A Micropolitics Model of Status Hierarchies in Teams

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In the past several years we have witnessed a surge of interest in hierarchy. A simple keyword search found that the number of articles focusing on "hierarchy," "status," or "power" jumped threefold between 2004 and 2010 in journals typically targeted by *RMGT* readers (see Figure 1). This intensified interest in hierarchy is a testament to its importance. On the individual level, where people stands in a hierarchy strongly shapes their social and material welfare, psychological well-being, and even physical health and longevity (for a review, see Magee & Galinsky, 2008). On the level of the group, hierarchies determine how collective decisions are made, resources are distributed, labor is allocated, and ultimately how successful the group is in achieving its goals (for reviews, see Anderson & Brown, 2010; Gruenfeld & Tiedens, 2010).

Hierarchy is especially important in the context of teams. As many scholars have noted, hierarchies are ubiquitous in team settings. They develop in teams of all kinds (Leavitt, 2005), even when teams are initially comprised of peers of equal status (Bales, Strodtbeck, Mills, & Roseborough, 1951), and even when teams strive to be egalitarian (Magee & Galinsky, 2008). Hierarchical differences develop quickly and naturally when individuals work together on joint tasks (Tiedens & Fragale, 2003), suggesting that humans may even have a dispositional propensity to form hierarchies when working collaboratively (e.g., House, 1988; Van Vugt, Hogan, & Kaiser, 2008).

Once developed, hierarchies have a profound impact on how team members work together. First, they provide individuals at the top of the hierarchy with disproportionate influence over the group. How disproportionate can this influence be? Bales' classic studies of small groups found that the top-ranking group members spoke 15 times more frequently than the lowest-ranking group members and nearly five times more than the next highest-

ranking members (Bales et al., 1951). Buzaglo and Wheelan (1999) found that higher-status members of a team dominated team discussions more than 75% of the time, even though they represented only 30% of the team's membership. Our own studies on teams found that 94% of the time, teams chose the first proposal offered by any member as their final answer – and that the two top-ranking members were nearly three times more likely to provide the first proposal than anyone else on the team (Anderson & Kilduff, 2009).

Team members at the top of the hierarchy also receive a multitude of social, psychological, and material benefits. Their inputs and contributions are evaluated more positively than is warranted (Berger, Rosenholtz, & Zelditch, 1980, p. 495; Sande, Ellard, & Ross, 1986; Sherif, White, & Harvey, 1955; Whyte, 1943), they are given more favorable jobs and duties (Homans, 1950; Roethlisberger & Dickson, 1939) as well as more support in their duties from fellow group members (Blau, 1964). They are compensated more highly for their contributions to the team (Thibault & Kelley, 1959), and enjoy elevated subjective well-being and happiness (Anderson, Kraus, Galinsky, & Keltner, 2012).

Given the importance of hierarchies to team dynamics, it is critical for scholars to understand how hierarchies develop, how members become organized into high and low status ranks, how hierarchies change over time, and how and why they affect group performance. The current chapter thus focuses on research that has examined status hierarchies in teams. In line with the broad aims of this *RMGT* volume, our goal is to review prior research and discuss the state of the science, outline issues about which we know little, and suggest directions for future research on status hierarchies in teams.

As we will discuss, there are two major accounts of status hierarchies in teams -- functionalist and dominance theory -- that offer two completely contrasting views of

hierarchy. These two theories encompass virtually all scholarship on the emergence of status hierarchies (Ng, 1980), and they both address the most fundamental questions regarding status hierarchies in teams, such as: Why do status hierarchies exist? How do they emerge? Why do some individuals but not others attain high status in teams? What impact do hierarchies have on team performance? Therefore, we will use these two theories to ground and to orient our discussion.

In reviewing prior research, we will describe how the empirical record overwhelmingly supports the functionalist perspective and refutes the dominance perspective. However, we will also highlight a number of findings that cannot be explained by the functionalist perspective, and that even seem to contradict it. Therefore, we will propose a new model of status that integrates the functionalist and dominance accounts to help us better understand status dynamics in teams and generate numerous hypotheses for future research. Borrowing a term from prior work (Clark, 1990; Kemper, 1990), we call this the *Micropolitics* theory of team status hierarchies.

Defining Status Hierarchy

Status hierarchies in teams are the differences in respect, prominence, and influence that emerge among team members (Anderson, John, Keltner, & Kring, 2001). A long tradition of research has focused on status hierarchies in teams, including work by Bales (Bales et al., 1951), Blau (1964; Blau & Scott, 1962), Homans (1950), Thibault and Kelley (1959), and scholars working in the Status Characteristics tradition (Berger, Cohen, & Zelditch, 1972; Ridgeway, 1978). The body of research on status in teams has shown that whenever individuals work collectively on tasks, differences in respect, prominence, and influence tend to emerge among them. Some individuals are held in higher regard and

admiration, are given more attention and chances to participate, and have more control over the group's processes and decisions than others.

This conception of status focuses on the "informal" hierarchies that emerge in teams – that is, the differences in respect and influence that develop organically through the process of interaction, and that are based on group members' evaluations of each member (Berger et al., 1972). At the core of informal status hierarchies are the group's *perceptions* of each member's prominence, respect, and influence.

Such informal hierarchies can thus be contrasted with formal hierarchies, which involve differences in formal authority, or when members occupy different positions in the formal organizational hierarchy (e.g., Manager, Director). This is not to say that formal status hierarchies are unimportant, or that they are unrelated to informal status hierarchies. In most theoretical models, formal differences in authority are one source of informal status. For example, in a team of engineers, senior engineers who occupy a higher level of the organization's hierarchy will likely have higher status than others (but not necessarily). Formal authority is thus construed as one source of informal status among many possible others, such as personal characteristics, traits, or abilities (Anderson, Ames, & Gosling, 2008; Cohen & Zhou, 1991).

This conception of status also combines respect and influence as part of the overarching construct. Some scholars have rightly pointed out that respect and influence are distinguishable constructs (Magee & Galinsky, 2008). Indeed, there are sometimes substantive differences in the way these two constructs affect social, psychological, and organizational processes (e.g., French & Raven, 1959; Henrich & Gil-White, 2001; Magee & Galinsky, 2008). However, in the context of small groups and teams, respect and influence

tend to correlate so highly that they are empirically indistinguishable – which is why they are treated as part of the broader concept of status (Berger et al., 1972).

The Functionalist Perspective of Status Hierarchies

Scholars who study status have long sought to understand basic questions about hierarchies. Why do they exist? How do they develop? How do they change over time? What effect do they have on group performance and functioning? In addressing these questions, two very different theoretical camps have emerged: the functionalist and dominance camps. These two theoretical perspectives provide starkly contrasting accounts of the most fundamental questions regarding status hierarchies in teams.

By far, most scholars in the field have espoused a functionalist perspective of status hierarchies (Anderson, Srivastava, Beer, Spataro, & Chatman, 2006; Blau, 1964; Berger et al., 1980; Gruenfeld & Tiedens, 2010; Homans, 1950; Magee & Galinsky, 2008; Thibault & Kelley, 1959; Willer, 2009). These scholars may vary in some of their specific hypotheses or traditions, but they converge on the idea that status hierarchies facilitate group success by serving numerous functions. More specifically, hierarchies help groups solve some of their most fundamental problems.

First, because group members often disagree over the group's goals, the strategies to pursue those goals, and possible solutions to problems, groups must make collective decisions in a peaceful and efficient manner (e.g., Cartwright & Zander, 1953; Levine & Moreland, 1990; Van Vugt et al., 2008). Second, groups must motivate members to behave selflessly and contribute to the group's success, even when such behavior requires personal investment and sacrifice (e.g., Hardin, 1982; Kerr & Tindale, 2004; Latane, Williams, & Harkins, 1979; Willer, 2009). Third, groups must coordinate individual

behavior so that members work in concert toward collective success; for example they must allocate tasks and responsibilities, maintain communication among members, and minimize intra-group conflict (e.g., Blau & Scott, 1962; Cartwright & Zander, 1953; Hinsz, Tindale, & Vollrath, 1997; Levine & Moreland, 1990). According to the functionalist perspective, hierarchies help groups overcome each of these challenges.

Hierarchies are thought to help groups solve the problem of collective decision-making by giving disproportionate control to one or few members (Van Vugt et al., 2008). Group leaders are given control over decisions and allowed to direct others' actions, whereas lower ranked individuals are expected to defer to others and keep their opinions to themselves (Bales et al., 1951; Berger et al., 1980; Goffman, 1967; Keltner, Gruenfeld, & Anderson, 2003). This concentration of control at the top helps groups make decisions more efficiently and avoid conflict (Cartwright & Zander, 1953; Van Vugt et al., 2008).

Hierarchies are also thought to increase the quality of group decisions by giving disproportionate control to the individuals perceived to be the most competent. Decisions about a group's goals or strategies are often fraught with ambiguity and intimidating complexity. Competent individuals presumably will make better decisions for the group than would those with lesser or average acuity (Berger et al., 1980; Davis & Moore, 1945; Eibl-Eibesfeldt, 1989; Ridgeway & Diekema, 1989). Therefore, groups strive to put their most competent members in charge by allocating influence to those who seem most expert.

To help overcome the second major challenge, that of motivating individual members to contribute to the group, hierarchies are believed to provide social, material, and psychological incentives (Barnard, 1964; Berger et al., 1972; Blau, 1964; Davis & Moore, 1945; Frank, 1985; Hardy & Van Vugt, 2006; Homans, 1950; Kanter, 1977; Keltner,

Van Kleef, Chen, & Kraus, 2008; Lambert, Larcker, & Weigelt, 1993; Lazear & Rosen, 1981; Pfeffer & Cohen, 1984; Tannenbaum, Kavcic, Rosner, Vianello, & Wieser, 1974; Thibault & Kelley, 1959; Van Emmerik, Lambooy, & Sanders, 2002; Willer, 2009). For example, high rank comes with greater respect and admiration, autonomy, power, social support, self-esteem, well- being, lower physiological stress, and material resources. And groups allocate higher rank to members perceiving as contributing to the group's goals. Individuals perceived as making important contributions are granted higher rank, whereas those believed to be making fewer contributions, or even to be undermining a group's success, are assigned lower rank. Valued contributions can take several forms, such as expending effort for the group or providing expertise to fellow members. Therefore, by rewarding group-oriented behavior, hierarchies compel individual members to work toward the group's goals, which facilitates collective success. Individual group members are driven to self-sacrifice and contribute to the group's well-being in order to obtain the myriad rewards that come with being on top of the ladder. Even once at the top, the promise of continuing to receive those rewards drives high-status individuals to continue making contributions.

Hierarchies are thought to help groups address the third major challenge, that of intra-group coordination, by reducing conflict and facilitating communication. As previously mentioned, hierarchies putatively facilitate an orderly division of resources and influence among group members, using such means as allowing or denying different individuals access to resources and the rights to perform certain behaviors (Barnard, 1964; Berger et al., 1980; Chance, 1967; Durkheim, 1893/1997; Katz & Kahn, 1966; Keltner et al., 2008; Leavitt, 2005; Magee & Galinsky, 2008; Marx, 1844/1964; Mintzberg, 1983; Parsons,

1961; Tiedens, Unzueta, & Young, 2007). Differential allocation of responsibilities and control helps mitigate the common problem of having ‘‘too many cooks in the kitchen,’’ wherein too many individuals desire access to the scarce resource of leadership.

Finally, hierarchies are also believed to allow information to flow between members more efficiently and for the integration of this information to occur more easily (Arrow, 1974; Bavelas, 1950; Leavitt, 2005; Scott, 1998; Vroom, 1969; Williamson, 1975). For example, in the prototypical pyramid hierarchy, information travels up through hierarchical levels until it reaches group leaders. The leaders integrate this diverse information and make the relevant decisions. Their decisions then flow down to each respective hierarchical level and get implemented according to leaders’ plans.

In short, according to the functionalist perspective, the most apt metaphor for status hierarchies in teams is a meritocracy. Team members who are perceived to have the strongest skills and abilities and who contribute the most to the team are afforded high status. However, it is important to note that the key driver of status differences is each member’s *perceived* contributions and value to the group – not necessarily their *actual* contributions and value to the group. Because each individual member’s abilities or value is typically hidden from others, groups can only allocate status on the basis of what they believe each member’s competence and value to be (Berger et al., 1972; Driskell & Mullen, 1990; Lord, 1985). These beliefs are often based on superficial cues such as demographic variables (e.g., sex, ethnicity, age), or nonverbal demeanor (Driskell, Olmstead, & Salas, 1993). Therefore, teams can make mistakes in allocating status among members, by giving high status to individuals who only appear to provide more value, even when they do not. What is important to functionalism, however, is that groups strive to base status on merit.

The Dominance Perspective of Status Hierarchies

A smaller number of scholars have espoused what is sometimes called the dominance theory of status hierarchies (Henrich & Gil-White, 2001; Lee & Ofshe, 1981; Mazur, 1985; Ng, 1980). According to this perspective, group members jockey for position through assertiveness and manipulation, and sometimes compete for status through dominance contests. Status allocation is seen as a highly competitive, and sometimes even conflict-laden process; it is cutthroat and harsh, rather than rational and cooperative.

One prominently cited dominance theory stems from the work of Mazur and colleagues (1973; 1985; Mazur & Booth, 1998). According to his model, status hierarchies share commonalities across all kinds of animal species – human hierarchies might differ from that in other species, but they also show many similarities. Important to his model is that in these species, individuals can exhibit behaviors that communicate to others the status they claim to already have or the status they aim to take from others (Mazur, 1985). These are called *dominance acts*, and in humans include behaviors like erect posture, strutting, and assertive facial gestures. Testosterone plays a central role in Mazur's model, in that higher levels of testosterone lead individuals to display more dominance acts, and to more assertively pursue higher status in their group.

Status can either be allocated peacefully or through dominance contests. For example, one member of a jury who wishes to lead the deliberations would exhibit dominant nonverbal behavior (e.g., expanded posture, a loud vocal tone) because he has high testosterone levels. In turn, other jurors have a choice: They can defer to him because they feel intimidated and have lower testosterone levels. In this case, status has been allocated peacefully, though through force and intimidation.

Or other group members can dispute his status claim. In this case, the other person would engage in a dominance contest with him. Dominance contests are defined as "short, well-defined encounters in which each participant tries to outstress the other through the use of various dominant actions" (Mazur, 1985, p. 394). These actions might be violent or nonviolent, determined through staredowns or conversation. In other words, as the two individuals engage in a dominance contest, their stress levels rise and they become increasingly uncomfortable. The easiest way to end this discomfort is to defer to the other person, thus terminating the contest and accepting a lower status. When one individual cannot handle the stress any longer, he defers to the other – and the status ordering between those two individuals has been set.

Therefore, dominance theories of status propose a very different view of hierarchies in groups than do functionalist theories. According to dominance theorists, hierarchies are not the product of cooperation among group members but are born of competition and conflict. Rather than being something that is given to the individual by the group, status is something that is taken by the individual. And in terms of the individual characteristics that lead to status attainment, while functionalist theories focus on skills and abilities that contribute to the group's success, dominance theories focus on the motivation to attain status and the ability to intimidate others. The most apt metaphor for status hierarchies in teams is not a meritocracy, but rather a pecking order. Testosterone, aggressiveness, and the willingness to engage in conflict with others are all crucial factors that determine the status order.

One interesting difference between the functionalist and dominance models of hierarchy is that they suggest opposing predictions about the stability of individuals' status

from one context to another. The functionalist model suggests that individuals' status can vary from one group to another, even markedly, because the tasks and abilities that contribute to a group's success vary across groups (e.g., Anderson et al., 2008). While quantitative skills will help a team of engineers solve important problems, such skills will not be of much use on a soccer team. In contrast, the dominance model suggests that individuals' status might be somewhat stable across the groups to which they belong. The motivation to attain status, testosterone, and combativeness are considered dispositional traits that do not waver much between contexts (e.g., Winter & Stewart, 1983). Therefore, an individual would likely attain consistently high or low status across their groups, depending on their levels of these stable individual differences (see Table 1 for a review of the differences between the two perspectives).

Evidence Supporting the Functionalist Model

Given that these two theories of status give very different accounts of team hierarchies, which one is supported by the empirical evidence? A review of the scientific literature provides a very clear answer: On balance, the vast majority of research has supported the functionalist model of status hierarchies and refuted the dominance model.

First, a mountain of research has shown that groups tend to give higher rank to members who exhibit superior skills and abilities that contribute to the group's success (for reviews, see Bass, 1981; Driskell & Mullen, 1990; Hollander & Julian, 1969; Mann, 1959). The specific abilities that contribute to a team's success, and that are thus required to attain high rank, can depend on the group's specific tasks and goals (e.g., Anderson, Spataro, & Flynn, 2008; Hogan & Hogan, 1991). However, in general, individuals are given higher rank if they exhibit expertise related to the group's tasks as well as show social and

leadership skills (Lord, 1985; Van Vugt, 2006). Moreover, studies have found that when a group's hierarchy is based on task expertise it functions better (e.g., Maier, 1967; Pfeffer & Langton, 1993; Roby, Nicol, & Farrell, 1963), supporting the notion that meritocratic hierarchies promote group success.

Studies have also consistently found that groups give higher rank to members who are more selfless, generous with fellow group members, and who make more sacrifices for the group's success (Blau, 1964; Flynn, Reagans, Amanatullah, & Ames, 2006; Hardy & Van Vugt, 2006; Ridgeway & Diekema, 1989; Willer, 2009). In contrast, individuals who are perceived as acting in ways that are selfish and harmful to the group are given lower rank (Anderson et al., 2008; Anderson et al., 2006; Blau, 1964; Homans, 1950; Ridgeway & Diekema, 1989; Roethlisberger & Dickson, 1939). Additionally, recent work has shown that providing individuals higher status motivates them to act more selflessly (Willer, 2009), which further supports the idea that status incentivizes contributions to the collective.

Moreover, evidence refuting the dominance model has found that selfish individuals who behave in ways that undermine the group's success are afforded lower status (Blau, 1964; Homans, 1950; Ridgeway & Diekema, 1989; Roethlisberger & Dickson, 1939). This suggests that individuals who put their own needs above those of the group, and who strive for higher status simply because of the personal rewards it engenders, are disallowed from attaining high rank and relegated to the bottom of the hierarchy.

Similarly, aggressive, threatening individuals who try to take status through force do not attain status, and instead are socially punished and censured (e.g., Ridgeway & Diekema, 1989). Aggression fails to win higher status in a group, and it tends to decrease the person's overall standing. In our own work, we have found that disagreeable

individuals, who behave in aggressive, quarrelsome, and deceptive ways, fail to attain higher status (Anderson et al., 2001; Anderson et al., 2008). Across all of our assessments we have not found a single significant correlation between disagreeableness and status. Nice guys (and gals) do not finish last, as the dominance model suggests.

Finally, we have also found evidence suggesting that status cannot be taken by the individual team member, but instead must be given to team members by the group. In a series of studies we found that people who overestimate their place and unilaterally claim status don't attain higher status; in fact, they are punished with ostracism and lower compensation by the group (Anderson et al., 2006; Anderson et al., 2008). Groups seem to protect the status order from these individual "status grabs" and penalize individuals for failing to know their place.

Enduring Mysteries about Status Hierarchies in Groups

The previous section described an accumulation of empirical findings suggesting that the functionalist perspective – not the dominance perspective – captures the status dynamics of teams. Status hierarchies seem to be determined by the group, organized according to who provides more value to the group's success. Those individuals who have unique talents and skills that can help the group succeed, and who are willing to use those talents to contribute to the collective endeavor, are given the highest status ranks.

However, the abovementioned evidence might provide too much confidence in the functionalist model. A closer look a the literature on status hierarchies shows there are numerous findings – findings that consistently emerge across different studies – that cannot be explained by the functionalist account. In fact, many findings even seem to contradict functionalist premises, calling into question some of the model's basic

implications. In this section, we outline a few of those findings and describe their relation to functionalism, outlining why they fail to fit within its theoretical assumptions.

Hierarchies develop and stabilize very quickly. The first set of findings that seem to run counter to functionalism concern the development of hierarchies over time. If hierarchies are purely functional and develop because they help the group solve its important problems, one would expect the emergence of hierarchies to be a gradual and deliberate process. That is, hierarchies would emerge slowly at the beginning of the group's formation. Groups would start with a relatively flat structure, in which there are smaller differences in status among members, and gradually develop a steeper hierarchy over time, with status differences becoming more pronounced, as group members come to know each other's relative capabilities and commitment to the group's success. In the beginning of the group's formation, members usually have relatively little information about each other's competence and individual attributes. Even in organizational settings where teams are comprised of members who know each other by reputation, those members still do not know a great deal about each other, such as how much each individual can contribute to the team's success, and how committed each member is to the group. Therefore, it would behoove teams to hold off on forming stark differences in status until they come to learn each member's relative contributions.

Yet the empirical record paints a very different picture of how status hierarchies develop, suggesting they develop quickly and become rigid over time. That is, they emerge in a rushed fashion, based on little information about each group member. Once formed, team hierarchies are then very stable and somewhat slow to adjust over time, even in the

face of evidence that less competent people are in charge and that changes in the status order are warranted.

For example, the amount that group members speak is often used as a measure of status (Berger et al., 1972). Individuals who are respected and admired are given more chances to speak. Kalma (1991) found that rank orders in speaking time emerged within the first minute of interaction of dyads and triads. Schmid Mast (2001) similarly found that rank order in speaking time developed within the first 8 min of interaction. Fisek and Ofshe (1970) found that rank order in speaking time in the first minute of triadic interactions correlated in the .50's with final rank order at end of 45 min session. And Rosa and Mazur (1979) found that when two individuals make initial visual contact, the person who holds the glance longer ends up having higher status in the group. They argue, "As part of a process of status formation, it seems that ego almost immediately ascribes high or low status attributes to alter. If immediate cues indicate that alter is high in status, then ego is likely to defer to alter. If cues indicate that alter is of lower status than ego, ego is likely to withhold deference" (pp. 30-31). They also found that the first to speak (when visual contact pre-group task was not allowed) was the best predictor of each individual's eventual status with a regression coefficient of .55. Therefore, hierarchies seem to emerge before group members have an accurate sense of who has superior skills and abilities, and who is willing to contribute more to the group's success.

The rapid emergence of hierarchies might be justified if the hierarchy remained fluid and flexible, with the group making adjustments over time as the members learn which of them are actually more competent and committed to the group's success. That is, even if groups make rush judgments in the beginning of their interaction, they could still

construct a merit-based hierarchy if they adjusted the hierarchy over time, reordering the status ranks according to who actually provides more and less value to the collective.

Yet the empirical evidence suggests that status hierarchies are stable and even rigid rather than fluid and flexible. It seems that once the plaster sets, it sets hard. The stability of hierarchies was observed in classic groups research (Bell & French, 1950; Fiske & Cox, 1960; Nelson & Berry, 1965) and not only in laboratory groups but "real world" groups as well, such as teams of resident doctors (Caudill, 1958, p. 249). It has been observed in short time periods as well as long. For example, the Kalma (1991) study above found that speaking time rank orders measured within first minute of interaction of dyads and triads did not change over a 10 min session. In the Schmid Mast (2001) study, rank order in speaking time measured in the first 8 min of interaction in the first session correlated strongly with speaking time rank orders in the last 8 min of interaction (r's of .63 for women and .68 for men). The Fisek and Ofshe (1970) study found that rank order in speaking time measured in the first minute of interactions correlated in the .50's with final rank order at end of 45 min session.

This stability extends to longer periods as well. Schmid Mast (2001) found that the correlations of speaking time rank orders from the end of first group session to the beginning of the second session a week later were .54 for women and .49 for men. In our own research in which we followed teams over the course of four weeks, we found that individuals' status showed an average stability correlation of r = .61 across the four weeks; that is, individuals' status in any two weeks tended to correlate with each other around r = .61. Finally, in a study in which we followed groups over the course of nine months, we found that individuals' status in first two weeks correlated r = .61 with their status five

months later, and that status at five months in the group correlated a whopping r = .86 with status at end of year (Anderson et al., 2001).

Magee and Galinsky (2008) reviewed the literature on the stability of hierarchies, highlighting the numerous ways in which hierarchies reinforce themselves. Part of the reason that status is so seemingly resistant to change is that status perceptions coalesce quickly in the group and members come to consensus as to who has high and who has low status (Kenny, Horner, Kashy, & Chu, 1992; Thibault & Kelley, 1959). As Sherif and colleagues argued, within a group setting:

> Interaction becomes stabilized in a pattern of reciprocities manifested in a group structures consisting of hierarchical statuses and roles for individual members. The established pattern of reciprocities becomes codified in terms of certain norms regulating the expectations, responsibilities, and loyalties of members occupying the respective roles and statuses. (Sherif et al., 1955, p. 372)

Individual differences that predict the attainment of status. An abundance of research has shown that individual characteristics related to status striving are strong predictors of status in groups – even though those characteristics do not necessarily provide any value to the group. For example, an aggregated analysis of 85 years of groups research found that the personality trait dominance, which involves a preference for possessing authority and the tendency to behave assertively, predicts who emerges as the leader in groups more consistently than any other individual-difference dimension examined, including intelligence (Lord, de Vader, & Alliger, 1986). Further, individual differences such as the need for power, self-monitoring, and testosterone, which are also

associated with a desire for high social standing, similarly predict the attainment of higher status across group settings (Cashdan, 1995; Flynn et al., 2006; Winter, 1988).

From a functionalist perspective, it is not clear why these characteristics predict differences in status. Individual differences such as dominance and the need for power are not socially valued; in fact, many groups look down on individuals who blatantly desire status and even prevent them from attaining leadership positions (Freedman, 1980). Further, these individual differences are largely uncorrelated with competence or communal orientation (e.g., see Anderson & Kilduff, 2009). Therefore, it is unclear why these attributes would so strongly and consistently predict the attainment of status in teams.

Status dynamics differ for men and women. If status hierarchies in groups exist because they facilitate group success, there would be no reason to expect hierarchies to be different for men and women. Hierarchies putatively serve the same functions for groups of men and women, they should be based on the same individual differences in ability and merit, and they should have the same affect on group performance, whether or not the group was comprised of men and women.

Yet men's and women's hierarchies diverge in many ways – ways for which functionalism cannot account. For example, in a study of longer-term groups mentioned earlier (Anderson et al., 2001), we measured status with peer-ratings of "the amount of prominence, respect, and influence" the individual held in the group, from 1 *(low)* to 7 *(high).* We found that men's hierarchies seemed to emerge much more quickly than women's: For men, status was highly stable from Time 1 (two weeks after the group formed) to Time 2 (five months later), with an r = .80. For the women in the same group,

the stability correlation between status at Time 1 and 2 was only .41, which was significantly lower. Thus, early in the group's formation, female status was less stable, consistent with earlier findings (Aries, 1996; Savin-Williams, 1979).

It is interesting that men's and women's status was equally stable later in the group however. Male status was also highly stable from Time 2 to Time 3, a time interval of another five months, $\underline{r} = .89$. For women, the correlation between Time 2 and 3 was .88, almost exactly the same as the correlation observed among men. Therefore, these findings suggest that men negotiate and settle hierarchies more rapidly than women do, but that eventually both sexes develop status orders that are quite stable. Indeed, some status theorists have suggested that men's status order is established very quickly whereas women's status negotiation has been described as a more complicated and subtle process (Mazur, 1985; Savin-Williams, 1979). Thus, the status order among women might just take longer to emerge. In these mixed-sex groups, it seems that while men's status remains stable, women tend to change status positions with each other.

Once the hierarchy is formed, men also tend to develop steeper hierarchies than women. In a longitudinal study of teams (Berdahl & Anderson, 2005), we found that women more than men prefer equality in groups, and that all-male groups were more hierarchical than all-female groups. Similarly, Schmid Mast (2001) found that all-male groups had steeper hierarchical structures than all-female groups in their initial sessions.

Finally, different individual differences sometimes predict status for men and women. We found consistent evidence that neuroticism negatively predicts status in men but not in women (Anderson et al., 2001). Neuroticism reflects individual differences in negative emotionality, including vulnerability to stress, anxiety, depression, and negative

self-conscious emotions, such as guilt, shame, and embarrassment (Costa & McCrae, 1992). In other words, men who show signs of stress, anxiety, depression, or self-consciousness (i.e., highly neurotic men) are viewed more negatively than are highly neurotic women, and are likely to be socially penalized with lower status. Moreover, physical attractiveness predicted status in men but not in women (Anderson et al., 2001). This effect is surprising because it is often thought that physical attractiveness is valued more in women than in men (Buss & Schmitt, 1993).

Hierarchies often lead to worse group outcomes. A direct test of the utility of hierarchies is whether groups function better when they have a hierarchical structure than when they have a flat structure. Groups with a steeper hierarchy – that is, those with larger asymmetries in members' power, status, and influence – should exhibit higher levels of performance, cohesion, intra-group coordination, and lower levels of intra-group conflict, for example, than groups with a flatter structure.

Yet the empirical evidence finds that the effects of hierarchy steepness are highly mixed across studies. Some studies show steeper hierarchies facilitate better group performance and intra-group coordination, yet many other studies (in fact, a larger number of studies) show that steeper hierarchies lead to worse group performance, lower motivation and satisfaction among members, and breakdowns in inter-member coordination.

For example, the classic laboratory studies of communication structure by Bavelas and colleagues (e.g., Bavelas, 1950; Leavitt, 1951; Christie, Luce, & Macy, 1952) experimentally manipulated the communication channels between different group members while they worked on a joint task, allowing some members to directly

communicate with each other while precluding others from communicating. These different communication structures determined the steepness of the group's hierarchy (e.g., Bavelas, 1950; Leavitt, 1951; Shaw, 1954). In a review of these studies, Shaw (1964) found that sometimes more centralized communication structures led to higher performance than less centralized communication structures, and sometimes to lower performance. For example, of the 36 relationships he tallied between centralization and the speed with which the group solved its problem (faster times indicating better performance), more centralized structures led to faster problem solving in 14 instances, and slower problem solving in 22 instances. Of the 20 relationships he reviewed between centralization and the number of errors made by the group, more centralized structures led to more errors in 6 instances, fewer errors in 10 instances, and centralization had no effect in four instances.

A related line of laboratory studies manipulated or measured hierarchy steepness more directly by focusing on leadership structures. These studies also found mixed results. A few studies found positive relations between hierarchy steepness and group performance. For example, Carzo and Yanouzas (1969) examined 15-person groups who estimated how much demand there would be of a product in various markets and thus how much of that product they should order from suppliers. They found that groups performed better in a taller (3-level) than in a flatter (2-level) hierarchy. Maier and Solem (1952) found that groups working on a math task performed better when they had a leader than when they did not. However, this effect must be qualified because leaders were specifically instructed to encourage participation, to avoid expressing their own views, and to accept

the views expressed. Therefore, it is unclear whether the findings are due to hierarchy steepness or due to the effects of highly democratic leaders.

Other studies found negative association between hierarchy steepness and group performance. Torrance (1955) examined three-person Air Force flight crews and found "real" crews (that had been actually working together for a long time) performed worse on a math task than crews of strangers that were constructed temporarily for the sake of the experiment – and that this effect emerged because the real crews were more hierarchical than the temporary crews. For example, when lower ranked members of real crews knew the correct answer to the problem they were less able to convince the others to accept it.

Roby et al. (1963) manipulated whether groups had an appointed leader while they worked on a simple task involving flipping switches in response to display lights. They found overall that the effect of hierarchy steepness on group performance (i.e., the speed with which they solved problems) depended on whether group members had to coordinate with each other or not, and whether a competent or incompetent person was appointed leader. However, their means suggest that egalitarian groups outperformed hierarchical groups in all conditions except one: when the group worked on a task that required more coordination and when there was a highly competent person in charge.

Becker and Baloff (1969) also manipulated whether three-person groups had an appointed leader or not and had them perform a task involving estimating the demand for products based on a series of dimensions. They found that more hierarchical groups performed worse than flatter groups. And Berdahl and Anderson (2005) measured the degree to which undergraduate student teams who worked in a group project together naturally formed more centralized leadership structures (i.e., leaders with more control

over group activities), and found that more centralized groups performed worse on the team project and received lower project grades.

Finally, some studies found null effects of hierarchy steepness. McCurdy and Lambert (1952), as well as McCurdy and Eber (1953) manipulated whether groups had an appointed leader or not when they worked on a light-switching task in which subjects were asked to turn a switch as fast as possible when given the signal. They found no differences in performance between groups in which one member was appointed the leader, and groups in which all three members presumably had equal influence. Haslam et al. (1998) assigned leaders in groups based on their scores on a leadership survey and had them work on a Desert Survival problem. They found that groups with leaders did not perform better than leaderless groups. Curiously, groups in which a leader was randomly assigned outperformed both of those kinds of groups. Similarly, Blinder and Morgan (2008) found that groups with leaders appointed based on their pre-test scores of task ability did not outperform groups without leaders in a monetary policy task.

An Integrative Model: Micropolitics Theory

In sum, there are numerous findings that emerge consistently in the literature that cannot be explained by functionalist accounts of status. Yet at the same time, vast evidence contradicts the dominance theory of status, making dominance theory per se a non-viable alternative. It seems therefore that a new model of status is needed, one that helps us understand the findings outlined so far – both the findings that are consistent with the functionalist view, and those that are inconsistent with it and even seem to contradict it.

One possibility is that there are elements of both theories that are accurate, and that an integrative model that incorporates those elements from each perspective might best

capture status dynamics in teams. In other words, looking back at the empirical findings, it seems likely that functionalism accurately captures many aspects of status hierarchies, but not all of them. Similarly, dominance theory might have been on the right track in many respects, but perhaps misguided in its specific assumptions and hypotheses.

Based on a review and synthesis of the empirical literature, we propose a *Micropolitics* model of status hierarchies in teams. As suggested above, this model draws from functionalist and dominance theories of status, incorporating elements that fit with prior evidence and discarding elements that are clearly not supported. But rather than being based on metaphors of meritocracy (as the functionalist model is) or pecking order (as the dominance model is), we base our model on electoral politics. We propose that in the "micro" context of groups and teams, individuals attain status by convincing their group that they possess the skills and abilities needed to take charge – just as political candidates must convince voters they are the right people for the job. The final column of Table 1 summarizes of its major points.

The functionalist perspective locates the origin of status in the group. Status is viewed as a function of the group's collective judgments and decisions about which individuals deserve social status (Bales et al., 1951; Berger et al., 1972; Eibl-Eibesfeldt, 1989; Emerson, 1962; Goldhamer & Shils, 1939). According to this perspective, groups develop an implicit consensus as to which individual characteristics are valuable to the collective, and allocate high and low status positions according to whether the individual possesses relatively more of those characteristics. Individuals who possess more valuable characteristics are afforded high status positions in the group, whereas individuals who possess fewer positive characteristics are allocated low status positions.

The dominance perspective locates the origin of status in the individual, viewing status as resulting from the individual's drive and ability to attain status (e.g., Mazur, 1985; Savin-Williams, 1979). According to this perspective, differences in status develop because personality differences dispose some individuals to strive for status and use successful strategies to navigate the hierarchy.

Because these two perspectives place the determinants of status within the individual and within the group, respectively, they might at first glance seem to contradict each other. However, they might describe processes that occur in tandem. Status attainment is a function of both the group's values and perceptions *and* the individual's drive and ability to attain status.

Yet individuals' ability to attain status might depend less on their ability to intimidate and manipulate others into deference. By emphasizing conflict and fear-based strategies for attaining status, dominance theory seems to have been misguided. Instead, status-seeking individuals might ascend the hierarchy by behaving in ways that make them appear more valuable to the group – more competent, generous, and committed to the group's success. Status differences might thus be a product of the group's judgments about who possesses valued characteristics as well as the individual's desire for and pursuit of higher standing.

Group members thus ultimately decide who is afforded high or low status, but individuals jockey for such status affordances. Status is afforded to individuals who are perceived to provide value – and therefore individuals jockey for status by trying to signal their high value to the group. The status organizing process is both cooperative and

competitive; the group collectively decides who should be in charge, but individual members compete with each other.

In this sense, perhaps the best metaphor for status hierarchies in the Micropolitics model is a political election. Just as in political elections, individual members are chosen by the collective to occupy high status, influential positions. Individual members, just like political candidates, are selected according to whether they convey the right characteristics – decision-making skills, leadership abilities, etc. – and whether they convey a commitment to their constituencies' or group's welfare. Individual members, just like political candidates, who are the most skilled at conveying that they possess such valued characteristics (even when they do not), and those who are more successful in convincing others that they are the most qualified for the position, win status. Therefore, in the "micro" context of groups and teams, groups engage in a form of electoral politics, wherein members who seek high office (i.e., high-status positions) try to convey their positive qualities to others; and only by convincing fellow group members can individuals take charge.

This Micropolitics theory of status can be used to address the mysteries outlined above that functionalism could not explain. For example, why would groups develop hierarchies so quickly and adjust them so slowly? The Micropolitics model would suggest that early in the group's formation, members do jockey for position, trying to attain the highest status possible. Thus the model allows for individual motivation in status to help shape the status order; when multiple individuals in a group would like to occupy the top status ranks, they might seek to sort out the status order quickly – with some individuals who want it more and who are more equipped at attaining it successfully achieving those

ranks. Similarly, even as the group is confronted with information that some top-ranking members are less competent than they first seemed, the stability of hierarchies can be partly explained by the self-interested protection of status. Individuals who occupy those positions might not give them up easily.

Why would individuals who desire status attain it more readily? As mentioned earlier, implicit within the functionalist perspective of status is that individuals are given higher status in a group when they are *perceived* to be valuable to the group – not necessarily when they are *actually* more valuable (Berger et al., 1972). Because an individual's estimated value to a group is based on the group's subjective perceptions, we believe this provides individuals with the opportunity to shape such perceptions. Indeed, several recent studies have begun to show how individuals can enhance their apparent value, and in turn their status, by behaving in ways that signal higher competence and commitment to the group.

Our recent work suggests that individuals can achieve higher status by behaving in ways that increase their competence in the eyes of others (Anderson & Kilduff, 2009). Specifically, we found that individuals high in the personality trait dominance, who tend to behave in assertive, firm, and self-assured ways, were rated as having higher status and influence by their teammates. Further, dominant individuals were granted higher status because they were perceived to possess higher task competence by their teammates, even though they were actually no more competent. For instance, in one study examining groups who worked on math problems, individuals higher in trait dominance did not score higher on standardized tests of quantitative abilities, nor did they provide more accurate answers

during the group task. Rather, these individuals merely gave the impression of superior competence.

To understand how dominant individuals accomplished this, we turned to videotapes of the group sessions. Independent judges who were blind to our hypotheses coded each member's behavior and found that dominant individuals exhibited more competence cues, such as volunteering answers and problem-relevant information. Therefore, although dominant individuals were not any more competent, they achieved higher status by taking the initiative and acting in ways that conveyed high competence (Anderson & Kilduff, 2009).

Individuals can also attain status by displaying selflessness, thus signaling their commitment to the group. Individuals pursuing status can engage in what has been referred to as "competitive altruism," in which they attempt to outdo others in their generosity (Hardy & Van Vugt, 2006). For instance, studies of work organizations and MBA classmate cohorts used self- and peer-ratings to measure how much group members helped each other in their work (Flynn et al., 2006). These studies found that individuals who reported being more motivated to achieve high status gave help to more of their fellow group members and sought out help for themselves from fewer others. Further, this seemingly selfless behavior led to being perceived as more generous in the group, which in turn led to higher status. Therefore, status-seekers achieved higher social standing by acting strategically with regards to giving and receiving help.

Why would men and women's status dynamics differ? One possibility is that men might jockey for status more strongly – and earlier in the group formation – than women. There is evidence that men are higher on individual difference variables related to the

desire for status than women, such as trait dominance (Feingold, 1994), the need for dominance (Feingold, 1994), testosterone (Mazur & Booth, 1998) and Machiavellianism (Wilson, Near, & Miller, 1996). Moreover, evidence suggests that the need for power is manifested in overt behavior differently for men and women; specifically, the need for power predicts more impulsive behavior in men but not in women (Winter, 1988). This suggests that men higher in the need for power might jockey for status more than women in the group's formation because they are all striving for higher status and eager to sort out the hierarchical order.

Finally, why would hierarchies harm group success so often? One possibility is that although groups strive to put the right people in charge, they fail to do so. Because individuals jockey for position and thus sometimes people attain status who lack competence or a group-orientation, this could lead some groups to fail. Much research suggests that groups often fail in selecting the right people, placing incompetent individuals in positions of leadership. This failure in selection might give the wrong individuals disproportionate control over the group and its decisions, thereby increasing the chances for group failure (Barnard, 1964). Indeed, studies have found that when a group's hierarchy is based on expertise it performs better (e.g., Maier, 1967; Roby et al., 1963), which supports the notion that meritocratic hierarchies promote group success, and suggesting that when the hierarchy is based on non-meritocratic characteristics (e.g., the ability to only *convey* competence), group performance would suffer.

Summary and Future Directions

Status hierarchies are fundamental to a group's processes and performance. Where a group member falls in a team's status order shapes her motivation, self-concept, feelings

about the team, and participation in the group. Status hierarchies impact some of the most important processes within groups such as how labor and resources get distributed as well as how well groups perform.

The questions addressed in the current chapter are fundamental because they concern the very nature of hierarchies. Why do they exist? How do they form? What impact do they have on the group? As we discussed, there are two very different and conflicting accounts of status hierarchies that give very different answers to those fundamental questions. Functionalist accounts tend to portray hierarchies as a functional adaptation that evolved in response to specific group problems such as coordination, motivation, and self-interest. Hierarchies form because the group implicitly determines which individual members are most important to the group's success and affords status to those individuals. In contrast, dominance theories portray hierarchies as the simple result of dominance contests between group members. Hierarchies are born of competition and conflict; individuals who are more forceful and intimidating grab high status by beating others in status contests.

For many years, the functionalism account has held sway. The vast majority of findings that most directly pit functionalist and dominance theories against each other support the functionalist model. Most scholars who work on status hierarchies tend to adopt functionalist assumptions in their hypotheses.

Yet as we also discussed in the current chapter, there are many findings in the literature that cannot be explained by functionalism. For instance, why do hierarchies develop so quickly, before individual members can possibly know each other's value to the group? Why do hierarchies so often predict worse, rather than better, group performance?

The time seems right for a new model of status, one that can better account for the wide range of results in the literature.

With that goal in mind, we proposed an integrative model of status, Micropolitics theory, which incorporates elements of both the functionalist and dominance models. More specifically, in line with functionalism, Micropolitics theory views status as a function of the group's collective judgments and decisions about which individuals deserve social status. Groups develop an implicit consensus as to which individual characteristics are valuable to the collective, and allocate high and low status positions according to whether the individual possesses relatively more of those characteristics. However, status differences also depend on the individual's motivation and ability to attain status. Status-seeking individuals ascend the hierarchy by behaving in ways that make them appear more valuable to the group – more competent, generous, and committed to the group's success. Status differences are thus a product of the group's judgments about who possesses valued characteristics as well as the individual's desire for and pursuit of higher standing.

In terms of future directions, this Micropolitics theory poses a number of directions for future research. First, of course what we have presented is a rough model and much of it needs to be fleshed out further. Starting with the questions addressed earlier in the chapter, future research needs to test whether in fact status hierarchies emerge as quickly as they do because individual members jockey for position; one specific way to test this hypothesis would be to test whether groups with members higher in the desire for status form their status hierarchy quicker than other groups. Research also needs to test whether status hierarchies in teams are as stable as they are because status-driven individuals seek to keep their lofty position, even when evidence suggests they should defer more to others.

In addition, future research needs to test whether steeper status hierarchies harm group performance because the "wrong" members (who lack competence and a group-orientation) attain the high-ranking positions.

Further, one interesting avenue for future research is to examine whether, in some groups contexts, the dominance theory of status does more accurately portray the hierarchy's dynamics. That is, are there some group contexts in which status differences *are* determined by fear and intimidation, coercion and manipulation? We believe that in the vast majority of organizational team settings, the Micropolitics view of status will hold sway. However, it is possible that in some unique settings, status hierarchies emerge according to processes similar to those found in street gangs (Whyte, 1943) or prisons (Piquette & Papachristos, 2012). Perhaps in organizations where the culture is particularly toxic, in which coalitions are unable to form and each individual is fending for him or herself, dominance and intimidation could win the day (Ridgeway, 1984). Or in other settings, it is possible that dominant and fear-inducing individuals are afforded higher status because those individuals' primary responsibility is to interact with outgroups (Halevy, Chou, Cohen, and Livingston, 2012). Groups might select tough, intimidating, even Machiavellian individuals as leaders because those individuals would help the group compete against other groups.

Finally, the Micropolitics theory generates a number of hypotheses to be tested. For example, research should test whether individuals who successfully attain status – but who in fact lack characteristics that would allow them to contribute to the group's success – possess unique abilities related to the signaling of value to others. For example, do individuals higher in testosterone, self-monitoring, or the need for power have superior

skills at conveying positive qualities to others? Do they possess the ability to project the image of competence, leadership, or commitment to the group's success, even when they lack those characteristics? Do they possess what some scholars have called "Machiavellian intelligence" (Byrne & Whiten, 2002), which involves the ability to read the structure and value of a group and behave in ways that leverage such knowledge? For example, it is possible that individuals high in the need for power are more adept at reading, early in a group's formation, the kinds of characteristics and traits that will be valued by the group – that is, the characteristics and traits that will help individuals attain status. They would then have a leg up in competing for status because they would know which characteristics to project to others. It is also possible that individuals high in self-monitoring attain higher status (Flynn et al., 2006) in part because they are better able to tailor their behavior and image to others; that is, not only can they "read a room" and understand what others will value, but they also have the ability to act in ways that are consistent with those values.

Similarly, there is a broad tendency for individuals who are taller to attain positions of status (Judge & Cable, 2004), even though of course physical height has no relation to characteristics that would provide value to the group (e.g., intelligence, commitment to the group, leadership skills). Our Micropolitics theory suggests that height might lead to status because it signals to others that the individual does in fact possess competencies needed for successful leadership; in other words, group members might use height as a sign that the individual is more expert, more skilled at leading, or that he or she would make stronger contributions to the group. Future research should test this hypothesis and examine what perceptions, precisely, might mediate the link between height and status.

Given the increase in interest in hierarchy that has emerged in the past several years, it is time for new models and fresh perspectives on status hierarchies in teams. We hope that this Micropolitics theory of status provides a useful framework on which to build and generate new ideas and hypotheses.

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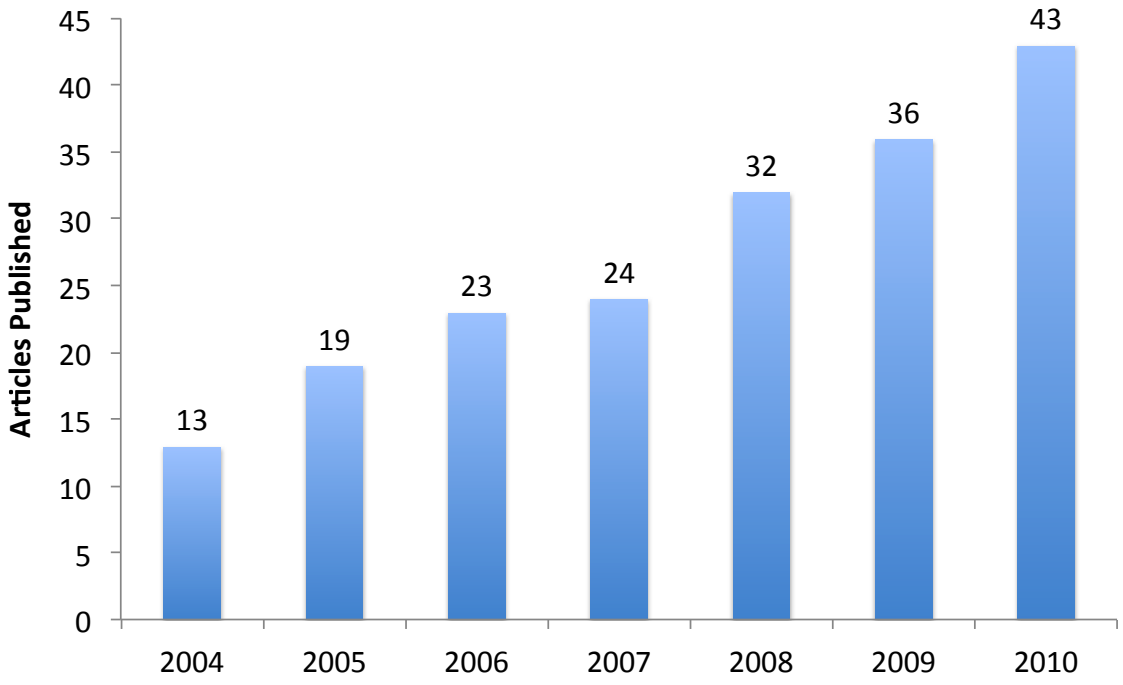
Table 1

Comparison of Theories of Status

	Functionalist Theory	Dominance Theory	Micropolitics Theory
Who drives status?	The group Groups give status to those who provide value	The individual Individuals jockey for position through dominance contests	Both Groups give status to those who provide value; individuals strive to appear more valuable than others
Status characteristics	Skills, commitment to the group	Motivation & ability to dominate others	Motivation and ability to signal one's value
Model	Meritocracy	Pecking order	Election
Status organizing process	Cooperative	Competitive, conflict-laden	Cooperative and competitive
Effects of hierarchy on performance	Positive	?	Contingent on whether the right people take charge
Is individuals' status context-dependent?	Yes	No	Somewhat

Figure 1

Number of Articles on Hierarchy Published by Year



**Search includes OBHDP, AMJ, JAP, JPSP, PSPB, JESP, Psych Science. Keyword includes "hierarchy," "status," or "power."*