

EXECUTIVE JOB DEMANDS: NEW INSIGHTS FOR EXPLAINING STRATEGIC DECISIONS AND LEADER BEHAVIORS

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Executive jobs vary widely in the difficulty they pose for their incumbents, yet research on top executives and strategic decision making has largely ignored this reality. We build on work in industrial/organizational psychology to develop the construct of executive job demands; discuss its major determinants; propose some of its key implications for strategic choices and leadership behaviors; and propose the usefulness of this construct in advancing research on numerous fronts, including agency theory, executive compensation, and upper echelons.

In recent years the study of top executives has become an important research strand within the field of strategic management, as researchers have attempted to understand the role of human factors in strategic choice, organizational design, and performance (Finkelstein & Hambrick, 1996). Missing, however, has been any conceptual apparatus for describing or analyzing the difficulty that executives experience in their jobs. Indeed, in prior research on executives, scholars have implicitly held job difficulty constant. We have some idea of what executives do (Kotter, 1982; Mintzberg, 1973), and we have evidence that executive personalities and experiences can affect organizational outcomes (Bantel & Jackson, 1989; Miller & Droge, 1986), but we have no insights about how the degree of challenge a given executive experiences in his or her job will affect task conduct, strategic actions, or performance. Some executives, for instance, operate in munificent environments, lead companies that have well-fortified (sometimes even monopoly) positions, and are supported by highly capable colleagues, whereas other executives have none of these comforts.

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Executive jobs vary in the difficulty they pose for their incumbents, yet research on top managers has consistently disregarded this reality, leaving important puzzles unaddressed.

Lack of attention to executive job demands may account, in part, for the incomplete and inconsistent explanations of strategic behavior that researchers have generated. One group of strategy researchers tends to assume that executives can largely comprehend their strategic situations and will pursue actions that logically follow from the contextual situations they face (e.g., Brandenburger & Nalebuff, 1997; Porter, 1980). Other groups of researchers tend to adhere to assumptions of bounded rationality (e.g., Cyert & March, 1963)—the premise that executives face too many stimuli and are under too much pressure to be able to comprehensively and accurately weigh their objective situations. Instead, according to these scholars, executives filter and interpret the overwhelming stimuli confronting them either by relying on their personal experiences and repertoires (e.g., Hambrick & Mason, 1984) or by imitating the actions of others (e.g., DiMaggio & Powell, 1983). Although studies in all of these streams of research have explained some variance in strategic behaviors among firms, the amount of explained variance is almost always modest, and sometimes, depending on the sample, it is

nearly nonexistent. We can anticipate that executive job demands constitute a crucial omitted variable in prior strategy research. In particular, assumptions of strategic rationality may lead to the strongest predictions when executive job demands are only slight or moderate. In contrast, assumptions of bounded rationality, and the accompanying logic of upper echelons and institutional theorists, may be most predictive under conditions of high executive job demands.

In this article we build on work in organizational behavior and industrial/organizational psychology to develop the construct of executive job demands, which we define as *the degree to which a given executive experiences his or her job as difficult or challenging*. We consider executive job demands to be a variation of the broader, well-established construct of job demands (e.g., Janssen, 2001; Karasek, 1979)—and it might even be referred to, awkwardly, as “job demands at the executive level.” As we will argue, however, a specific focus on executive job demands may greatly advance our understanding of strategic decision making, and it may even open up new research avenues for those interested in job demands generally. We will specify the set of factors that determine executive job demands; these factors have analogues at other organizational levels but are manifested in distinctive ways at the executive level. We also will propose major consequences associated with executive job demands, focusing on strategic choices and leadership behaviors. These outcomes are particularly germane to the executive level and have received no attention in the existing literature on job demands. Our ideas are meant to apply to all types of executive positions, including CEOs, COOs, and divisional presidents.

THE CONCEPT OF EXECUTIVE JOB DEMANDS

Existing Literature on Job Demands

Researchers in organizational behavior and industrial/organizational psychology have long been interested in the job demands placed on individuals (e.g., Janssen, 2001; Karasek, 1979; Xie & Johns, 1995). One main research thrust has provided evidence that job demands engender mental strain and stress (Karasek, 1979; Van Yperen & Snijders, 2000; Wall, Jackson, Mullarky, & Parker, 1996; Xie & Johns, 1995), as well as

physical health problems (Fox, Dwyer, & Ganster, 1993; Theorell & Karasek, 1996; Warr, 1990). In a substream of research, scholars have pursued Karasek’s (1979) idea that these harmful effects of job demands are greatest when coupled with lack of job latitude or control, finding mixed empirical support (Fletcher & Jones, 1993).

In another major thrust of research on job demands, researchers have examined the relationship between job demands and both job performance and job satisfaction. According to their research, increases in job demands cause workers to perform better and become more satisfied with their jobs, but only up to a point, beyond which performance and satisfaction start to decline (Gardner, 1986; Gardner & Cummings, 1988; Janssen, 2001; Scott, 1996). Researchers have also found this inverted-U relationship to be moderated by demands-ability fit (Xie & Johns, 1995), pay and supervisory satisfaction (Champoux, 1992), and perceptions of the ratio between job demands and rewards (Janssen, 2001).

Researchers of job demands have used varying definitions of the construct, including role obligations (Janssen, 2001); instigators of work action (Dwyer & Ganster, 1991; Janssen, 2000; Karasek, 1979); and the degree to which an employee has to work fast and hard, has a great deal to do, and has too little time to fulfill job responsibilities (Ganster & Fusilier, 1989; Van Yperen & Snijders, 2000). Accordingly, job demands can be seen as a relatively broad concept incorporating both quantitative demands—how much workload a person faces—and qualitative demands—role ambiguity and conflicting obligations a worker faces (Janssen, 2001; Karasek, 1979). As Janssen argues, “Using broad definitions and measurements that mix up quantitative and qualitative aspects may produce unclear theory on the nature and consequences of job demands” (2001: 1040).

To avoid such problems, Janssen (2000, 2001) and most other researchers (e.g., Dwyer & Ganster, 1991; Ganster & Fusilier, 1989; Karasek, 1979; Van Yperen & Snijders, 2000) specify that their focus is on quantitative job demands. As we explain below, we also focus on quantitative job demands (the degree of overall difficulty an executive experiences) and exclude, for now, consideration of qualitative demands that might arise when an executive is torn or conflicted about which of these challenges, or which of his

or her constituencies, is most important (Biddle, 1979). We do, however, believe there is a significant need and opportunity to examine the qualitative job demands executives face.

Executive Job Demands

Although prior research on job demands has improved our understanding of this important construct, its relevance for executives and their work has not been considered. We are aware of only one empirical inquiry that has examined managers: Janssen's (2001) study of low- and mid-level managers in a Dutch company, in which job demands were measured by means of a survey (including items such as "Do you have to work fast?") and included dependent variables, such as satisfaction and performance, that were among those customary in other studies.

Distinct attention to executives is warranted not because they deserve special consideration as human beings or because they necessarily face greater demands than others but, rather, because of the advances in theory and knowledge that such a specific focus will yield. The contributions from studying job demands at the executive level will be significant in guiding our understanding of strategic decision making and executive leadership, but they also may help in extending and refining the literature on job demands.

A focus on executives may help to open up new thinking about the implications of job demands on task behaviors. To date, the literature on job demands has focused on the individual's well-being (including stress, anxiety, and health consequences; Karasek, 1979; Theorell & Karasek, 1996; Van Yperen & Snijders, 2000; Warr, 1990), attitude toward the job (e.g., satisfaction and commitment; Fox et al., 1993), and performance (Gardner, 1986; Gardner & Cummings, 1988; Janssen, 2001). Conspicuously absent has been much attention to task behaviors (except absenteeism and tardiness; Dwyer & Ganster, 1991). If we consider the well-documented tendency for performance to deteriorate under extremely high levels of job demands, the question arises as to how this deterioration is first manifested as actions. Do people with high job demands become paralyzed by their heavy loads? Do they maintain their pace but simply make a lot of mistakes? Do they become angry

and engage in witting or unwitting sabotage? Or does something else happen?

Obviously, the potential answers will vary for different kinds of work. By focusing specifically on top executives and drawing on some well-established constructs of strategic behavior, we have an opportunity not only to improve our explanations of those strategic behaviors (as discussed earlier) but also to open a path for researchers to consider, more broadly, the implications of job demands on task behaviors for other categories of employees.

Additionally, distinct attention to job demands at the executive level is warranted because executive work is qualitatively different from work at other organizational levels—not in ways that render existing literature on job demands immaterial but, rather, in ways that cause that literature to be incomplete or strained when applied to the executive level. For example, in prior research scholars have conceived of job demands as arising primarily because of task design (Gardner, 1986; Gardner & Cummings, 1988) or job scope (Xie & Johns, 1995)—a view that has only limited salience for the typically unbounded responsibilities of top executive work. Similarly, in the literature on job demands, researchers have largely omitted consideration of the external environment as a source of job pressure, but executives are responsible for scanning the environment and developing adaptive responses to it (Miles & Snow, 1978; Mintzberg, 1973), and we can anticipate that some environments are much easier to cope with than others.

Finally, specific attention to executives is warranted because any effects of job demands—positive or negative—could have far-reaching implications for the entire organization and its constituents. If job demands affect the nature of strategic decision making or the executive's leadership behaviors, as we argue below, then the organization's overall vitality and performance may be at stake, in ways that have yet to be considered.

As noted above, we define executive job demands as the degree to which a given executive experiences his or her job as difficult or challenging. Although our definition is similar to others in the literature on job demands (e.g., Ganster & Fusilier, 1989; Van Yperen & Snijders, 2000), elements of it warrant elaboration.

First, by referring to "a given executive," we are indicating that the level of job demands depends, in part, on the degree to which the executive's capabilities are appropriate for the situation. Although top executives can be thought of as the winners in a series of rigorous career tournaments (Lazear & Rosen, 1981) and, hence, of uniformly exceptional talent, the reality is that executives vary widely in their abilities (Fama, 1980; Hubbard & Palia, 1995) and in the suitability of their talents for the specific contexts they face (summarized in Finkelstein & Hambrick, 1996). For instance, an executive could have the qualities needed to manage a small organization, but not a large one; a domestic business, but not a global business; or a cost-oriented commodity business, but not an image-oriented luxury goods business. In a related vein, an executive can start a position without the requisite knowledge or skills but then learn them along the way (Hambrick & Fukutomi, 1991). The opposite can happen as well: an executive who is well-suited for a job at the outset of his or her tenure may become obsolete by new requirements that arise from technology, customers, competition, or other factors. Understanding the "fit" between contextual conditions and managerial characteristics (Edwards & Cooper, 1990; Gupta, 1984; Gupta & Govindarajan, 1984) is essential to the concept of executive job demands, because a given executive will experience greater job demands to the extent that he or she is ill-suited for the job.

The second element of our definition that warrants elaboration is that the executive must "experience" his or her job as difficult or challenging. Executive job demands may emanate from objective factors (discussed in the next section), but they must be felt or perceived in order to influence executive behavior (Dearborn & Simon, 1958; Mitroff, 1982; Wiersema & Bantel, 1993). Although we have chosen to avoid the complexity of referring formally to "subjective" and "objective" executive job demands, our definition aligns with the former. We anticipate that there will generally be a strong correlation between objective determinants of job demands and the actual degree of challenge felt by executives (as there is for other employees [e.g., Fox et al., 1993]), but the correspondence will not be total, and we expect that felt, or experienced, demands will be far more predictive of the out-

comes we discuss later than will objective indicators of job conditions.

Finally, we need to explain our stipulation that a demanding job is one that the executive experiences as "difficult or challenging." Job difficulty could be felt in various ways, including the amount of time the job requires, the degree to which the job is always on the executive's mind, the degree to which the executive feels ill-equipped to do the job, and the degree to which the executive believes that success at the job will be hard to achieve. It is essential, however, to conceive of the executive's sense of challenge as distinct from its possible outcomes, such as stress, strain, and anxiety (Karasek, 1979; Xie & Johns, 1995).

In a related vein, we allow for the possibility that executive job demands can vary over time. There may be not only long-term changes (such as when executive learning or obsolescence gradually occurs) but also short-term peaks and valleys in job demands such that some periods are more difficult than others. For example, an executive might be particularly taxed while working on acquiring another company, but once the deal is completed, the executive will return to a more typical, lower level of job demands. We are not aware of any prior research on job demands that has considered the possibility of time-varying demands; doing so, however, opens up the opportunity to examine the implications of, say, demand constancy, momentary crises, and respites for job behavior and performance.

Before proceeding, it is important to distinguish executive job demands from related constructs. First, the concept of executive job demands is not the same as executive stress. As conceived in the psychology literature, job demands are a potential source or determinant of stress (a "stressor"), along with such other determinants as family situation and financial security (Karasek, 1979; Perrewe, Ferris, Frink, & Anthony, 2000). But stress itself is a reaction—a consequence of extreme job demands and other factors. Thus, stress may be a key mediator in some of the propositions we present below, but executive job demands are the precipitating force.

Second, executive job demands differ from the concept of managerial discretion or latitude of action (Hambrick & Finkelstein, 1987). Although an executive who has a wide array of choices

(hence, high discretion) can be thought of as having a demanding job, many other factors contribute to determining job demands, as we discuss. Moreover, not every discretion-enhancing condition gives rise to increased job demands, and some actually reduce job difficulty. For example, as Hambrick and Finkelstein (1987) have discussed, a board that is beholden to the CEO will tend to confer discretion, but such a board may also tend to impose minimal performance demands, thus reducing the demands on the CEO.

The Determinants of Executive Job Demands

Executive job demands are determined by three sets of factors. Two of these—task challenges and performance challenges—are contextual. The third set of factors resides within the executive—his or her performance aspirations. In the brief discussion that follows, we define and illustrate these three sets of determinants, without attempting to be exhaustive.

Task challenges. Some managerial situations are more arduous than others. Task challenges—the conditions that make it difficult for an executive to attain a given level of performance—arise from the environment (notably, its scarcity, complexity, and dynamism) and from the organization (its resource limitations and complexity).

Environments can be hostile or munificent (Dess & Beard, 1984). Industry conditions might be very harsh (say, with buyers who have significant power, intense rivalry among competitors, and low barriers to entry), or they may be inherently abundant (Porter, 1980; Williamson, 1963). Beyond munificence, the complexity of an environment also affects an executive's task challenges. Some environments consist of numerous variables and contingencies, imposing considerable information-processing demands on executives, whereas others are simple and homogeneous (Aldrich, 1979). For example, an industry composed of many direct and indirect competitors, in which the product is sold through a large number of channels to heterogeneous customers and where technology changes rapidly, is complex and poses considerable demands on the executive, compared to a more simple and homogeneous environment (Eisenhardt, 1989).

Similarly, environments vary widely in how many decisions the executive is called on to make (Hambrick & Finkelstein, 1987). Some environments allow for (and warrant) frequent choices on a wide array of fronts (e.g., product form, pricing, promotion, capacity decisions, and so on), whereas other environments allow managers few elements of choice—either because choices are directly constrained or there is an absence of means-ends ambiguity (i.e., there is no difficulty in deciding). Paraphrasing Hambrick and Finkelstein's portrayal of an extreme, the chief executive of a regulated electric utility that has a long-term fuel contract, in a town with a stable population, has few major things to decide (1987: 372). Even though an absence of discretion restricts the executive, its virtue is that it makes his or her job less demanding.

Characteristics of the organization also determine task challenges. Some organizations have few resources and lack legitimacy (Stinchcombe, 1965); others are well established and have abundant resources. Some have fragile market footholds; others hold well-fortified positions, sometimes even with patent protection or other forms of monopolies (Porter, 1980). Some organizations have relatively underdeveloped managerial cadres (Quinn, Anderson, & Finkelstein, 1996), resistant or lethargic workforces, and primitive systems and procedures (Mintzberg, 1979); others have an abundance of talent and well-established administrative infrastructures that can greatly ease an executive's tasks (Vancil, 1979). The complexity of the organization's strategy and structure is also a source of task challenges. For example, large firms with technologically interdependent units that are geographically far-flung, with complex matrix structures, require significant top-level coordination and integration; organizations with less complex arrangements are not as burdensome to manage (Henderson & Fredrickson, 1996; Vancil, 1979).

Performance challenges. Executives differ in how much performance is required of them—that is, in their performance challenges. These challenges arise principally from the firm's owners and directors, but they also can be shaped by other constituencies. An organization can be viewed as a coalition of stakeholders (Thompson, 1967), each of which must be induced to contribute its resources (Barnard, 1938;

March & Simon, 1958). If the inducements fall short of what a stakeholder believes is appropriate and obtainable elsewhere, the stakeholder withholds its contributions and the overall coalition is frayed. Sometimes stakeholders—including customers and employee groups—place great performance demands on companies and have the power to enforce those demands, causing intense pressure for executives (Porter, 1980).

Managers may especially feel pressure to perform from the company's owners, but here, too, conditions can vary. If agency conditions are weak (Fama & Jensen, 1983) or there is an inefficient market for corporate control (Walsh & Seward, 1990), performance demands from owners will be muted.

Among modern, publicly traded corporations, in which ownership and management are separate (Berle & Means, 1932), the board of directors is a primary means of shareholder influence on executives (Jensen & Meckling, 1976; Williamson, 1964). Thus, the prescriptions offered by agency theorists and shareholder activists to improve board vigilance—for example, increasing the number of outsiders on the board (Hermalin & Weisbach, 1991) who have a significant ownership stake in the company (Morck, Shleifer, & Vishny, 1988) and who have not been appointed by the CEO (Westphal & Zajac, 1994)—should result in greater executive job demands. Executive job demands also will be heightened when shares are held by a few major owners, rather than widely dispersed (McEachern, 1975). In short, the stronger the position of owners relative to the executive, the greater the executive job demands.

The market for corporate control also greatly affects executive job demands. If the market for corporate control is inefficient—say, if companies are allowed to adopt antitakeover provisions, states pass antitakeover laws, and financial institutions are unwilling to provide large amounts of money for takeovers—then executives simply have to deliver performance that is “in the ballpark” (Milgrom & Roberts, 1992). However, if the market for corporate control is efficient, then performance demands are sharply increased (Denis & Kruse, 2000). Performance must not just be reasonable but at least as high as all other possible owners believe they could achieve if the firm's resources were under their control (Fama & Jensen, 1983). An efficient, ac-

tive market for corporate control will greatly increase executive job demands.

Finally, performance challenges will depend on the executive's recent and current performance. An executive who has not been performing well faces the risk of sanction or dismissal, in proportion to the severity and duration of his or her shortfall (Boeker, 1992; Puffer & Weintrop, 1991). Because there is a tendency to attribute performance outcomes to executives, regardless of whether their behaviors actually caused the outcomes (Meindl, Ehrlich, & Dukerich, 1985), executives whose units have been performing poorly will face considerable pressure; conversely, those whose units have been performing well will be under less pressure, experiencing fewer job demands. These phenomena are manifested in various ways, including the tendency for poorly performing executives to feel a greater need for strategic change (Hambrick, Geletkanycz, & Fredrickson, 1993). Conversely, executives who have recently overseen favorable performance tend to succumb to the “fat cat syndrome” (Dutton & Duncan, 1987: 290) of self-satisfaction and complacency.

Executive aspirations. Although executives are sometimes portrayed as uniformly highly motivated to lead their organizations to lofty outcomes (Donaldson & Lorsch, 1983), they actually vary widely in their drive to perform—that is, in their aspirations. Those who are strongly motivated to enhance the performance of their organizations may place more demands on themselves than contextual conditions alone present. Conversely, executives who are motivated only to maintain their organizations—to satisfice, to perform merely credibly—will experience only the bare demands presented by contextual conditions (and may even selectively ignore or avoid those demands). This is an essential point, because it highlights that executives partially determine their own job demands. Those executives who are driven to achieve high levels of performance may experience great job demands, even if the other contextual forces we have identified are minimal or moderate.

Aspirations to deliver maximum organizational performance could come from personality factors—for example, need for achievement (Miller & Droge, 1986)—or internal locus of control (Miller, Kets de Vries, & Toulouse, 1982). It could also come from aging or tenure effects. Those

who are younger or earlier in their careers or jobs may have more to prove and feel under pressure to demonstrate their efficacy and to establish reputation and a foothold (Hambrick & Fukutomi, 1991); those who have long tenures and records of success may be more inclined to satisfice and rest on their laurels.

Intense motivation to enhance company performance also could arise because of an alignment of executive rewards with company performance, through use of stock options, performance-based pay plans, and executive stock ownership (Alchian & Demsetz, 1972; Raviv, 1985). To the extent that an executive is motivated by money (either for its purchasing power or scorecard symbolism), tying his or her pay to company performance will induce a performance orientation and heighten self-imposed executive job demands (Fama & Jensen, 1983).

In summary, task challenges and performance challenges constitute the context that contributes to making executive work more (or less) difficult. The executive's own aspirations can add to (or subtract from) the overall degree of job demands. We now turn to the implications of varying levels of executive job demands on strategic choices and leader behaviors.

CONSEQUENCES OF EXECUTIVE JOB DEMANDS

The degree of job difficulty an executive faces may be an instrumental factor in improving our understanding of a wide array of organizational phenomena. Here we set forth several propositions that address what we see as the most central consequences of executive job demands, encompassing both strategic decision making and leadership behaviors. We leave effects on the executive himself or herself, such as stress or illness, outside our formal scope (but, again, stress may be an unspecified mediator in some of the relationships we propose).

Strategic Decision Making

The prevailing view among researchers who have closely examined executive work is that top managers generally are confronted with more stimuli than they can attend to or adequately process (Kotter, 1982; Mintzberg, 1973). According to these theorists, executives are "boundedly rational," striving to be deliberate

and comprehensive in their decision making but not fully able to achieve that ideal (e.g., Cyert & March, 1963; Simon, 1945). The greater the job demands an executive experiences, the more remote strategic rationality becomes. As job demands increase, executives will comprehend a smaller proportion of the stimuli that bear on their strategic situations. Under high job demands, executives have so much performance pressure, so many decisions to make, in the face of so much information, they simply cannot afford—in terms of cognitive wherewithal, time, or other resources—to be comprehensive in their analyses or search for solutions (Eisenhardt, 1989; Mintzberg, Raisinghani, & Theoret, 1976).

Importantly, it is not that executives facing high job demands purposely become less comprehensive. The pressures of the job may actually encourage them to try to be more comprehensive, but they cannot achieve that ideal. And the greater the job demands, the more the executives will fall short of the ideal. That is exactly what "boundedly rational" refers to—cognitive limitations cause executives' best efforts at rational decision making to be incomplete (Cyert & March, 1963). It may even be counterproductive to try to be comprehensive in the face of overwhelming job demands, since doing so may cause serious time delays (Fredrickson & Mitchell, 1984) and focus an executive on microscopic details, while the situation calls for his or her best, but simplified, construal of the big picture. Thus, executives who are under great job demands take mental shortcuts and engage in limited search to arrive at their choices.

Executives who face high job demands will economize in their strategic decision making by relying on their experiences to search for and interpret information, as well as to select among options (Cyert & March, 1963; Hambrick & Mason, 1984). They will be drawn to what has worked for them before, what they find familiar or comfortable, and what fits their cognitive schema (Axelrod, 1976; Starbuck & Hedberg, 1977). Accordingly, decisions made by executives who are under significant job demands will closely reflect their backgrounds (Mischel, 1977)—their functional backgrounds (Kimberly & Evanisko, 1981), educational experiences (Wiersema & Bantel, 1992), and age and tenure (Finkelstein & Hambrick, 1990)—as well as their psychological dispositions (e.g., Miller & Droge, 1986). In contrast, executives whose jobs are less

difficult will not encounter such information overload or extreme pressures.

Although we can assume that all executives face at least some pressure to perform, those with lower job demands can take advantage of greater available time, attention, and other resources to be comprehensive in their analyses and search for solutions. Their decisions will hinge proportionately more on the characteristics of the objective decision environment, instead of largely reflecting idiosyncratic construals of their situations (Mischel, 1977).

Psychologists have long noted the tendency for subjects who are confronted with "weak situations" to inject their personalized interpretations into their decisions (Mischel, 1977). However, the main ingredient of a weak situation, as conceptualized by psychologists, is ambiguity of the stimuli, not necessarily the sheer volume or pace of stimuli (Davis-Blake & Pfeffer, 1989). But it can reasonably be expected that decision makers who are confronted with more information and more variables than they can handle will draw on their personal stock of experiences and biases in order to make sense of and simplify their difficult situations—just as they do when stimuli are ambiguous.

In a somewhat related vein, organizational theorists have found that executives' experiences are reflected in their actions more under conditions of high discretion than low discretion (Finkelstein & Hambrick, 1990). But the causal argument proposed by these researchers is that high-discretion settings provide abundant opportunity for managerial judgments to be exercised, rather than that high-discretion settings are taxing and complex. To our knowledge, no theorists have directly proposed that the preexisting schemas of executives will be manifested in their choices in proportion to the job demands they face.

Indeed, it could be that researchers have encountered inconsistent relationships between executive characteristics and strategic interpretations/choices because of failure to control for job demands. For example, differences in job demands could account for the contrasting results of two well-known studies of managerial information processing. Dearborn and Simon (1958) asked participants in an executive program to quickly read a ten-thousand-word case and then indicate their interpretations of the problems the company faced. The authors found

a considerable association between the executives' functional backgrounds and their interpretations of the case.

In contrast, Walsh (1986) asked managers to do a similar task, but based on reading only a one-thousand-word (three-page) case for twenty-five minutes. Walsh's design would seem not to be a condition of information overload in which the subjects needed to engage in cognitive shortcuts, and, thus, it is not surprising that Walsh observed none of the perceptual filtering that Dearborn and Simon found. (It is worth noting that even Dearborn and Simon's ten-thousand-word case greatly simplifies the informational and task complexity faced by most executives). We can more broadly anticipate that executive job demands inhibit thoroughness and deliberate weighing of stimuli, enhancing the aptness of the bounded rationality assumption.

Proposition 1: The greater an executive's job demands, the stronger the association will be between the executive's characteristics (demographic and psychological) and strategic choices.

Another shortcut that executives who face high job demands will take is imitating others (DiMaggio & Powell, 1983; Haveman, 1993). Neoinstitutionalists have emphasized the role of uncertainty in propelling mimetic isomorphism (DiMaggio & Powell, 1983; Mizruchi & Fein, 1999), without acknowledging that sheer decision complexity and job demands may also play a role. For example, in their comprehensive review of the literature on mimetic isomorphism, Mizruchi and Fein reaffirm that the central logic of DiMaggio and Powell's (1983) seminal piece—and the works that have followed it—is that "mimetic processes will tend to occur under conditions of uncertainty" (1999: 663).

We can expect, however, that pressured executives who lack the capacity to conduct comprehensive search and analysis will look to other firms—those that are geographically close (Galaskiewicz & Wasserman, 1989) or otherwise similar (Fligstein, 1985) to the focal firm, or those that are the most visible or admired (Haveman, 1993)—for signals as to what might work for their own companies. Imitative action is economical, because it minimizes search and analysis costs; moreover, it can be defended, since

other exemplar companies have given it legitimacy. But the imitative action may or may not be efficacious for the focal firm, depending on whether the firm's situation is similar to the firm being copied (Haveman, 1993), as well as whether the focal firm adequately understands how to implement the more subtle elements of the initiative being imitated (Burns & Wholey, 1993). Namely, shortcuts taken under pressure may be economical as acts of decision making, but, to the extent that they ignore or discount the objective and detailed realities the firm faces, they will not necessarily lead to the hoped-for results.

It is useful to note that imitating others is often a variation of acting on the basis of one's own experiences. With imitation, the experience may be through firsthand involvement with another firm (e.g., Boeker, 1997); through vicarious learning by means of weak ties, such as board seats or officerships in trade associations (Davis, 1991; Geletkanycz & Hambrick, 1997); or through more detached observation (Haveman, 1993). Except possibly for actions that result from systematic benchmarking of other firms, most imitative actions are taken on the basis of a few convenient or familiar insights and, thus, represent substantial departures from the comprehensive decision-making process that is supposed to accompany strategic rationality. The greater the job demands on an executive, the more these simplified, stylized decision processes will be employed.

Proposition 2: The greater an executive's job demands, the greater the tendency will be to imitate the strategic actions of other firms.

When job demands become extremely high—at the very upper range of the continuum—an executive's tendency to engage in simplified search, analysis, and decision making gives way to outright decision desperation. The task is so complex and challenging, the stimuli so many and rich, and the performance standards so great, the executive is essentially overwhelmed. Although he or she may not be facing a "threat" per se, the executive's behaviors will resemble those of subjects under threat. Indeed, we would argue that the "threat-rigidity response" described by Staw, Sandelands, and Dutton (1981) might more appropriately be thought of as an "extreme demands-rigidity re-

sponse," with a threat constituting just one form of extreme demand.

In the face of extremely high job demands, executives are under substantial pressure to perform but are only able to comprehend and process a small proportion of the facts that bear on their situations. These executives can be expected to experience stress (Xie & Johns, 1995), as well as the decision flaws that accompany stress, including habituated responses (Zajonc, 1965), "wishful thinking" (Janis, 1958), "freezing up" (Glass, 1955), or, alternatively, "lashing out" with unusual or far-fetched behaviors (Bazerman, 2002; Tversky & Kahneman, 1981). These extreme behaviors could include large-scale acquisitions, divestitures, reorganizations, downsizing, aggressive accounting practices, and others.

Hambrick and D'Aveni's (1988) study of large corporate bankruptcies helps to illustrate and specify how extremely high job demands—often accompanied by executive stress—may shape strategic behaviors. The authors found that the bankrupt companies showed signs of financial weakness as early as ten years prior to failing. The troubled companies then started engaging in strategic extremism and vacillation, which, Hambrick and D'Aveni argued, were a result of the pressure their managers were under but which only served to worsen their situations. While a matched sample of healthy firms tended, on average, to engage in moderate levels of domain-change initiatives each year (adding and dropping stores, product lines, geographic regions), the failing firms tended to engage in either no domain initiatives (freezing up) or a very large level of initiatives (lashing out) in a given year; moreover, they swung from each of these extreme profiles from one year to the next, thus preventing the development of any refined repertoires or routines (Miles & Snow, 1978; Nelson & Winter, 1982).

An intriguing possibility is that the extreme actions taken by highly pressured executives are often exaggerated versions of initiatives that worked well for them in the past or of actions they have seen other companies undertake. That is, extreme job demands cause executives to take shortcuts in decision making but also to be under so much pressure that they are unable to accurately assess the appropriateness or scale of their actions.

John McCoy, the long-time CEO of BancOne, provides an example (Moore, 1999). McCoy built BancOne by making a series of friendly acquisitions of small- and medium-size banks, which he allowed to retain a great deal of autonomy. Eventually, the company suffered from severe duplication of activities, since each subunit continued to operate as a nearly independent entity. McCoy decided to centralize and standardize, in order to achieve economies of scale. At this point, however, the demands on McCoy had grown considerably: the company was far bigger than it had ever been; the new philosophy of centralization created sizable coordination and rationalization tasks at his level, in contrast to the company's history of decentralization; and, of course, shareholders were unhappy about deteriorating performance. After a year of struggling unsuccessfully with these extreme demands, McCoy reversed course and reverted to form: he made an acquisition. His acquisition of First USA, however, was far larger than any he had made in the past, and he paid a premium (5.5 times book value) well above any he had paid before. The company deteriorated even more. The acquisition of First USA seemingly played to McCoy's strengths, but the intense pressure he was under almost certainly compromised his ability to weigh the appropriateness of this outsized action or to understand the required subtleties of executing it.

Proposition 3: Executives who are under extremely great job demands will exhibit more extreme strategic behaviors and more vacillation in their strategic behaviors than executives who are under low or moderate job demands.

Just as researchers have found that lower-level employees perform worse under very high job demands than under moderate job demands (Janssen, 2001), so, too, do we expect inferior performance from executives who are under extremely great demands. Because this basic relationship is well established in the literature, we do not present it as a formal proposition, but it is useful to describe how it occurs at the executive level.

Executives who are under extremely high job demands have ample perception of urgency and desire for performance improvement, but pressure is so intense—because of a combination of stakeholder requirements, situational complex-

ity, and possibly limited resources—that decision making is erratic and flawed (Staw et al., 1981). As discussed above, decisions are based on a simplified and often erroneous understanding of the situation and appropriate alternatives (Hambrick & D'Aveni, 1988).

Research on the effects of stress and anxiety on individual performance has shown that high levels of stress cause biased information acquisition and cognitive processing, diminished problem-solving ability, and increased conformity pressures (summarized in Staw et al., 1981). When these tendencies are coupled with the decisional by-products of intense job demands—including paralysis on the one hand and aggressive, costly initiatives on the other, as well as vacillation between these two poles (Hambrick & D'Aveni, 1988; Staw et al., 1981)—we can expect that extremely high job demands and accompanying intense pressure will cause poor performance.

The harmful effects of very high levels of job demands occur even if an executive is motivated to perform well. We emphasize this because a naive model of human behavior might purport that executive performance simply depends on a high level of directed motivation (Jensen & Meckling, 1976), without recognizing that motivation will not surmount the burden of extreme task demands. With such a view, agency theorists sometimes encourage the use of very high debt levels, as a way to put executives in a crucible that requires extraordinary effort and performance in order to avoid bankruptcy (Jensen, 1989). We know of no research that has examined the actual consequences of such a prescription, but we can conjecture that it was proposed with an incomplete understanding of the effects of pressure on human performance and that it may not lead to generally salutary results.

Executives who face high job demands, however, will not always perform poorly. Sometimes (by luck, instinct, or skill) they will perform well, which leads us to one more proposition about strategic behavior. When success occurs for highly pressured executives, they will become supremely confident. External ratification of success, such as from media attention or elevated profiles in the community, might reinforce this effect, but we would expect the executive's own self-attribution of success to be the driving force in boosting self-confidence.

Researchers have long been interested in decision biases associated with overconfidence or naive optimism (e.g., Dutton, 1993; Dutton & Duncan, 1987; summarized in Bazerman, 2002). In recent publications, researchers have explored the influence of "executive hubris"—exaggerated self-confidence—on the size of premiums paid for corporate acquisitions (Hayward & Hambrick, 1997) and the role of overconfidence in executives' decisions to hold, rather than exercise, their stock options even after the options are well "in the money" (Malmendier & Tate, in press). A common premise in this work is that decision makers who perform well become more confident, often to the point of becoming overconfident.

What has not been considered is that decision makers who have met with success under conditions of high job demands will feel even more confident than those who have succeeded under easier conditions. To the extent that decision makers or executives are aware of the level of job difficulty they have confronted, we can expect that those who have performed well under the most arduous conditions will feel extremely confident, and this confidence will be reflected in their next round of decisions (leading to large-scale, risky actions, such as big or high-priced acquisitions and large capital expenditures). That is, executives who have succeeded against what they see as extreme adversity or difficult conditions will develop a sense of invincibility.

Proposition 4: There is an interactive effect between executive job demands and performance on subsequent executive self-confidence and risk taking. Specifically, executives who have performed well under high job demands will become more self-confident than those executives who have performed well under low or moderate demands. In turn, they will engage in riskier strategic behaviors.

Leadership Behaviors

In addition to affecting strategic decision making, job demands can be expected to influence an executive's leadership behaviors. Here we examine two such possibilities: (1) the tendency for executives to impose demands on

their subordinates in proportion to the demands they themselves face and (2) the tendency for executives to convey the impression that they are pressured when they really are not and, conversely, to convey the impression that they are not pressured when they really are.

It is an axiom of organizational life that hierarchical superiors assign work and set performance expectations for subordinates (Mintzberg, 1973). Obviously, the more work the superior has, the more work he or she passes on to others. Executives who experience high job demands will impose more demands on their organizations than will executives who experience lower job demands. To a great extent, the increased pressures on the organization will be in the form of requirements for more work—more sales, faster production, quicker collections of receivables, and so on. But executives' own intense pressures might also be manifested in bullying or threatening those who cannot handle the load. A survey of employees in British companies showed that managers were the perpetrators of 75 percent of all reported instances of bullying (Hoel & Cooper, 2000). Although some of these managers may have lacked basic supervisory skills, the authors surmised that many of them were responding to intense pressures imposed from above—a cascade that started at the top. When subordinates are bullied or otherwise negatively supervised, they develop stress (e.g., Balshem, 1988), symptoms of depression (Repetti, 1993), and negative attitudes toward their superior, all of which tend to lead to behaviors that will exacerbate the pressure felt by their superior (Hoel & Cooper, 2000)—in a vicious circle.

Although Cooper and associates have discussed how forces such as technological pace, global competition, and delayering have increased the pressures on employees in recent decades (e.g., Schabracq & Cooper, 2000; Cooper, 1998), they have not pointedly considered the possibility that top executives are the mediators in these causal relationships. In order to advance theory and prescriptions about stressful organizational climates, it may be essential to comprehend that top executives serve a linchpin function, conveying the pressures they experience from the task environment onto the rest of the organization.

Proposition 5: The greater an executive's job demands, the greater the pressures placed on others in the organization will be.

Job difficulty also may greatly affect an executive's management of impressions, in ways that have not been considered. For decades now, researchers have explored the importance of impression management. For example, researchers have recently examined impression management in job interviews (e.g., Ellis, West, Ryan, & DeShon, 2002; McFarland, Ryan, & Kriska, 2003), in employee performance evaluations and assessments (Bolino & Turnley, 2003a; Vasilopoulos, Reilly, & Leaman, 2000), and among males versus females (Bolino & Turnley, 2003b; Singh, Kumra, & Vinnicombe, 2002). Although the body of research on impression management is vast, we do not know of any studies linking job demands and impression management.

Moreover, there are very few studies that have explored the impression management practices of executives. Exceptions include research on executives' attempts to deflect blame for poor performance (Bettman & Weitz, 1983; Bowman, 1976), as well as on executives' attempts to create the appearance that corrections for poor performance are underway (Elsbach & Sutton, 1992). Little attention has been paid to the need for executives to enhance the impression that they are experiencing a level of job demands other than what is actually the case.

The challenge for an executive who faces limited job demands is to enjoy the benefits of his or her position without appearing to be shirking. Although constituencies are willing to concede that executives need personal time, as well as time for recreation and replenishment, they also expect executives to work diligently on the organization's behalf and to set a model of diligence for others in the organization (Pfeffer, 1981). Thus, executives who face minimal demands must create the impression that they are busier on the organization's behalf than they actually are.

To give the impression of robust activity, unpressured executives may go on widely announced trips to distant operations, commission reports and hire consultants to produce "white papers," and encourage press coverage of vari-

ous initiatives to send signals to key stakeholders about the intensity of their efforts. Similarly, executives who face minimal job demands may particularly try to emphasize how their various outside activities are valuable for their firms, reporting energetically on what they have learned through their outside board seats, philanthropic endeavors, and so on—all to enhance the impression that these activities are worthwhile.

Unpressured executives also may go to lengths to be discreet about time spent on leisure activities. Whereas an executive who is in a highly demanding situation, where stakeholders recognize the extreme challenges he or she faces, can openly discuss leisure activities (even time-consuming ones), the executive who is in a position that is seen as not very challenging must be more discreet about the use of personal time. So, Larry Ellison, CEO of Oracle—who probably is seen as facing a great deal of job pressure due to the competitiveness and pace of his industry—can publicize his extended, flamboyant trips as a way to reinforce his risk-taking image (as well as to demonstrate that he is not overly pressured by his job). But the CEO of a regulated, stable public utility may need to hide occasional extended weekend getaways.

Proposition 6: The lower an executive's job demands, the greater his or her attention will be to enhancing the impression of having high job demands.

Members of an organization seek assurances that their leaders are in full possession of their faculties (Barnard, 1938; Bass, 1990, especially Chapters 6, 7, & 12; Keegan, 1987). Accordingly, executives are socialized as to the importance of conveying calm and thoughtfulness, no matter how much pressure they may be feeling (Eccles & Nohria, 1992). The greater the pressure, the more intently executives must focus on conveying calm. At the extreme, executives who are in the midst of, or on the verge of, catastrophe must go to lengths to appear reassuring and confident. We saw an instance of this during the lead-up to America's war in Iraq. With every indication that President George W. Bush was only days away from launching all-out war, each day's newscasts brought more footage of Iraq's President Saddam Hussein smiling calmly and gently waving his cigar.

Proposition 7: The greater an executive's job demands, the greater the executive's attention will be to conveying confidence and calm.

What this means is that executive job demands cannot reliably be discerned by observing the superficial demeanor or behaviors of executives. Those who appear the most frenzied may be masking the relative ease of their jobs, while those who seem the most calm and measured may be going to great lengths to hide the intense pressures they are feeling. This poses a challenge for a firm's stakeholders, who might be concerned about executive shirking on the one hand and executive overload on the other. Rather than relying on the executive to visibly show how challenged he or she feels, observers may benefit instead from focusing on some of the leading indicators of the consequences we have proposed (such as extreme and vacillating strategic behaviors) or on assessing the determinants of executive job demands we enumerated earlier (such as environmental scarcity and organizational complexity).

FUTURE RESEARCH DIRECTIONS

The formal propositions we have presented are all testable and represent some of the most promising future inquiries on the topic of executive job demands. However, the concept of executive job demands has the potential to contribute substantially to our understanding of a wide array of organizational phenomena. In this section we identify a limited set of additional research opportunities.

Measurement and Methods

Before turning to these substantive research ideas, it is useful to briefly address major methodological alternatives for studying executive job demands. Because job demands must be experienced or perceived, we expect the most promising approach to measurement will be via survey instrument. Organizational behavior researchers who have examined job demands have taken this tack, commonly using an eight-item index that Van Veldhoven and Meijman (1994) developed and validated (Janssen, 2000, 2001). Examples of items include "Do you work under time pressure?" and "Do you have prob-

lems with the workload?" Although these items would need to be adapted for executive-level respondents, we anticipate that such a battery could generate valid and reliable responses. As we have posited, executives may mask their degree of job demands in their work behaviors, but they may be candid about them in a private, anonymous questionnaire—as researchers have found in asking executives about other sensitive issues (Gupta & Govindarajan, 1984; Westphal, 1999).

We also suggest that researchers explore ways to assess executive job demands directly, perhaps by interviews or in-depth observation. It has been more than two decades since scholars have undertaken an in-depth clinical analyses of how executives spend their time and behave on the job (Kotter, 1982; Mintzberg, 1973). Not only would such investigations shed light on how executive priorities might have changed in recent decades, but it might also allow inferences about the extent of executive job demands for different executives, as well as about the temporal dynamics of executive job demands (if a longitudinal study were conducted). A related approach would be to examine documentation of time allocation by executives. For example, researchers might ask executives to keep a log of their activities or to share their calendars, which might provide useful data from which to assess job demands.

Laboratory experiments may also be useful for advancing our understanding of executive job demands. For example, subjects (executive program participants) could be placed in simulated high-job-demands and low-job-demands conditions and then observed for how they spend their time, how they notice and react to stimuli, how they make decisions, how they interact with teammates, and so on. More complex experiments could also test for how managerial aspiration levels interact with contextual sources of job demands to affect behavior. Incidentally, we also expect that these alternatives to survey measurement (e.g., laboratory experiments, interviews, in-depth observation) might be promising for studying job demands at the nonexecutive level.

Ideas for Building and Extending Theory

The construct of executive job demands could be helpful for refining and extending numerous

theoretical perspectives. We highlight just four such possibilities here.

First and most notably, the concept of executive job demands might advance agency theory (Fama & Jensen, 1983). Agency theorists commonly call for mechanisms that will keep executives intently focused on shareholder wealth maximization, including close monitoring by the board, prompt dismissal for poor performance, compensation contracts that hold a heavy contingent-pay element, and an efficient market for corporate control that easily allows takeovers of poor performers (Alchian & Demsetz, 1972; Holmstrom & Milgrom, 1990). Although these prescriptions may be sensible at a distance, when their effects on executive job demands are factored in, it becomes easier to understand why some executives operating under such regimes engage in erratic strategic choices, impression management, and even illegalities—none of which serve shareholders well. One of the reasons agency theorists' prescriptions often fail to deliver their hoped-for results is that they may involve pumping up the pressure on executives to levels that are counterproductive. If firms are better off when executive job demands are moderate, as we argue, then there are significant implications for executive compensation, board vigilance, corporate financing, and other agency levers. Of course, the challenge remains to figure out what constitutes a moderate or moderately high level of executive job demands, as well as how to engineer agency conditions to keep the job in that range. However, our theoretical formulation provides a basis for approaching these challenges.

Thus, an understanding of job demands might offer important prescriptions for developing executive compensation plans. Researchers who have examined the determinants of executive compensation have so far resorted to piecemeal conceptions of job challenge or difficulty, such as company size (Ciscel & Carroll, 1980), information-processing demands (Henderson & Fredrickson, 1996), or pressure to perform (Gomez-Mejia, Tosi, & Hinkin, 1987). We believe executive job demands could be an important overarching construct in such future research.

Second, executive job demands may lead to new insights for researchers of top management teams (TMTs). For example, executive job demands may be an instrumental factor in affecting such TMT dynamics as social cohesion

(Glick, Miller, & Huber, 1993) and political behavior (Eisenhardt & Bourgeois, 1988; Pettigrew, 1992). Researchers could examine the consequences of asymmetric job demands within TMTs, where some members of the team have extremely high job demands while others have much less.

Third, if executive job demands have the implications we have proposed, it would be valuable to consider how executives might attempt to reduce their demands. Perhaps the most common approach is to delegate. For example, a CEO experiencing an intense load may appoint a COO or otherwise strengthen the TMT by creating new positions or replacing members with more capable individuals. To alleviate job demands, executives might also try to improve their own capabilities by seeking opportunities for education and development. Executives experiencing extremely high job demands might avoid initiatives (possibly even those that are desirable for firm performance) that stretch them thinner, or they might try to alleviate job demands by actively reducing the scale or complexity of the firm (say, by selling some units).

Finally, it would also be beneficial to consider the role that executive job demands play in executive stress, health, and career choices, including voluntary departures. To be effective, this research should be multidisciplinary, possibly drawing on expertise in the topics of executive roles, psychology, and physiology.

Additional Suggestions

We encourage researchers to examine the effects of different sources of executive job demands. For example, an executive who feels greatly burdened by task challenges (environmental scarcity, information overload, etc.) may behave differently than an executive who feels pressured primarily by performance challenges (owners' demands, takeover raids, etc.). Similarly, an executive who imposes more pressure on himself or herself (through personal aspirations) than the context itself warrants may behave differently than an executive whose job demands stem primarily from a difficult task context.

In a related vein, it could be very informative to explore the congruence between objective indicators of executive job demands and executives' perceptions of job difficulty. What causes

some executives to perceive their jobs as more (or less) difficult than the objective factors would suggest? Even more important, what are the implications of misalignment between objective and perceived executive job demands?

Last, we encourage researchers to explore the dynamic nature of executive job demands. In this vein, we expect our propositions to have dynamic counterparts, in which changes in executive job demands will be associated with changes in the proposed consequences. Additionally, there may be consequences that arise when executive job demands abruptly change from being extremely low to extremely high, or vice versa.

BROADER IMPLICATIONS AND SUMMARY

As discussed earlier, executive job demands emanate from task challenges, performance challenges, and executive aspirations. Although these forces can vary widely from firm to firm and from executive to executive, it is also possible that macro or system-wide factors can cause entire populations of executives to experience simultaneous increases (or decreases) in their job demands. In our assessment, the recent era in corporate America (particularly the 1990s) is a case of an across-the-board increase in executive job demands.

Numerous observers have commented on the increased dynamism or rate of change in the business environment in the period leading up to and including the 1990s. Researchers have observed an increased pace of competitive dynamics (D'Aveni, 1994), increased technological dynamism (Christensen, 1997), shorter product life cycles (Bonney, Ratchev, & Moualek, 2003), greater geopolitical integration (Trent & Monczka, 2002), and an overall increase in the "velocity" of the business environment (Eisenhardt, 1989).

At the same time, executives (of public corporations, at least) were put under increased pressure to perform. First came the takeover wave of the late 1980s, in which profitable companies, such as Gillette and Disney, were targeted by raiders who thought that these companies could be even *more profitable* in their hands (Ward, 1997). The message to corporate executives was clear: "You may no longer satisfice; you must maximize. If you don't, we will." Additionally, institutional shareholders held larger shares of major companies (Useem, 1996), and these pow-

erful investors exerted more pressure for financial performance—cajoling managers, putting companies on public "watch lists," and sometimes selling shares (Useem, 1996). In turn, executives became more vulnerable to dismissal. This trend first became apparent when thirteen CEOs of Fortune 500 companies were fired in the short span of April 1992 through August 1993 (Ward, 1997). By one account, CEO dismissal rates trebled between 1980 and 1999 (Charan & Colvin, 1999).

Executives in the 1990s were not only under unprecedented risk of dismissal for poor performance but also were given substantial incentives to achieve good performance. Following directly from the prescriptions of agency theorists, executives were given large—in some cases, very large—grants of stock or stock options, in order to align their interests with those of stockholders. According to an exhaustive analysis by Hall and Liebman (1998), equity-based incentives (stock and option grants) accounted for 8 percent of the median CEO's pay in 1990 (in major U.S. corporations); by 1998, it had risen to 58 percent. It is essential to note that these figures are based on *ex ante*, not *ex post*, valuations. In order for these equity instruments to be valuable to the CEO, the stock price needed to climb.

CEOs at Mattel, Bristol-Myers Squibb, and K-Mart, as well as highly visible cases at Enron, Tyco, Worldcom, and Adelphia, were all widely criticized in the period 2000–2002 for aggressive, even ethically dubious, acts. Some observers would attribute their actions to hubris (Hayward & Hambrick, 1997) or to greed (Stewart, 2003), but in our estimation, extremely intense job demands also may have played a major role. Executives in the 1990s faced prodigious task challenges and performance challenges, and they were given incentives in a way that sent their own performance aspirations to supreme heights.

We do not wish to be seen as apologists for the recent mistakes of executives. America's corporate leaders were fully responsible for their actions. Nor are we saying that executives should necessarily be spared any pressure. As the old adage goes, "If you can't stand the heat, get out of the kitchen." We are simply proposing that the heat in the kitchen—executive job demands—is an instrumental factor in shaping executive behavior, which so far has gone unacknowledged. Sometimes macro conditions

cause the heat to be turned up for a large number of executives, contributing to what will seem an epidemic of the various consequences of extremely high executive job demands that we have proposed, including strategic extremism and vacillation, strategic errors, pressuring the rest of the organization, managing the impression that everything is fine, and, ultimately, poor performance.

The concept of executive job demands is potentially important for enhancing our understanding of a wide array of upper echelons and organizational phenomena. We particularly view executive job demands as a fruitful arena for discourse and collaboration between scholars who emphasize individual-level issues (those in organizational behavior and psychology) and researchers whose interests are in overall organizations (organizational and strategy theorists). Our paper lays a foundation for future inquiry by identifying and defining the concepts of executive job demands, specifying their major classes of determinants, and proposing some major implications for executive behavior and organizational outcomes.

REFERENCES

- Alchian, A. A., & Demsetz, H. 1972. Production, information costs and economic organization. *American Economic Review*, 62: 777-795.
- Aldrich, H. E. 1979. *Organizations and environments*. Englewood Cliffs, NJ: Prentice-Hall.
- Axelrod, R. M. (Ed.). 1976. *Structure of decision: The cognitive maps of political elites*. Princeton, NJ: Princeton University Press.
- Balshem, M. 1988. The clerical workers' boss: An agent of job stress. *Human Organization*, 47: 361-367.
- Bantel, K. A., & Jackson, S. E. 1989. Top management and innovations in banking: Does the composition of the top team make a difference? *Strategic Management Journal*, 10: 107-124.
- Barnard, C. I. 1938. *Functions of the executive*. Cambridge, MA: Harvard University Press.
- Bass, B. M. 1990. From transactional to transformational leadership: Learning to share the vision. *Organizational Dynamics*, 18(3): 19-31.
- Bazerman, M. H. 2002. *Judgment in managerial decision making*. New York: Wiley.
- Berle, A. A., & Means, G. C. 1932. *The modern corporation and private property*. New York: Macmillan.
- Bettman, J. R., & Weitz, B. A. 1983. Attributions in the boardroom: Causal reasoning in corporate annual reports. *Administrative Science Quarterly*, 28: 165-183.
- Biddle, B. J. 1979. *Role theory: Expectations, identities and behaviors*. New York: Academic Press.
- Boeker, W. 1992. Power and managerial dismissal: Scapegoating at the top. *Administrative Science Quarterly*, 27: 538-547.
- Boeker, W. 1997. Executive migration and strategic change: The effect of top manager movement on product-market entry. *Administrative Science Quarterly*, 42: 213-236.
- Bolino, M. C., & Turnley, W. H. 2003a. More than one way to make an impression: Exploring profiles of impression management. *Journal of Management*, 29: 141-160.
- Bolino, M. C., & Turnley, W. H. 2003b. Counternormative impression management, likeability, and performance ratings: The use of intimidation in an organizational setting. *Journal of Organizational Behavior*, 24: 237-250.
- Bonney, M., Ratchev, S., & Moualek, I. 2003. The changing relationship between production and inventory examined in a concurrent engineering context. *International Journal of Production Economics*, 81: 243-254.
- Bowman, E. H. 1976. Strategy and the weather. *Sloan Management Review*, 17(2): 49-62.
- Brandenburger, A. M., & Nalebuff, B. J. 1997. *Co-opetition: 1. A revolutionary mindset that redefines competition and cooperation; 2. The game theory strategy that's changing the game of business*. New York: Doubleday.
- Burns, L. R., & Wholey, D. R. 1993. Adoption and abandonment of matrix management programs: Effects of organizational characteristics and interorganizational networks. *Academy of Management Journal*, 36: 106-138.
- Champoux, J. E. 1992. A multivariate analysis of curvilinear relationships among job scope, work context satisfactions, and affective outcomes. *Human Relations*, 45: 87-111.
- Charan, R., & Colvin, G. 1999. Why CEOs fail. *Fortune*, June 21: 69-78.
- Christensen, C. 1997. *The innovator's dilemma: When new technologies cause great firms to fail*. Boston: Harvard Business School Press.
- Ciscel, D. H., & Carroll, T. M. 1980. The determinants of executive salaries: An econometric survey. *Review of Economics and Statistics*, 62: 7-13.
- Cooper, C. L. 1998. The 1998 Crystal lecture: The future of work—a strategy for managing the pressure. *Journal of Applied Management Studies*, 7: 275-281.
- Cyert, R. M., & March, J. G. 1963. *A behavioral theory of the firm*. Englewood Cliffs, NJ: Prentice-Hall.
- D'Aveni, R. A. 1994. *Hypercompetition: Managing the dynamics of strategic maneuvering*. New York: Free Press.
- Davis, G. F. 1991. Agents without principles? The spread of the poison pill through the intercorporate network. *Administrative Science Quarterly*, 36: 583-613.
- Davis-Blake, A., & Pfeffer, J. 1989. Just a mirage: The search for dispositional effects in organizational research. *Academy of Management Review*, 14: 385-400.
- Dearborn, D. C., & Simon, H. A. 1958. Selective perception: A

- note on the departmental affiliations of executives. *Sociometry*, 21: 144–150.
- Denis, D. J., & Kruse, T. A. 2000. Managerial discipline and corporate restructuring following performance declines. *Journal of Financial Economics*, 55: 391–424.
- Dess, G. G., & Beard, D. W. 1984. Dimensions of organizational task environments. *Administrative Science Quarterly*, 29: 52–73.
- DiMaggio, P. J., & Powell, W. W. 1983. The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48: 147–160.
- Donaldson, G., & Lorsch, J. W. 1983. *Decision making at the top*. New York: Basic Books.
- Dutton, J. E. 1993. Interpretation on automatic: A different view of strategic issue diagnosis. *Journal of Management Studies*, 30: 339–357.
- Dutton, J. E., & Duncan, R. B. 1987. The creation of momentum for change through the process of strategic issue diagnosis. *Strategic Management Journal*, 8: 279–295.
- Dwyer, D. J., & Ganster, D. C. 1991. The effects of job demands and control on employee attendance and satisfaction. *Journal of Organizational Behavior*, 12: 595–608.
- Eccles, R. G., & Nohria, N. 1992. *Beyond the hype: Rediscovering the essence of management*. Boston: Harvard Business School Press.
- Edwards, J. R., & Cooper, C. L. 1990. The person-environment fit approach to stress: Recurring problems and some suggested solutions. *Journal of Organizational Behavior*, 11: 293–307.
- Eisenhardt, K. M. 1989. Making fast strategic decisions in high-velocity environments. *Academy of Management Journal*, 32: 543–576.
- Eisenhardt, K. M., & Bourgeois, L. J. 1988. Politics of strategic decision making in high-velocity environments: Toward a midrange theory. *Academy of Management Journal*, 31: 737–770.
- Ellis, A. P., West, B. J., Ryan, A. M., & DeShon, R. P. 2002. The use of impression management tactics in structured interviews: A function of question type? *Journal of Applied Psychology*, 87: 1200–1208.
- Elsbach, K. D., & Sutton, R. I. 1992. Acquiring organizational legitimacy through illegitimate actions—a marriage of institutional and impression management theories. *Academy of Management Journal*, 35: 699–738.
- Fama, E. F. 1980. Agency problems and the theory of the firm. *Journal of Political Economy*, 88: 288–307.
- Fama, E. F., & Jensen, M. C. 1983. Separation of ownership and control. *Journal of Law and Economics*, 26: 301–325.
- Finkelstein, S., & Hambrick, D. C. 1990. Top management team tenure and organizational outcomes: The moderating role of managerial discretion. *Administrative Science Quarterly*, 35: 484–503.
- Finkelstein, S., & Hambrick, D. C. 1996. *Strategic leadership: Top executives and their effects on organizations*. Minneapolis/St. Paul: West Educational Publishing.
- Fletcher, B. C., & Jones, F. 1993. A refutation of Karasek's demand-discretion model of occupational stress with a range of dependent measures. *Journal of Organizational Behavior*, 14: 319–330.
- Fligstein, N. 1985. The structural transformation of American industry: An institutional account of the causes of diversification in the largest firms, 1919–1979. In W. W. Powell & P. J. DiMaggio (Eds.), *The new institutionalism in organizational analysis*: 294–310. Chicago: University of Chicago Press.
- Fox, M. L., Dwyer, D. J., & Ganster, D. C. 1993. Effects of stressful job demands and control on physiological and attitudinal outcomes in a hospital setting. *Academy of Management Journal*, 26: 289–318.
- Fredrickson, J. W., & Mitchell, T. R. 1984. Strategic decision processes: Comprehensiveness and performance in an industry with an unstable environment. *Academy of Management Journal*, 27: 299–423.
- Galaskiewicz, J., & Wasserman, S. 1989. Mimetic processes within an interorganizational field: An empirical test. *Administrative Science Quarterly*, 34: 454–479.
- Ganster, D. C., & Fusilier, M. R. 1989. Control in the workplace. In C. L. Cooper & I. T. Robertson (Eds.), *International review of industrial and organizational psychology*: 235–280. Chichester, UK: Wiley.
- Gardner, D. G., 1986. Activation theory and task design: An empirical test of several new predictions. *Journal of Applied Psychology*, 71: 411–418.
- Gardner, D. G., & Cummings, L. L. 1988. Activation theory and job design: Review and reconceptualization. *Research in Organizational Behavior*, 10: 81–122.
- Geletkanycz, M. A., & Hambrick, D. C. 1997. The external ties of top executives: Implications for strategic choice and performance. *Administrative Science Quarterly*, 42: 654–681.
- Glass, A. J. 1955. *Psychological considerations in Atomic Warfare No. 560*. Washington, DC: Walter Reed Army Medical Center.
- Glick, W. H., Miller, C. C., & Huber, G. P. 1993. Upper-level diversity in organizations: Demographic, structural, and cognitive influences on organizational effectiveness. In G. P. Huber & W. H. Glick (Eds.), *Organizational change and redesign: Ideas and insights for improving performance*: 176–214. New York: Oxford University Press.
- Gomez-Mejia, L. R., Tosi, H. L., & Hinkin, T. 1987. Managerial control, performance, and executive compensation. *Academy of Management Journal*, 30: 51–70.
- Gupta, A. K. 1984. Contingency linkages between strategy and general manager characteristics: A conceptual examination. *Academy of Management Review*, 9: 399–412.
- Gupta, A. K., & Govindarajan, V. 1984. Business unit strategy, managerial characteristics, and business unit effectiveness at strategy implementation. *Academy of Management Journal*, 27: 25–41.
- Hall, B. J., & Liebman, J. B. 1998. Are CEOs really paid like bureaucrats? *Quarterly Journal of Economics*, 113: 653–691.

- Hambrick, D. C., & D'Aveni, R. A. 1988. Large corporate failures as downward spirals. *Administrative Science Quarterly*, 33: 1-23.
- Hambrick, D. C., & Finkelstein, S. 1987. Managerial discretion: A bridge between polar views of organizational outcomes. *Research in Organizational Behavior*, 9: 369-406.
- Hambrick, D. C., & Fukutomi, G. D. S. 1991. The seasons of a CEO's tenure. *Academy of Management Review*, 16: 719-742.
- Hambrick, D. C., Geletkanycz, M. A., & Fredrickson, J. W. 1993. Top executive commitment to the status quo: Some tests of its determinants. *Strategic Management Journal*, 14: 401-418.
- Hambrick, D. C., & Mason, P. 1984. Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review*, 9: 193-206.
- Haveman, H. A. 1993. Follow the leader: Mimetic isomorphism and entry into new markets. *Administrative Science Quarterly*, 38: 593-627.
- Hayward, M. L. A., & Hambrick, D. C. 1997. Explaining the premium paid for large acquisitions: Evidence of CEO hubris. *Administrative Science Quarterly*, 42: 103-127.
- Henderson, A. D., & Fredrickson, J. W. 1996. Information processing demands as a determinant of CEO compensation. *Academy of Management Journal*, 39: 575-606.
- Hermalin, B. E., & Weisbach, M. S. 1991. The effects of board composition and direct incentives on firm performance. *Financial Management*, 20(4): 101-112.
- Hoel, H., & Cooper, C. L. 2000. *Destructive conflict and bullying at work*. Working paper, Manchester School of Management, Manchester, UK.
- Holmstrom, B., & Milgrom, P. 1990. Regulating trade among agents. *Journal of Institutional and Theoretical Economics*, 146: 85-105.
- Hubbard, R. G., & Palia, D. 1995. Executive pay and performance: Evidence from the U.S. banking industry. *Journal of Financial Economics*, 39: 105-130.
- Janis, I. L. 1958. *Psychological stress*. New York: Wiley.
- Janssen, O. 2000. Job demands, perceptions of effort-reward fairness and innovative work behaviour. *Journal of Occupational and Organizational Psychology*, 73: 287-302.
- Janssen, O. 2001. Fairness perceptions as a moderator in the curvilinear relationships between job demands, and job satisfaction and job performance." *Academy of Management Journal*, 44: 1039-1050.
- Jensen, M. C. 1989. Eclipse of the public corporation. *Harvard Business Review*, 67(5): 61-74.
- Jensen, M. C., & Meckling, W. 1976. Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*, 3: 305-360.
- Karasek, R. A., Jr. 1979. Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly*, 24: 285-311.
- Keegan, J. 1987. *The mask of command*. New York: Penguin Group.
- Kimberly, J. R., & Evanisko, M. J. 1981. Organizational innovation: The influence of individual, organizational, and contextual factors on hospital adoption of technological and administrative innovations. *Academy of Management Journal*, 24: 689-713.
- Kotter, J. P. 1982. *The general managers*. New York: Free Press.
- Lazear, E. P., & Rosen, S. 1981. Rank-order tournaments as optimum labor contracts. *Journal of Political Economy*, 89: 841-864.
- Malmendier, R., & Tate, G. In press. *CEO overconfidence and corporate investment*. Working paper, Harvard University, Boston.
- March, J. G., & Simon, H. A. 1958 *Organizations*. New York: Wiley.
- McEachern, W. 1975. *Managerial control and performance*. Lexington, MA: Lexington Books.
- McFarland, L. A., Ryan, A. M., & Kriska, S. D. 2003. Impression management use and effectiveness across assessment methods. *Journal of Management*, 29: 641-661.
- Meindl, J. R., Ehrlich, S. B., & Dukerich, J. M. 1985. The romance of leadership. *Administrative Science Quarterly*, 30: 521-551.
- Miles, R. H., & Snow, C. C. 1978. *Organizational strategy, structure, and process*. New York: McGraw-Hill.
- Milgrom, P. R., & Roberts, J. 1992. *Economics, organization, and management*. Englewood Cliffs, NJ: Prentice-Hall.
- Miller, D., & Droge, C. 1986. Psychological and traditional determinants of structure. *Administrative Science Quarterly*, 31: 539-560.
- Miller, D., Kets de Vries, M. F. R., & Toulouse, J. M. 1982. Top executive locus of control and its relationship to strategy-making, structure, and environment. *Academy of Management Journal*, 25: 221-235.
- Mintzberg, H. 1973. *The nature of managerial work*. New York: Harper & Row.
- Mintzberg, H. 1979. *The structuring of organizations*. Englewood Cliffs, NJ: Prentice-Hall.
- Mintzberg, H., Raisinghani, D., & Theoret, A. 1976. The structure of unstructured decision processes. *Administrative Science Quarterly*, 21: 246-275.
- Mischel, W. 1977. The interaction of person and situation. In D. Magnusson & N. S. Endler (Eds.), *Personality at the crossroads: Current issues in interactional psychology*: 166-207. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Mitroff, I. I. 1982. Talking past one's colleagues in matters of policy. *Strategic Management Journal*, 10: 125-141.
- Mizruchi, M. S., & Fein, L. C. 1999. The social construction of organizational knowledge: A study of the uses of coercive, mimetic, and normative isomorphism. *Administrative Science Quarterly*, 44: 653-683.
- Moore, P. L. 1999. Cracks in the wall at Banc One: Investors await answers as John McCoy's strategy unravels. *Business Week*, December 13: 164.
- Morck, R., Shleifer, A., & Vishny, R. W. 1988. Management

- ownership and market valuation: An empirical analysis. *Journal of Financial Economics*, 20: 293–315.
- Nelson, R. R., & Winter, S. G. 1982. *An evolutionary theory of economic change*. Cambridge, MA: Belknap Press of Harvard University Press.
- Perrewe, P. L., Ferris, G. R., Frink, D. D., & Anthony, W. P. 2000. Political skill: An antidote for workplace stressors. *Academy of Management Executive*, 14(3): 115–123.
- Pettigrew, A. 1992. On studying managerial elites. *Strategic Management Journal*, 13: 163–182.
- Pfeffer, J. 1981. *Power in organizations*. Boston: Pitman.
- Porter, M. E. 1980. *Competitive strategy: Techniques for analyzing industry and competitors*. New York: Harper & Row.
- Puffer, S. M., & Weintrop, J. B. 1991. Corporate performance and CEO turnover: The role of performance expectations. *Administrative Science Quarterly*, 36: 1–19.
- Quinn, J. B., Anderson, P., & Finkelstein, S. 1996. Managing professional intellect: Making the most of the best. *Harvard Business Review*, 74(2): 71–80.
- Raviv, A. 1985. Management compensation and the managerial labor markets: An overview. *Journal of Accounting and Economics*, 7: 239–245.
- Repetti, R. L. 1993. The effects of workload and the social environment at work on health. In L. Goldberger & S. Breznitz (Eds.), *Handbook of stress: Theoretical and clinical aspects*: 368–385. New York: Free Press.
- Schabracq, M. J., & Cooper, C. L. 2000. The changing nature of work and stress. *Journal of Managerial Psychology*, 15(3): 227–241.
- Scott, W. R. 1996. The mandate is still being honored: In defense of Weber's disciples. *Administrative Science Quarterly*, 41: 163–171.
- Simon, H. A. 1945. *Administrative behavior*. New York: Free Press.
- Singh, V., Kumra, S., & Vinnicombe, S. 2002. Gender and impression management: Playing the promotion game. *Journal of Business Ethics*, 37: 77–90.
- Starbuck, W. H., & Hedberg, B. 1977. Saving an organization from a stagnating environment. In H. Thorelli (Ed.), *Strategy + structure = performance*: 249–258. Bloomington: Indiana University Press.
- Staw, B. M., Sandelands, L. E., & Dutton, J. E. 1981. Threat-rigidity effects in organizational behavior: A multi-level analysis. *Administrative Science Quarterly*, 26: 501–524.
- Stewart, J. B. 2003. Spend! Spend! Spend!, Where did Tyco's money go? *New Yorker*, February 17: 132.
- Stinchcombe, A. L. 1965. Social structure and organizations. In J. G. March (Ed.), *Handbook of organizations*: 153–193. Chicago: Rand McNally.
- Theorell, T., & Karasek, R. A. 1996. Current issues relating to psychosocial job strain and cardiovascular disease research. *Journal of Occupational Health Psychology*, 1: 9–26.
- Thompson, J. D. 1967. *Organizations in action: Social science bases of administrative theory*. New York: McGraw-Hill.
- Trent, R. J., & Monczka, R. M. 2002. Pursuing competitive advantage through integrated global sourcing. *Academy of Management Executive*, 16(2): 66–80.
- Tversky, A., & Kahneman, D. 1981. The framing of decisions and the psychology of choice. *Science*, 211: 453–458.
- Useem, M. 1996. *Investor capitalism: How money managers are changing the face of corporate America*. New York: Basic Books.
- Van Veldhoven, M., & Meijman, T. 1994. *The measurement of psychosocial job demands*. Amsterdam: NIA.
- Van Yperen, N. W., & Snijders, T. A. 2000. A multi-level analysis of the demands-control model: Is stress at work determined by factors at the group or individual level? *Journal of Occupational Health Psychology*, 5: 182–190.
- Vancil, R. F. 1979. *Decentralization: Managerial ambiguity by design*. New York: Financial Executives Research Foundation.
- Vasilopoulos, N. L., Reilly, R. R., & Leaman, J. A. 2000. The influence of job familiarity and impression management on self-report measure scale scores and response latencies. *Journal of Applied Psychology*, 85: 50–64.
- Wall, T. D., Jackson, P. R., Mullarkety, S., & Parker, S. K. 1996. The demands-control model of job strain: A more specific test. *Journal of Occupational and Organizational Psychology*, 69: 153–166.
- Walsh, J. P. 1986. *Cognitive simplification processes in managerial decision making*. Working paper, Dartmouth College, Hanover, NH.
- Walsh, J. P., & Seward, J. K. 1990. On the efficiency of internal and external corporate control mechanisms. *Academy of Management Review*, 15: 421–458.
- Ward, R. D. 1997. *21st century corporate board*. New York: Wiley.
- Warr, P. B. 1990. Decision latitude, job demands, and employee well-being. *Work & Stress*, 4: 285–294.
- Westphal, J. D. 1999. Collaboration in the boardroom: The consequences of social ties in the CEO/board relationship. *Academy of Management Journal*, 43: 7–14.
- Westphal, J. D., & Zajac, E. J. 1994. Substance and symbolism in CEO's long-term incentive plans. *Administrative Science Quarterly*, 39: 367–390.
- Wiersema, M. F., & Bantel, K. A. 1992. Top management team demography and corporate strategic change. *Academy of Management Journal*, 35: 91–121.
- Wiersema, M. F., & Bantel, K. A. 1993. Top management team turnover as an adaptation mechanism: The role of the environment. *Strategic Management Journal*, 14: 485–504.
- Williamson, O. E. 1963. Managerial discretion and business behavior. *American Economic Review*, 53: 1032–1057.
- Williamson, O. E. 1964. *The economics of discretionary behavior: Managerial objectives in a theory of the firm*. Englewood Cliffs, NJ: Prentice-Hall.
- Xie, J. L., & Johns, G. 1995. Job scope and stress. Can job scope be too high? *Academy of Management Journal*, 38: 1288–1309.
- Zajonc, R. B. 1965. Social facilitation. *Science*, 149: 269–274.

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