Rating Performance or Asserting Status: A Test of a Social Dominance Theory of Supervisor Bias in Performance Ratings

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ABSTRACT

Supervisory ratings of employees’ performance remain the dominant means of assessing job performance in organizations despite decades of research documenting their biases. We propose that a major reason why so little progress in improving the accuracy of these ratings has been made is the theoretical mis-specification of the reasons for systematic supervisory rating bias. We extend Social Dominance Theory to explain similarity bias in supervisory ratings and test this theory against the reigning theory of homophily in a strong inference test. The contradictory hypotheses are tested against one another in a field study of 358 supervisor-subordinate dyads in ten organizations. Using hierarchical linear modeling to eliminate explanations at the organizational and supervisory levels, we find that supervisors’ biases in rating their subordinates’ contextual and task performance are explained by Social Dominance effects, and that none of the homophily bias hypotheses are supported. The implications of these results for addressing bias in supervisory performance ratings, as well as the theories of status in organizational behavior are discussed.
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Supervisors’ ratings of their subordinates’ job performance are as pervasive as they are
notoriously biased, and this is a problem. Biased appraisals hurt both organizations and
employees. For organizations, inaccurate appraisals undermine organizational performance; if
employee performance is misidentified, flawed information means adjustments cannot be made
and the organization’s own performance is undermined (Banks & Murphy, 1985). Widespread
knowledge of rating bias also impedes attempts to reward for performance (Pearce, 1987).
Inaccurate performance ratings undermine employees’ sense of fairness (Folger, 1992; Fulk,
Brief & Barr, 1985; Kanfer, Sawyer, Earley & Lind, 1987), their trust in their organizations
(Mayer & Davis, 1999), and lead to rewards and promotions going to less able people (Folger,
Konovsky & Cropanzano, 1992). Yet, as important as this problem is, it has defied solution,
despite fifty years of research and experimentation.

We suggest that one reason for this has been a misunderstanding of the reasons for
supervisors’ ratings biases. Heretofore, scholars have assumed that performance rating
inaccuracy results from supervisors’ perceptual errors, or their faulty decision making processes,
or similarity-attraction biases (e.g., Feldman, 1981; Smith, 1996). Yet, these approaches have
been of limited usefulness. Recently Folger et al. (1992) developed an innovative way to work
around supervisory inaccuracy. They proposed that supervisor’s ratings should be treated as
disputes over the allocation of resources and so subject to due-process procedures. Adding due-
process procedures, such as adequate notice and a fair hearing, do improve employees’
perceptions that the ratings are fairer and more accurate (Taylor, Tracy, Renard, Harrison &
Carroll, 1995). This work is an important practical step forward, but did not eliminate reliance on biased supervisors’ performance ratings, and so a need to have a better understanding of why they are inaccurate.

**Supervisors’ Biased Ratings of Performance**

Supervisors’ ratings of their subordinates’ job performance are the primary way employee job performance is measured for the vast majority of jobs in most organizations (Landy & Farr, 1980). This reliance on supervisors’ ratings continues despite extensive evidence of their inaccuracy (Pulakos & Wexley, 1983). Supervisory ratings of performance persist because, except under rare circumstances, the alternatives are worse. There are few jobs with comprehensive objective measures of performance, because the employment contract itself is based on a need for flexibility in the face of uncertainty about future demands (Pearce, 1987). This is one reason why the rigid use of objective measures of performance is notorious for creating goal displacement, and for punishing innovation and adaptation to change (Meyer, 1994). Most jobs are too complex, require too much management of the unexpected, and rely on improvisation to have employee performance judged solely on objective measures of performance.

Early approaches to the problem of supervisory ratings inaccuracy treated it as a problem of either supervisors’ flawed perceptions of reality, or of their poor assessments of their subordinates’ individual differences in performance. Both of these approaches drew on substantial research in psychology on person perception and psychometrics, but proved unable to do much to improve supervisors’ ratings accuracy in practice. More systematic measurement systems and better supervisory training in assessing individual differences based on these
theoretical explanations have had only limited effects on ratings accuracy (Jacobs, Kafry & Zedeck, 1980). Others have tried to improve the accuracy of supervisor’s ratings by triangulating them with others’ ratings. However, peer ratings are even less accurate than supervisors’ ratings (Thornton, 1980; Motowidlo, 1982), and can create demoralizing politicking and retaliation (DeNisi, Randolph & Blencoe, 1983). For most jobs, most of the time, an employees’ performance needs to be assessed via a retrospective assessments of job effort, judgment, and performance after the fact (Pearce, 1987). The persistence of supervisory ratings of performance, however flawed, after so much investment of scholarship and practice in trying to improve their accuracy strongly suggests that there is no viable alternative to them. Their inaccuracy remains an important practical problem that can be addressed by better theory.

There is strong evidence that supervisor ratings inaccuracy is not random, but the result of systematic biases. The best documented is similarity bias: the more similar subordinates are to their supervisors the higher the subordinates’ performance ratings (Pulakos & Wexley, 1983; Baltes, Bauer & French, 2007). Research finds that evaluators of all kinds tend to rate those more similar to themselves more positively than those who are dissimilar (e.g., Golightly, Huffman & Byrne, 1972; Wexley, Alexander, Greenwalt & Couch, 1980). For example, Graen, Novak, & Sommerkamp (1982), found that supervisors gave more positive evaluations to more similar employees. Supervisors rated their subordinates’ contextual and task performance lower the more demographically different those subordinates are (e.g., Ferris, Judge, Chachere, & Liden, 1991; Tsui & O'Reilly, 1989; Tsui, Porter, & Egan, 2002). Similarity bias in supervisors’ ratings of their subordinates’ performance also has widespread effects on organizational behavior. Wakabayashi, Graen, & Graen (1988) reported that subordinates more similar to their supervisors received more frequent promotions. Anit’s (2003) research established that
demographic differences between supervisors and subordinates were negatively associated with supervisor’s inclusion of subordinates in participative decision-making. McCain, O’Reilly, and Pfeffer (1983) and Wagner, Pfeffer, and O Reilly (1984) found that subordinates with demographically dissimilar supervisors were more likely to leave their jobs. While this similarity bias in supervisory performance ratings is undisputed, too many scholars have simply assumed that it is explained by supervisory homophily bias, an assumption that has been resistant to contradictory evidence.

**Homophily Bias**

The dominant theoretical explanation for similarity biases in supervisory ratings has been the similarity-attraction explanation (Byrne, 1971). There is a large body of research in social and industrial/organizational psychology demonstrating that people tend to be more attracted to, and prefer to be with, those who are more similar to themselves; another term for this is homophily bias. Byrne (1971) stated that individuals who are similar on demographic dimensions have had more common life experiences, beliefs and values, and so are more attracted to the similar members of their work unit. Glaman, Jones and Rozelle (1996) found that demographically similar co-workers liked one another more and preferred similar others as coworkers. Homophily bias results from demographic similarities that invoke an attraction dynamic whereby demographically similar individuals accentuate the positive attributes of each other and derive positive social identities from identifying with similar others.

This dynamic has been tied to Social Identity and Self-Categorization Theories. It is proposed that individuals develop positive self-definitions that are tied to their social identities (Messick & Massie, 1989; Turner, 1987), and classify themselves and others into social
categories on the basis of demographic characteristics such as ethnicity, age, gender, education and tenure in order to build attractive social identities. In this way, others are more attractive to the individual if they have demographic profiles that are consistent with the categories that the individual has chosen for self-categorization (Turner, 1987). Those evoking similarity-attraction or self-categorization theory assume that attraction drives the observed demographic similarity effects. We shall use the term homophily bias to refer to both explanations.

Homophily bias has been used as a retrospective explanation for a wide range of observed similarity biases in organizational settings (e.g., Chatman & Sparato, 2005; Ibarra, 1995; Pelled, Eisenhardt & Xin, 1999; Tsui, Egan, & O Reilly, 1992). Focusing on supervisors’ similarity biases in rating their subordinates, Tsui, Xin and Egan (1995) argued that demographic differences between supervisors and subordinates can undermine supervisor-subordinate interpersonal attraction, supervisor perceptions of employee performance, and subordinate perceptions of managerial supportiveness all assumptions that homophily bias is causing the effect. However, there is growing empirical evidence that homophily bias is not universal, and can be trumped by concerns for status.

Social Dominance Theory and Bias

Social Dominance Theory proposes that many who are of lower status are not homophilous, but prefer those of higher status (Sidanius, 1993; Pratto, Sidanius & Levin, 2006). This effect is used by political scientists and sociologists to explain racial and gender discrimination, and why those with lower status often accept their disadvantaged positions. Social Dominance Theory posits that human societies tend to be organized as group-based social hierarchies with some groups enjoying greater social status and power than other groups (Pratto,
Sidanius & Levin, 2006, among others). Those in higher status groups are motivated to subjugate groups of lower status, while members of lower status groups provide willing support for their own subjugation.

Although Social Dominance Theory operates at many levels, the empirical research has been dominated by research on a measure of individual differences called Social Dominance Orientation (SDO). Umphress, Smith-Crowe, Brief, Dietz & Watkins (2007) applied this individual differences measure to organizational questions and found that homophily bias was indeed more common among those in high-status groups, especially among those high in SDO. Umphress et al.’s (2007) research contradicts the universal homophily bias explanation so common in organizational demography research, and demonstrated the value of Social Dominance Theory in organizational settings.

The component of this comprehensive theory that is useful in understanding supervisory ratings biases is that those in dominant positions will be homophilous (favor in-group members) while those in subordinate or lower status positions tend not to identify as strongly with those in the same positions, and will display less homophily (this effect was first proposed by Tajfel & Turner, 1979; for a recent review see, Sidanius, Pratto, van Laar & Levin, 2004). Hinkle & Brown (1990) found that lower status individuals did not favor their own ingroup. Levin (1992) found that some low-status individuals favored the higher status outgroup rather than those in their own ingroup, and lower status members are less likely to identify with their own ingroup than are higher status members (Sidanius, Pratto & Rabinowitz, 1994).

According to Social Dominance Theory, status striving and defense, not homophily bias, explain most of the variance in ingroup identification and intergroup perceptions (Ridgeway, Boyle, Kuipers & Robinson, 1998; Sidanius, et al., 2004). Homophily does not work uniformly,
but is most characteristic of those holding high-status positions who wish to defend their privileged places.

There is empirical evidence from the organizational literature that a preference for associating with those with higher status can overwhelm homophily. Tsui, Egan and O’Reilly’s (1992) found that men responded more negatively than did women to working in groups dominated by the other gender. Chatman and O’Reilly (2004) intuited that because men traditionally have occupied a higher status, men would be more sensitive to the status incongruence of working in women-dominated work groups. They found that men were more likely to want to transfer out of work groups with greater proportions of women. However, contrary to their predictions, but consistent with Social Dominance Theory, lower status women did not favor either women dominated or men dominated work groups. Vecchio (1993) tested a status incongruence explanation for supervisor-subordinate relational age differences against similarity-attraction, social competition and loyalty explanations. Unfortunately, his mixed results did not consistently support any of these explanations. Finally, Perry et al. (1999) conducted a direct test comparing the homophily and status incongruence explanations for similarity bias effects. Again, their results were conflicting: while the similarity-attraction explanations were not supported, neither were most of the status incongruence explanations.

These studies all demonstrated that homophily bias is not universal in organizational settings, but they do not seem to have successfully unseated the attachment to homophily explanations in organizational behavior (see Williams & O’Reilly, 1998). We believe there are three reasons for this failure of contradictory data to shift attachment to a preferred theory. First, the minor role status has played in theories of organizational behavior means that many scholars remain unaware of empirically supported theory that better accounts for their empirical data.
Second, there is a bias in the field of organizational behavior to build increasingly complex omnibus theories rather than conduct strong inference tests of competing theoretical arguments. Third, there has been an absence of a strong competing theory that could better account for their results (Kuhn, 1970). Social Dominance Theory can provide the theoretically coherent explanation that is most consistent with the available empirical data that homophily bias is not universal, and so provide more support in addressing supervisory biases in performance ratings.

**Minor Role of Status Striving in Organizational Behavior**

Status has had a relatively minor role in organizational behavior, most often treated as a variable of secondary interest. The concept of status dates back to the earliest days of sociology (Simmel ([1908] 1950; Weber, [1914] 1978), and has been much studied in that field and in social psychology (e.g., Blau, 1994; Harvey & Consalvi, 1960). Given this history it isn’t surprising that there have been numerous definitional debates over the meaning of status and how it might differ from such ideas as estates, (Weber, 1978), class (Marx, [1894] 1967), power (Pearce, Ramirez & Branyiczki, 2001); as well as the debate about status as a subjective evaluation and as an objective structural reality (Wegener, 1992). Building on Pearce et al.’s (2001) review of the varied definitions of status we adopt their definition of status as one’s relative respected social standing with reference to a particular social grouping or hierarchy.

Mirroring early interest in status in sociology and social psychology, status was prominent in early organizational behavior theory; for example, Barnard ([1938] 1968) suggested that status (what he called prestige) was an important inducement in organizations, and Vroom (1964) proposed that seeking status is one of the major reasons why people work. Yet since this early work, studies of the effects of status seeking or defense on motivation, performance and
affective responses in organizations have been few. Only recently have scholars in organizational behavior begun to focus their attention on the role of status and status striving in organizational behavior. This growing interest is important, because other social scientists have helped to demonstrate the importance of status in social settings, with Troyer and Younts (1997) proposing that a primary motivation in social interaction is the avoidance of status loss, and Waldron (1988) arguing that it has a fundamental biological basis.

There is no question that having high status is a source of many advantages. To cite just a few examples: Those with higher status are listened to more, receive more deference from others, and are perceived as having more power (Berger, Zelditch & Anderson, 1966; Sheets & Braver, 1999). People with higher status have better health and longevity (Marmot, 2004), and their decisions have more legitimacy (Keashly & Newberry, 1995). Those randomly assigned a higher status outperform those randomly assigned a lower status (Lovaglia, Lucas, Houser, Thye & Markovsky, 1998), are able to command higher prices in markets (Ball, Eckel, Grossman & Zame, 2001), and will lose their business partners abandon when they lose status (Jensen, 2006). Stuart, Hoang and Hybels (1999) demonstrated that the higher the status of a firm’s affiliates, the shorter its time to initial public stock offering, and the higher the firm’s valuation once it went public. D’Aveni (1996) found that the higher the status of employees’ university degrees the better their mobility opportunities.

Because of its advantages, higher status usually is actively sought in social settings (Harvey & Consalvi, 1960). Having more money (Weber 1914 1978; Nee, 1996), displaying status-objects (Sundstrom & Sundstrom, 1986), having more education (Bidwell & Friedkin, 1988), working in more prestigious occupations (Kanekar, Kolsawalla & Nazareth, 1989), and belonging to elite organizations (D’Aveni & Kesner, 1993) all lead to greater status, and so
status attainment is seen as a primary motive for pursuing money, status-objects, education, certain occupations, and membership in elite voluntary associations. In more organization-focused research, better task performance can be a means to obtaining higher status (Shackelford, Wood & Worchel, 1996). What is more, those who lose status at work tend to be less satisfied, have lower self-esteem, and report more work-related depression (Schlenker & Gutek, 1987). Elsbach and Kramer (1996) found that when an organization’s status was denigrated, its members experienced dissonance and acted to emphasize those dimensions on which their organization had higher rank. Pearce, et al. (2001) suggested that relative status incongruence was the primary motivator of executives’ corporate strategies in transition economies. There is overwhelming evidence that high status is actively pursued and vigorously defended because it provides so many advantages -- power, wealth, dispensations, and longevity, within organizations or in any other social setting. The importance and centrality of status to social life is reflected in literature, mass entertainment, and is a pillar supporting the popular leadership and management self-help industries. Given the power of status striving and defense in social settings, its central place, and its popular awareness, it is surprising that status does not have a more prominent role in theories of organizational behavior. There are no handbooks of research on organizational status, no journal special issues on status in organizations. Status certainly is mentioned, but usually as one of many possible factors in a list of factors, as, for example, the single facet of Social Status Satisfaction from Dawis, Lofquist and Weiss’s (1968) Minnesota Satisfaction Questionnaire.

Quite recently, status is beginning to gain greater attention in the field of organizational behavior, but at present the work is scattered across subfields such as discrimination (e.g., Umphress, et al., 2007), within-group conflict (Phillips & Thomas-Hunt, 2007), workplace
harassment (Berdahl, 2007), and organizational learning (Perretti & Negro, 2006), among others. From across the wide range of organizational behavior topics scholars are increasingly turning to status to account for empirical puzzles. For example, Pearce et. al (2001) found that those executives who were willing to undertake large organizational change projects were seeking to increase a recently degraded status, while those who made no attempts at change occupied high-status positions. Phillips and Thomas-Hunt (2007) suggested that status distance within task groups can account for the conflicting findings about the effects of diversity on conflict.

The scattered attention to status in organizational behavior is costly. First, the diversity of subfields in which status is introduced means that scholars working in these fields focus on their specific problems, and while they find that status and status striving are useful ways to think about their problems, they remain unaware of each others’ work and so cannot build on it and develop our understanding of status in organizations. For example, Van der Vegt, Bunderson and Oosterhof (2006) deplore their finding that those group members who have the most expertise receive the most help from their fellow group members, when those with less expertise needed it more. Those familiar with the status literature, and in particular, that expertise bestows status and those with more status receive more attention and assistance, would not be surprised by this finding. Second, the lack of sustained theoretical conversation about the role of status in organizational behavior means that many empirical phenomena that might be better explained as status effects are explained in other, less powerful ways. Here we make the case that status threat, not homophily bias, better explains similarity bias in supervisory ratings.
Strong Inference Tests of Competing Theories

A second reason why disconfirming evidence that homophily bias accounts for supervisor similarity biases is the preference in the field for building omnibus multifaceted theories, rather than in building and testing theories that seek to identify the most powerful explanatory constructs. Over forty years ago Platt (1964) argued that science best progressed through the use of what he called strong inference tests of competing theories. This is Francis Bacon’s method of inductive inference. It involves proposing plausible alternative hypotheses and then conducting a crucial test of one against the other. Platt (1964) suggested that theories which do not exclude anything are not theories at all, and theories that try to predict everything, predict nothing at all. He argued that the biological and physical scientific specialities he studied advanced best, not over lifetimes, but through theoretical disagreements and the conduct of head-to-head tests of alternative theoretical accounts. Strong inference testing in organizational behavior is unusual (Notable exceptions include Latham, Erez and Locke, 1988, Vecchio, 1993, among a few others). Instead, ever more comprehensive theories have become dominant in organizational behavior.

An omnibus approach to theory development limits theoretical understanding in several ways. First, if there is no effort to empirically compare different theoretical accounts, we cannot correct our mistakes and advance knowledge. Some pruning of mis-specified theories is necessary, and one approach to theoretical pruning is to test one proposed theory directly against another plausible alternative. In addition, the theoretical relationships among so many variables in complex models are rarely carefully considered. Too often a plausible single sentence for a proposed relationship is offered for each bivariate relationship, with no consideration of how
these concepts work together as a whole. Are any of them substitutes for one another? How, exactly do they mutually influence one another? Such a plethora of variables and relationships overwhelms scholars’ capacities to process theoretical information. Finally, theories that have survived tests against alternatives are particularly important for a practical field such as organizational behavior: the consumers of research need to know what to do first. Those wishing to take action must make trade offs and so need to know what is actually causal, and what can be left in the background as insufficiently powerful to make it a priority.

This case for more focused theories and strong inference tests of competing claims runs the risk of being confused with the current disputes about paradigm heterogeneity. Pfeffer’s (1993) suggestion that knowledge advancement, resources and careers in organizational studies have been harmed by the absence of comprehensive and cumulative theory building ignited a storm of controversy (e.g., Perrow, 1994; Cannella & Paetzold, 1994) that continues (e.g., Glick, Miller, & Cardinal, 2007). Certainly, Platt (1964) writes from a perspective in the biological and physical sciences, and so would seem to fall within the camp of those who call for more homogeneity in our theoretical and methodological paradigms. However, this is not the case. We are not arguing for one best way to develop theories, conduct research, or for one overarching paradigm for the field. To the contrary, we are arguing for more theories and more tests of differing theoretical accounts. Strong inference tests surely are not the only way to advance our understanding of organizational behavior, but they a valuable approach that currently is under-used in the field. To this end, we offer the following alternative theory of similarity-bias in supervisory ratings and test it against the homophily bias explanation.

A Social Dominance Theory of Supervisory Ratings Bias
Supervisors occupy positions of higher status and dominance than do their subordinates in most organizations. Greater occupational prestige (Kanekar, Kolsawalla, & Nazareth, 1989) leads to higher status, as does holding power over others (Levine & Moreland, 1990). Both of these are associated with higher hierarchical position in most organizational settings. In fact, Driskell and Salas (1991), among others, have used hierarchical organizational position as the measure of status in their organizational research. Of course, there are exceptions, particularly for professional and artistic work, where the most knowledgeable or talented person’s superior task performance can trump hierarchical position (Pearce, et al., 2001). However, in most organizational settings, we would expect supervisors to be considered as holding higher status than their subordinates. It follows, then, that any actions or characteristics, including demographic ones, serving to compete with and threaten supervisors’ status claims to dominance relative to their subordinates would be distressing for supervisors. There is substantial evidence that those who have inconsistent status roles in organizations experience greater stress and strain (Bacharach, Bamberger & Mundell, 1993). Social Dominance Theory proposes that supervisors, as members of the dominant group, would be expected to be more subject to homophily bias, and so any other competing claim for dominance would be threatening to them. Social Dominance Theory finds that dominant group members seek to maintain their dominant positions, and we propose that this means they tend to see any subordinate who is a member of a higher competing status group as providing a challenge to their dominant positions.

There is substantial evidence that demography sends status signals; the status implications of differing races, ages, genders, and occupations all have been documented. We can conduct our strong inference test pitting our Social Dominance Theory of Supervisor Ratings Bias against the homophily one using two distinct demographic characteristics – gender and age.
Using two different demographic groups avoids the risk of inadvertently drawing general theoretical conclusions from relationships that could be particular to the meanings attached to any one categorical demographic characteristic.

**Gender-based Status Incongruence.** There is a large body of research finding that men hold higher status than women (Cohen & Zhou, 1991; Major, McFarlin & Gagnon, 1989; Thomas-Hunt & Phillips, 2004). When jobs are dominated by women they are perceived to be less complex (Miller, 1992), and have lower status (Kanekar, Kolsawalla & Nazareth, 1989). Women are less likely to engage in the higher status actions of interrupting, dominating, and confidently contributing their expertise than are men (see Thomas-Hunt & Phillips, 2004, for a review). Further, women are perceived as less competent than men, and must display superior task competence to overcome this status-enhancing stereotype (Driskell, Olmstead & Salas, 1993). Finally, women are expected to be emotionally sensitive and deferential (the actions of those with lower status) while managers are expected to be dominating and forceful (the actions of those with higher status). Thus, it isn’t surprising that many have found incongruence in the different roles of manager and woman (Byron, 2004; Eagly & Carli, 2007; Kanter, 1977). This suggests that there will be potential status threat to (lower status) women occupying roles supervising (higher status) men. When women supervise men the higher status gender role of their male subordinates threatens their own dominant positions. Social Dominance Theory research finds that the more insecure a dominant status is the more likely the dominant person is to show similarity favoritism (Brewer & Kramer, 1985).

For this reason, we expect to find that women who supervise men would tend to rate their subordinates’ contextual and task performance lower than they would rate their non-status threatening women subordinates. Status threat, not homophily, would account for gender-based
supervisors’ biases in performance ratings. If homophily best explained supervisory bias in performance ratings, we would expect men supervising women also to rate their women subordinates’ performances more negatively than that of their male subordinates, since both are equally dissimilar. We also don’t expect struggles for status dominance when women supervise women subordinates or men supervise men subordinates, because the dominance of the supervisor’s position would be uncontested. This allows Social Dominance and homophily bias theories to be tested against one another.

**Hypothesis 1a:** Supervisors with gender-based status-threatening subordinates (women supervising men) will give them poorer contextual performance ratings than they will non-threatening status congruent subordinates (men supervising women and same-gender supervisors and subordinates).

Versus,

**Hypothesis 1b:** Supervisors with subordinates of dissimilar gender will give them poorer contextual performance ratings than those supervisors rating subordinates of the same gender.

**Hypothesis 2a:** Supervisors with gender-based status-threatening subordinates (women supervising men) will give them poorer task performance ratings than they will non-threatening status-congruent subordinates (men supervising women and same-gender supervisors and subordinates).

Versus,
Hypothesis 2b: Supervisors with subordinates of dissimilar gender will give them poorer task performance ratings than those with supervisors rating subordinates of the same gender.

Age-based Status Incongruence. The research indicating that slow or stalled career progression reflects status degradation (Lawrence, 1988) provides an opportunity to compare Social Dominance Theory and homophily explanations for age-based demographic differences. While greater age may reflect greater social status in many cultures, in most Western developed countries we would not expect a direct age effect on relative social status. Rather, the organizational age literature conducted in the United States indicates that it is holding an age-inappropriate job that leads the incumbent to experience reduced status (Lawrence, 1988). Those who are older are expected to have more experience and expertise and this enhances and supports the higher status of the supervisory role (Vecchio, 1993). We propose that having a subordinate much older than themselves could be viewed as a threat to the dominant status of supervisors. In most organizational settings, it is normative that subordinates should be younger than their supervisors (Perry, et al., 1999). As above, Social Dominance Theory research finds that the more insecure a person with dominant status is, the more likely the person is to show similarity bias (Brewer & Kramer, 1985).

If the homophily explanation is best, we would expect to find that supervisors with much younger subordinates would be as negatively biased against them as supervisors with much older subordinates, since both are equally dissimilar. However, Social Dominance Theory predicts that only the younger supervisors of noticeably older subordinates would demonstrate homophily bias in their ratings of their subordinates’ job performance.
Hypothesis 3a: Supervisors with age-based status-threatening subordinates (supervisors noticeably younger than subordinates) will give them poorer contextual performance ratings than they will their non-status threatening subordinates (subordinates and supervisors of similar ages or subordinates with older supervisors).

Versus,

Hypothesis 3b: Supervisors with age-dissimilar subordinates (supervisors noticeably older or younger than subordinates) will give them poorer contextual performance ratings than they will subordinates of similar ages.

Hypothesis 4a: Supervisors with age-based status-threatening subordinates (supervisors noticeably younger than subordinates) will give them poorer task performance ratings than they will to their non-status threatening subordinates (subordinates and supervisor of similar ages or subordinates with older supervisors).

Versus,

Hypothesis 4b: Supervisors with age-dissimilar subordinates (supervisors noticeably older or younger than subordinates) will give them poorer task performance ratings than they will to their subordinates of similar ages.

METHODS

The sample for this study consisted of 358 supervisor-subordinate dyads. These are employees working in ten companies in the computer manufacturing, electronics, telecommunications, retail
industries, and food services located in the United States. Subordinates and supervisors provided data independently via surveys. Surveys were mailed to the respondents’ work addresses and were coded to enable the matching of data from the members of the dyad. Respondents were provided stamped, self-addressed envelopes to return completed surveys. Confidentiality of the survey was guaranteed. The supervisors had a response rate of 64% and provided data on their subordinates’ Contextual and Task Performances, and on their own demographic characteristics. Ninety-seven percent of the supervisors classified themselves as White and reported a mean organizational tenure of 11.1 years. For each supervisor three subordinates were randomly selected to receive questionnaires (60% response rate), with employees providing data on their personal demographics; 87% of the subordinates classified themselves as White and reported a mean organizational tenure of 8.9 years.

Measures

The independent variables are age and gender, with the supervisor-subordinate dyads grouped by whether or not they are status-incongruent or status-congruent (called Status Incongruence) and by whether or not they are relationally dissimilar or relationally similar (called Dissimilarity). Categorical Gender is measured by a dichotomous variable. A value of “1” was used to denote men and “2” women. Categorical Age was measured in years. The means, standard deviations and intercorrelations for all study variables appear in Table 1.

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**Incongruence and dissimilarity.** Status Incongruence-Gender consists of supervisor-subordinate dyads with women supervisors and men subordinates (coded 1, n=10), with all other dyads categorized as gender status congruent (coded 0, n=348). Supervisor-subordinate dyads are gender relationally dissimilar if a man supervises a woman or a woman supervises a man (n=79), all other dyads are considered gender relationally similar (n=279). Dissimilarity-Gender was coded with a value of 1, and similarity was coded as 0.

For Status Incongruence-Age, there is no theoretical guidance on what age differences would become noticeably incongruent. We believed Vecchio (1993) and Perry et al.’s (1999) use of the simple arithmetic differences in ages would classify some dyads which are not meaningfully different in age (only a year or two) as either dissimilar or status incongruent, and could account for their non-supportive results. Thus, relying on common sense and the distribution of the differences as guidelines, three age groups were created. The first group is composed of supervisors five years younger than their subordinates. The second group contains supervisors five years older than their subordinates, and the third group has dyads with the supervisors and subordinates within five years of age. The Status Incongruent-Age group is the first group, coded 1 (n= 59), with supervisors at least five years younger than their subordinates, with all other dyads considered age status congruent, coded 0 (n=299). The Dissimilar-Age dyads are those with supervisors at least five years younger than their subordinates and those with supervisors at least five years older than their subordinates, coded 1 (n=223). All other supervisor-subordinate dyads are considered age relationally similar, and are coded 0 (n=125).

**Contextual Performance.** Subordinate Contextual Performance was measured using nine items drawn from the existing literature (e.g. Graham, 1986; O’Reilly & Chatman, 1986; Smith et al., 1983). This scale includes items like “is willing to speak up”, “calls management attention
to dysfunctional activities”, “does not keep doubts about a work issue to him/herself”, “expresses opinions honestly”, “informs management of unproductive policies”, “makes suggestions to improve organization”, and “makes innovative suggestions to improve department”. The supervisors stated the extent to which they agreed that their subordinates exhibited the actions described by the item, on a seven-point agree-disagree Likert scale, converted to five-point scale here. The Cronbach reliability coefficient for this scale is .93.

**Task Performance.** Subordinates’ task performance consists of six items asked of supervisors and used to assess core task performance, originally described in [author identifying citation removed], where it was found to be sufficiently distinct from subordinate Contextual Performance to merit separate analyses. Task Performance items focused on quantity, quality and efficiency of job performance, rated on a seven-point Likert agree-disagree scale, converted to a five point scale for these analyses. The internal consistency reliability of this scale in this sample is .96.

**Analyses.** The hypotheses are at the supervisor-subordinate dyadic level, however these dyads are nested in two other levels: organizations, and supervisory raters who evaluated the performance of one, two or three subordinates. Therefore, hierarchical linear models (HLM) were used in order to be sure that there were controls for any organizational or supervisor effects in testing these dyadic level hypotheses. The HLM was performed following Garson’s (Garson, n.d.) and used the SPSS "Mixed models-linear”. Hofmann (1997) suggested that in general, relatively large sample size are required for HLM models and with fewer groups, we can obtain sufficient power by having more groups within each organization. Although ten organizations are included in this study, we have more than three hundred supervisor-subordinate dyads, which is acceptable for us to do the analysis. As can be seen in Table 1, the supervisors in Organization
6 tended to rate their subordinates lower than did supervisors in the other nine organizations, further evidence that controlling for effects at the organizational level are necessary. For example, to test Hypothesis 1a and 1b, hierarch linear models were performed with Contextual Performance as the outcome variable. At the dyad level, Dissimilar-Gender and Status Congruence-Gender were used as predictors of Contextual Performance. At the supervisor level, supervisors’ identification numbers were incorporated as supervisor-level predictors of the intercept term. At the organizational level, organizations’ identification numbers were used as predictors of the organization-level intercept terms. Similar procedures were performed for the other hypothesis tests.

Further, as can be seen in Table 1, younger supervisors tended to give their subordinates lower performance ratings, and gender is often associated with Contextual Performance. Therefore, controls for age in the gender tests, and gender in the age tests in all of the HLM models, to insure that effects of categorical demography are not mistakenly interpreted as supporting either of the tested theories. Finally, to aid in interpretation we have included all paired-comparison tests of group means, applying Levene’s tests for inequality of variances to all tests to control for the group-size skew in these samples.

RESULTS

All of the “a” hypotheses make predictions derived from Social Dominance Theory for similarity biases in supervisory ratings, while the “b” hypothesis make contradictory predictions based on homophily bias explanations. Hypothesis 1 concerns gender effects on Contextual Performance while Hypothesis 2 concerns gender effects on Task Performance. Table 2 presents the results of
the hierarchical linear models for gender on both contextual and task performance. Here, and in the paired comparison tests reported in Table 3, we can see that for Contextual Performance (Model 1) the prediction for the status threat explanation was supported (Hypothesis 1a) with a significant negative coefficient for Status Incongruence-Gender but not for Dissimilarity-Gender (Hypothesis 1b). As shown in Table 2, no significant coefficients were found at the supervisor or organization levels in either Model 1 or 2. Women supervisors rated their male subordinates as having significantly lower Contextual Performance than did men rating either men or women subordinates. In contrast, once the status-threat dyads were removed homophily bias has no significant effects. Unfortunately, there were no significant gender-based relational demography effects for subordinates’ Task Performance here (See Table 2), preventing the comparative test of gender-based status threat vs. homophily explanations for supervisor ratings of Task Performance (Hypotheses 2a vs. 2b). Nevertheless, for those tests of gender-based performance ratings biases that were possible, the status-threat hypothesis was supported and the homophily one was not.

Hypothesis 3 addresses the Social Dominance Theory and homophily predictions of age-based effects on Contextual Performance, and Hypothesis 4 makes those predictions for Task Performance. Table 4 has the results of the hierarchical linear model analyses for the age differences hypotheses. We can see that the significant negative coefficients support both status threat explanations for both Contextual Performance (Model 3, Hypothesis 3a) and Task
Performance (Model 4, Hypothesis 4a), while none of the homophily coefficients were significant, once the status-threat dyads were removed (Hypotheses 3b and 4b). Nor were there any significant coefficients at the supervisory or organizational levels. As can be seen from the paired comparison tests of group means in Table 5, supervisors rated their subordinates more than five years older than themselves as significantly lower in Contextual and Task Job Performance than did supervisors rating subordinates about their own age or who were dissimilar but younger.

DISCUSSION AND CONCLUSION

We developed a Social Dominance Theory of Supervisory Ratings Bias that better accounted for the existing empirical data on when and why individuals will tend to have similarity biases. It was tested against the currently dominant universal homophily bias explanation of supervisory performance ratings by placing predictions from the homophily explanation in head-to-head strong inference tests against status threat explanations. We found that, for both gender and age, status threat significantly accounted for the supervisory ratings, while the homophily bias explanations received no support, once status threatening dyads were removed. With a sample of 358 supervisor-subordinate dyads in ten different organizations the tests were sufficiently powerful to find support for the non-status-confounded homophily bias effects in supervisory performance ratings if they existed. These findings provide strong support for the superiority of
the Social Dominance Theory-derived status threat explanation for systematic similarity biases in supervisors’ ratings of their subordinates’ job performance over the current homophily explanations.

Here we found that supervisors systematically rated those subordinates whose higher demographic status threatened their own dominant hierarchical status lower in both contextual and task performance. While those lower ratings could possibly be based on relatively lower real subordinate performance, it is hard to imagine why men working for women should systematically perform more poorly than women working for women, or that noticeably older subordinates should perform more poorly at their jobs than subordinates of a similar age or younger than their supervisors. Similarly, we did not directly measure either experienced status-threat or homophily here, but tested for patterns of data that would be predicted from each of these explanations. Given the difficulty of getting honest self-reports of both status seeking and homophily bias, this study, as did others in the literature, did not directly seek to obtain these measures. We did demonstrate that the similarity bias in supervisory ratings that has been widely assumed apparently had been masking a bias against those whose higher demographic status threatened the supervisor’s superior status, resulting in a mis-specification of this bias as one resulting from similarity-attraction or homophily bias. Social Dominance Theory provides a theoretically coherent account for these, and other, empirical reports of demographic similarity effects, however, with additional research on status in organizational settings it is possible that anomalous empirical results will surface, suggesting the need for another theory. However, at present this study indicates that status-threat, not homophily, best accounts for the well-documented systematic similarity bias in supervisory performance ratings of their subordinates.
This theoretical correction has important practical implications. When this bias was misunderstood as universal homophily bias, practical interventions focused on diversity sensitivity, seeking to increase awareness of homophily bias and so reduce it. This research suggests that such training would be useless in reducing similarity bias in supervisory ratings: supervisors are reacting to perceived threats to their dominant status, not to any aversion to someone who is demographically different. Social Dominance Theory emphasizes that not all differences are equal. Ignoring the potential status threats and status striving underlying various differences (to say nothing of behavior) is a prescription for training impotence. This research suggests that training involving discussions of status striving and status defense, and how they may consciously or unconsciously color perceptions and actions, while potentially difficult, hold more promise for effectiveness than abstract admonitions to respect differences.

These tests confirm the claim that status striving and defense are powerful explanatory variables in organizational behavior. Status defense better accounted for bias in supervisor ratings of their subordinates’ contextual and task performance than did homophily bias. A focus on status also is more consistent with previous research showing that homophily bias is not universal. As Social dominance Theory proposes, status will usually trump homophily, such that those in dominant status positions tend to devalue the performance of subordinates who display competing claims to high status. Supervisors exist in social environments, and are as concerned with maintaining their dominant roles as are people in other social settings. Social Dominance Theory better accounts for the observed systematic demographic biases in supervisor’s performance ratings, and provides a more nuanced account of why these biases occur. Supervisors’ authority is fragile (Sayles, 1989), and they are alert to potential threats to their dominant status positions. While the effect sizes deriving from demographic threats to their
dominance reported here may be small, this may be because demographic threats to status are relatively weak in these organizations. More direct threats to supervisors’ dominant status positions, such as insubordination or politicking, would probably be much more threatening. Social Dominance Theory suggests that supervisors will be sensitive to threats to their dominant positions and that they will act to protect and enhance their status from any threats to it. Organizations are rife with status striving for dominance and Social Dominance Theory promises to be a fruitful source of explanatory power for a variety of organizational behaviors.

Regarding homophily explanations of demography effects, this test demonstrates that much previous organizational research was conducted in a way that masked the more theoretically complete and empirically supported reason for these effects – threats to status dominance. The fact that none of the homophily bias hypotheses were supported, once the status incongruent effects were removed, combined with the well-established status differences among different demographic groups, strongly suggest that previous assumptions that homophily is the best explanation for relational diversity effects more generally appear to be misplaced. Certainly, the data used in other relational demography studies could be reanalyzed to conduct strong inference tests of status threat vs. homophily as was done here. In any case, these results indicate that it is no longer appropriate to assume that relational demographic diversity effects are primarily driven by homophily bias. Social Dominance Theory provides a credible and powerful alternative explanation, something that would not have been clear if it was simply added to an omnibus theory of demographic diversity effects.

This strong inference approach to theory testing, rather than any all-inclusive omnibus theory, highlighted the more powerful effects of status threat. As such, we hope it illustrated the potential dangers of all-inclusive theories to the advancement of our knowledge in the field of
organizational behavior. Omnibus theories tend to treat all constructs as equally important, and so may mask false or redundant theoretical claims. By assuming that plausible alternative hypotheses should to be added to existing theory, rather than pitted against one another, the field risks stagnating intellectually, and misleading those who wish to put our research to practical use. Future research in organizational behavior might profitably seek to deconstruct omnibus theories and subject their multiple relationships to competing strong-inference tests. We might better advance our understanding of organizational behavior if we more often asked, What is most important?, rather than, What might explain additional variance?

In conclusion, these results help to demonstrate what has long been apparent to sociologists and social psychologists — social status is important to people, and the seeking of higher status and avoidance of status degradation drives much behavior, in workplaces as in other social settings. This work supports the growing attention to status in the diverse sub-specializations of organizational behavior. Sociologists and social psychologists have long considered it a central explanatory variable, and the more powerful status threat effects demonstrated here suggests it could have a prominent place in a wider range of diversity and organizational behavior theories.
FOOTNOTE

1Ironically, the first systematic examination of homophily effects in the social sciences (Lazerfeld & Merton, 1954) distinguished between status homophily and value homophily; with current work in organizational behavior focused only on the effects of value homophily.
REFERENCES


### Means, Standard Deviations, and Intercorrelations among Study Variables

|                                | Mean | s.d. | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   |
|--------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1. Subordinate Gender<sup>a</sup> | 1.32 | .47  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 2. Supervisor Age              | 39.65| 8.77 | -18**|      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 3. Supervisor Gender<sup>a</sup>| 1.16 | .37  | .47**| -.02 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 4. Supervisor Age              | 43.50| 6.69 | .03  | .14**| -.11*|      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 5. Org D1                      | .03  | .17  | .06  | -.03 | .20**| .07  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 6. Org D2                      | .05  | .22  | .11* | -.06 | .07  | .02  | -.04 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 7. Org D3                      | .04  | .20  | .09  | -.16**| -.01 | -.07 | -.04 | -.05 |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 8. Org D4                      | .06  | .24  | .13* | -.04 | .02  | .05  | -.04 | -.06 | -.05 |      |      |      |      |      |      |      |      |      |      |      |      |
| 9. Org D5                      | .05  | .21  | .01  | .07  | -.10 | -.04 | -.05 | -.05 | -.06 |      |      |      |      |      |      |      |      |      |      |      |      |
| 10. Org D6                     | .15  | .35  | -.13*| -.16**| -.14**| -.19**| -.07 | -.09 | -.09 | -.10 | -.09 |      |      |      |      |      |      |      |      |      |      |
| 11. Org D7                     | .08  | .27  | .09  | .08  | .16**| .13* | -.05 | -.07 | -.06 | -.07 | -.07 | -.12*|      |      |      |      |      |      |      |      |      |
| 12. Org D8                     | .07  | .26  | .07  | .13* | .15**| .19**| -.05 | -.06 | -.06 | -.07 | -.06 | -.11*| -.08 |      |      |      |      |      |      |      |      |
| 13. Org D9                     | .43  | .50  | -.20**| -.14**| -.25**| -.05 | -.15**| -.20**| -.18**| -.22**| -.19**| -.36**| -.25**| -.24**|      |      |      |      |      |      |      |
| 14. Status Incongruence-Gender<sup>c</sup> | .03  | .17  | -.12*| .02  | .39**| -.11*| .07  | -.04 | -.04 | -.04 | .12* | -.02 | .01  | .09  | -.08 |      |      |      |      |      |      |
| 15. Dissimilar- Gender<sup>c</sup> | .22  | .42  | .62**| -.17**| -.05 | -.04 | -.05 | .03  | .09  | .10  | .10  | -.05 | -.03 | .01  | -.06 | .32**|      |      |      |      |      |      |
| 16. Status Incongruence-Age<sup>d</sup> | .16  | .37  | -.13*| .64**| .05  | -.26**| -.03 | -.07 | -.06 | -.05 | .08  | -.05 | -.07 | .00  | .16**| .11* | -.11*|      |      |      |      |      |
| 17. Dissimilar- Age<sup>e</sup> | .62  | .49  | .03  | -.13*| -.02 | .22**| -.04 | -.01 | .13* | .00  | -.07 | -.07 | -.05 | .05  | .01  | .03  | .08  | .35**|      |      |      |      |      |
| 18. Contextual Performance      | 3.76 | .68  | -.01 | -.01 | -.06 | .22**| .03  | .05  | .04  | -.00 | -.04 | -.14**| .07  | .06  | .02  | -.12*| .02  | -.19**| -.09 |      |      |      |      |
| 19. Task Performance            | 3.83 | .70  | .08  | -.09 | -.00 | .15**| .03  | .04  | .02  | -.01 | -.00 | -.11*| -.03 | .12* | -.01 | -.02 | .07  | -.19**| -.04 | .72**|      |      |      |

n = 358  * p < .05   ** p < .01.
<sup>a</sup> 1 = men, 2 = women;
<sup>b</sup> 1 = men subordinates with women supervisors, 0 = all other supervisor-subordinate pairs
<sup>c</sup> 1 = men with women supervisors and women with men supervisors, 0 = all other supervisor-subordinate pairs
<sup>d</sup> 1 = subordinates more than five years older than their supervisors, 0 = all other supervisor-subordinate pairs
<sup>e</sup> 1 = subordinates more than five years older and more than five years younger than their supervisors, 0 = all other supervisor-subordinate pairs
Table 2

Results of Model Analysis for Gender-based Status Dissimilarity and Incongruence on Contextual and Task Performance

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<th>Estimate</th>
<th>SE</th>
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** p <.01
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* p < .05
Table 4

Results of Model Analysis for Age-based Status Dissimilarity and Incongruence on Contextual and Task Performance

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** p <.01
Table 5

Paired Comparisons for Age Groups

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<tr>
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<td>3.80</td>
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<td>Sub&gt;5Yrs vs. Similar Age</td>
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<td>3.84</td>
<td>-3.49**</td>
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<td>Sub&lt;5 vs. Similar Age</td>
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<td>3.84</td>
<td>-.42</td>
<td>297</td>
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</table>

| **Task Performance**     |       |       |         |      |
| Sub>5Yrs vs. Sub<5Yrs    | 3.53  | 3.91  | -3.52** | 221  |
| Sub>5Yrs vs. Similar Age | 3.53  | 3.86  | -3.10** | 191  |
| Sub<5Yrs vs. Similar Age | 3.91  | 3.86  | .51     | 296  |

** p <.01