# Power Hierarchy and Team Performance: The Alignment and Divergence of Power and Status Postprint

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## Abstract

This study aims to address the divergent findings in research on power hierarchy and team performance within the context of power-status misalignment. This study proposes that the relationship between power hierarchy and team performance is contingent upon hierarchical consistency—the degree of alignment between power and status. Specifically, when hierarchy is consistent (i.e., power aligns with status), power hierarchy enhances team performance; conversely, when hierarchy is inconsistent (i.e., power misaligns with status), power hierarchy undermines team performance. This study integrates questionnaire surveys, experiments, and secondary data analysis to test these hypotheses. Study 1 employs a two-stage questionnaire survey of 46 university student entrepreneurial teams and finds that hierarchical consistency moderates the relationship between power hierarchy and team performance. Study 2 subsequently establishes causality through an experiment with 64 teams, revealing that power struggle mediates the interactive effect of power hierarchy and hierarchical consistency on team performance. Study 3 further replicates the moderating role of hierarchical consistency using secondary data from internet companies (203 observations), thereby enhancing the ecological validity of the findings. This study contributes to the literature on power hierarchies and offers practical implications for team management.

## Full Text

### The Relationship Between Power Hierarchy and Team Performance: The Alignment and Misalignment of Power and Status

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**Abstract**

This study investigates the divergent findings regarding the relationship between power hierarchy and team performance by examining the role of hierarchical consistency—the alignment between power and status hierarchies. We propose that the relationship between power hierarchy and team performance depends on the degree of hierarchical consistency within a team. Specifically, when hierarchies are consistent (i.e., power and status are aligned), power hierarchy enhances team performance; when hierarchies are inconsistent (i.e., power and status are misaligned), power hierarchy undermines team performance. We tested our hypotheses using a multimethod approach combining survey, experimental, and archival data. Study 1 employed a two-wave survey of 46 student entrepreneurial teams and found that hierarchical consistency moderated the relationship between power hierarchy and team performance. Study 2, a team experiment involving 64 teams, established causality and revealed that power struggle mediates the interactive effect of power hierarchy and hierarchical consistency on team performance. Finally, Study 3 replicated the moderating effect of hierarchical consistency using archival data from 203 observations in internet companies, thereby enhancing the ecological validity of our findings. This research contributes to the literature on power hierarchy and offers insights for team management.

**Keywords:** power hierarchy; hierarchical consistency; power struggle; team performance
**Classification:** B849:C93

## 1. Introduction

### 1.1 Problem Statement

Clarysse and Moray (2004) documented a case study of a venture team led by a CEO appointed by an investment firm. Because this CEO was not a founding member and lacked technical expertise relevant to the venture, team members continuously resisted his leadership and even rallied behind another technical leader who had joined the team from its inception, challenging the CEO' s authority. Consequently, the team became chaotic and performed poorly. Magee and Galinsky (2008) identified power and status as the two most fundamental dimensions of social hierarchy. Power refers to asymmetric control over valued resources, whereas status reflects the degree to which an individual is respected and admired by others. These two dimensions can become misaligned, such that an individual may possess high power but low status, or high status but low power, and such misalignment is not uncommon (Blader & Chen, 2014). As illus-

trated in the aforementioned venture team case, the formally appointed team leader possessed formal authority but was not well-regarded (high power/low status), while the technical subordinate earned respect and admiration from other team members (low power/high status).

Power hierarchy refers to the rank order formed by differential access to important resources within a group (Magee & Galinsky, 2008) and significantly influences interpersonal interactions and organizational functioning (Bunderson & Reagans, 2011; Fiske, 1992; Greer, 2014). Although existing research generally acknowledges the importance of power hierarchy, substantial disagreement persists regarding its effects on team performance (Tarakci, Greer, & Groenen, 2016). Functionalist scholars argue that power hierarchy facilitates coordination within teams and thereby enhances team performance (e.g., Halevy, Chou, Galinsky, & Murnighan, 2012; Ronay, Greenaway, Anicich, & Galinsky, 2012). In contrast, dysfunctionalist scholars contend that power hierarchy triggers conflict within teams and undermines team performance (e.g., Bloom, 1999; Mannix, 1993). To reconcile these conflicting perspectives, some studies have begun to explore moderating factors in the relationship between power hierarchy and team performance (e.g., Ronay et al., 2012; Tarakci et al., 2016; Van der Vegt, de Jong, Bunderson, & Molleman, 2010). However, these studies have implicitly assumed that power and status hierarchies are highly aligned, overlooking the potential influence of misalignment between power and status hierarchies on the relationship between power hierarchy and team performance.

We argue that the contradictory logic and empirical evidence from functionalist and dysfunctionalist perspectives may stem from previous research' s neglect of hierarchical consistency—the alignment between status hierarchy and power hierarchy—in shaping the relationship between power hierarchy and team performance. Hierarchical consistency refers to the degree of alignment between status hierarchy and power hierarchy within a team (Halevy, Chou, & Galinsky, 2011). When status and power hierarchies are aligned, the legitimacy of the power hierarchy is enhanced (Magee & Galinsky, 2008), which helps reduce power struggles and improve team performance. Conversely, when status and power hierarchies are misaligned, the legitimacy of the power hierarchy is compromised, triggering power struggles and undermining team performance. Based on these arguments, this study integrates survey, experimental, and archival data methods to examine the moderating role of hierarchical consistency in the relationship between power hierarchy and team performance, as well as the mediating role of power struggle in the relationship between the interaction of power hierarchy and hierarchical consistency and team performance. Our research makes several contributions to the relevant literature. First, we are the first to propose and test the effect of hierarchical consistency on the relationship between power hierarchy and team performance at the team level, which helps reconcile the conflict between functionalist and dysfunctionalist perspectives in team hierarchy research and extends research on hierarchical consistency and the legitimacy of power hierarchy.

[Figure 1: see original paper]

### 1.2 Power Hierarchy and Team Performance: Conflicting Conclusions and Evidence

Research on the effects of power hierarchy on team performance has split into two opposing camps: functionalism, which emphasizes the positive effects of power hierarchy, and dysfunctionism, which emphasizes its negative effects. Functionalists argue that power hierarchy clarifies dominance and submission relationships among members (e.g., Anicich, Swaab, & Galinsky, 2015; Gruenfeld & Tiedens, 2010; Keltner, Van Kleef, Chen, & Kraus, 2008), thereby suppressing conflict and promoting cooperation and coordination (Bendersky & Hays, 2012; Bunderson, Van der Vegt, Cantimur, & Rink, 2016). Numerous empirical studies support the functionalist perspective. For example, Halevy et al. (2012) analyzed 11 seasons of North American professional basketball league data and found that power hierarchies based on salary and draft order facilitated coordination and cooperation within teams, thereby improving team winning percentages.

In contrast, dysfunctionalist scholars argue that power hierarchy undermines team performance. Drawing on social equity theory (Adams, 1965), dysfunctionalist scholars contend that low-power individuals experience feelings of injustice when comparing their contributions to the team with the power they have been granted (Anderson & Brown, 2010). Such feelings of injustice trigger dissatisfaction with the existing power order and heighten hierarchy sensitivity, leading to power struggles and conflict within teams (Greer, Caruso, & Jehn, 2011; Greer, Van Bunderen, & Yu, 2017; Mannix, 1993). Numerous empirical studies also support the dysfunctionalist perspective. For example, Bloom (1999) analyzed secondary data from North American professional baseball leagues and found that pay dispersion within teams negatively affected team performance, arguing that this negative effect stemmed from hierarchy undermining cooperation.

The above review reveals clear disagreements in previous research. We contend that these disagreements likely arise from previous studies' neglect of variations in the alignment between power hierarchy and status hierarchy in shaping the relationship between power hierarchy and team performance.

### 1.3 Power and Status: The Overlooked Role of Hierarchical Consistency

Magee and Galinsky (2008) identified power and status as two fundamental dimensions of social hierarchy. Power involves asymmetric control over valued resources, whereas status reflects the degree to which an individual is respected or admired by others. This distinction has been widely adopted and supported by numerous studies (e.g., Anicich, Fast, Halevy, & Galinsky, 2016; Fast, Halevy, & Galinsky, 2012; Hays, 2013). Power is typically based on control over resources and opportunities and the ability to command, punish, or

reward others, whereas status is usually based on expertise, competence, and reputation (Blader, Shirako, & Chen, 2016; Hu & Xie, 2015; Magee & Galinsky, 2008). This study adopts Magee and Galinsky' s (2008) definition of hierarchy, distinguishing between power hierarchy and status hierarchy. Status hierarchy refers to the rank order formed by differences in the degree to which individuals receive respect from others, whereas power hierarchy refers to the rank order formed by differences in control over important resources.

Previous research has generally assumed that power and status are highly aligned, yet misalignment between these two dimensions is not uncommon (Blader & Chen, 2014; Luan, Hu, & Xie, 2017). Individuals may possess substantial resources but fail to command respect (high power/low status), or they may be widely respected and admired despite lacking important resources (low power/high status) (Magee & Galinsky, 2008). Recent research at the individual level has begun to examine this phenomenon of hierarchical misalignment and its effects on interpersonal behavior (e.g., Anicich et al., 2016; Blader & Chen, 2012; Fast et al., 2012). Additionally, Ma, Rhee, and Yang (2013) found at the organizational level that alignment between ownership (power) and status in strategic alliances facilitated alliance performance. However, research on power hierarchy and team performance has overlooked the potential influence of misalignment between power and status hierarchies.

This study defines hierarchical consistency as the degree of alignment between power hierarchy and status hierarchy within a team. Operationally, it refers to the average alignment between each team member' s power and status. As shown in Figure 2 [Figure 2: see original paper], within a team, power hierarchy and status hierarchy may be perfectly aligned, as in Team 4, where high-power members also have high status and low-power members have low status. Conversely, power hierarchy and status hierarchy may be completely misaligned, as in Team 1, where high-power members have low status and low-power members have high status. Beyond these two extreme cases of perfect alignment and complete misalignment, hierarchical consistency can also vary in degree. In some teams, members' power and status are largely aligned, as in Team 3, whereas in other teams, some members' power and status are substantially misaligned, as in Team 2, resulting in lower hierarchical consistency for the latter. Even when power is equally distributed within a team, hierarchical consistency can still vary, as Team 5 exhibits lower hierarchical consistency than Team 6. Such variations in hierarchical consistency may influence the effects of power hierarchy on team performance (Halevy et al., 2011), yet this has been overlooked in previous research. Therefore, this study examines how hierarchical consistency moderates the relationship between power hierarchy and team performance.

### 1.4 Theory and Hypotheses

According to legitimacy theory, the effectiveness of a power hierarchy depends on its legitimacy. When individuals perceive a power hierarchy as reasonable and just, they voluntarily accept and comply with hierarchical arrangements;

when they perceive it as illegitimate, they may engage in resistance and opposition (Tyler, 2006). Hierarchical consistency influences perceptions of the legitimacy of the power hierarchy and thereby affects the functioning of power hierarchy (Magee & Galinsky, 2008). For example, when individuals who control important resources within a team (high power) are not respected or admired (low status), while those who are widely respected and admired (high status) lack resources and opportunities (low power), team members will perceive such a power hierarchy as illegitimate. Conversely, when members' resources and respect are aligned, the power hierarchy enjoys higher legitimacy. When a power hierarchy is perceived as legitimate, it can effectively reduce friction and conflict within the team, thereby benefiting team performance. When a power hierarchy lacks legitimacy, it can trigger competition and conflict, negatively affecting team performance (Halevy et al., 2011). Therefore, we propose the following hypothesis:

**Hypothesis 1:** Hierarchical consistency moderates the relationship between power hierarchy and team performance, such that power hierarchy enhances team performance when hierarchies are consistent (i.e., status hierarchy aligns with power hierarchy), but undermines team performance when hierarchies are inconsistent (i.e., status hierarchy misaligns with power hierarchy).

Power struggle within a team refers to competition among team members for control over important resources (Greer & van Kleef, 2010; Greer et al., 2017). We argue that the interaction between power hierarchy and hierarchical consistency influences team performance through power struggle. As noted above, hierarchical consistency affects perceptions of the legitimacy of the power hierarchy. When a power hierarchy is legitimate, it encourages team members to internalize their hierarchical roles and voluntarily accept and comply with norms and commands established by high-power members, thereby suppressing friction and conflict within the team (Halevy et al., 2011; Tyler, 2006). Empirical research supports this view. For example, Baldassarri and Grossman (2011) conducted field experiments with 1,543 farmers across 50 agricultural cooperatives in Uganda and found that legitimate power structures promoted cooperative behavior more effectively than illegitimate ones. When a power hierarchy lacks legitimacy, team members are unwilling to accept and follow decisions and rules established by high-power members and may adopt resistant and challenging attitudes (Fiske, 2010; Tyler, 2006). As shown in Team 4 in Table 1 , when hierarchical inconsistency exists, a team simultaneously contains a high-power/low-status member and a low-power/high-status member. In such cases, the low-power/high-status member is unlikely to comply with the leadership of the high-power/low-status member. For instance, Clarysse and Moray' s (2004) qualitative study of venture teams found that when a team simultaneously had a formal leader with power (the CEO) and an informal leader respected by team members, the two continuously competed for influence, other team members resisted and circumvented the formal leader' s commands, and the formal leader' s effectiveness was severely constrained by the informal leader. Research also shows that when power hierarchies are illegitimate, low-power individuals are

more likely to engage in risky behaviors (Lammers, Galinsky, Gordijn, & Otten, 2008), become more goal-oriented (Willis, Guinote, & Rodríguez-Bailón, 2010), and violate social norms (Hays & Goldstein, 2015). Therefore, we propose the following hypothesis:

**Hypothesis 2:** Hierarchical consistency moderates the relationship between power hierarchy and power struggle, such that power hierarchy attenuates power struggle when hierarchies are consistent but intensifies power struggle when hierarchies are inconsistent.

Furthermore, we argue that power struggles among team members undermine cooperation and trigger conflict, thereby harming team performance. Power is a structural attribute based on relative control over important resources (Magee & Galinsky, 2008). Therefore, an increase in one member' s power may mean a decrease in other members' power. Power struggle is competition among team members for relative control over important resources within the team (Greer & van Kleef, 2010). Participants in power struggles all aim to increase their relative resources, making their goals inherently conflicting. When team members' goals conflict, they strive to achieve their own goals while obstructing others' goal attainment (Deutsch, 1949, 2014; Johnson & Johnson, 2005), which undermines cooperation among team members (Deutsch, 1949). For example, research has found that disagreements and struggles over hierarchical positions lead team members to reduce their investment in team tasks (Kilduff, Willer, & Anderson, 2016) and inhibit information sharing within teams (Bendersky & Hays, 2012). Additionally, during power struggles, team members may employ coercion, threats, and deception, triggering conflict within the team (Deutsch, 2014). For instance, some studies have found that power struggles within teams intensify political behavior, with coalition-building, monitoring, and betrayal activities further exacerbating team conflict (e.g., Eisenhardt & Bourgeois, 1988). Effectively promoting cooperation and suppressing conflict within teams is crucial for improving team performance (Deutsch, 2014; Mathieu, Maynard, Rapp, & Gilson, 2008). Empirical research and meta-analyses have also found that team cooperation positively promotes team performance (e.g., Halevy et al., 2012; Stewart, 2006), while team conflict negatively affects team performance (e.g., Bendersky & Hays, 2012; De Dreu & Weingart, 2003). Moreover, Greer and van Kleef' s (2010) empirical research has directly verified the negative effect of power struggle on team performance.

In summary, when hierarchies are consistent, the power hierarchy is perceived as legitimate, which helps reduce power struggles within the team. When hierarchies are inconsistent, the power hierarchy lacks legitimacy, triggering power struggles within the team. Power struggles, in turn, undermine cooperation and trigger conflict, negatively affecting team performance. Therefore, we propose the following hypothesis:

**Hypothesis 3:** Power struggle mediates the relationship between the interaction of power hierarchy and hierarchical consistency and team performance.

We will next combine questionnaire surveys, experiments, and secondary data analysis to test our hypotheses using different types of samples.

## 2 Study 1

We first conducted a questionnaire survey of student entrepreneurial teams to verify the moderating effect of hierarchical consistency on the relationship between power hierarchy and team performance. We conducted this study in an entrepreneurial practice course at a university in central China. This four-week course required junior business majors to participate full-time (eight hours per day). In this course, all teams independently engaged in business activities such as establishing virtual companies, conducting market research, and on-site sales. Each team' s virtual company operated in the university' s entrepreneurship incubation park. All operating funds were raised by each team, and all economic profits from operations belonged to the team itself. The teams in this entrepreneurial practice course had considerable autonomy in performing team tasks and shared common task objectives, making them suitable samples for team research. Moreover, these teams' entrepreneurial practice projects involved real operations, and each team submitted standardized financial statements, providing relatively reliable objective indicators for measuring team performance.

### 2.1 Sample

A total of 352 junior business majors (majoring in marketing, marketing planning, and business administration) participated in this study. Participants had a mean age of 20.67 years (SD = 0.87), with 52.48% male and 47.52% female. Participants had an average of 6.58 months (SD = 10.45) of part-time work experience outside of class. Teams of 5 to 10 participants were formed voluntarily to conduct entrepreneurial practice tasks. A total of 46 teams participated in this study, and all members of these 46 teams completed the questionnaire.

### 2.2 Procedure

Task groups typically require a period of interaction to establish hierarchy within the team (Berger, Cohen, & Zelditch, 1972). Therefore, we administered the questionnaire two weeks after the entrepreneurial practice course began. In the questionnaire, each team member evaluated the power and status of all other team members. We then collected objective financial data at the end of the entrepreneurial practice course (two weeks after questionnaire collection) to measure team performance. This temporal lag design and use of different data sources effectively reduced the impact of common method bias on our results (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).

### 2.3 Measures

Since the scales used in this study were originally developed in English, we followed a back-translation procedure (Brislin, 1980) to translate them into Chi-

nese. Following previous research (Cantimur, Rink, & van der Vegt, 2016; Hays & Bendersky, 2015), we used the round-robin method to measure power and status, where each team member rated the power and status of all other team members. Since each team member' s power and status ratings were aggregated from other team members' ratings, we calculated intraclass correlation coefficients (ICC) (James, 1982) to examine the feasibility of data aggregation.

**Power.** We used the 2-item scale developed by Hays and Bendersky (2015) to measure power. All team members rated each teammate' s "level of power" within the team using two items: "To what extent does he/she control important resources in the team?" and "How much power does he/she have in the team?" Participants responded to these items using a 5-point Likert scale. The scale' s Cronbach' s alpha was 0.81, indicating good reliability. ICC(1) was 0.22 and ICC(2) was 0.68, showing strong within-group agreement.

**Status.** We used the 2-item scale developed by Blader et al. (2016) to measure status. All team members rated each teammate' s "level of status" within the team using two items: "To what extent is he/she respected in the team?" and "How much status (admiration and respect) does he/she have in the team?" Participants responded to these items using a 5-point Likert scale. The scale' s Cronbach' s alpha was 0.83, indicating good reliability. ICC(1) was 0.19 and ICC(2) was 0.65, showing strong within-group agreement.

**Power hierarchy.** First, we calculated the mean of other-rated power scores for each team member to obtain each member' s power score. We then aggregated individual-level power scores to the team level to form team-level power hierarchy scores. Consistent with previous research (e.g., Cantimur et al., 2016; Greer & van Kleef, 2010; Halevy et al., 2012), we used the standard deviation of team members' power to calculate power hierarchy; larger standard deviation values represent greater power inequality within the team.

**Hierarchical consistency.** To calculate hierarchical consistency, we first computed the absolute difference between each team member' s power and status, then averaged these absolute differences within the team, and finally took the negative of this mean to represent each team' s hierarchical consistency, where smaller values indicate lower hierarchical consistency. Similar measurement approaches have been used in other group-level consistency or alignment research (e.g., Kunze & Menges, 2017).

**Team performance.** We measured team performance using the actual economic profit earned by each team' s entrepreneurial venture. At the end of the entrepreneurial practice course, each team submitted financial statements listing costs, revenues, and profits. We observed that some teams adopted low-margin strategies to increase sales volume, while others achieved high revenues but incurred losses due to high costs. To mitigate these effects, we used actual profit rather than total revenue to measure performance.

**Control variables.** Previous research has shown that team size significantly affects team performance (Lepine, Piccolo, Jackson, Mathieu, & Saul, 2008).

Therefore, we controlled for team size in this study. Similarly, to rule out the effects of team average age (Streufert, Pogash, Piasecki, & Post, 1990), gender diversity (Campbell & Mínguez-Vera, 2008), and familiarity diversity (Avgerinos & Gokpinar, 2017) on team performance, we also controlled for team average age, familiarity diversity, and gender diversity. Gender diversity was calculated using the Blau coefficient, and familiarity diversity was calculated using standard deviation (Harrison & Klein, 2007). Harrison and Klein (2007) noted that when studying disparity variables such as power hierarchy, researchers should control for the mean of that variable. Therefore, we also controlled for team mean power and team mean status in our analyses.

### 2.4 Results

As shown in Table 2 , consistent with our predictions, power hierarchy was not significantly correlated with team performance. We used multiple regression analysis to test whether hierarchical consistency moderated the relationship between power hierarchy and team performance.

**Table 2** Means, Standard Deviations, and Correlations

| Variable | M | SD | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Team size | 7.17 | 1.41 | - | | | | | | | | |
| 2. Average age | 20.67 | 0.23 | -0.14 | - | | | | | | | |
| 3. Familiarity diversity | 7.35 | 4.79 | 0.37* | -0.03 | - | | | | | | |
| 4. Gender diversity | 0.49 | 0.12 | -0.16 | 0.78** | - | | | | | | |
| 5. Team power mean | 3.37 | 0.34 | -0.02 | -0.09 | -0.17 | -0.14 | - | | | | |
| 6. Team status mean | 3.63 | 0.31 | -0.03 | -0.02 | -0.16 | -0.30** | -0.20 | - | | | |
| 7. Power hierarchy | 0.56 | 0.24 | 0.11 | -0.34 | -0.42** | -0.20 | 0.09 | -0.17 | - | | |
| 8. Hierarchical consistency | -0.58 | 0.23 | -0.09 | -0.17 | -0.12 | -0.17 | -0.16 | -0.00 | - | | |
| 9. Team performance | 0.00 | 1.00 | -0.09 | -0.17 | -0.12 | -0.17 | -0.16 | -0.00 | - | | |

*Note: n = 46.* p < 0.05, **p < 0.01.*

Before entering variables into the regression equation, we centered all predictor variables to address potential multicollinearity. Additionally, because the mean and standard deviation of team performance were substantially larger than those of other variables, we standardized team performance to reduce differences in scale and variance relative to other variables (Rodgers & Nicewander, 1988; Rovine & von Eye, 1997). In Hypothesis 1, we proposed that hierarchical consistency would moderate the relationship between power hierarchy and team performance. The regression results (see Table 3 ) show that in Model 2 (M2), the effect of power hierarchy on team performance was not significant (b = −2.39, ns, t = −1.77). However, in Model 3 (M3), the interaction between power hierarchy and hierarchical consistency significantly affected team performance (b = 12.20, p < 0.05, t = 2.06), indicating that power hierarchy had no significant main effect on team performance, while hierarchical consistency moderated the relationship between power hierarchy and team performance. Thus, Hypothesis 1 was supported.

**Table 3** Multiple Regression Analysis Results

| Variable | M1 | M2 | M3 |
|---|---|---|---|
| Team size | -0.41 | -0.62 | -0.58 |
| Average age | -0.91 | -1.12 | -1.88 |
| Familiarity diversity | -2.05 | -2.39 | -1.95 |
| Gender diversity | -0.81 | -1.12 | -1.88 |
| Team power mean | -1.77 | -2.05 | -2.05 |
| Team status mean | -0.95 | -1.95 | -1.95 |
| Power hierarchy | | 0.09* | 0.09* |
| Hierarchical consistency | | | 0.09* |
| Power hierarchy × Hierarchical consistency | | | 12.20* |
| $R^2$ | 0.09* | 0.09* | 0.17** |
| $\Delta R^2$ | 0.09* | 0.00 | 0.08* |
| F | 4.90** | 4.97** | 6.06** |

*Note: n = 46.* p < 0.05, **p < 0.01. The dependent variable is standardized team performance. Regression coefficients are unstandardized.*

We conducted simple effects analysis to further examine the moderating effect of hierarchical consistency on the relationship between power hierarchy and team performance and plotted the relationship at different levels of hierarchical consistency (see Figure 3 [Figure 3: see original paper]). When hierarchical consistency was low, the slope representing the relationship between power hierarchy and team performance was negative and significant (k = −4.10, p < 0.05). When hierarchical consistency was high, the slope was positive but not significant (k = 0.34, ns). These results indicate that when status hierarchy and power hierarchy were misaligned, power hierarchy was negatively related to

team performance; when status hierarchy and power hierarchy were aligned, the relationship between power hierarchy and team performance was not significant. Thus, Hypothesis 1 received partial support.

**Figure 3** The Moderating Effect of Hierarchical Consistency on the Relationship Between Power Hierarchy and Team Performance (Study 1)

Finally, we conducted robustness tests using alternative operationalizations of hierarchy. Previous hierarchy research has used coefficient of variation (e.g., Hays & Bendersky, 2015), Gini coefficient (e.g., Bloom, 1999), and centralization (e.g., Huang & Cummings, 2011) to operationalize hierarchy. Therefore, we used these three indicators to test the robustness of our findings. While holding all other variables constant, we replaced the original power hierarchy variable with team members' coefficient of variation, Gini coefficient, and centralization in the regression model testing the moderating effect. The interaction effects were similar to those obtained using standard deviation (coefficient of variation: b = 32.21, $p < 0.10$, t = 1.80; Gini coefficient: b = 72.16, $p < 0.10$, t = 1.94; centralization: b = 26.06, $p < 0.05$, t = 2.19). These results demonstrate that our findings are robust.

Study 1 largely supported Hypothesis 1, showing that hierarchical consistency moderated the relationship between power hierarchy and team performance. When hierarchies were inconsistent, power hierarchy negatively affected team performance. However, contrary to our prediction, when hierarchies were consistent, power hierarchy was not significantly related to team performance. Using teams with similar task cycles and team tasks, employing a time-lagged design, and using objective performance measures enhanced the internal validity of Study 1. However, as a questionnaire-based correlational study, it could not establish causal logic, and it did not test the mechanism underlying the interactive effect of power hierarchy and hierarchical consistency on team performance. To address these limitations, we conducted an experimental study.

## 3 Study 2

The purpose of Study 2 was to test our mediation hypotheses and establish causal logic through experimental methods, thereby enhancing the internal validity of our research.

### 3.1 Sample

One hundred ninety-two undergraduates and postgraduates from a university in eastern China participated in this experiment. Participants were randomly assigned to three-person teams of the same gender, resulting in 64 three-person teams. Participants had a mean age of 22.29 years (SD = 2.44); 55.7% were undergraduates and 44.3% were postgraduates; 59.4% were female and 40.6% were male. Participants were recruited through public announcements on university forums for a "team business decision-making study." All participants participated voluntarily and received 30 RMB as compensation. To motivate

participants to balance personal interests with team goals, we explicitly stated in recruitment materials and experimental instructions that the top-performing three-person team and three individuals would each receive an additional 100 RMB reward. These additional rewards were distributed after all experimental sessions concluded.

### 3.2 Experimental Task

We adapted Greer and van Kleef' s (2010) multiparty negotiation task as our experimental task. This task reflects common team tasks in organizations and captures team members' mixed motives—pursuing personal interests while hoping for team success (van Bunderen, Greer, & van Knippenberg, 2018)—while also allowing us to examine power struggle processes within teams (Greer & van Kleef, 2010). Each experimental team was told they would serve as a consulting team for ABC Consulting Company, working on a project to provide performance improvement solutions for Tongda Express Company (in reality, they only completed six preliminary decision items about the project). Before providing improvement solutions, teams needed to make decisions on six matters: project start time, frequency and method of client communication, number of customer training sessions, etc. Each decision outcome affected the number of resource points individuals could obtain, which could be used to improve personal performance. Table 4 shows the resource points each role could obtain for the first three decision options. In the actual experimental materials, each participant only received the resource point list relevant to their assigned role and could not learn about other members' corresponding resource points. As shown in Table 4, each team member could obtain different resource points from these six decisions, and we stipulated that participants could not disclose their personal resource amounts for each decision to other team members. For each matter, the three team members could either reach a consensus through negotiation or exercise "veto power" to unilaterally impose their choice as the team decision. Each team was required to make these six decisions within 15 minutes; otherwise, all members would receive zero resource points.

**Table 4** Experimental Task Materials

| Issue | Resource (Consultant A) | Resource (Consultant B) | Resource (Consultant C) |
|---|---|---|---|
| Issue 1: Project start time | 21 hours | 35 hours | 14 hours |

| Issue | Resource (Consultant A) | Resource (Consultant B) | Resource (Consultant C) |
|---|---|---|---|
| Issue 2: Number of customer interviews | 3 times | 5 times | 2 times |
| Issue 3: Duration of customer training | 2 hours | 1 hour | 3 hours |

### 3.3 Experimental Design

The experiment employed a 2 (power hierarchy: unequal vs. equal) × 2 (hierarchical consistency: status hierarchy misaligned with power hierarchy vs. status hierarchy aligned with power hierarchy) between-subjects design. Participants were randomly assigned to experimental conditions. To avoid potential gender effects on power and status (Hays, 2013), each experimental team consisted of three same-gender participants. After all participants in an experimental team arrived, each participant was asked to first read the experimental instructions and task materials alone and complete a management consulting knowledge test. The experimenter then graded the test and publicly announced the score rankings (false feedback, used to manipulate hierarchical consistency). The experimenter also emphasized the number of "veto powers" each team member possessed. Participants then worked as a team to complete the multiparty negotiation task within 15 minutes. After completing the negotiation task, each participant individually completed a questionnaire on demographic information and manipulation checks before receiving compensation.

### 3.4 Experimental Manipulations and Measures

**Power hierarchy and hierarchical consistency.** We manipulated power hierarchy by varying team members' differential control over important team resources and manipulated hierarchical consistency by varying the alignment between power and status within the team. Since both power hierarchy and hierarchical consistency are team-level constructs, we operationalized them at the team level by manipulating individual power/status, similar to other team-level hierarchy research (e.g., Greer & van Kleef, 2010; Ronay et al., 2012). Empir-

ical research has found that power is typically based on control over resources and opportunities and the ability to command others, whereas status is usually based on skills and expertise (Blader et al., 2016). Therefore, we operationalized power differences using differential "veto power" among team members and operationalized status differences using differential skills and expertise. Specifically, we used the number of "veto powers" team members possessed to manipulate power differences. When exercising veto power, participants could obtain resource points without other team members' approval. High-power members were informed they had three veto powers, medium-power members had two, and low-power members had one. Second, we used scores on the "management consulting knowledge" test to manipulate status, as test scores represented participants' expertise levels in the consulting task. Participants first completed a brief management consulting knowledge test. The experimenter then graded the tests and publicly announced score rankings. High-status members were told they received the highest score among team members, low-status members received the lowest score, and medium-status members' scores fell between high- and low-status members.

We then operationalized power hierarchy and hierarchical consistency based on the alignment between team members' power and status. For example, in the power unequal and hierarchy consistent condition, three members played the roles of Consultant A, Consultant B, and Consultant C. Consultant A received three veto powers and the highest score on the management consulting knowledge test, Consultant B received two veto powers and a medium test score, and Consultant C received one veto power and the lowest test score. Specific operationalizations for other experimental conditions are shown in Table 5 .

**Table 5** Manipulation of Power Hierarchy and Hierarchical Consistency

| Condition | Team Member | Veto Power | Test Score |
|---|---|---|---|
| Power equal & hierarchy consistent | Member 1 | 2 | High |
| | Member 2 | 2 | Medium |
| | Member 3 | 2 | Low |
| Power unequal & hierarchy consistent | Consultant A | 3 | High |
| | Consultant B | 2 | Medium |
| | Consultant C | 1 | Low |
| Power equal & hierarchy inconsistent | Member 1 | 2 | Low |
| | Member 2 | 2 | Medium |
| | Member 3 | 2 | High |
| Power unequal & hierarchy inconsistent | Consultant A | 3 | Low |
| | Consultant B | 2 | Medium |
| | Consultant C | 1 | High |

**Power struggle and team performance.** We measured power struggle using the total number of times "veto power" was used within a team. Power struggle is competition among team members for control over important resources

within the team (Greer & van Kleef, 2010). By using veto power, participants could obtain resource points without other team members' approval. The more frequently veto power was used within a team, the more intense the competition for important resources. Therefore, the total number of veto power uses reflected the overall level of power struggle within the team. Team performance was measured by the sum of resource points obtained by team members, as this reflects the quality of conflict resolution within the team (Greer & van Kleef, 2010). The more resource points a team obtained through the multiparty negotiation task, the higher the team performance.

### 3.5 Experimental Results

**Manipulation checks.** We used Hays and Bendersky' s (2015) 2-item power scale and a 3-item status scale to test the effectiveness of our manipulations. Sample power items included "I control important resources in the team."Sample status items included "I am respected in the team." One-way ANOVA results showed that the power manipulation significantly affected manipulation check results, $F(2, 189) = 48.47$, $p < 0.01$, $^{2} = 0.34$. High-power participants ($M = 4.05$, $SD = 0.73$) perceived their power significantly higher than medium-power ($M = 3.43$, $SD = 0.60$) and low-power participants ($M = 2.44$, $SD = 0.84$). The status manipulation also significantly affected manipulation check results, $F(2, 189) = 4.39$, $p < 0.05$, $^{2} = 0.04$. High-status participants ($M = 3.42$, $SD = 0.69$) perceived their status significantly higher than low-status participants ($M = 3.08$, $SD = 0.55$). High-status participants also perceived higher status than medium-status participants ($M = 3.29$, $SD = 0.52$), though this difference was not significant.

**Hypothesis testing.** In Hypothesis 1, we proposed that hierarchical consistency would moderate the relationship between power hierarchy and team performance. ANOVA results showed that, after controlling for team average age, the interaction effect of power hierarchy and hierarchical consistency on team performance was significant, $F(1, 59) = 4.34$, $p < 0.05$, $^{2} = 0.07$, supporting Hypothesis 1. Simple effects analysis (see Figure 4 [Figure 4: see original paper]) revealed that when hierarchies were consistent, the main effect of power hierarchy on team performance was significant, $F(1, 59) = 14.39$, $p < 0.01$, $^{2} = 0.10$. When hierarchies were inconsistent, the main effect of power hierarchy on team performance was not significant, $F(1, 59) = 0.72$, ns.

**Figure 4** The Interaction Between Power Hierarchy and Hierarchical Consistency on Team Performance (Study 2)

In Hypothesis 2, we proposed that hierarchical consistency would moderate the relationship between power hierarchy and power struggle. ANOVA results showed that, after controlling for team average age, the interaction effect of power hierarchy and hierarchical consistency on power struggle was significant, $F(1, 59) = 15.13$, $p < 0.05$, $^{2} = 0.10$. Simple effects analysis (see Figure 5 [Figure 5: see original paper]) revealed that when hierarchies were consistent,

the main effect of power hierarchy on power struggle was significant, F(1, 59) = 12.06, p < 0.01, $^2$ = 0.08. Teams in the power unequal condition used veto power significantly fewer times (M = 2.13, SD = 1.41) than teams in the power equal condition (M = 3.37, SD = 1.59). When hierarchies were inconsistent, the main effect of power hierarchy on power struggle was not significant, F(1, 59) = 0.03, ns. Teams in the power unequal condition did not differ significantly from teams in the power equal condition in their use of veto power (M = 3.94, SD = 1.18 vs. M = 3.31, SD = 1.78). Therefore, hierarchical consistency also moderated the relationship between power hierarchy and power struggle, supporting Hypothesis 2.

**Figure 5** The Interaction Between Power Hierarchy and Hierarchical Consistency on Power Struggle (Study 2)

In Hypothesis 3, we proposed that power struggle would mediate the relationship between the interaction of power hierarchy and hierarchical consistency and team performance. We used multilevel regression to test this mediated moderation model, following Muller, Judd, and Yzerbyt' s (2005) recommendations. Table 6 shows that in Model 3 (M3), the interaction of power hierarchy and hierarchical consistency significantly affected team performance (b = 0.94, p < 0.05, t = 2.08). However, when power struggle was entered into the model (M4), the interaction effect on team performance became non-significant (b = 0.04, ns, t = 0.12), while the effect of power struggle on team performance remained significant (b = −0.46, p < 0.01, t = −9.46).

**Table 6** Multilevel Regression Analysis Results

| Variable | M1 | M2 | M3 | M4 |
|---|---|---|---|---|
| Team average age | -0.10 | -0.08 | -0.11 | -0.06 |
| Hierarchical consistency | | -0.11 | -0.08 | -0.11 |
| Power hierarchy | | 0.74** | 0.21* | 0.04 |
| Power hierarchy × Hierarchical consistency | | | 0.94* | 0.04 |
| Power struggle | | | | -0.46** |
| $R^2$ | 0.01 | 0.17** | 0.20** | 0.45** |
| $\Delta R^2$ | 0.01 | 0.16** | 0.03* | 0.25** |
| F | 0.74 | 12.31** | 10.99** | 27.83** |

*Note: n = 64.* p < 0.05, **p < 0.01. The dependent variable is standardized team performance. Regression coefficients are unstandardized.*

We further tested the mediated moderation effect using the bootstrapping method recommended by Preacher, Rucker, and Hayes (2007), with 20,000 bootstrap samples. As shown in Table 7 , when hierarchical consistency was low, the indirect effect of power hierarchy on team performance was not significant (95% confidence interval included zero). When hierarchical consistency was high, the indirect effect of power hierarchy on team performance was significant

(95% confidence interval excluded zero). Combined with ANOVA, regression, and bootstrap results, Hypothesis 3 received partial support.

**Table 7** Mediated Moderation Analysis Results

| Hierarchical consistency | Indirect effect | Boot SE | Boot LLCI | Boot ULCI |
|---|---|---|---|---|
| Low | -0.35 | 0.25 | -0.91 | 0.08 |
| High | 0.49 | 0.22 | 0.11 | 0.99 |

*Note: Bootstrap samples = 20,000; confidence level = 95%.*

Study 2 replicated Study 1' s findings, showing that hierarchical consistency moderates the relationship between power hierarchy and team performance. However, there was a slight difference: Study 2 found that when hierarchies were consistent, power hierarchy positively enhanced team performance, whereas when hierarchies were inconsistent, power hierarchy was not significantly related to team performance. In contrast, Study 1 found that when hierarchies were consistent, the effect of power hierarchy on team performance was positive but not significant, whereas when hierarchies were inconsistent, power hierarchy undermined team performance. Additionally, Study 2 tested Hypotheses 2 and 3, which were not examined in Study 1. The results revealed that hierarchical consistency moderated the relationship between power hierarchy and power struggle, and that power struggle mediated the relationship between the interaction of power hierarchy and hierarchical consistency and team performance, providing support for Hypothesis 3.

## 4 Study 3

Studies 1 and 2 used student samples. Although such student samples have been widely used in team-level hierarchy research (e.g., Hays & Bendersky, 2015; Jung, Vissa, & Pich, 2017), course teams differ from work teams, which somewhat limits the ecological validity of our research. To address this issue, we added a field study using top management teams (TMTs) as a sample.

### 4.1 Sample

Study 3 used data from TMTs of internet industry companies listed on the New Third Board (NEEQ) to test our hypotheses. We chose this sample for several reasons. First, TMTs of listed companies are appropriate samples for studying power and status hierarchies (He & Huang, 2011; Greve & Mitsuhashi, 2007). Second, internet industry companies tend to have flatter organizational structures (Chen, He, & Chen, 2018), where hierarchical inconsistency may be more prevalent. Third, NEEQ-listed companies must annually disclose audited operating data and board and executive information according to the National Equities Exchange and Quotations requirements, providing relatively objective

indicators for our research. Finally, TMTs of new ventures have strong control over their companies and significantly impact firm performance (e.g., Busenitz, Plummer, Klotz, Shahzad, & Rhoads, 2014; Harper, 2008). Since NEEQ-listed companies are primarily new ventures, this provided favorable conditions for testing the effects of power structures and hierarchical consistency within TMTs on organizational performance.

Since the NEEQ only began accepting company listings nationwide at the end of 2013, available data are limited to 2013-2017. Following previous research recommendations that TMT studies should include at least three members (e.g., Jackson et al., 1991), we excluded companies with fewer than three TMT members. Additionally, we excluded observations from years when companies were delisted or had missing operating data or executive member data. After these screening steps, the final sample for Study 3 consisted of 203 observations from 169 listed companies from 2013 to 2016. In this sample, average annual operating revenue was 335 million RMB (SD = 2.9 billion), average number of employees was 139.44 (SD = 150.00), average TMT size was 4.14 members (SD = 1.34), and average company age was 4.14 years (SD = 1.52).

### 4.2 Measures

**Power hierarchy.** Many studies have noted that equity ownership largely reflects executives' power levels (e.g., Daily & Johnson, 1997; Haynes & Hillman, 2010). Therefore, Study 3 measured each TMT member' s power level based on their equity ownership percentage in the company. Consistent with previous research (e.g., Cantimur et al., 2016; Halevy et al., 2012) and Study 1, Study 3 used the standard deviation of TMT members' power to calculate power hierarchy.

**Hierarchical consistency.** Previous research (He & Huang, 2011; Greve & Mitsuhashi, 2007) has indicated that executives' tenure in a company reflects their status within the company, with longer tenure indicating higher status. Therefore, Study 3 measured status based on TMT members' tenure in the company. We then standardized both TMT members' tenure (status) and equity percentage (power) and calculated hierarchical consistency following the same method as Study 1: we computed the absolute difference between each member's standardized tenure and standardized equity, averaged these absolute differences within the team, and took the negative of this mean to calculate hierarchical consistency.

**Firm performance.** Return on equity (ROE) reflects a company' s ability to reward shareholders' investments and is an important indicator of business success (Hitt, Ireland, & Stadter, 1982). Many studies of listed companies have used this indicator to measure firm performance (e.g., Chadwick, Super, & Kwon, 2015; Peng, 2010; Zhao & Murrell, 2016). Therefore, Study 3 used ROE to measure firm performance. Consistent with previous archival studies of listed companies (e.g., He & Huang, 2011; Zhao & Murrell, 2016), we used

ROE from one year after the independent variables as the dependent variable.

**Control variables.** First, team size may significantly affect team performance (Lepine et al., 2008), so we controlled for team size in Study 3. Second, TMT diversity may affect organizational performance (e.g., Boone & Hendriks, 2009; Campbell & Mínguez-Vera, 2008), so we controlled for gender diversity and educational level diversity in TMTs. Third, temporal factors may importantly affect team processes and outcomes (e.g., Koopmann, Lanaj, Wang, Zhou, & Shi, 2016; Sieweke & Zhao, 2015), so we controlled for average team tenure. Finally, since Study 3' s sample is panel data spanning multiple years, we controlled for data year, consistent with previous panel data studies (e.g., He & Huang, 2011; Sieweke & Zhao, 2015).

### 4.3 Results

Table 8 presents descriptive statistics and correlations. Consistent with our predictions, power hierarchy was not significantly correlated with firm performance (ROE). Since Study 3' s data include observations from the same sample at different time points (i.e., panel data), panel data studies typically use fixed effects models to analyze data to exclude the influence of time-invariant sample characteristics (e.g., Campbell & Mínguez-Vera, 2008; Zhao & Murrell, 2016). Therefore, we also used this method to test our hypotheses.

**Table 8** Means, Standard Deviations, and Correlations

| Variable | M | SD | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|---|---|
| 1. TMT size | 4.14 | 1.34 | - | | | | | | |
| 2. Gender diversity | 0.31 | 0.30 | 0.16* | - | | | | | |
| 3. Average tenure | 2.14 | 1.52 | -0.11 | -0.04 | - | | | | |
| 4. Educational diversity | 0.59 | 0.29 | -0.13 | -0.10 | -0.04 | - | | | |
| 5. Power hierarchy | 0.08 | 0.09 | -0.30** | -0.04 | -0.04 | 0.21** | - | | |
| 6. Hierarchical consistency | -0.64 | 0.29 | -0.29** | -0.04 | -0.04 | 0.21** | -0.21 | - | |
| 7. ROE | 0.08 | 0.29 | -0.21 | -0.11 | -0.12 | -0.03 | -0.00 | - | |

*Note: n = 203.* $p < 0.05$, $^{**}p < 0.01$. Dummy variables for data year are not listed.*

Before regression analysis, we centered all predictor variables to reduce potential multicollinearity. In Hypothesis 1, we proposed that hierarchical consistency would moderate the relationship between power hierarchy and team performance. Fixed effects model regression results (see Table 9 ) show that in Model 3 (M3), the interaction between power hierarchy and hierarchical consistency significantly affected team performance (b = 0.21, p < 0.05, t = 2.36).

**Table 9** Fixed Effects Model Regression Results

| Variable | M1 | M2 | M3 |
|---|---|---|---|
| TMT size | -0.24 | -0.29 | -0.12* |
| Gender diversity | -2.64 | -1.43** | -2.06 |
| Educational diversity | -1.43** | -1.22* | -1.26* |
| Average tenure | -0.29 | -0.12* | -0.08 |
| Power hierarchy | | 2.31* | -0.15 |
| Hierarchical consistency | | | 0.21* |
| Power hierarchy × Hierarchical consistency | | | 2.99* |
| $R^2$ | 0.06** | 0.08** | 0.11** |

*Note: n = 203.* p < 0.05, **p < 0.01. Regression coefficients are unstandardized.*

We plotted the relationship between power hierarchy and firm performance at different levels of hierarchical consistency (see Figure 6 [Figure 6: see original paper]). Simple effects analysis showed that when hierarchical consistency was low, the slope representing the relationship between power hierarchy and team performance was negative and significant (k = −0.16, p < 0.01). When hierarchical consistency was high, the slope was positive but not significant (k = 0.004, ns). These results indicate that when hierarchies were inconsistent, power hierarchy was negatively related to team performance; when hierarchies were consistent, power hierarchy was not significantly related to team performance. Combined with regression and simple effects analysis results, Hypothesis 1 received partial support.

**Figure 6** The Moderating Effect of Hierarchical Consistency on the Relationship Between Power Hierarchy and Team Performance (Study 3)

### 4.4 Robustness Tests

Finally, Study 3 conducted robustness tests using alternative operationalizations of hierarchy. We used coefficient of variation and centralization as alternative indicators (e.g., Hays & Bendersky, 2015; Huang & Cummings, 2011). First, while holding all control variables constant, we used team members' coefficient of variation as the operationalization of power hierarchy in the regression model. Results showed that the interaction between power hierarchy and hierarchical consistency remained significantly positively related to firm performance (b =

4.84, $p < 0.01$, $t = 3.05$). Second, when using centralization as the operationalization of power hierarchy, the interaction between power hierarchy and hierarchical consistency remained significantly positively related to firm performance ($b = 13.63$, $p < 0.01$, $t = 3.13$). These results demonstrate that Study 3' s findings are robust.

Study 3 replicated the test of Hypothesis 1 using TMTs from NEEQ-listed companies as a sample. Results showed that hierarchical consistency moderated the relationship between power hierarchy and firm performance. When hierarchical consistency was low, power hierarchy was negatively related to firm performance; when hierarchical consistency was high, power hierarchy had no significant effect on firm performance. Thus, Hypothesis 1 received partial support. Study 3 addressed the limitation of using student samples in Studies 1 and 2 by using a field sample of TMTs, thereby enhancing the ecological validity of our research.

## 5 General Discussion

This study combined questionnaire surveys, experiments, and archival data to explore the moderating effect of hierarchical consistency on the relationship between power hierarchy and team performance, as well as the mediating role of power struggle in the relationship between the interaction of power hierarchy and hierarchical consistency and team performance. Results partially support that hierarchical consistency moderates the relationship between power hierarchy and team performance and that power struggle mediates the relationship between the interaction of power hierarchy and hierarchical consistency and team performance.

### 5.1 Theoretical Contributions

Regarding the relationship between power hierarchy and team performance, existing research has clearly split into two opposing camps: functionalism, which emphasizes the positive effects of power hierarchy, and dysfunctionism, which emphasizes its negative effects. Most existing research has implicitly assumed that status hierarchy and power hierarchy are highly aligned, overlooking the potential impact of hierarchical inconsistency. This study finds that hierarchical consistency moderates the relationship between power hierarchy and team performance, suggesting that hierarchical consistency affects perceptions of power hierarchy legitimacy. Hierarchical inconsistency undermines power hierarchy legitimacy, whereas hierarchical consistency enhances it, thereby influencing the relationships among power hierarchy, power struggle, and team performance. Our research helps reconcile the conflict and opposition between functionalism and dysfunctionism. The positive effects of power hierarchy advocated by functionalism only occur when status hierarchy aligns with power hierarchy. When status hierarchy and power hierarchy are misaligned, power hierarchy lacks legitimacy and produces negative effects.

Second, our research extends research on power hierarchy legitimacy. Previous

research on power hierarchy legitimacy has generally argued that legitimacy derives from procedural fairness in power use—that is, whether a power hierarchy is legitimate depends on how those in power use it (e.g., Tyler, 2006; van Dijke, De Cremer, & Mayer, 2010). Research on status hierarchy legitimacy provides an alternative perspective. Ridgeway and Berger (1986) proposed that the greater the difference in performance expectations among team members, the stronger the legitimacy of the status hierarchy, and that these expectation differences stem from variations in members' individual characteristics. In other words, status hierarchy legitimacy can come from how it is constructed, not solely from how it is used. Our study extends this perspective by proposing that alignment between status hierarchy and power hierarchy affects power hierarchy legitimacy. However, since our study did not directly measure power hierarchy legitimacy, future research should test our arguments using direct measures.

Additionally, this study advances research on hierarchical consistency. After Magee and Galinsky (2008) theoretically distinguished between power and status and proposed their potential misalignment, individual-level research on power-status inconsistency has emerged and produced many findings (e.g., Anicich et al., 2016; Blader & Chen, 2012; Fast et al., 2012). However, hierarchical consistency research has focused almost exclusively on the individual level. Although one study examined the effects of hierarchical consistency on bilateral relationships (i.e., Ma et al., 2013), hierarchical consistency research has not considered potential effects at more complex group or team levels. On the other hand, in team-level hierarchy research, only a few theoretical studies have mentioned the potential role of alignment between status hierarchy and power hierarchy (Halevy et al., 2011), and the vast majority of empirical studies have ignored the effects of hierarchical consistency. This study is among the first to introduce hierarchical consistency into team-level hierarchy research and empirically verify its important effect on the relationship between power hierarchy and team performance, thereby advancing hierarchical consistency research.

### 5.2 Managerial Implications

In contemporary organizations, teams have gradually become the basic organizational unit (Edmondson, 2002; Nohria & Garcia-Pont, 1991). However, what structure should be used to organize teams remains a challenge for management practice (Bunderson & Boumgarden, 2010). According to the functionalist perspective on hierarchy, hierarchical structures with clear power differences are more conducive to team functioning. According to the dysfunctionalist perspective, power-equal structures are more beneficial. This study finds that whether power hierarchy within a team benefits team performance depends on hierarchical consistency. When hierarchies are consistent, power hierarchy benefits team performance; when hierarchies are inconsistent, power hierarchy undermines team performance. Therefore, for managers, ensuring alignment between status hierarchy and power hierarchy within teams is crucial.

### 5.3 Limitations and Future Directions

This study has several limitations. First, our theory has not been tested across multiple contexts and team tasks. For example, we did not examine whether our theory holds in highly innovative tasks, and some research suggests that power hierarchy may inhibit the generation of novel ideas within teams (e.g., Yuan & Zhou, 2015). Therefore, even when hierarchies are consistent, power hierarchy may still be detrimental to innovation. Second, we found relatively high correlations between team members' power and status in the field studies (Studies 1 and 3), which supports the common assumption in previous research that power and status are often aligned (e.g., Magee & Galinsky, 2008). However, in our studies, some teams showed negative correlations between members'power and status, and in Study 3, the correlation between power and status reached −1.00 in two teams, demonstrating that power-status misalignment does exist.

This study examined the moderating effect of hierarchical consistency on the relationship between power hierarchy and team performance. Through three sub-studies using questionnaire surveys, experiments, and archival data, we found that when hierarchies are consistent, power hierarchy benefits team performance, whereas when hierarchies are inconsistent, power hierarchy undermines team performance. Additionally, power struggle mediates the relationship between the interaction of power hierarchy and hierarchical consistency and team performance.

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*Note: Figure translations are in progress. See original paper for figures.*