



# **Disagreement about the Team's Status Hierarchy: An Insidious Obstacle to Coordination and Performance**

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**Disagreement about the Team's Status Hierarchy:  
An Insidious Obstacle to Coordination and Performance**

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**Abstract:**

Hierarchies are pervasive in groups, generally providing clear guidelines for the dominance and deference behaviors that members are expected to show based on their relative ranks. But what happens when team members disagree about where each member ranks on the status hierarchy? While some research has examined overt status rivalries (Sutton & Hargadon, 1996), typically focusing on battles for the top positions (Groysberg, Polzer & Elfenbein, 2009; Overbeck, Correll, & Park, 2005), our study contributes novel findings on the effects of disagreement amongst *all* members' *perceptions* of their team's status hierarchy. This paper develops and tests a theory to explain how even small differences in members' status perceptions—differences that may not be apparent to the members themselves—can diminish coordination, generate task conflict, and weaken performance.

We identify two conditions—time pressure and intragroup familiarity—under which team members' disagreements on the status hierarchy are more likely to lead to poor coordination and increased conflict. Survey data from a longitudinal field study of 89 consulting and accounting teams from a Big Four firm allow us to examine how teams experience status disagreement over time. Independent, third-party performance data for each team demonstrates how coordination and conflict ultimately affect performance with clients.

These findings contribute both to the micro-status literature (especially to the growing body of research on the role of status in shaping team dynamics and outcomes) and more broadly to the team effectiveness literature.

Hierarchies are the primary organizing mechanism for group activity (e.g., Levine 1999; Sidanius et al. 1994). They delineate the behavioral “rules” for group members: Higher-status individuals, for example, are permitted to direct group decision-making (Johnson et al. 1998), display anger (Tiedens et al. 2000; Tiedens 2001), and interrupt others (Bales and Slater 1955; Robinson and Reis 1989) whereas those toward the bottom are expected to defer to higher-ups by listening to their opinions (Kirchmeyer 1993), asking fewer questions (Alkire et al. 1968), and expressing appreciation (Tiedens, et al. 2000).

Researchers have theorized that these behavioral norms take their strength from their presumed legitimacy, the “presumption of consensus” (Berger et al. 1998) whereby each group member believes that he or she and all the other group members are in agreement about each other’s relative status. But consensus does not exist in all groups. Researchers have recently begun to examine status conflict—the situation in which a group fails to establish a consensual status hierarchy and members are therefore competing for status (Groysberg et al. 2009; Overbeck et al. 2005; Porath et al. 2008). While such research focuses on groups whose members recognize that they are in conflict over the status hierarchy, it clearly indicates a different and unexplored possibility: groups whose members *think* they are in agreement with each other on the status hierarchy but in fact are not. Because prior research tends to infer the status hierarchy from group behaviors rather than measure status perceptions directly (cf. Berger et al. 1998), the effects of the perceptions themselves have been difficult to detect.

Published research on status conflict has so far focused primarily on the effects of high-status members jockeying for top positions to attain valuable resources such as power, credit, and reputational benefits (Groysberg et al. 2009; Haas 2005; Overbeck et al. 2005; Sutton and Hargadon 1996b). Research has yet to explore the effects of all team members’ inconsistent perceptions of each other’s status, especially when disagreement is latent rather than explicit. Given how much is known about the

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benefits of agreed-upon status differentiation between group members, it is surprising how little research has examined the effect that disagreement on status differentiation can have on group process.

To address these concerns and tackle the unanswered questions about team-level status disagreement, this paper develops and tests a theory to explain how even small differences in team members' perceptions of their team's status hierarchy can affect group processes and performance. In particular, we identify two conditions—time pressure and intragroup familiarity—under which team members' disagreements on the status hierarchy are more likely to lead to poor coordination and increased conflict. Survey data from a longitudinal field study of 89 consulting and accounting teams from a Big Four firm allow us to test this model of how teams experience status disagreement over time. Third-party performance data for each team demonstrates how its coordination and conflict ultimately affect its performance with clients.

### **Defining Status Disagreement**

When people join a group, they tend to be concerned with their status relative to their fellow members and therefore to organize themselves, explicitly or implicitly, into a status hierarchy which affects their subsequent interactions (Bales and Slater 1955; Berger et al. 1972; Overbeck et al. 2005). Clear status differentiation within a group clarifies social interactions by signaling to members their rightful “place” (Anderson and Spataro 2005). Hierarchical differentiation may also enhance a group's survival by ensuring that its members are accountable for accomplishing their tasks and that its resources are distributed appropriately (Overbeck et al. 2005). In contrast, Hambrick (1994) argued that too much similarity between members of a top-management group (that is, too little status differentiation) can engender head-on rivalries for CEO succession, ultimately driving group members apart and hindering their collaboration and exchange of information. All told, though, the advantages of status differentiation help to explain the prevalence of status hierarchies in groups of all types (Mazur 1985).

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In newly formed groups, status hierarchies arise from group members' implicit or explicit evaluations of each other (Berger et al. 1977). During the status-organizing process, members perceive each other's status cues, then mentally weigh and combine them to develop a status ranking<sup>1</sup> (Fisek et al. 1995). These status cues may be *diffuse* cues such as age, gender, and race or *specific* cues such as task competency, language fluency, and mathematical ability (Berger et al. 1972). Each member's beliefs, values, and prior experiences influence which cues he or she focuses on and the meaning he or she ascribes to them (Fragale 2005; Randel et al. 2005).

Given the multiple factors that determine a status hierarchy, each of which are filtered and interpreted by each group member, we might expect that members will sometimes arrive at different assessments of each other's relative rankings. In a cross-functional team, for instance, designers might bestow status according to the creativity of members' contributions whereas engineers might bestow status to those who demonstrate quantitative excellence; these team members' perceptions of the status hierarchy might therefore differ significantly. Although members might generally behave as if there were a consensus on status hierarchy, especially in situations in which social norms are highly regarded, they might actually disagree about it. Indeed, research that has directly measured perceptions of status *has* found such disagreements, at least between one's own and others' evaluations of oneself (see Anderson and Spataro 2005 for an overview). In situations in which the norms exert less power over behavior, we might therefore expect to see behavior attributable to status disagreements.

In this paper, we define individual status as “the amount of respect, influence, and prominence” people enjoy in the eyes of others (Anderson et al. 2001: 117). High-performing individuals are typically (but not invariably) accorded high status by those around them, both informally and formally and both within and outside their groups (e.g., Groysberg et al. 2009). Indeed members' beliefs about one another's task competence (or “performance expectations”) has been shown to be a fundamental source of intra-

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<sup>1</sup> Much of this status-organizing process is probably subconscious (Berger et al. 1986).

group status (cf. Ridgeway, 1987). When a group's members believe that one member has great expertise, they are more likely to accept, remember, and repeat what he or she says (Stasser et al. 1994). Being seen as an expert thus increases one's influence over the group (cf. Horai et al. 1974).

In professional service firms (the context for our research; see Research Setting, below), all the facets of status—respect, influence, and prominence—emanate predominantly from one's perceived level of competence, which is also the criterion for promotion. Group members generally achieve higher rank to the extent that they represent the prototypical features of their group (Hogg 2001) because the more a person identifies with a particular characteristic, the more he or she will rely on that characteristic in determining the status of others (Randel et al. 2005). Given that professional service firms are quintessential knowledge-intensive firms in which expertise is deeply valued (Greenwood et al. 2007), task competence is logically a core determinant of a person's status rank there.

In the remainder of this paper, we (a) develop and test a theoretical framework to explain how *team-level disagreement about the team's internal status hierarchy* (hereafter called *status disagreement*) affects team processes and ultimate performance and (b) delineate the conditions under which this is most likely to be a problem.

## **Effects of Status Disagreement on Team Process**

### **Status Disagreement and Team Coordination**

Team coordination involves members of interdependent task groups using strategies and behavior patterns to align their actions and using knowledge and objectives to attain a common goal (McGrath et al. 2000). Coordination is recognized as a distinct aspect of team activities (Gladstein 1984), one that can take place explicitly or implicitly (Rico et al. 2008). When team coordination goes well, it improves team outcome by making the best use of each member's work (Brannick and Prince 1997); poor coordination, however, can disrupt processes and diminish outcomes (Wilke and Meertens 1994).

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Disagreement on the status hierarchy is likely to weaken team coordination in two main ways. First, status disagreement can make it unclear who is in charge. Generally, higher-status team members are implicitly charged with directing the team, while lower-status members are expected to follow the instructions of their status superiors (Brewer, 1997; Sidanius & Pratto, 1999). But if team members disagree about who holds relatively higher status, they may end up following different leaders, an obvious blow to team coordination.

Second, disagreement on the status hierarchy can make it hard for a team to assign tasks to appropriate members. In groups with an established status hierarchy, performance expectations—beliefs about each member’s potential to contribute to the task—are highly correlated with each member’s status ranking (Berger et al. 1972). Accordingly, tasks requiring greater expertise should fall to higher-status members. If the status hierarchy is unclear, however, difficult tasks may unwittingly be assigned to members with insufficient competence. Furthermore, in many organizations, certain tasks are perceived to be lower- versus higher-status tasks. In a management consulting project, for example, data gathering and analysis are typically handled by more junior team members while interacting with senior clients is reserved for higher-status team members. When teams disagree about who holds greater status, members may balk at being assigned to tasks that are “beneath” what they believe to be their standing or may wind up struggling with assigned tasks beyond their capabilities.

With these two effects of status disagreement on team coordination in mind, we propose our first hypothesis:

Hypothesis 1 (H1): *Teams with greater status disagreement have lower team coordination.*

### **Status Disagreement and Team Conflict**

Teamwork invariably involves conflict (Jehn 1995). Scholars distinguish between *relationship conflict*, which focuses on interpersonal incompatibilities and includes affective dimensions such as friction, tension, and dislike, and *task conflict*, which focuses on substantive aspects of the task (Jehn 1995;

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Pinkley 1990). Prior research has identified myriad antecedents for relationship conflict, including demographic diversity (Pelled et al. 1999), geographic distribution (Hinds and Bailey 2003), goal uncertainty (Mooney et al. 2007), and communication norms (Jehn 1995). Scholars have also identified predictors for task conflict, including geographic distribution (Hinds and Bailey 2003) and communication medium, such as computer-moderated versus face-to-face (Campbell and Stasser 2006; Carnevale et al. 1981; Hollingshead et al. 1993). Although several scholars have examined a link between status and the potential for intragroup conflict (Overbeck et al. 2005), surprisingly little published research has examined status disagreement as a source of team conflict (for an exception, see Owens and Sutton 2001).

### **Status Disagreement and Relationship Conflict**

Relationship conflict, also known as socio-emotional conflict, involves irritation about personal taste, incompatible personalities, or opposing values (Jehn 1995) and is likely to arise when one team member believes that another's actions will impinge on his or her own values or interests (Thomas 1992).

Disagreement on the status hierarchy is likely to generate higher levels of relationship conflict within a group. Without a collectively agreed-upon structure, the group is less stable and conflict is more likely to become manifest (Zelditch & Walker, 1984) as low-status members challenge their superiors. Status challenges undermine high-status members' sense of personal legitimacy, in turn threatening their egos and self-identities (Tajfel and Turner 1986) and generating overt interpersonal rivalry (Ravlin, Thomas & Ilsev, 2000).

Hypothesis 2 (H2): *Teams with greater status disagreement will experience more relationship conflict.*

### **Status Disagreement and Task Conflict**

Task conflict arises when team members disagree on substantive issues such as opinions, ideas, and labor distribution (Jehn 1995; Pinkley 1990) It can center around strategy and tactics (Jehn 1995; Parry et al.



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2008) and manifest as arguments over which way to accomplish the group's task (DeChurch and Marks 2001). Task conflict is typically attributed to the situation and context rather than to team members and their relationships (Bono et al. 2002). Although task conflict may lead to relational conflict (Jehn 1997; Pelled et al. 1999), the two are distinct (Pinkley 1990; Simons and Peterson 2000) and we therefore also examine the effect of status disagreement on task conflict.

Status disagreement may generate task conflict in a team by three means: disputes over roles, deviation from expected behaviors, and lack of a legitimate leader to resolve disputes. First, when teams form, the initial determination of the status hierarchy is typically affected by overt clues such as salary, title, and explicit assignment; even in the absence of such signals, though, people enter a team with expectations about the roles and status that they and other team members will have (Berger et al. 1972; Magee and Galinsky 2008; Overbeck et al. 2005). Those who perceive themselves or are perceived as higher-status members may select tasks that affirm this rank (Groysberg et al. 2009), precipitating task conflict if more than one member is vying for the same task because of unclear status hierarchies.

Second, status disagreement may also generate team conflict if a member's behavior does not conform to expectations (Magee and Galinsky 2008). Common norms of deference dictate that high-status members are expected to contribute significantly more to the information and idea pool than lower-status members (Wittenbaum and Bowman 2005). If a lower-status member begins offering "too many" ideas and opinions, this deviation from other members' expectations can create tension concerning what information to include in the problem-solving process—a symptom of task conflict (Jehn, Greer & Levine, 2008).

Third, a team's task conflicts are generally resolved by its higher-status members (Hogan & Hogan, 2002; Groysberg et al. 2009). But if the status ranking is unclear, higher-status members may find it harder to settle disputes, which are therefore likely to be more lengthy and disruptive. Because status

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hierarchies are self-reinforcing (Magee and Galinsky 2008; Jost & Banaji, 1994), initial status disagreements will be perpetuated and task conflicts will proliferate as the project progresses.

Hypothesis 3 (H3): *Teams with greater status disagreement will experience more task conflict.*

### **Team Conflict and Performance**

We draw on Hackman's (2002) widely used definition of group effectiveness, the first criterion of which is that "the productive output of the team (that is, its product, service, or decision) meets or exceeds the standards of quantity, quality, and timeliness of the team's clients—the people who receive, review, or use the output" (p. 23). In interdependent task groups, effectiveness is a function not only of members' individual talents but also of their ability to work together (Wageman 2001); any disruption of a team's collaborative process is therefore likely to weaken its performance. Indeed, a great deal of research has already found negative (albeit context-dependent) effects of both relationship and task conflict on team performance.

### **Relationship Conflict and Performance**

Relationship conflict has been shown to lead team members to withdraw from cooperative behaviors (Jehn 1997), to diminish a team's information-processing capabilities (Jehn and Mannix 2001), and to lower cognitive functioning by increasing members' stress and anxiety levels (Staw, Sandelands, & Dutton, 1981). A group whose task requires concentration and thoughtful input might pay a particularly high price for relationship conflict. A meta-analysis of the conflict-performance literature suggests that, across studies, the average (corrected) correlation between relationship conflict and team performance is negative and significant ( $\rho = -.22$ ) (De Dreu and Weingart 2003). In the case of a team whose members do not agree on their relative status, there may already be serious interpersonal friction and we would expect relationship conflict to exact a particularly high toll.

Hypothesis 4 (H4): *Performance will be lower for teams with more relationship conflict.*

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### **Task Conflict and Performance**

Findings about the effects of task conflict on team performance have been somewhat mixed. Some studies have demonstrated positive outcomes of task conflict (Jehn 1995), especially for complex and non-routine tasks (Jehn 1995) and under fairly specific conditions (Jehn and Chatman 2000; Lovelace et al. 2001). More generally, however, research indicates that task conflict reduces overall team effectiveness (De Dreu and Weingart 2003; Hinds and Bailey 2003; Jehn 1997; Pondy 1967). On the whole, meta-analytical results indicate a negative and significant average correlation between task conflict and team performance ( $\rho = -.23$ ) (De Dreu and Weingart 2003).

Task conflict is particularly likely to have a detrimental performance effect for teams exhibiting status disagreement. We know that people's egos are intertwined with their social standing (Hambrick 1994). When a team member's dominance is challenged—more likely to happen in teams with unstable status hierarchies—he or she is likely to engage in competitive tactics to win a dispute (i.e., exert influence) rather than engage in objective debate aimed at completing the task at hand (Levine and Thompson 1996). We therefore predict:

Hypothesis 5 (H5): *Performance is lower for teams with more task conflict.*

### **Moderating Conditions**

We propose that status disagreement does not necessarily result in overt conflict unless the situation lessens the constrictions of social norms. Drawing on research from the small groups tradition, we suggest that two factors—time pressure and intra-team familiarity—are likely to weaken the effects of behavioral norms so that status disagreement is more likely to result in coordination problems and task conflict.

#### **Moderating Effects of Time Pressure on Effects of Status Disagreement**

Teams make better decisions when they are not rushed (Campbell and Stasser 2006). Time pressure—the feeling that the team will suffer, or at least lose out on a reward, if a deadline is not reached (Bronner 1982)—hinders team effectiveness (Drach-Zahavy and Freund 2007). Research shows that these effects

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occur because the team decreases its knowledge-sharing and discussion (Campbell and Stasser 2006; Kelly and Loving 2004), becoming so task-focused as to disregard interpersonal communication (Karau and Kelly 1992; Kelly and Karau 1999; Kelly and McGrath 1985). Under such conditions, status disagreement is likely to have an even more damaging effect on coordination and conflict may be magnified.

We have already argued that status disagreement will impede coordination by hampering effective leadership and by decreasing the alignment between tasks and those assigned to do them. Groups facing time pressure are even less likely than those not under such pressure to spend the necessary time to discuss and resolve these issue (e.g., (Campbell and Stasser 2006).

*Hypothesis 6a (H6a): The negative relationship between status disagreement and team coordination is stronger for teams facing high versus low time pressure.*

Time pressure is also likely to make a team with status disagreement even more vulnerable to task conflict. Teams under time pressure tend to feel more stress and find tasks more difficult to do than teams without the pressure do (Kelly and McGrath 1985). Because teams under time pressure spend far less time on interpersonal activities (Kelly and McGrath 1985) and far more time engaging in direct-task activity (Karau and Kelly 1992; Kelly and Karau 1999), they are less likely to develop the interpersonal trust that would allow task conflict to be perceived as constructive debate (Simons and Peterson 2000). Because time pressure encourages a more individualistic self-focus rather than a broad team perspective (Driskell et al. 1999), members are more likely to approach task conflicts in a competitive frame of mind, focusing on winning the argument rather than on solving the collective problem. We therefore expect the following:

*Hypothesis 6b (H6b): The positive relationship between status disagreement and task conflict is stronger for teams facing high versus low time pressure.*

### **Moderating Effects of Team Familiarity on Effects of Status Disagreement**

Familiarity (or prior shared task experience) among team members is typically considered a positive contributor to team effectiveness (Harrison et al. 2003) through its effects, for example, on interpersonal attraction and cohesiveness (Gruenfeld et al. 1996) and on the development of a group's transactive memory system (Liang et al. 1995). Yet a number of its demonstrated effects on team process are likely to exacerbate the negative effects of status disagreement on both team-level coordination and task conflict.

As we have said, coordination requires (a) clarity of direction and (b) accuracy in assigning tasks to team members who have the necessary ability and appropriate relative status. But when team members are very familiar with each other, their decision making tends to rely on the information that is common to all of them (Kim 1997). In a familiar team with status disagreement, members might rely on different "bosses" for direction. But because they focus on commonly held information, discrepant instructions and information are less likely to arise in conversation and may only come to light through conflicting actions. Additionally, concerns about existing and future relationships between team members can confuse the coordination process by focusing team members' attention on matters of relational management rather than on problem solving and exploration of alternative solutions (Peterson and Thompson 1997). Finally, familiar groups have been shown to make quicker, less accurate decisions (Adams et al. 2005). In highly familiar teams, therefore, people may be more likely to assume that they know how to coordinate their work without investing in explicit discussions about which member is best suited for a particular task.

*Hypothesis 7a (H7a): The negative relationship between status disagreement and team coordination is stronger for teams whose members are highly familiar with each other than for teams whose members are less familiar with each other.*

As argued above, status disagreement will increase task conflict when a group member's behavior fails to conform to others' expectations based on his or her perceived rank in the hierarchy. This tendency is likely to be exacerbated in familiar groups. Prior research has shown that more familiar

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groups display disinhibition; that is, the gradual nonconformity to behavioral norms and expectations (Orengo Castellá et al. 2000; Smolensky et al. 1990). These findings are consistent with sociopsychological research suggesting that stronger interpersonal relations make members more willing to behave in ways that are inconsistent with a traditional status hierarchy (Heiss 1962; Leik 1963). Familiar team members may thus be more willing to challenge superiors by means of task-related actions, increasing the potential for task conflict.

Familiarity is also linked with spiraling negative behavior in a group. Members who overestimate their “place” in the hierarchy are often thought to be rude or arrogant (Anderson and Spataro 2005); other members are likely to view this uncivil behavior as a status challenge (Porath et al. 2008). For highly familiar groups in particular, deviant behavior is likely to result in tit-for-tat behavior by other members (Anderson and Pearson 1999), leading to one-upmanship that further escalates the conflict.

*Hypothesis 7b (H7b): The positive relationship between status disagreement and task conflict is stronger for teams whose members are highly familiar with each other than for teams whose members are less familiar with each other.*

## **Research Design and Methodology**

### **Research Setting**

The professional services sector is a rich setting in which to investigate the effects of status disagreement. We conducted our study in one of the global Big Four accounting firms that offers both audit and advisory services. Such professional service firms are widely viewed as the archetype of knowledge-intensive firms (Greenwood et al. 2005; Starbuck 1992).

Knowledge is both the raw material and the finished product in such firms, yet it is often very unevenly distributed among the members of a client-service project team (i.e., a group of consultants who interact with a client). One member may have relevant functional experience, another may have industry knowledge, and so on. In addition, both accounting and consulting projects typically involve a

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divide-and-conquer approach to data gathering and problem solving; once the team clarifies the project's focus, each member typically takes responsibility for a piece of the puzzle, collecting data and conducting analysis on this sub-issue. This division of labor causes further specialization within the team. To create an integrated product in this setting, team-level coordination is particularly important.

Hierarchy is an especially salient feature in professional service firms. Unlike many task forces or ad hoc teams, consulting and accounting project teams have a formal structure, with roles closely aligned to members' formal titles.<sup>2</sup> Because many firms use an "up-or-out" promotion system<sup>3</sup> that fosters an aggressive focus on performance and climbing the ladder, team members may strive to achieve the highest status they can on the team, a situation inviting conflict over relative rankings.

Finally, researching project teams in consulting and accounting firms offers some practical benefits. Projects often move from team origination to completion in several months, allowing researchers to follow a team through an entire project cycle. Teams vary considerably in terms of members' interpersonal familiarity; depending on the staffing needs of the client and the professionals' availability, some teams may move intact from one project to another while others are populated with members who are strangers to one another. Lastly, a partner is responsible for soliciting client input on each team's performance, providing a reliable source for objective performance data.

### **Research Design Overview**

We conducted our study in both the consulting and audit divisions of "AuditCo," one of the global Big Four accounting and business-service firms.

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<sup>2</sup> For example, in an accounting firm, a project team would typically include a trainee, an assistant, an assistant manager, an in-charge auditor, a manager, and a senior manager. A partner/director might be part of the working team or assigned to oversee the project with less day-to-day involvement.

<sup>3</sup> The "up-or-out" system means that employees biannually undergo a formal performance evaluation; those who are judged not capable of earning promotion to the next level in the hierarchy (up) are asked to leave the firm (out) (Malos and Campion 1995)

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*Initial field work.* For the initial phase of the field study, we conducted longitudinal case studies of six consulting and audit teams in order to develop a fine-grained understanding of professional-service project teams (data not reported here). We also conducted 35 interviews in both the audit and consulting divisions of AuditCo in order to understand the context, team processes, and relevant outcomes; 16 of these interviews included pre-tests of the survey described below.

*Survey research design.* In order to capture longitudinal data to understand how a process unfolded over time—while further minimizing issues of same-source bias—we collected team input and process data from team members at two points in time and outcome measures from an independent source. Survey 1 was sent within the team’s first three days on the project; Survey 2 was sent during the team’s final week on the project. Most people responded within four days of receiving the survey. We collected final performance data from partners who were responsible for the projects but were not involved in the day-to-day project work.

*Sample.* Because our aim was to capture a sample that would realistically represent the range of tasks that AuditCo teams confront, interviewees advised us to maximize variance across three specific objective task features: client governance category (i.e., publicly listed, subsidiary of an international corporation, privately held) as an indicator of the complexity of its financial reporting requirements, length of the client’s relationship with AuditCo as an indicator of project uncertainty, and client’s geographic location to capture the variation in intra-team familiarity amongst large and small offices. The chief operating officer of AuditCo was our primary contact; his office compiled an initial list of possible teams intended to maximize diversity across these variables. We included teams from that list which met certain logistical criteria (i.e., project start date within an 8-week period, project duration of



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3-16 weeks, 3-10 full-time team members). After gaining consent from the lead partner for each team, we surveyed more than 600 members of 89 teams from both the audit and consulting divisions.<sup>4</sup>

Individuals were only considered as part of the core project team if they were employees of AuditCo and spent at least 50% of their time on the project. This definition excluded (1) most partners,<sup>5</sup> (2) internal firm experts (e.g., practice specialists), (3) other AuditCo support personnel (i.e., library researchers and secretaries), and (4) client employees who assisted the team.

505 people answered at least one survey, a final response rate of 82%. These respondents had an average age of 30 and an average of 4.7 years working at AuditCo. 66% of the respondents were male. These figures closely mirror the overall demographics of the firm, according to statistics provided by the human resource function.

## Measures

### **Disagreement on the Status Hierarchy**

To identify each member's perception of all team members' task-relevant competence—the foundation of the status hierarchy as described above—we first adapted Austin's (2003) measure of competence perception for field-based project teams. On survey 1, team members were asked to rate themselves and each of the other team members on five dimensions of competence along a five-point scale (very little competence to great competence). The five dimensions were initially suggested in an interview with AuditCo's head of human resources; they represent the core skills necessary for effective client service and the criteria for individual evaluations at the end of each project.<sup>6</sup> These skills have long been

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<sup>4</sup> Two lead audit partners who had been identified by the COO declined to participate. One was concerned about client confidentiality (the client was a government agency) and the other was concerned about the amount of time the surveys would require from team members. Given the high rate of participation otherwise, it is unlikely that the inclusion of these two teams would have materially affected our results.

<sup>5</sup> Firm partners typically work on at least two "live" projects at any time, but have many other responsibilities, such as clientele development and firm administration.

<sup>6</sup> The five criteria are also the building blocks of modules used in AuditCo's foundational training program; wording on the surveys reflected descriptions used in AuditCo's training materials.

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recognized in the accounting literature as the five core skills necessary for incoming auditors (Johnson 1975). The heads of both the audit and consulting divisions confirmed the appropriateness of these dimensions for our study at AuditCo.

The five competence items were averaged for each team member (by rater) to create a score reflecting the rater's overall perception of each of his or her team members. To determine team-level disagreement on the relative status of members, each individual's set of ratings for his or her complete team<sup>7</sup> was converted from a continuous measure to an ordinal scale (a ranking), allowing for ties. Team-level agreement on the expertise hierarchy was calculated using Kendall's Coefficient of Concordance (W), a nonparametric statistical test of the agreement among sets of rankings (Kendall 1955, Lewis and Johnson 1971). W is scaled from 0 (no agreement) to 1 (complete agreement); W ranged from .13 to 1 (mean = .73, SD = .21). *Disagreement* was therefore calculated using 1 minus the Kendall's W. Scores closer to 1, therefore, indicate stronger disagreement on the status hierarchy.

### **Team Process Variables**

We used principal components analysis (PCA) with varimax rotation to assess scale reliability for each of the three team processes: coordination, relationship conflict, and task conflict. Items for each scale loaded onto a single factor, with Cronbach's alpha statistics reported below. To assess discriminant validity between the three process scales, we entered all 13 items into a single PCA; again, all items loaded onto their respective scales. (See Table 1 for wording of all items and details of factor loadings.)

The three team-process variables were:

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<sup>7</sup> Members' self-ratings were included in this measure for both conceptual and empirical reasons. First, individuals' self-perceptions can be expected to influence both team processes under consideration. Second, use of both self-ratings and ratings of others is justifiable if they are appropriately correlated. In the present dataset, self-ratings and ratings of others were significantly correlated ( $r=.65$ ,  $p<.001$ ); in any case, Kendall's W (including self-ratings) is a more conservative test of the model than is W' (excluding self-ratings) (Jones, 1959).

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*Team Coordination.* Survey 1 included five items focused on team coordination from Lewis (2004). Example items include “Our team works together in a well-coordinated fashion” and “We accomplish the task smoothly and efficiently.” Cronbach’s alpha = .94.

*Relationship conflict.* Survey 2 presented four questions on intra-team relationship conflict, drawn from Jehn (1995). An example item is “How much friction is there among members in your team?” Chronbach’s alpha = .90.

*Task conflict.* Task-conflict data was collected in Survey 2, using Jehn’s (1995) four-item scale. An example item is “How frequently are there conflicts about ideas in your work unit?” Chronbach’s alpha = .92.

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### **Team Performance**

For each participating team, we conducted an interview and a survey with a senior partner who was responsible for the team’s relationship with the client but had not been involved in the team’s day-to-day work. We collected this data within one month of the project’s completion but only after the partner had conducted a post-project debrief with the client. Partner-rated data provided us with a reliable, independent evaluation of a team’s performance, while eliminating issues of common-source bias.

We captured team performance with three questions answered by the senior partner managing the client relationship: “The AuditCo team communicated effectively (i.e., in a timely, clear, concise, non-confrontational way) with the client throughout the audit [project] cycle,” “The team established strong relationships with the client,” and “The team performed a robust and challenging (‘tough but fair’) audit.” (The final question was for audit teams; the equivalent question for consulting teams was “The team performed a robust (‘thorough and tailored’) project.” Chronbach’s alpha was .76 for the audit scale and .72 for the consulting team scale.

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### **Moderating Variables**

*Time pressure.* Three questions on Survey 1 assessed the degree of time pressure faced on the project. Items drawn from Durham et al. (2000) were modified for the current context and rated on a five-point scale (1 = strongly agree to 5 = strongly disagree): “We feel we are working under excessive time pressure,” “Given more time, we could perform a more robust audit [project],” and “We have sufficient time to complete our task to an acceptable quality” (reverse scored). Chronbach’s alpha = .74.

*Familiarity.* On Survey 1, team members were asked to rate each of the other team members based on how many months they had previously worked together on two types of professional engagement—prior client work (“FAMIL\_EXT”) and prior internal firm work (i.e., training programs and internal projects; “FAMIL\_INT”). Both ratings were along a five-point scale (1=no prior experience together; 2=<2 months; 3=2-6 months; 4=6-12 months; 5=more than one year). Correlation between the two sets was .69 ( $p<.001$ ). Because both kinds of prior shared work experience could affect team process, it was important to capture both dimensions. The two sets of individual scores were therefore averaged to create a single familiarity score per team.<sup>8</sup>

### **Control Variables**

*Team size.* Because a team’s size may affect its ability to coordinate (Moreland et al. 1996), this variable was included as a control in all analyses. Note that this measure captures the number of team members on the project, not the number of respondents; however, these two measures are very highly correlated ( $r=.90$ ) and use of the latter does not change results.

*Project duration.* Because group longevity has been shown to affect group conflict (Pelled et al. 1999), we included a control for the length of the project.

## **Results**

Table 2 shows the descriptive statistics and correlations for all variables.

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<sup>8</sup> Analyses using either the FAMIL\_EXT or FAMIL\_INT score alone produced results very similar to those produced using the combined score.

----- INSERT TABLE 2 ABOUT HERE -----

### **Outcomes of Disagreement for Full Sample**

To test the results for Hypotheses 1-5, we conducted an analysis of moment structures (AMOS) (Arbuckle 1994), a method of structural equation modeling, via AMOS 16.0 (Arbuckle 2003).<sup>9</sup> We specified a model with all paths that were predicted to be significant, along with the appropriate paths for control variables and covariances among predictors. Consistent with the correlation results, there was no significant relationship evidenced between status disagreement and relationship conflict. Further, fit statistics for the overall models were poor (details available from the authors upon request). Accordingly, we modified the proposed model by removing relationship conflict; all other hypothesized paths remained intact. Results for the modified model are shown in Figure 1. The unconstrained model was confirmed versus the independence model ( $\chi^2=2.21$ ,  $df=5$ ,  $p<.01$ ) and fit statistics were very good (NFI = .957, CFI= 1.00, RMSEA=.000).<sup>10</sup>

Hypothesis 1 predicted an association between status disagreement and lower levels of team coordination. Results support this hypothesis: The AMOS path coefficients show that status disagreement is significantly, negatively related to team coordination ( $\beta = -.44$ ,  $p<.001$ ).

In Hypothesis 2, we proposed a positive relationship between status disagreement and team-level relationship conflict. As mentioned above, our data provided no evidence for the effects of status disagreement on relationship conflict. H2 was not supported.

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<sup>9</sup> If we had used regression analyses to specify this model, we would have completed three unrelated analyses with three separate dependent variables: task conflict, team coordination, and team performance. The benefit of using AMOS was that it allowed us to examine relationships among all independent and dependent variables simultaneously. For example, we could consider the effects of status disagreement on both coordination and task conflict simultaneously; failure to do so might have resulted in misspecification of the effects of status disagreement on one process variable because we would have considered this relationship in isolation from status disagreement's effects on the other process variable. Therefore, as a modeling technique for a complex model, AMOS provided a much more accurate measurement of relationships than would have been possible with regression analyses.

<sup>10</sup> For the normed fit index (NFI), models with overall fit indices of less than .9 can usually be improved substantially (i.e., models  $>.9$  represent a good fit (Bentler & Bonett, 1980). The comparative fit index (CFI) ranges from 0 to 1, with values close to 1 indicating a good fit (Bentler, 1990). For the root mean square error of approximation (RMSEA), rules of thumb suggest that a value of about .05 or less indicates a close fit of the model in relation to the degrees of freedom (Browne and Cudeck, 1993).

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We expected that status disagreement would be positively related to team-level task conflict (Hypothesis 3). The standardized path coefficient for this relationship is indeed positive and significant ( $\beta = .41, p < .01$ ), supporting H3.

Hypotheses 4 and 5 predicted lower performance for teams that experience higher relationship conflict and task conflict, respectively. As shown in Table 1, relationship conflict is significantly and negatively correlated with team performance as expected. But because we did not include it in a structural equation model with full controls and simultaneous tests of other relationships, we suggest that the data offer an indication, rather than confirmation, of support for H4. The prediction of negative effects of task conflict on team performance (H5) was unequivocally supported ( $\beta = -.33, p < .05$ ).

----- *INSERT FIGURE 1 ABOUT HERE* -----

### **Moderating Effects of Time Pressure**

To test for the moderating effects of time pressure on the link between status disagreement and team process (Hypotheses 6a and 6b), we conducted a structural equation model via AMOS 16.0 (Arbuckle 2003), this time with separate analyses for the subsamples of high- and low-time-pressure teams. We used the median of time pressure to split our sample into high- versus low-time-pressure teams. This allowed us to test for differences in outcomes of status disagreement associated with time pressure (see Table 3 and Figure 2).

We specified a model with all paths that were predicted to be significant for high- or low-time-pressure teams (and covariances among predictors). To test for time-pressure differences, we conducted subgroup or subsample analysis, the preferred method in AMOS (Arbuckle 2003) when an absence of differences in the models for two subsamples would justify combining the data into one sample including both time-pressure subgroups.

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Subgroup analysis requires several tests. First, we specified an unconstrained model (Model 1), meaning that the same variables and paths were in each model but coefficient magnitudes for low- and high-familiarity teams were not constrained to be the same; that is, the unconstrained model allowed us to test for differences by familiarity.

Second, we specified a “constrained structural weight model” (Model 2) in which we constrained the paths from each predictor to the team process and performance variables to have similar magnitudes for the high-familiarity subsample and for its low-familiarity counterpart. If this model fit the data as well as the unconstrained model did, then there would be little or no difference based on time pressure (Arbuckle 2003). For example, if the path coefficient from disagreement to task conflict were .20 for high-time-pressure teams and .21 for low-time-pressure teams, and if this pattern of similarity held for other predictor-outcome relationships, then the constrained model’s fit statistics would be roughly as good as those of the unconstrained model. If coefficients were unequal (e.g., .06 for high pressure and .34 for low pressure), the unconstrained model would show better fit to the data, indicating time-pressure differences. As recommended, we also specified models that were further constrained (i.e., intercepts, means, covariances and residuals).

The third step involved comparing the models’ fit statistics, as shown in Table 3. Results indicate that the unconstrained model (Model 1, allowing for differences between high- and low-time-pressure groups) showed good fit in comparison to standards. Fit worsened as more parts of the model were constrained to be equal for these two groups, providing evidence of meaningful differences between teams facing high and low time pressure. In Hypothesis 6a, we predicted that the negative effects of status disagreement on coordination would be stronger for teams facing high time pressure; H6a is supported with a significant (albeit at the  $p < .10$  level), negative coefficient for high-pressure teams and non-significant results for low-pressure teams. Hypothesis 6b predicted a stronger relationship between status disagreement and task conflict for high-pressure teams, but the results were contrary to the prediction, with non-significant results for high-pressure teams and significant, positive results for low-pressure

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teams. In summary, the results for the moderating effects of time pressure on the link between status disagreement and team process were mixed.

----- *INSERT TABLE 3 AND FIGURE 2 ABOUT HERE* -----

### **Moderating Effects of Team Familiarity**

We followed the same multi-step procedure to test for the moderating effects of team familiarity on the link between status disagreement and team process (Hypotheses 7a and 7b): subsample analyses for high-familiarity teams and low-familiarity teams. Table 4 and Figure 3 show the results.

The fit statistics confirm that there are significant distinctions between teams in which members have either higher or lower interpersonal familiarity. The unconstrained model (Model 1) fits the data very well; fit statistics worsen for the more constrained models (Models 2-4). We predicted stronger effects of status disagreement on coordination (H7a) and on task conflict (H7b) for teams with high familiarity compared to teams with low familiarity. Results strongly support both hypotheses. For high-familiarity teams, status disagreement was significantly and negatively related to coordination and significantly and positively related to task conflict, but was unrelated to these team process variables for low-familiarity teams.

----- *INSERT TABLE 4 AND FIGURE 3 ABOUT HERE* -----

### **Post-survey field work**

After we collected the second-round survey data from team members and had run initial analyses on the team-level status disagreement, we conducted interviews with 27 members of 11 of the participating teams. Seven teams (four audit, three consulting) had scores indicating high disagreement, four (two audit, two consulting) had relatively low disagreement scores. We selected interviewees from the teams based on the responses they had provided on Survey 2 to the open-ended question, “Do you feel like you made the greatest possible contribution to this team? If 'yes', what allowed you to do so? If 'no', what could the team, manager, firm or client have done differently to help you achieve your best?”. For the high-disagreement teams, we sought to understand in greater detail the members’ observations of how



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well the team had worked and whether they were aware of existing status disagreement within their team.<sup>11</sup> For example, we asked, “Do you think your kick-off meeting allowed everyone to get a good idea of who on the team had different kinds of knowledge?<sup>12</sup>” and “If you recall, early in the project you completed a survey about your teammates’ abilities. How closely would you imagine your teammates’ scores matched your estimates?” Table 5 provides a brief summary of both the survey and interview responses, drawn from the seven low-agreement teams. What we found, again and again, was that team members were very clear about how the *symptoms* of their teams’ issues, but struggled to articulate any root *cause* for breakdowns in coordination or heightened conflict. Interviewees typically said that they believed that their own views about others’ status (task competence) would have been “pretty well calibrated” within the team. The qualitative data shed light on the way that underlying disagreement was often not recognized by team members themselves, yet instigated a variety of negative behaviors and poor organization within the team.

----- *INSERT TABLE 5 ABOUT HERE* -----

## Discussion

This research begins to explain how even small—and perhaps latent—differences in team members’ perceptions about the status hierarchy can affect group process and performance. In particular, we identify two contextual conditions—time pressure and intragroup familiarity—under which group members’ disagreements on the status hierarchy are more likely to lead to poor coordination and increased task conflict.

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<sup>11</sup> To avoid “leading the witness,” we ensured (1) that we did not reveal any information early in the interview about why the interviewee or his/her team had been selected for further discussion, (2) that we inquired about the interviewee’s perception of his/her team’s level of status disagreement and (3) that we only disclosed our status disagreement finding after the rest of the discussion had taken place.

<sup>12</sup> A standard part of AuditCo’s project protocol was to hold a kick-off meeting where members shared with the group their prior experience with the client, knowledge from related projects, etc.

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We argued and found empirical support for the assertion that disagreement about the status hierarchy negatively affects team coordinating activities, increases occurrences of task conflict, and ultimately hampers overall team performance. First, our theory suggests that when team members disagree about who has the highest relative status, confusion arises about whose leadership to follow and about which team members would be most appropriate for which tasks – a recipe for poor team coordination. Our results demonstrate that more disagreement about the status hierarchy is indeed linked with poorer team coordination. Second, we developed and found empirical support for the assertion that initial status disagreements (i.e., at the beginning of a team’s project) can give rise to task conflict later in the team’s life. Our theory suggests that team members at all levels struggle with the fallout of competing priorities and perceptions if they fail to agree on a hierarchy. Our results demonstrate that, in all cases, task conflict reduced team performance, as rated by AuditCo partners who were not themselves members of the teams.

One novel finding here is that difference in team members’ perceptions of the status hierarchy is itself enough to hamper team coordination and generate task conflict; the difference in perception doesn’t have to generate blatant status rivalries—or even be recognized at all—in order to cause trouble. While prior research has examined the effects of overt contests (e.g., Sutton and Hargadon 1996), team members in our study were not necessarily even aware that disagreement existed. Our qualitative evidence suggests, in fact, that most team members assumed that everyone on their team did agree on “where they stood on the totem pole,” even in teams where status disagreement was actually high. After hearing his team’s actual status disagreement score, one AuditCo manager initially expressed deep surprise; two weeks later, however, he telephoned us to say that he’d been doing a “mental post-mortem” on the team’s processes. “I can’t stop thinking about this disagreement [that existed within our team] – it was like an insidious obstacle to performance. It was the unknown unknown that pulled us down.”

Another new twist in our research is the contrast with the scope of prior work on status conflicts, which tended to focus on struggles for power at the top ranks or among “star” players (e.g., Groysberg et al. 2009; Haas 2005; Overbeck et al. 2005). Our study examines status dynamics throughout the ranks of

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the team. We provide a theoretically grounded rationale to explain, for instance, how junior team members' inconsistent perceptions of superiors' status could generate confusion, hamper coordination, breed conflict, and diminish ultimate performance.

It is worth considering in more depth the findings linking status disagreement with conflict. Interestingly, we found that status disagreement had a strong relationship with task conflict but not with relationship conflict. Overall levels of reported relationship conflict were quite low (mean of 1.69 on a 5-point scale) and post-study interviews with AuditCo team members and executives suggest that relationship conflict is rather rare in their professional environment. When interpersonal affective conflicts do arise between these professionals, they apparently try to shield the rest of their team from the negative effects.

We theorized that the negative effects of status disagreement would be amplified when time pressure was considered. Our results confirmed that teams experiencing high levels of time pressure had more difficulty with team coordination than did those who felt less time pressure. We did not, however, find enhanced effects on the link between status disagreement and task conflict; indeed, teams with low time pressure actually experienced more task conflict as a result of status disagreement than their high-pressure counterparts did. Such results may be explained by Karau and Kelly's (1992) Attentional Focus Model, which asserts that, as time pressure increases, team members will focus on the most salient features of group interaction and task. In other words, the effort to get the job done will supersede other group dynamic concerns, regardless of perceived or latent status conflicts. Perhaps it is when this constraint is relaxed that team members can turn their minds to the interpersonal concerns and status implications of particular task assignments; there is time for differences then of opinion to surface and generate task conflict.

We found that familiarity is another important condition that affects the impact of status disagreement on team processes and that it does so in a way that may be counterintuitive to scholars who know that

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familiarity has often been shown to have positive effects on team outcomes (Haon et al. 2009; Stasser et al. 1994; Zalesny et al. 1995). Our research paralleled prior research by showing the expected beneficial links of intra-team familiarity with both coordination ( $r = .28, p < .01$ ) and task conflict ( $r = -.24, p < .05$ ). Interestingly, though, these favorable effects of familiarity are reversed for teams experiencing status disagreement; we found that it had far worse effects on coordination and task conflict in highly familiar teams than it had in less familiar teams. Consistent with research on workplace incivility (cf, Andersson and Pearson 1999), we suggest that politeness norms begin to break down as members spend more time together; members gradually experience disinhibition that may lead to more expression of conflicting and previously self-censored ideas.

### **Implications for Theory**

Our findings contribute to the growing literature on team-level status process (Bendersky and Hays 2009; Groysberg et al. 2009; Haas 2005) by documenting the impact of status disagreement on team coordination, task conflict, and ultimate performance. Whereas much prior research on group status, especially in the expectation states tradition, tended to infer a group's status hierarchy from the observed behavior of its members (cf, Berger et al. 1998), our direct measurement of the inputs for status perceptions allowed us to capture an inherent uncertainty that affects overall team process, instead of just the rivalrous behavioral manifestations of particular individuals who vie for status. Imagine, for example, a team with members A, B, C, D, and E. Members A, C, and E think that A (who is the nominal leader) is at the top of the status hierarchy while members B and D think that B holds that rank. All five members agree that C, D, and E hold positions 3, 4, and 5, respectively. Observers of this group might well see behavioral evidence of a status contest between A and B. What they would likely miss, however, is the coordination losses that the whole team incurs because C and E are following a different "leader" than their teammate D is following. Without measuring how the status hierarchy was perceived by C, D, and E—all of whom acknowledge their own "place" in it—observers would be unable to account for the task conflict that arises between these three members. Our approach, on the other hand, reveals how even small differences in members' perceptions about their teams' status hierarchy can affect group processes.

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A focus on perceptions also distinguishes our research from that of dominance theorists, who focus on explicit status struggles within groups. In that tradition, a person's position in a status hierarchy is determined by the outcomes of dominance contests, which are essentially attempts to "outstress" one another through the use of verbal and nonverbal dominance cues such as shouting, staring, pointing fingers, and so on (Ellyson and Dovidio 1985; Mazur 1985). Our novel contribution is to show how perceptual disagreements, which may be subtle or even subconscious, can affect team process even in the absence of overt status contests between group members. Our findings thus advance theory by offering a new explanation for the (in)effectiveness of team processes such as coordination and task conflict, themselves important because of their influence on performance.

Our research also adds to the literature on team process and team effectiveness (Feldman 1984; Gladstein 1984; Gruenfeld et al. 1996; Thomas-Hunt et al. 2003; Zalesny et al. 1995). First, by studying naturally occurring task groups over time, we extend prior research by examining the disruptive impact of context as critical team processes unfold. Scholars have repeatedly called for more attention to the role of time in team research (Ilgen 1999; Kozlowski and Bell 2002; McGrath and Argote 2001); our paper addresses those calls not only by examining the impact of members' perceived time pressure but also through its longitudinal design that shows how processes play out during a full team life cycle. Further, we identify time pressure and intra-group familiarity as critical conditions that exacerbate the negative effects of status disagreement on team coordination and conflict. Although group conflict has inspired an enormous amount of research (De Dreu and Weingart 2003; Jehn and Rispens 2008 for reviews), few studies have considered the relationship between status and conflict (see Groysberg et al. 2009; Haas 2005; Overbeck et al. 2005 for exceptions). While our results are consistent with much prior research showing the negative effects of task conflict on team performance—likely because the teams we studied were doing complex, non-routine tasks (De Dreu and Weingart 2003)—our study indicates that task conflict is far more likely to arise in groups with an unclear status hierarchy, especially when group members have had prior experience working together.

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One factor that needs to be considered is our measurement of status as members' perceptions of teammates' task competence. Although there is strong theoretical (e.g., Berger et al. 1977) and empirical (e.g., Sutton and Hargadon 1996) support for the use of competence perceptions as the foundation of the status hierarchy, one might ask whether we would achieve higher face validity by using a more explicit measure, such as "How much status does each member of your group have?" We had two clear reasons for our choice of status measure. First, research and theory suggest that the status-sorting process is subconscious (Berger et al. 1986); asking members an explicit question about status might distort responses such as resulting in demand characteristics (i.e., respondents telling researchers what they think the researchers want to hear). Second, our initial interviews clearly suggested not only that task competence was the overriding determinant of the status hierarchy in AuditCo, but also that using the term "status" connoted to them elitist characteristics (e.g., one's university affiliation), which jarred against their culture.

### **Limitations and Future Research**

We acknowledge several limitations of this study, some of which offer interesting avenues for future research. First, more research is needed to clarify the precise mechanisms by which familiarity affects the relationship between status disagreement and team process. We theorized about psychological processes (disinhibition and motivation) but did not capture these constructs in our field study. An experimental study with careful manipulation of team status disagreement and interpersonal familiarity could effectively complement our research.

Second, how does *configuration* of familiarity affect team process? Our measure of team familiarity captures how long members have previously worked together *on average*; interesting possibilities arise when considering the outcomes of different patterns of familiarity. For example, a team comprising two distinct subgroups with high familiarity within but not between them might experience severe conflict between strong coalitions vying for the highest possible status for their fellow subgroup members. Research on "faultlines" (e.g., Earley and Mosakowski 2000; Lau and Murnighan 2005) may provide a

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starting point from which to consider how coalitions of similarly-minded, familiar team members may coalesce and affect group process.

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**Table 1** Principal Components Analysis for Team Process Variables

Rotated Component Matrix	Component		
	Coordination	Relationship Conflict	Task Conflict
Our team had very few misunderstandings about what to do.	<b>.904</b>	-.183	-.080
There is very little confusion about how we will accomplish the task.	<b>.888</b>	-.098	-.214
We accomplished the task smoothly and efficiently.	<b>.871</b>	-.160	-.140
Our team rarely needs to backtrack and start over.	<b>.864</b>	-.142	-.135
Our team worked together in a well-coordinated fashion.	<b>.827</b>	-.338	-.068
How much are personality conflicts evident in your team?	-.210	<b>.885</b>	.290
How much friction is there among members in your team?	-.220	<b>.884</b>	.314
How much tension is there among members in your team?	-.330	<b>.832</b>	.331
How much emotional conflict is there among members in your team?	-.148	<b>.804</b>	.404
To what extent are there differences of opinion in your work unit?	-.174	.241	<b>.874</b>
How often do people in your team disagree about opinions regarding work being done?	-.054	.237	<b>.845</b>
How frequently are there conflicts about ideas in your work unit?	-.147	.463	<b>.802</b>
How much conflict about the work you do is there in your work unit?	-.268	.428	<b>.740</b>
Eigenvalue	7.4	2.6	1.1
Variance explained (%)	56.6	19.8	8.1

*Notes:* High loadings in bold (N = 89). Principal Component Analysis using Varimax Rotation



**Table 2 Descriptive Statistics and Correlations for Full Sample**

	Mean	Standard Deviation	CORRELATIONS								
			1	2	3	4	5	6	7	8	
1. Disagreement	0.28	0.20									
2. Coordination	3.81	0.48	-.23*								
3. Relationship conflict	1.69	0.59	.18	-.46**							
4. Task conflict	1.84	0.46	.25*	-.40**	.75**						
5. Familiarity	2.03	0.76	-.15	.28**	-.23*	-.24*					
6. Time pressure	2.86	0.52	.13	-.43**	.33**	.19	-.33**				
7. Performance	4.19	0.58	-.13	.29**	-.31**	-.34**	.17	-.25*			
8. Project duration	2.23	0.90	.16	-.16	-.06	-.03	-.03	-.25*	.02		
9. Team size	7.44	2.81	-.20	-.08	.20	.11	-.14	.10	-.04	-.03	

\* Correlation is significant at the 0.05 level (2-tailed); \*\* Correlation is significant at the 0.01 level (2-tailed).

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Table 5 Survey responses and interview excerpts: Member perceptions of status disagreement and process, drawn from teams with high levels of status disagreement

Team identifier and division	Response to open-ended survey question*	Excerpt from post-project interview with the author: members' diagnosis of team process	Excerpt from post-project interview with the authors, probing extent to which they were aware that disagreement on the status hierarchy existed in their team:
6 - Consulting	"Knowing the boundaries of the work I was responsible for would have helped me to achieve my best. I kept bumping up against [the other associate]."	"Along the way it became clear that [two teammates] were following a different playbook. I'm not sure how or why we diverged."	"After the kick-off, I would think we all knew who had the right know-how for their parts of the job. Yeah, I would guess that we all agreed."
9 - Audit	"I did my best but it just wasn't clear what I was meant to be doing.[...] We could have done more to bring the sub- teams together earlier in the project"	"It's hard to explain. On the one hand I had very defined tasks – it was standard 'divide and conquer' – but on the other hand when we tried to put the pieces together we really struggled."	"The senior manager was sort of a figurehead, I guess. Maybe not everyone saw it that way? I thought it was pretty obvious that [the Manager] was the one who knew what was needed for day-to-day work."
33 - Audit	"I tried to delegate but this team was having none of it."	"I'd tell them what to do, even show them how to do it, but when I came back a day or two later they'd have done something totally different. We had a number of rows about it but never got it sorted."	"Sometimes it's hard to tell the difference between trainees, but on this team there was a reasonable gradation between everyone."  [in response to high disagreement result]: "I'm pretty surprised. I'd even say shocked. Did they all rank me at the top??"
68- Consulting	"No, the pressure was intense, as the deadline was very tight and made worse because we had to repeat a lot of the analyses"	"We wasted a lot of time. We have some standard processes but there's a lot of room for interpretation and we somehow kept talking past one another."	"Normally I'd think we could agree on who knows what. I never really thought about it that way. But now that you're asking, it gives me pause for thought. Why <i>are</i> you asking?"
74 – Audit	"No, I did the work assigned to me and tried to help with additional tasks in order to complete the audit but I found the manager unreceptive to my inputs."	"I really felt like I was trying to be helpful but she seemed reluctant to take me onboard. Eventually I just kept my head down and threw my results over the wall [emailed documents without discussing them]."	"In the [pre-project] planning meeting we all got our assignments and from that knew just where we were on the totem pole."  [in response to high disagreement result]: "There was a sort of undertone but I never quite put my finger on it."

\* "Do you feel like you made the greatest possible contribution to this team? If 'yes', what allowed you to do so? If 'no', what could the team, manager, firm or client have done differently to help you achieve your best?"

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**Table 3 Fit Indices for the Models Used to Test Moderating Effects of Time Pressure**

Model	$\chi^2$	df	NFI	CFI	RMSEA	$\chi^2$ change from preceding model	df change
1 Unconstrained model (outcomes of disagreement)	12.66	10	0.88	0.94	0.06		
2 Constrained model structural weights	31.99*	20	0.69	0.74	0.08	12.354	10
3 Constrained structural covariance	113.32***	37	-0.10	0.00	0.15	28.147	17
4 Constrained structural residuals	118.24***	40	-0.15	0.00	0.15	12.721	3

\* p<0.05, \*\*p <0.01, \*\*\*p <0.001

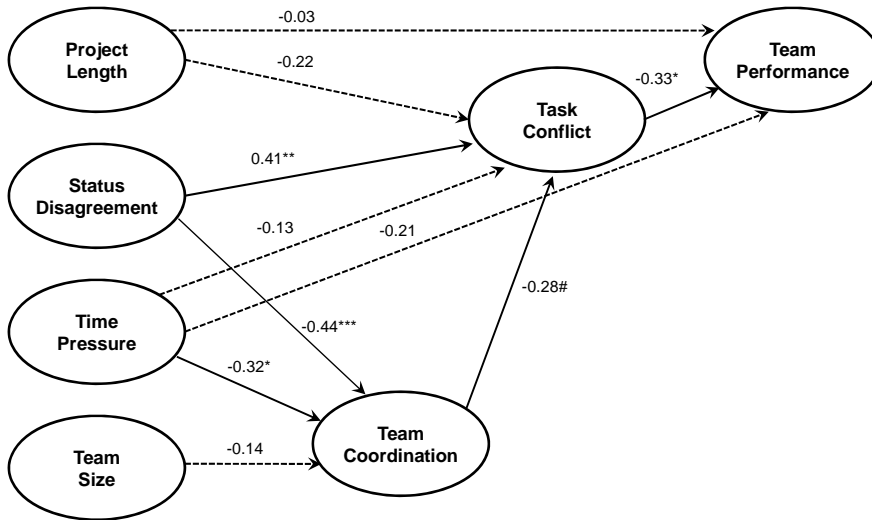
**Table 4 Fit Indices for the Models Used to Test Moderating Effects of Familiarity**

Model	$\chi^2$	df	NFI	CFI	RMSEA	$\chi^2$ change from preceding model	df change
1 Unconstrained model	10.50	10	0.90	0.99	0.02		
2 Constrained model structural weights	22.85	20	0.77	0.94	0.04	12.354	10
3 Constrained structural covariance	50.99	37	0.49	0.69	0.07	28.147	17
4 Constrained structural residuals	63.72	40	0.37	0.47	0.08	12.721	3

\*p<0.05, \*\*p<0.01, \*\*\*p<0.001

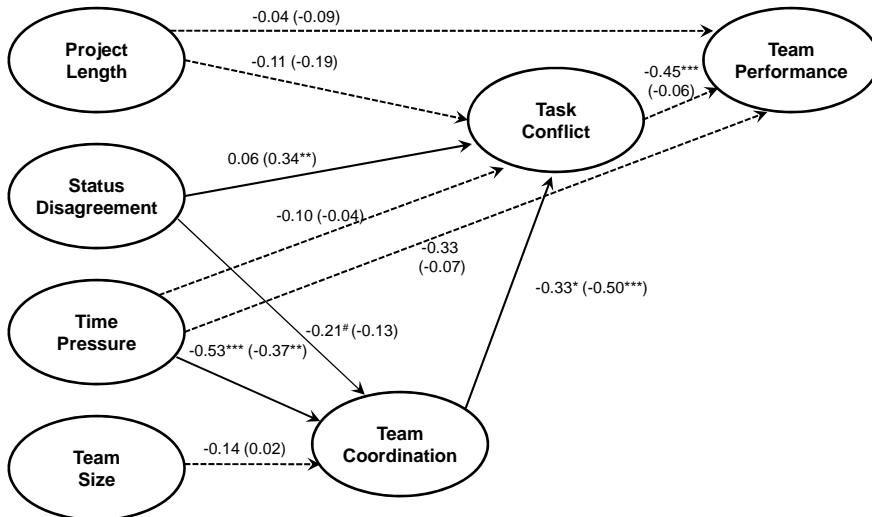
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**Figure 1** Results of AMOS Analysis for All Teams



Note: Standardized path coefficients for all teams are reported. Paths that are non-significant are shown dotted. Covariances are omitted for readability. #  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.001$ , \*\*\*  $p < 0.001$ .

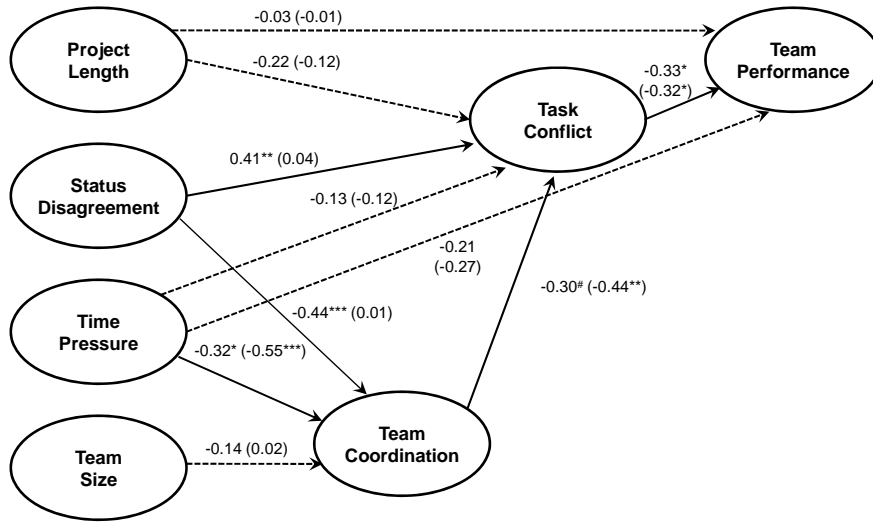
**Figure 2** Results of AMOS Analysis for Subsamples of High (and Low) Time Pressure Teams



Note: Standardized path coefficients for high familiarity (and low familiarity, in parenthesis) teams are reported. Paths that are non-significant in both models are shown dotted. Covariances are omitted for readability. #  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

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**Figure 3** Results of AMOS Analysis for Subsamples of High (and Low) Familiarity Teams



Note: Standardized path coefficients for high familiarity (and low familiarity, in parenthesis) teams are reported. Paths that are non-significant in both models are shown dotted. Covariances are omitted for readability. #p<0.10, \*p<0.05, \*\*p<0.01, \*\*\*p<0.001.

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