sought to divide highly talented group members from other subordinates as a way of protecting their own power. Just as alpha male chimpanzees divide beta from gamma males to prevent them from forming alliances, dominance-motivated leaders prevent talented subordinates from forming positive relationships with other group members, even though doing

⁴ We report in this article all studies we conducted to test our hypotheses. We did not omit any unsuccessful studies.

so could ultimately detract from the well-being of the group as a whole.

Divide and Conquer: A Strategy for Protecting a Leader's Power

These studies provide evidence for specific strategies leaders might use to divide their subordinates. In Experiment 1, leaders limited the degree to which a talented subordinate could cooperate and communicate directly with other group members. In Experiment 2, leaders prevented group cohesion by physically isolating a talented subordinate and placing him or her in a room alone, away from other subordinates. In Experiment 3, leaders went beyond simply limiting interaction among subordinates, specifically preventing a talented subordinate from socializing with others on a close, interpersonal level. In Experiment 4, leaders were disinclined from pairing a talented subordinate with a group member with whom the subordinate was likely to bond socially. These findings provide insight into specific tactics leaders might use to divide their subordinates as a means of protecting their own power. Indeed, this research goes well beyond simply showing that some people are highly motivated to protect their positions of power. It suggests that powerful leaders sometimes seek to undermine the cooperative fabric that binds groups together. The current findings have novel and potentially important implications for the dynamics that exist within groups.

Evidence for moderating variables in these studies strengthens the claim that leaders' dividing strategies were motivated by a desire for power. First, evidence for dividing strategies was observed primarily among leaders high in dominance motivation, a trait also quite characteristic of chimpanzees striving to attain and maintain position as alpha. People high in dominance motivation greatly desire power, and they sometimes behave in manipulative and coercive ways in order to achieve and preserve their privileged position atop the social hierarchy. Indeed, the current experiments demonstrated that dominant leaders tried to socially isolate a talented yet potentially threatening group member. Leaders low in dominance motivation, in contrast, did just the opposite, seeking to increase the social contact between skilled subordinates and other group members.

The current studies differentiated between the leadership strategies of individuals high in dominance motivation versus those high in prestige motivation. Unlike individuals high in dominance motivation, people high in prestige motivation are primarily interested in receiving respect and admiration from others—a desire that appears to be far more prominent in humans than in other primate species. In the current studies, highly prestige-motivated leaders did not seek to isolate highly skilled subordinates the way dominant leaders did. Indeed, we even saw some evidence to suggest that high levels of prestige motivation caused leaders to foster interaction with-not divisions between-highly skilled subordinates. This is consistent with the idea that a desire for prestige motivates people to behave in ways that benefit the group, because such behaviors are likely to garner respect and appreciation from others. The current work adds to a growing body of work suggesting that dominance and prestige reflect two very different strategies through which people attain and maintain power within social groups (cf. Chen et al., 2010).

The robust differences between leaders high in dominance versus prestige motivation are interesting and particularly noteworthy given that the two motivations are positively correlated. We did observe evidence in the current studies that those particularly low in prestige motivation (like those high in dominance motivation) tended to isolate skilled subordinates. Thus, consistent with recent work examining the consequences of social roles that afford power but not status (Fast, Halevy, & Galinsky, 2012), a toxic combination of leadership traits would seem to be high dominance motivation coupled with low prestige motivation—individuals who want to control and dominate others and who are not particularly interested in whether they are respected or admired.

Second, evidence for dividing strategies was observed primarily when the hierarchy was unstable. Leaders who were aware that they could lose their power behaved much like alpha male chimpanzees who might lose their powerful alpha position to an aspiring subordinate. When the stability of the hierarchy was ambiguous (i.e., in standard power), participants displayed a relatively weaker and less consistent tendency to divide their subordinates than those with unstable power did. The overall pattern is consistent with the idea that, although chronic concerns about power might cause dominant leaders to protect their position when the potential for loss of power is ambiguous and uncertain (e.g., Maner et al., 2007; Tetlock, 2002), such individuals are especially strongly motivated to safeguard their power by the presence of overt instability within the hierarchy. Indeed, like many nonhuman primates, humans often have malleable hierarchies in which positions of power can be lost to other individuals, and strategies aimed at protecting one's power are likely to be most prominent when dominant leaders perceive clear threats to their power.

Although many human hierarchies are malleable, such hierarchies are at times characterized by relative stability such that shifts to the power structure are unlikely. Our theory implies that when leaders perceive their power as irrevocable, they should show no interest in dividing their subordinates, because there is little need to protect their power. Indeed, when participants were assured that their power could not be lost (Experiment 4), even highly dominant leaders showed no evidence of dividing their subordinates and those leaders were significantly less likely to divide their subordinates than were leaders with unstable power.

Although real-world leadership positions are often ambiguous with regard to the stability of the role, there are differences in the degree to which a leader's power might be appropriated by his or her subordinates. For example, advisor-student relationships are characterized by highly stable and irrevocable power (the student cannot take over the advisor's position), so we would not expect advisors to use strategies aimed at dividing their students. In contrast, because a corporate manager could have the potential to take over a CEO's position, it is possible that the CEO would try to isolate the manager in order to maintain his or her powerful role. Moreover, the CEO's use of dividing strategies would be expected to become especially pronounced when the instability of his or her role is made salient. The current findings have important implications for understanding when and why leaders might divide their subordinates in a range of organizational settings.

Third, dividing strategies were directed only toward highly skilled (and thus potentially threatening) subordinates. Because subordinates possessing valuable skills might receive deference and respect from other group members (Henrich & Gil-White,

2001), those subordinates can pose particularly salient threats to a leader's power. Like alpha male chimpanzees who prevent powerthreatening betas from forming social alliances with other subordinates (de Waal, 1982), dominant leaders in the current studies were concerned primarily with reducing threats posed by those subordinates who were identified as highly skilled. Moreover, dominant leaders sought to isolate skilled subordinates despite the fact that those subordinates never showed any overt interest in taking over the leader's position. Merely being highly skilled was enough to evoke the ire of dominant leaders. Part of the irony behind these findings is that highly skilled subordinates are likely to be in the best position to help their group achieve its goals and presumably this would occur in part through fostering positive, cohesive relationships with other group members. For example, highly skilled group members can help motivate and train others in order to enhance overall group success. Nevertheless, it was precisely those group members who were targeted and isolated by dominant leaders, suggesting that those leaders were more interested in protecting their own power than in enhancing group success.

Limitations and Future Directions

Limitations of the current studies provide valuable opportunities for future research. One limitation pertains to consequences of dividing group members for actual group performance. Although the current research may have implications for group performance, it fell short of directly examining the effects leaders' behavior might have on the way groups function and perform. Future studies would profit from extending the current investigation by examining whether leaders' use of dividing strategies hinders group performance and success.

A second limitation is that these studies were conducted within the confines of our laboratory. Our goal was to provide rigorous and highly controlled tests of our hypotheses and to pinpoint the factors that cause leaders to divide their subordinates. Nevertheless, the extent to which the current findings would generalize straightforwardly to leadership behavior in extant groups is unknown. For example, participants in our studies were unacquainted with their (ostensible) group members. The extent to which leaders attempt to divide their subordinates might be moderated by whether those subordinates already possess close interpersonal relationships; presumably it would be more difficult to divide those who are already close than it would be to divide those who have not yet formed close alliances. Future research would benefit from assessing the extent to which the current findings generalize to existing organizations. Our studies provide a valuable springboard for undertaking such investigations. A related limitation pertains to statistical power. Although we collected as much data as was afforded by our laboratory-based participant pool, the current studies remained somewhat underpowered statistically. As such, future studies would benefit from including larger participant samples.

A third limitation is that, because we were interested primarily in understanding the behavior of leaders high in dominance motivation, we did not fully elucidate the potential role of prestige motivation in leadership behavior. It is possible that effects of prestige motivation are most pronounced when leaders are provided opportunities to publicly promote positive group processes,

for such processes could help leaders gain respect and admiration. However, although the current research provides the best insight so far into the behavior of leaders high in prestige motivation, directly examining those positive group processes was outside the scope of the current research. Future research would therefore benefit from examining more directly the specific ways in which prestige motivation influences leadership behavior.

A fourth limitation is that, although the current research suggests that one reason leaders divide their subordinates is to protect their power, there may be other reasons, as well. For example, some leaders might worry about the perceived legitimacy of their role within the group (see Lammers et al., 2008). Consequently, interactions among subordinates could be perceived as highlighting or communicating any lack of legitimacy and some leaders might therefore wish to divide their subordinates as a way of enhancing the perceived legitimacy of their role within the hierarchy. Future research should explore some of the other reasons leaders might prevent their subordinates from forming alliances.

Conclusion

In the opening to this article we cited a historically important political strategy—"Divide and Conquer"—that has been attributed mainly to Niccolò Machiavelli, an Italian politician and diplomat famous not only for his expert political acumen, but also for voicing strategies aimed at casting aside moral virtues when politically advantageous to do so. By dividing and conquering their foes, leaders throughout history have enhanced their ability to selfishly maintain their positions of power and authority. Indeed, our closest extant relatives—chimpanzees—appear to employ that very same dividing strategy in order to maintain the coveted and powerful alpha position within the group.

The current findings provide the first rigorous empirical investigation into how, when and why leaders might attempt to undermine the cooperative social fabric that binds many groups together. Our studies demonstrate that the tendency to "divide and conquer" one's subordinates depends on key interactions among factors within both the person and the immediate social situation. These studies have important implications for understanding some of the fundamental forces that undermine group cohesion and cooperation and that set the stage for corruption and the abuse of power.

References

Anderson, C., Kraus, M. W., Galinsky, A. D., & Keltner, D. (2012). The local-ladder effect: Social status and subjective well-being. *Psychological Science*, 23, 764–771. http://dx.doi.org/10.1177/0956797611434537

Anderson, C., Willer, R., Kilduff, G. J., & Brown, C. E. (2012). The origins of deference: When do people prefer lower status? *Journal of Personality and Social Psychology*, 102, 1077–1088. http://dx.doi.org/10.1037/ a0027409

Archer, J. (1988). The behavioural biology of aggression. Cambridge, England and New York, New York: Cambridge University Press.

Barkow, J. (1989). *Darwin, sex, and status*. Toronto, Ontario, Canada: University of Toronto Press.

Boehm, C. (1999). *Hierarchy in the forest*. London, England: Harvard University Press.

Cassidy, T., & Lynn, R. (1989). A multifactorial approach to achievement motivation: The development of a comprehensive measure. *Journal of Occupational Psychology*, 62, 301–312.

- Chen, J. T., Tracy, J. L., & Henrich, J. (2010). Pride, personality, and the evolutionary foundations of human social status. *Evolution and Human Behavior*, 31, 334–347. http://dx.doi.org/10.1016/j.evolhumbehav.2010 .02.004
- Cheng, J. T., Tracy, J. L., Foulsham, T., Kingstone, A., & Henrich, J. (2013). Two ways to the top: Evidence that dominance and prestige are distinct yet viable avenues to social rank and influence. *Journal of Personality and Social Psychology*, 104, 103–125. http://dx.doi.org/10.1037/a0030398
- Das, T. K., & Teng, B. S. (1998). Between trust and control: Developing confidence in partner cooperation in alliances. *Academy of Management Review*, 23, 491–512.
- De Cremer, D. (2002). Respect and cooperation in social dilemmas: The importance of feeling included. *Personality and Social Psychology Bulletin*, 28, 1335–1341. http://dx.doi.org/10.1177/014616702236830
- De Cremer, D., van Dijke, M., & Mayer, D. M. (2010). Cooperating when "you" and "I" are treated fairly: The moderating role of leader prototypicality. *Journal of Applied Psychology*, 95, 1121–1133. http://dx.doi.org/10.1037/a0020419
- De Cremer, D., & van Knippenberg, D. (2002). How do leaders promote cooperation? The effects of charisma and procedural fairness. *Journal of Applied Psychology*, 87, 858–866. http://dx.doi.org/10.1037/0021-9010.87.5.858
- De Cremer, D., & Van Vugt, M. (2002). Intergroup and intragroup aspects of leadership in social dilemmas: A relational model of cooperation. *Journal of Experimental Social Psychology*, 38, 126–136. http://dx.doi.org/10.1006/jesp.2001.1499
- De Jong, B. A., & Elfring, T. (2010). How does trust affect the performance of ongoing teams? The mediating role of reflexivity, monitoring, and effort. *Academy of Management Journal*, 53, 535–549. http://dx.doi.org/10.5465/AMJ.2010.51468649
- de Waal, F. B. M. (1982). Chimpanzee politics: Power and sex among apes. New York, NY: Harper & Row.
- Dirks, K. T. (1999). The effects of interpersonal trust on work group performance. *Journal of Applied Psychology*, 84, 445–455. http://dx.doi.org/10.1037/0021-9010.84.3.445
- Dumas, T. L., Phillips, K. W., & Rothbard, N. P. (2013). Getting closer at the company party: Integration experiences, racial dissimilarity, and workplace relationships. *Organization Science*, 24, 1377–1401. http:// dx.doi.org/10.1287/orsc.1120.0808
- Ellemers, N., Wilke, H., & Van Knippenberg, A. (1993). Effects of the legitimacy of low group or individual status on individual and collective status-enhancement strategies. *Journal of Personality and Social Psychology*, 64, 766–778. http://dx.doi.org/10.1037/0022-3514.64.5.766
- Ellis, L. (1995). Dominance and reproductive success among nonhuman animals. Ethology and Sociobiology, 16, 257–333.
- Fast, N. J., Halevy, N., & Galinsky, A. D. (2012). The destructive nature of power without status. *Journal of Experimental Social Psychology*, 48, 391–394.
- Fodor, E. M. (1985). The power motive, group conflict, and physiological arousal. *Journal of Personality and Social Psychology*, 49, 1408–1415. http://dx.doi.org/10.1037/0022-3514.49.5.1408
- Galinsky, A. D., Gruenfeld, D. H., & Magee, J. C. (2003). From power to action. *Journal of Personality and Social Psychology*, 85, 453–466. http://dx.doi.org/10.1037/0022-3514.85.3.453
- Georgesen, J. C., & Harris, M. J. (1998). Why's my boss always holding me down? A meta-analysis of power effects on performance evaluations. *Personality and Social Psychology Review*, 2, 184–195. http://dx.doi.org/10.1207/s15327957pspr0203_3
- Georgesen, J. C., & Harris, M. J. (2006). Holding onto power: Effects of powerholders' positional instability and expectancies with subordinates. *European Journal of Social Psychology*, 36, 451–468. http://dx.doi.org/ 10.1002/ejsp.352

- Gosling, S. D., Rentfrow, P. J., & Swann, W. B., Jr. (2003). A very brief measure of the Big-Five personality domains. *Journal of Research in Personality*, 37, 504–528. http://dx.doi.org/10.1016/S0092-6566(03)00046-1
- Halevy, N., Chou, E. Y., Cohen, T. R., & Livingston, R. W. (2012). Status conferral in intergroup social dilemmas: Behavioral antecedents and consequences of prestige and dominance. *Journal of Personality and Social Psychology*, 102, 351–366. http://dx.doi.org/10.1037/a0025515
- Hayes, A. F., & Matthes, J. (2009). Computational procedures for probing interactions in OLS and logistic regression: SPSS and SAS implementations. *Behavior Research Methods*, 41, 924–936. http://dx.doi.org/ 10.3758/BRM.41.3.924
- Henrich, J., & Gil-White, F. J. (2001). The evolution of prestige: Freely conferred deference as a mechanism for enhancing the benefits of cultural transmission. *Evolution and Human Behavior*, 22, 165–196. http://dx.doi.org/10.1016/S1090-5138(00)00071-4
- Jehn, K. A., & Shah, P. P. (1997). Interpersonal relationships and task performance: An examination of mediation processes in friendship and acquaintance groups. *Journal of Personality and Social Psychology*, 72, 775–790. http://dx.doi.org/10.1037/0022-3514.72.4.775
- Johnson, P. O., & Neyman, J. (1936). Tests of certain linear hypotheses and their applications to some educational problems. *Statistical Research Memoirs*, 1, 57–93.
- Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). Power, approach, and inhibition. *Psychological Review*, 110, 265–284. http://dx.doi.org/ 10.1037/0033-295X.110.2.265
- Kifer, Y., Heller, D., Perunovic, W. Q. E., & Galinsky, A. D. (2013). The good life of the powerful: The experience of power and authenticity enhances subjective well-being. *Psychological Science*, 24, 280–288. http://dx.doi.org/10.1177/0956797612450891
- Kipnis, D. (1972). Does power corrupt? *Journal of Personality and Social Psychology*, 24, 33–41. http://dx.doi.org/10.1037/h0033390
- Kipnis, D. (1976). The powerholders. Chicago, IL: University of Chicago Press.
- Lammers, J., Galinsky, A. D., Gordijn, E. H., & Otten, S. (2008). Illegit-imacy moderates the effects of power on approach. *Psychological Science*, 19, 558–564. http://dx.doi.org/10.1111/j.1467-9280.2008.02123.x
- Lammers, J., Gordijn, E. H., & Otten, S. (2008). Looking through the eyes of the powerful. *Journal of Experimental Social Psychology*, 44, 1229– 1238. http://dx.doi.org/10.1016/j.jesp.2008.03.015
- Magee, J., & Galinsky, A. (2008). Social hierarchy: The self-reinforcing nature of power and status. *The Academy of Management Annals*, 2, 351–398. http://dx.doi.org/10.1080/19416520802211628
- Magee, J. C., & Langner, C. A. (2008). How personalized and socialized power motivation facilitate antisocial and prosocial decision-making. *Journal of Research in Personality*, 42, 1547–1559. http://dx.doi.org/ 10.1016/j.jrp.2008.07.009
- Maner, J. K., Gailliot, M. T., Butz, D. A., & Peruche, B. M. (2007). Power, risk, and the status quo: Does power promote riskier or more conservative decision making? *Personality and Social Psychology Bulletin*, 33, 451–462. http://dx.doi.org/10.1177/0146167206297405
- Maner, J. K., & Mead, N. L. (2010). The essential tension between leadership and power: When leaders sacrifice group goals for the sake of self-interest. *Journal of Personality and Social Psychology*, 99, 482– 497. http://dx.doi.org/10.1037/a0018559
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20, 709–734.
- McAllister, D. J. (1995). Affect-and cognition-based trust as foundations for interpersonal cooperation in organizations. Academy of Management Journal, 38, 24–59. http://dx.doi.org/10.2307/256727
- McClelland, D. C. (1975). *Power: The inner experience*. Oxford, England: Irvington.

- Mead, N. L., & Maner, J. K. (2012). On keeping your enemies close: Powerful leaders seek proximity to ingroup power threats. *Journal of Personality and Social Psychology*, 102, 576–591. http://dx.doi.org/10.1037/a0025755
- Mednick, S. A. (1968). The Remote Associates Test. The Journal of Creative Behavior, 2, 213–214. http://dx.doi.org/10.1002/j.2162-6057 .1968.tb00104.x
- Mosteller, F., & Bush, R. R. (1954). Selected quantitative techniques. In G. Lindzey (Ed.), *Handbook of Social Psychology* (Vol. 1, pp. 289–334). Cambridge, MA: Addison Wesley.
- Nishida, T. (1983). Alpha status and agonistic alliance in wild chimpanzees (Pan troglodytes schweinfurthii). Primates, 24, 318–336. http://dx.doi.org/10.1007/BF02381978
- Nishida, T., & Hosaka, K. (1996). Coalition strategies among adult male chimpanzees of the Mahale Mountains, Tanzania. *Great ape societies* (pp. 114–134). Cambridge and New York: Cambridge University Press.
- Ohtsubo, Y., Matsumura, A., Noda, C., Sawa, E., Yagi, A., & Yamaguchi, M. (2014). It's the attention that counts: Interpersonal attention fosters intimacy and social exchange. *Evolution and Human Behavior*, 35, 237–244. http://dx.doi.org/10.1016/j.evolhumbehav.2014.02.004
- Peng, W., & Hsieh, G. (2012). The influence of competition, cooperation, and player relationship in a motor performance centered computer game. *Computers in Human Behavior*, 28, 2100–2106. http://dx.doi.org/10.1016/j.chb.2012.06.014
- Rosenthal, R., & Rosnow, R. (1991). Essentials of behavioural research. Methods and Data Analysis. New York, NY: McGraw-Hill.
- Sapolsky, R. M. (2005). The influence of social hierarchy on primate health. *Science*, *308*, 648–652. http://dx.doi.org/10.1126/science .1106477
- Seppänen, R., Blomqvist, K., & Sundqvist, S. (2007). Measuring interorganizational trust—A critical review of the empirical research in 1990–2003. *Industrial Marketing Management*, 36, 249–265.
- Tetlock, P. E. (1981). Pre- to post-election shifts in presidential rhetoric: Impression management or cognitive adjustment? *Journal of Personality and Social Psychology*, 41, 207–212. http://dx.doi.org/10.1037/0022-3514.41.2.207

- Tetlock, P. E. (2002). Social-functionalist metaphors for judgment and choice: The politician, theologian, and prosecutor. *Psychological Re*view, 109, 451–472. http://dx.doi.org/10.1037/0033-295X.109.3.451
- Tiedens, L. Z., Unzueta, M. M., & Young, M. J. (2007). An unconscious desire for hierarchy? The motivated perception of dominance complementarity in task partners. *Journal of Personality and Social Psychol*ogy, 93, 402–414. http://dx.doi.org/10.1037/0022-3514.93.3.402
- Tyler, T. R., & Degoey, P. (1995). Collective restraint in social dilemmas: Procedural justice and social identification effects on support for authorities. *Journal of Personality and Social Psychology*, 69, 482–497. http://dx.doi.org/10.1037/0022-3514.69.3.482
- van Dijk, E., & De Cremer, D. (2006). Self-benefiting in the allocation of scarce resources: Leader-follower effects and the moderating effect of social value orientations. *Personality and Social Psychology Bulletin*, 32, 1352–1361. http://dx.doi.org/10.1177/0146167206290338
- Van Lange, P. A. M., De Cremer, D., van Dijk, E., & Van Vugt, M. (2007). Self-interest and beyond: Basic principles of social interaction. In A. Kruglanski & E. T. Higgins (Eds.), Social psychology: Handbook of basic principles (2nd ed., pp. 540–561). New York, NY: Guilford Press.
- van Thiel, S., & Yesilkagit, K. (2011). Good neighbours or distant friends? Trust between Dutch ministries and their executive agencies. *Public Management Review*, 13, 783–802. http://dx.doi.org/10.1080/14719037.2010.539111
- Van Vugt, M. (2006). Evolutionary origins of leadership and followership. Personality and Social Psychology Review, 10, 354–371. http://dx.doi.org/10.1207/s15327957pspr1004_5
- Van Vugt, M., & De Cremer, D. (1999). Leadership in social dilemmas: The effects of group identification on collective actions to provide public goods. *Journal of Personality and Social Psychology*, 76, 587–599. http://dx.doi.org/10.1037/0022-3514.76.4.587
- Van Vugt, M., Hogan, R., & Kaiser, R. B. (2008). Leadership, followership, and evolution: Some lessons from the past. *American Psychologist*, 63, 182–196. http://dx.doi.org/10.1037/0003-066X.63.3.182

Received August 22, 2013
Revision received September 10, 2014
Accepted September 11, 2014

E-Mail Notification of Your Latest Issue Online!

Would you like to know when the next issue of your favorite APA journal will be available online? This service is now available to you. Sign up at http://notify.apa.org/ and you will be notified by e-mail when issues of interest to you become available!