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## WAKING UP! MINDFULNESS IN THE FACE OF BANDWAGONS

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**Economic and sociological theories explaining bandwagon behaviors, along with cognitive and behavioral theories of decision making, do not fully address the process whereby decision makers choose whether or not to jump on bandwagons. In this article we model the interactions between mindfulness as a decision-maker characteristic and the decision-making context, and we show the impact of those interactions on managers' ability to discriminate in the face of bandwagons. We illustrate the framework by applying it to recent integration and disintegration bandwagon behaviors in the U.S. health care market.**

Until recently, integration of hospitals, physician groups, medical groups, and health plans was generally perceived to be the answer to overcapacity, rising costs, and contracting challenges in U.S. health care markets. Health care leaders viewed it as a means of improving efficiency and effectiveness and of gaining market share (Weil, 2000). Such consolidation in the marketplace represents one of the most dominant health care trends of the past two decades, despite a lack of evidence as to its real value (Coddington, Fischer, Moore, & Clarke, 2000). Recently, increasing criticism of this trend led to a countertrend of disintegration, which dominated the health care merger and acquisition scene in the late 1990s (Bellandi, 2000a; Lando, 2000). Both of these trends represent bandwagon behaviors.

Bandwagons are diffusion processes whereby individuals or organizations adopt an idea, technique, technology, or product because of pressures caused by the number of organizations that have already adopted it (Abrahamson & Rosenkopf, 1990). Bandwagon behaviors have been described in prior research as ranging from highly rational behaviors based on positive externalities (Katz & Shapiro, 1985) to conformist behaviors driven by social pressures toward isomorphism (Abrahamson & Rosenkopf, 1993). In this paper we focus on adopters of bandwagon behaviors who are driven to adopt because of social pressures.

Sociocognitive theories have provided explanations of how social processes interact to result in bandwagons (Van de Ven & Garud, 1993). And sociological theories have provided significant insight into the influence of ongoing social relations (Granovetter, 1985) on the extent of diffusion of bandwagon behaviors. Left largely unspecified are characteristics of decision makers and the immediate decision context that influence why a given decision maker is more or less likely to choose to follow a bandwagon. Drawing on theories of managerial and organizational cognition, we develop a conceptual framework that clarifies the interactions between the scanning and information-processing mechanisms that characterize the immediate decision context and the degree of mindfulness (a watchful and vigilant state of mind) that characterizes executive decision makers.

The paper adds value in that it complements and extends macrolevel theories of bandwagon behavior by exploring the microlevel processes underlying the behavior. We know a lot about how bandwagons can animate cycles in which increases in the number of adopters raise bandwagon pressures, and those pressures, in turn, cause the number of adopters to grow (Abrahamson & Rosenkopf, 1993). We know very little about the microlevel decision context that influences whether organizational leaders will make discriminating choices that fit an organization's unique circumstances in the face of such bandwagons, or whether they will simply follow the pack. Here we develop a framework to address that gap.

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Decision-making researchers have argued that accurate perceptions of the environment lead to choices that better fit an organization's circumstances (Tenbrunsel, Galvin, Neale, & Bazerman, 1996; Thomas, Clark, & Gioia, 1993). In line with this reasoning, in a growing body of research, scholars have focused on the need for enhanced decision structures (i.e., scanning and information-processing mechanisms that provide access to information and support the processing of that information) to improve perceptual accuracy (e.g., Sutcliffe, 1994; Thomas et al., 1993). We argue that decision structures intended to be accuracy enhancing will be resisted if managers are mindlessly following a bandwagon. Cognitive dissonance (Festinger, 1967) would be too great if decision makers allowed themselves to become aware of data that might be inconsistent with the bandwagon behaviors they are following.

We suggest that an emphasis on decision structures as the way to enhance perceptual accuracy actually may lead to the opposite of intended results. The widespread belief that enhanced decision structures should lead to greater perceptual accuracy is likely to place pressure on decision makers to live up to those expectations. If they feel pressure to accurately perceive the value of a particular bandwagon behavior in the face of rapidly changing conditions, decision makers may actually end up having less perceptual accuracy. Felt pressures for accuracy may lead to the threat-rigidity response (Staw, Sandelands, & Dutton, 1981) of simplifying interpretations and relying on cognitive shortcuts that restrict and constrain individual choice (Fiol & Huff, 1992). We describe the role of decision-maker mindfulness that can moderate this potentially dysfunctional effect of formal decision structures, thus contributing to greater discriminatory behavior in the face of bandwagons. This represents the first attempt to model the interactions between mindfulness as a decision-maker characteristic and decision structures and to show the impact of those interactions on decision outcomes.

Throughout the paper we discuss the implications of our framework within the context of U.S. health care. The U.S. health care market provides numerous examples of bandwagon behavior. Lee Kaiser, an eminent health care futurist, noted that

health care providers are "me too" folks. They wait for someone else to do something first and then they rush to copy it. . . . This copy-cat behavior can be seen in the rush to buy up physician practices, in mergers, hospitals getting into HMOs, etc. It is difficult to get hospitals to innovate, and hard to prevent them from copying the fad of the moment (2000: personal communication).

A health care "fad of the moment" throughout the late 1980s and early to mid 1990s was integration. A large number of health plans, hospitals, and physician groups became part of integrated health care systems (Coddington et al., 2000), despite the lack of evidence supporting such consolidation (Nerenz, 1992; Wheeler, Wickizer, & Shortell, 1986).

Extant bandwagon theories provide insights into the pressures driving the health care integration behaviors that rapidly diffused between 1985 and 1995. Two of the most widely publicized health care integration "success stories" were Columbia and PhyCor, both founded in 1987. By 1996 Columbia had become the tenth-largest employer in the United States (Coddington et al., 2000), and PhyCor had enjoyed its run as one of the darlings of Wall Street. These stories, along with other frequently publicized examples of apparent integration success, increased the pressure on remaining health care leaders to join the bonanza, which then turned sour for many. As we describe later, however, some leaders took a very different path that required them to identify strategic alternatives directly relevant to their specific organizational situation. Why? Here we seek to identify the microprocesses that influence which path executive decision makers will choose when faced with bandwagons.

After a brief review of macrotheories of bandwagons, we turn to theories of cognition, which suggest the need for decision structures that will enhance perceptual accuracy. We argue that such cognitive approaches have tended to treat information processing as disembodied, ignoring the role of the human mind in the process. The remainder of the article focuses on the impact of mindfulness on decision-making processes and outcomes in the face of bandwagons.

## BANDWAGONS

Drawing on economic and sociological theories, strategy researchers in the past decade

have made significant progress in understanding the macrolevel influencers of the extent of bandwagon behavior in a given collective (Abrahamson, 1991; Abrahamson & Rosenkopf, 1993; Abrahamson & Rosenkopf, 1997; Rosenkopf & Abrahamson, 1999). The two types of theories that have been forwarded to explain such bandwagon behaviors are rational-efficiency theories (Katz & Shapiro, 1985) and theories of fads (Abrahamson, 1991). Rational-efficiency theorists argue that decision makers adopt an innovation because of expected efficiency or returns. Fad theorists claim that information about how many adopters there are and who specifically has adopted the innovation, rather than information about the innovation itself, generates social pressure to conform to bandwagon behaviors. Specifically, the greater the number of adopters of the innovation, the more it becomes taken for granted that it is normal and legitimate (Aldrich & Fiol, 1994). In fact, organizations may adopt the innovation so as not to appear abnormal or illegitimate to their stakeholders (Meyer & Rowan, 1977).

The distinction between rational-efficiency and fad bandwagons has led to highly productive streams of economic and sociological research that have identified the factors causing bandwagon behaviors to diffuse. These streams of research have also clarified the varying predisposition to adopt a bandwagon behavior in the face of external pressures to conform. A firm will adopt such a behavior only if the pressure to adopt exceeds the firm's threshold—the point at which the strength of the bandwagon pressure to adopt is greater than the firm's predisposition against adopting (David, 1969).

Researchers have noted a number of factors that may influence adoption thresholds for a given firm. For example, firm size may determine its market power and, thus, may influence the level of competitive bandwagon pressure decision makers may feel (Rosenkopf & Abrahamson, 1999). The reputation of early adopters also influences the extent of subsequent diffusion (Abrahamson & Fombrun, 1994). Finally, conditions of high ambiguity appear to influence threshold levels. Under high-ambiguity conditions, bandwagon pressures tend to increase (Rosenkopf & Abrahamson, 1999). These explanations are useful in clarifying the rate at which bandwagon behaviors diffuse from a macroperspective (Rogers, 1995). A complemen-

tary perspective that focuses on the interactive effects of the immediate decision-making context and the characteristics of decision makers on leadership choices offers an opportunity to better understand the microprocesses that underlie specific bandwagon decisions.

To address this opportunity, we turn to theories of managerial and organizational cognition. From a cognitive interpretive perspective, realities—including the realities surrounding bandwagon behaviors—are socially constructed. This process of social construction occurs among decision makers within a firm (Weick, 1995), resulting in convergence around particular issues as important and worthy of attention. It also occurs among firms within an industry (Spender, 1989), resulting in widely adopted industry "recipes" for success. Such social constructions may fit a firm's particular circumstances, leading to effective choice behaviors. In contrast, the social constructions may lead to choices that follow the majority, regardless of their fit with the particular circumstances of a firm.

The accuracy of managers' perceptions of the value of a particular bandwagon behavior to the firm would appear to be a key determinant of whether or not it made sense to adopt the behavior. In fact, cognition researchers have long argued that perceptual accuracy maximizes the effectiveness of ensuing behaviors (Tenbrunsel et al., 1996; Thomas et al., 1993), suggesting that managerial accuracy should lower the predisposition of a firm to indiscriminately follow a bandwagon that does not add value to the firm. What follows is a brief review of research on cognition, especially as it relates to enhancing the perceptual accuracy of organizational decision makers.

## COGNITIVE PROCESSES AND BANDWAGONS

Social cognition is the study of how people make sense of others and themselves and how cognitive processes influence behavior (Fiske & Taylor, 1991). Cognitive theories should therefore tell us something about how decision makers make sense of bandwagons. Two basic cognitive processes characterize managers' sensemaking activities: scanning and interpretation (Thomas et al., 1993).

Scanning involves receiving information, and it has traditionally been seen as an antecedent

to interpretation (Daft & Weick, 1984). Scanning provides the external intelligence that decision makers use. The frequency of scanning is thought to indicate the amount of information obtained about the environment (Hambrick, 1982). Research has suggested that executives in high-performing firms scan more frequently than those in lower-performing firms (Daft, Sormunen, & Parks, 1988). In these studies it is implicitly or explicitly assumed that there are objective facts out there that managers can perceive more accurately if they obtain more and better information (Stubbart, 1989).

Interpretation involves processing and understanding the meaning of the received information. Interpretation is often viewed as the faulty part of the sensemaking process, because the use of various heuristics and other cognitive shortcuts to process information often leads to inaccuracies (Calori, Johnson, & Sarnin, 1992). Traditional views of interpretation assume that one can maximize the accuracy of decision making by providing decision makers with more and better information (Stubbart, 1989) and by using better decision mechanisms for sorting through and interpreting the information (Sutcliffe, 1994).

Decisions and resulting action are the outcomes of scanning and interpretation processes, although researchers recognize the reciprocal effects between them (Thomas et al., 1993). Contingency theorists have posited that successful organizations tailor their decisions and actions to environmental conditions (Lawrence & Lorsch, 1967). This assumes the need for prior accurate perceptions of the environment based on scanning and interpretation activities. From this perspective, to avoid bandwagon behaviors that add little or no value to a firm, it is important to enhance the accuracy of decision makers' perceptions of those behaviors and their fit with the firm's particular circumstances.

Researchers have focused significant attention on how to provide managers with more and better information through enhanced scanning and information-processing mechanisms. They have argued that more accurate decision making results from enhanced decision structures that increase the speed with which managers receive information and that expand the range of information managers receive (e.g., Gannon, Smith, & Grimm, 1992; Thomas & McDaniel, 1990; Yasai-Ardekani & Nystrom, 1996). Decision structures are formal scanning mechanisms—for ex-

ample, formal scanning systems and procedures—and formal information-processing mechanisms—for example, computer-based decision tools (Daft & Lengel, 1986). Decision structures support obtaining the required data, as well as exchanging views about those data in order to process the information. The assumption underlying much of the research in organizational cognition is that enhanced accuracy results from developing decision structures that support greater breadth of information and speed of information exchange (Lyles & Schwenk, 1992).

There are both theoretical and empirical reasons to doubt the above arguments. Kiesler and Sproull (1982) developed a number of theoretical arguments that shed doubt on the ability of structures and systems alone to enhance managers' perceptual accuracy. They argue that structural mechanisms, in and of themselves, do not bring about enhanced accuracy, because greater speed of information flows may lead to pressures of overload, and increasing the breadth of information may only increase the potential for bias. Results from empirical research examining the role of decision structures similarly have failed to demonstrate conclusively that decision structures influence managerial accuracy. Sutcliffe (1994), for example, hypothesized that greater internal and external scanning would produce a better fit between perceptions and objective environmental indicators for respondents from 502 firms in 35 industries. The proportion of variance she was able to explain was very low. While she suggested that this may have been due to four-digit SIC data that inaccurately depicted an organization's objective environment, we propose an alternative explanation below that suggests the need to specify more fully current models linking decision structures with improved scanning, interpretation, and decisions.

## ACCURACY AND BANDWAGONS

Accuracy is being in conformity to fact. Accuracy in assessing the value of bandwagon behaviors is particularly challenging for organizational decision makers, because the relevant facts, the interrelationships among those facts, and the implications of those facts for their organizations are often not only highly ambiguous but also in continual flux. In a dynamic decision

environment, accuracy in relation to any one of these must therefore involve constant change.

Ironically, as it has become more difficult to accurately pinpoint events or situations because of rapid environmental changes, there appears to be a growing belief that organizational decision makers can achieve such accuracy. The increased availability of information to decision makers has led to inflated expectations that they are capable of accurately assessing the decision situation and of acting on it appropriately (Ginsberg & Venkatraman, 1995). These expectations emanate from boards, customers, suppliers, and other interested stakeholders. The widespread belief that it is possible to accurately assess facts out there, and the inflated expectations of stakeholders about decision makers' capabilities to do so, inevitably result in managers' feeling increasing pressures to provide accurate assessments of their environment, including assessments of bandwagon behaviors.

Felt pressures for accuracy in the face of rapid environmental change often lead to predictable and unintended results. To cope with the difficulty of achieving perceptual accuracy in rapidly changing decision environments, decision makers often use cognitive simplifying processes that leave conclusions unchanged when realities are changing. Such simplifications tend to reduce the active search for more information, encouraging decision makers to rely instead on cognitive shortcuts (Fiol & Huff, 1992). This is consistent with the restrictive effect of stress on information processing (Holsti, 1978; Staw et al., 1981). Felt pressures for accuracy during times of uncertainty and change inevitably lead to stress, and stress leads to restriction of independent choice (Holsti, 1978). Compounding these restrictions, felt pressures for accuracy at a given point in time may lead people to withhold judgments and communications until they can demonstrate the validity of their views (Weick, Sutcliffe, & Obstfeld, 1999). The combined tendencies to simplify and withhold information seem likely to restrict search and constrain independent thought (Corner, Kinicki, & Keats, 1994; Fiol & Huff, 1992), thus contributing to following generally accepted patterns of bandwagon behavior when confronting complex environments.

In summary, research that has focused attention on how to improve the accuracy of manage-

rial perceptions has tended to treat information-processing mechanisms as separate and disembodied from the decision makers who use them. The problem with such a disembodied approach is that it ignores the fact that decision makers themselves often influence the decision context by mentally and socially constructing the realities that later constrain them (Weick, 1995). In the remainder of the paper we develop a framework that more fully specifies prior models of decision making by bringing the decision maker to the forefront. This framework describes the interactive effects of mindfulness and decision structures on a manager's ability to discriminate in the face of bandwagons so as to make decisions appropriate to the firm, rather than simply follow the majority.

### MINDFULNESS AND BANDWAGONS

In the information-rich contexts that characterize the worlds of executives today, the scarce resource is typically not information but the amount of mindful attention that decision makers allocate to making the information meaningful (Hansen & Haas, 2001). Langer (1989) introduced the concept of mindfulness as a state of alertness and lively awareness that is manifested in active information processing, characterized by the creation and refinement of categories and distinctions and the awareness of multiple perspectives. More recently, she indicated that "a mindful approach to any activity has three characteristics: the continuous creation of new categories; openness to new information; and an implicit awareness of more than one perspective" (Langer, 1997: 4).

In contrast, mindlessness is characterized by relying on past categories, acting on automatic pilot, precluding attention to new information, and fixating on a single perspective (Langer, 1997; Weick et al., 1999). Those who are mindless operate from a state of reduced attention that tends to lead to mechanically employing cognitively and emotionally rigid, rule-based behaviors. Trapped in previously created categories, these individuals easily confuse the stability of their assumptions with stability in the world, thus giving themselves a false reading on their surroundings (Langer, 1989).

Three central dimensions of the mindfulness-mindlessness continuum, therefore, extend (1) from category creation to category rigidity,

(2) from openness to new information to automatic behaviors that preclude new information, and (3) from awareness of multiple perspectives to fixation on a single point of view. Mindfulness means that the mind is present in embodied everyday experience (Varela, Thompson, & Rosch, 1991). Those who manifest mindfulness engage in thought patterns that allow them to make a larger number of currently relevant, more precise distinctions. By remaining alert to potential changes in their situation, mindful individuals are more adaptively responsive to shifts in their environment. This fosters a rich action repertoire with which to successfully greet the unknown (Langer, 1989; Weick et al., 1999).

Mindful scanning entails an expanded data search that extends beyond data relevant to past events and past behaviors, or what others are doing, and that leads to new, pertinent distinctions and categories. It entails a search for current data that may disconfirm as well as confirm existing beliefs. Mindful, self-questioning interpretations lead to regular efforts to update and expand awareness of multiple perspectives most relevant to the organization. And mindful decision making involves discriminating choices that best fit a firm's unique circumstances, rather than familiar and known behaviors based on what others are doing.

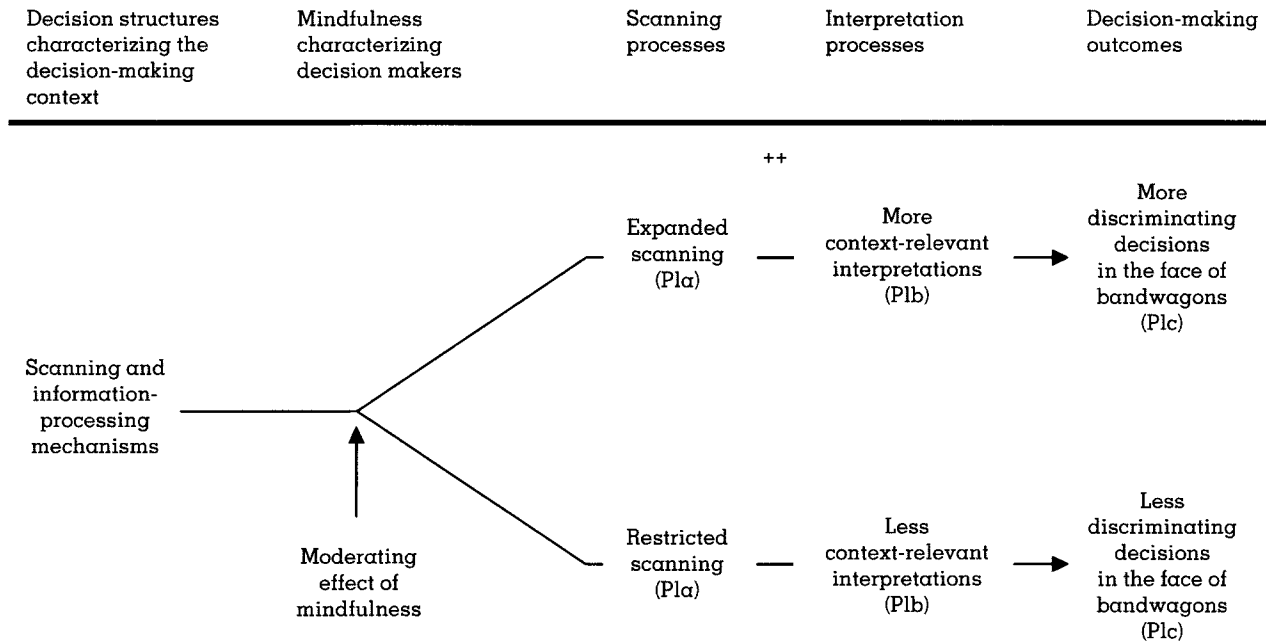
Traditional cognition research that has focused on decision structures alone as a way to enhance perceptual accuracy, as discussed above, misses the critical moderating role of the state of mindfulness of decision makers. Efforts to implement improved decision structures are like replacing an old telescope lens with a new and more powerful one: this will have no impact on the accuracy of telescopic viewing if no one is awake to look through the telescope. Decision structures that research has prescribed as appropriate for enhancing perceptual accuracy similarly will have little effect on decision making if they point to information that decision makers do not want to know or are not capable of knowing. If, for example, decision makers are mindlessly following a bandwagon, they will tend to avoid paying attention to information that in any way threatens their current perceptions and known patterns of behavior (Festinger, 1967). According to Mooers' Law, an information source or system will tend not to be used or paid attention to whenever it is more painful and

troublesome for the potential user to have the information than not (Mooers, 1960).

Leadership choices at Griffin Hospital (Freedman, 1999), during the 1980s and 1990s, provide a striking example of mindful decision making in the face of bandwagons. Surrounded by competitors and faced with a declining patient base, limited resources, and dissatisfaction in the community, the leaders might have followed the common wisdom of the time, either finding an alliance partner or possibly cutting back on services, staff, and space to minimize costs. Instead, they chose a very different path, initiating distinctive categories of actions to identify a new customer segment, to clarify their needs, and to develop the organizational capabilities to meet those needs. This has led not only to a positive reversal of their economic results but also to enjoying the benefits associated with being an employer of choice, as evidenced by their recent consistent recognition by *Fortune Magazine* as one of the 100 best places to work in the United States (Levering & Moskowitz, 2000, 2001).

Our discussion supports the importance of a real-time form of perceptual accuracy in achieving organization-environment fit. We have argued, however, that direct pressures to achieve accuracy through enhanced decision structures without regard for the mindfulness of decision makers is not likely to produce the desired outcome. Instead, such pressures may lead to static characterizations based on what is generally accepted to be true. Although accurate perceptions of internal and external conditions appear to have played an important role in the Griffin Hospital case, we propose that the general mindfulness of decision makers, rather than a direct focus on being accurate about specific events or situations, led to the discriminating behaviors. A preoccupation with accuracy at Griffin Hospital might easily have led to reduced scanning and a focus on widely accepted consolidation and/or cost-reduction solutions, instead of the dramatic transition the leaders undertook. Mindfulness allowed leaders to resist bandwagon pressures to implement generally accepted solutions and to follow their own uniquely successful strategy. They engaged in a search for additional relevant information, and they interpreted that information in ways that were directly relevant to their specific situation, leading to discriminating decision making.

**FIGURE 1**  
**Decision Structures, Mindfulness, and Decision-Making Processes and Outcomes**



These arguments are summarized in Proposition 1 and Figure 1.

*Proposition 1: The greater the mindfulness of decision makers, the greater their tendency will be to use scanning and information-processing mechanisms in a way that (a) expands scanning, (b) which, in turn, will enhance context-relevant interpretations of the information, (c) thus enabling discriminating decisions in the face of bandwagons.*

Figure 1 depicts the skeletal version of the arguments developed in this paper. The greater the degree of mindfulness of decision makers, the more likely it is they will use decision mechanisms to expand their search for information. Greater access to pertinent information encourages more context-relevant interpretations of that information, leading to the ability to discriminate between decisions that are appropriate for others and those that are appropriate for one's own organization.

In this form the proposed relationships are so general as to be nearly impossible to operationalize. We know very little about the specific processes by which varying degrees of mindfulness influence decision makers' scanning and inter-

pretation processes, and thereby decision outcomes. In the remainder of the article we more fully specify the sources of mindfulness in organizations and identify the more specific effects of mindfulness on scanning and interpretation processes and, thus, on decision outcomes.

**MINDFULNESS AND THE DECISION-MAKING PROCESS**

Weick and his colleagues suggest a number of processes that lead to mindfulness in organizations, including reluctance to simplify interpretations, commitment to resilience, and preoccupation with failure (Weick et al., 1999).<sup>1</sup> The following sections build on that prior work by

<sup>1</sup> Weick and his colleagues (1999) propose sensitivity to operations as one of the processes leading to mindfulness. These authors define sensitivity to operations as broad situational awareness. Although such awareness is central to the concept of mindfulness, we propose that its relationship to mindfulness is rather more circular than causal. Even Weick and his colleagues, while arguing that sensitivity to operations leads to mindfulness, state that such sensitivity is about acting "thinkingly" (1999: 97), thereby implying that the two are similar constructs. They also imply a reverse causality in their statement that sensitivity to operations is the result of gathering details into "mindful processing" (1999: 99). Given the inherent circularity in these arguments,



**TABLE 1**  
**The Moderating Effects of Varying Degrees of Mindfulness on Scanning and Interpretation**

Degree of Mindfulness		Effects on Scanning		Effects on Interpretation
Greater reluctance to simplify	→	More likely to attend to details based on current organizational conditions (P2a)	→	More likely to understand the value of information for current circumstances (P2b)
+		+		+
Greater commitment to resilience	→	More likely to scan through experimentation on the fringes of what is known (P3a)	→	More likely to interpret unusual and unexpected results as relevant if within the bounds of a firm's purpose (P3b)
+		+		+
Greater preoccupation with both success and failure	→	More likely to scan for contradictory information (P4a)	→	More likely to interpret data based on a belief that past practices may be wrong (P4b)
↓		↓		↓
Greater mindfulness	→	Expanded scanning (P1a)	→	More context-relevant interpretation (P1b)

specifically relating those three sources of mindfulness to the scanning and interpretation behaviors of managerial decision makers. Table 1 summarizes the discussion that follows. As depicted in the left column, greater reluctance to simplify, greater commitment to resilience, and greater preoccupation with both success and failure additively lead to greater mindfulness. That is, we propose that a greater degree of any one of these leads to greater mindfulness. We further propose that the moderating effects of each one of the three processes on scanning and interpretation are somewhat different. Those effects are again thought to be cumulative, leading to an overall level of expanded scanning and more context-relevant interpretation.

### Reluctance to Simplify

Weick and his colleagues (1999) propose that reluctance to simplify leads to mindfulness. Strategic decisions typically involve a high level of complexity. As a result, organizational decision makers often use cognitive simplifying processes that allow them to make sense of and

manage the complexity (Fiske & Taylor, 1991). Such simplified strategy making implies the type of intense focus and the consistency of style often characterizing successful start-up organizations that focus "narrowly and passionately on one or two pervasive and dominant goals" (Miller, 1993: 122).

Too much simplicity over time, such as observing what the bandwagon is doing rather than doing the hard work required to understand a complex environment, can lead to decline. This is true even during times of tremendous success. As Miller (1993) notes, outstanding organizations often lapse into decline because they develop too sharp an edge. They oversimplify interpretations, which, in turn, leads to homogenous and bandwagonlike collective beliefs and behaviors.

At the other extreme, the argument is often made that too much complexity, resulting from continuous reluctance to simplify, can lead to information overload that slows strategic decision making (Fredrickson & Mitchell, 1984). The more complex thinking (i.e., reluctance to simplify) that we propose leads to enhanced mindfulness, however, is focused on real-time information—based on understanding experience here and now—rather than what Eisenhardt

we treat sensitivity to operations as synonymous with mindfulness, rather than trace its causal effects on mindfulness.

(1989) calls "planning information," or purely cognitive representations. Real-time information that gives executives intimate knowledge of their business appears to speed decision making, while planning information, which attempts to predict the future, does not (Eisenhardt, 1989).

Reluctance to simplify interpretations of real-time information does not lead to increased general scanning of the environment. Rather, it tends to make scanning efforts more focused on details relevant to current organizational conditions. The intimate knowledge of the business that results from such a focus is likely to promote greater understanding of the value of information that may be inconsistent with past experience but relevant here and now (Eisenhardt, 1989). And, finally, understanding the value of information for current and unique circumstances, rather than relying on other firms' experiences with bandwagon behaviors, will tend to lead to more discriminating decisions in the face of those behaviors.

*Proposition 2: The more reluctant decision makers are to simplify real-time information, (a) the greater their tendency will be to use decision support structures in a way that focuses scanning efforts on details relevant to current organizational conditions, (b) which, in turn, will make it more likely that they will understand the value of the information for current circumstances, thus enabling more discriminating decisions in the face of bandwagons.*

Simplified interpretations of both integration and disintegration trends in health care have been easily justified, and on the surface the simple justifications have appeared legitimate (O'Connor & Fiol, 2002). The reasons for growth through alliances have included increased market share, expanded negotiation power, better risk coverage, increased valuations, lower costs because of shared overhead, expanded investments in systematic guidelines and technologies, improved access/coverage, and better professional managers, who would naturally implement the systems and structures necessary for ongoing success. Hearing these arguments over and over and seeing their peers pursuing the apparent benefits, many health care

leaders began to believe that this truly was the fad that was going to work.

Recently, however, the arguments have begun to shift (O'Connor & Fiol, 2002). Some health care leaders are now indicating that the sum of the parts is worth more than the combined whole and, therefore, that breaking up the whole can best create value. Divestiture, some argue, will stop significant losses, improve profits, enhance cash flows, allow leaders to focus business efforts on core competencies to better serve clients, shorten reaction times, and improve overall operating performance.

Beyond the simple justifications of both integration and disintegration, however, lurk significant potential challenges and problems. Only the hard work of going beyond these simple and generalized explanations and justifications can uncover them. Such hard work, for example, might lead to noticing that health care integration is related not only to an expanded scope and scale of operations (which generally accepted wisdom indicates would reduce costs) but also to increased complexity (which is likely to increase costs). After the fact, health care alliance partners such as Beth Israel-Deaconess (Todd, 1999) and Heritage Health System (Kirchheimer, 2000) have reported experiencing such complexity and higher cost consequences.

### Commitment to Resilience

Mindfulness is also thought to result from a commitment to resilience (Bourrier, 1996; Weick et al., 1999), which is about recovering from failure. A commitment to resilience is a general mindset that includes a belief that the road to success is rarely a straight line and that bouncing back from setbacks must be a way of life. It is the overall capability "to investigate, to learn, and to act, without knowing in advance what one will be called to act upon" (Wildavsky, 1991: 70).

A general commitment to resilience often leads to formal support for experimentation and improvisation (Bourrier, 1996). The belief that "we can always bounce back from failure" makes open-ended discovery in unknown territory less terrifying. Experimentation expands the range of what is noticed, as well as the range of possible action. Variance seeking, rather than consistency with prior practice, is the aim of experimentation (McGrath, 2001). Un-

der conditions of high uncertainty, variance-creating strategies have been found to be more valuable to organizations than attempts to directly improve on known practices (Eisenhardt & Tabrizi, 1995).

Highly adaptive firms typically demonstrate the ability to simultaneously engage in exploration for the creation of future knowledge and improvement of current knowledge and routines (Levinthal & March, 1993; March, 1991; Tushman & O'Reilly, 1997)—that is, the focus is on the present and future, simultaneously. Brown and Eisenhardt (1998) similarly have argued that if managers focus too much attention on only the present, they end up chaotically reacting to the market, and if they focus too much attention on only the future, they tend to lock into that future and lose their flexibility. Experimentation encompasses both a present and a future orientation in that it relies on small, fast, and cheap probes to gain insight into the future, without losing the flexibility to react to the future that actually unfolds in the present.

A general commitment of organizational decision makers to resilience thus shows up as a willingness to engage in experimental activities. This leads to an expansion of scanning, beyond that supported by formal scanning mechanisms, to include that which is learned from experimentation on the fringes of current operations. Continuous variance seeking through experimentation, however, may wreak havoc if it is not contained in some manner. Interpretations of the results of experimentation—although loosely coupled to specific outcomes—must be bound within certain parameters to lead to productive decision outcomes. A firm's purpose provides useful boundary delineations for this activity (Collins & Porras, 1994). As the reason for an organization's existence, its purpose is a powerful gauge of the meaning and the relevance of the outcomes of broad experimentation.

In line with the above discussion, we propose that the mindfulness that results from commitment to resilience leads to a focus of scanning efforts on those data that emerge from broad experimentation on the fringes of current operations. Given that such experimentation will, almost by design, lead to unexpected results, there will be a greater tendency to view the unexpected and unusual as relevant for consideration. Seeing the relevance of unexpected results provides a useful foundation for achieving

greater decision-making discrimination in the face of bandwagons.

*Proposition 3: The greater decision makers' general commitment to resilience, (a) the greater their tendency will be to use decision support structures in a way that expands their range of scanning through experimentation on the fringes of what is known, (b) which, in turn, will make it more likely that they will interpret unusual and unexpected results as relevant if they are within the bounds of the firm's purpose, thus enabling more discriminating decisions in the face of bandwagons.*

Consistent with this view, Griffin Hospital leaders were willing to doubt the wisdom of simply extending and improving upon their successful past practices of developing services for their traditional aging blue-collar patient base. This opened the door to the discovery of more valuable alternatives, such as new services for young, expectant mothers (Freedman, 1999). Another example of experimentation is evident in the academic health care institution that Malvey, Hyde, Topping, and Woodrell (2000) describe. Through experimentation within the bounds of its institutional purpose, this institution created a medical mall for an underserved inner city population, rather than following the bandwagon toward providing more services for affluent patients in an upscale medical mall.

### **Preoccupation with Both Success and Failure**

Weick and colleagues (1999) also suggest that a preoccupation with failure encourages mindfulness. Langer (1989) similarly proposes that mindfulness is more likely when (1) external factors disrupt initiation of a mindless sequence or prevent its completion, or (2) negative consequences are experienced that are discrepant with the outcomes previously resulting from similar behaviors. Both of Langer's conditions are related to failure. Concerns about failure appear to lead to mindfulness, especially when the failure is perceived to be very personal. Evidence suggests that when socially accepted justifications for unsuccessful outcomes are too costly, or when such outcomes are seen to be personally relevant, people tend to employ more

mindfully complex decision strategies (McAllister, Mitchell, & Beach, 1979; Tetlock, 1983). Grove (1996) may have been pointing toward this need to be preoccupied with failure when he wrote *Only the Paranoid Survive*.

In contrast, bandwagons appear to thrive from a preoccupation with avoidance of distinctive actions that might result in failure. Prior research suggests that decision makers often follow bandwagons because they are afraid of the failure that may ensue if they do not follow what others are doing (Abrahamson & Rosenkopf, 1990). The extent of decision makers' countering preoccupation with the potential failure associated with following bandwagon behaviors may impact their propensity to simply follow the behaviors of others.

The assertion that a preoccupation with failure leads to mindfulness appears to contradict research on the power of Appreciative Inquiry (Cooperrider & Srivastva, 1987) and positive future visions (Collins & Porras, 1994). Both are based on the power of a positive rather than negative preoccupation. Although it is certainly possible to be mindfully positive, the cautionary note here is that inquiry is not likely to be as active when one focuses on success as it is when one focuses on the possibility of failure.

Whereas an emphasis on success increases illusions of control, an emphasis on failure may completely eliminate any sense of control and lead to learned helplessness (Matute, 1994). Rather than a focus at either extreme, a mindful inclusion of both may be valuable. We agree with Weick et al. (1999) that focusing on possible failure appears to promote mindfulness and, thus, is likely to limit bandwagon behaviors. We propose, however, that this alone may not be sufficient for enduring success. A single-minded focus on failure is likely to drive a firm into the ground as quickly as a singular focus on success. Enduring effectiveness may require a paradoxical focus on both success and failure.

A preoccupation with failure along with success may lead to a form of paranoid scanning. Rather than scanning only to confirm existing practices and norms, mindful managers, paranoid in their preoccupation with both success and failure, would tend to scan to simultaneously confirm and disconfirm them (Grove, 1996). And if decision makers scanned for such contradictory information, it follows that they would tend to interpret the information they en-

countered from a belief that past practices may not necessarily be right for the present, and to make more discriminating decisions as a result.

*Proposition 4: The greater decision makers' general preoccupation with both failure and success, (a) the greater their tendency will be to use decision support structures in a way that encourages scanning for contradictory information, (b) which, in turn, will make it more likely that they will interpret the information from a belief that past practices may be wrong, thus enabling more discriminating decisions in the face of bandwagons.*

### Underspecified Decision Structures

In addition to the three processes discussed above, Weick et al. (1999) identify underspecified decision structures as a source of mindfulness in organizations. The specification of decision structures refers to the extent to which rules and procedures govern decision situations such that they become routinized (Nelson & Winter, 1982). To the extent that structures are less specified, they are more fluid, flexible, and adaptive and, thus, leave more room for individual discretion. Troublesome cues are exposed to a wider range of individuals with more varied capabilities, who are in a position to notice them and take useful action. In contrast, highly specified structures are composed of orderly routines and procedures that prescribe in a more rigid way who should notice and act on what issues.

Weick and his colleagues (1999) argue that underspecified structures lead to mindfulness and that overspecified structures encourage mindlessness. By encouraging mindless behavior, the very orderly and highly specified structures and procedures that are put in place to reduce error can end up spreading errors around (Turner, 1976). This holds important implications for research in which it is argued that well-specified decision structures must be put in place to increase the breadth of information and the speed with which managers receive the information in order to improve perceptual accuracy. While providing access to relevant information is clearly important, perceptual inaccuracies may, in fact, be amplified by overspecifying decision structures. Overspecified

structures may also narrow the focus of attention, ensuring that bandwagon-inconsistent information is not considered.

We agree that overspecified structures tend to reduce mindfulness in the high-reliability organizations that are the focus of the Weick et al. (1999) study. But mindfulness is the rule rather than the exception in high-reliability organizations. How does this assertion relate to organizational decision makers who are not as mindful? If decision makers are relatively mindless to begin with, it would seem that underspecified structures would simply tend to support the lack of awareness or responsibility. We argue for a contingency view by suggesting that structural specification may have very different effects on decision makers who are more or less mindful to begin with. If a high degree of mindfulness is the norm, we propose—as do Weick et al. (1999)—that overspecified structures will tend to reduce mindfulness and that less rigid underspecified structures will tend to support conditions that allow mindfulness to be maintained. In contrast, if mindlessness is the norm, we disagree with Weick et al.'s (1999) assertion that underspecified structures will lead to enhanced mindfulness. Instead, we argue that underspecified structures will tend to further encourage the avoidance of mindful responsibility and that overspecified structures, though leading to short-term control, will similarly support bureaucratic routines and, thus, further mindlessness. In summary, we argue that structures themselves do not and cannot create mindfulness. However, overspecified structures can lead to reduced mindfulness if it already exists.

Health care integration examples support such a contingency view. After mergers have occurred, numerous compromises have often kept things vague, rather than clarifying issues such as who would be the boss, how decisions would be made, what the future vision would be, or what computer system would be used after consolidation. Such underspecified decision structures have often been associated with the failure of consolidation efforts (Hensley, 1999; Todd, 1999). Highly respected health care organizations have been caught, at least temporarily, in the trap of mindlessly following others into poorly clarified integration efforts. Putting few decision structures in place both fits this mindless behavior and reinforces it. In contrast, putting underspecified, flexible, and fluid deci-

sion structures in an initially mindful organization will tend to support continued mindfulness. For example, integrated systems such as Ministry Healthcare (Desien, 2000, personal communication) and Centura Healthcare (Austin, 2000; Swedish, 2000, personal communication) may well owe a part of their current success to a mindful, mission-driven leadership. Underspecified structures may, in fact, promote continued mindfulness only in contexts where mindful behaviors are already the norm.

*Proposition 5a: In organizations where mindfulness is the norm, underspecified decision structures will lead to continued mindfulness over time.*

*Proposition 5b: In organizations where mindfulness is the norm, overspecified decision structures will lead to reduced mindfulness over time.*

*Proposition 5c: In organizations where mindlessness is the norm, neither underspecified nor overspecified decision structures will lead to greater mindfulness over time.*

We have proposed that mindfulness influences the usefulness of decision structures in two ways. First, as we argued earlier in the paper, mindlessness leads to unwillingness to doubt what is generally thought to be the truth about the value of bandwagon behaviors. This is expressed as resistance to or disregard for decision structures that may lead to uncovering bandwagon-inconsistent data. Second, varying degrees of mindfulness determine the appropriate level of structural specification. The greater the mindfulness, the less specified and routine should be the decision structures. In contrast, the greater the mindlessness, the more decision makers would seem to need specified decision structures to ensure short-term control, even though this is not likely to increase their mindfulness.

## DISCUSSION AND CONCLUSIONS

Following the seminal works of Burns and Stalker (1961), Lawrence and Lorsch (1967), and Thompson (1967), researchers have argued that there needs to be a fit between a firm's behavior and its environment. Between environmental data and a firm's behavior lie a number of intervening cognitive variables, however, that de-

termine the degree of accuracy in perceiving environmental conditions. It is widely accepted that the more accurately organizational decision makers perceive their environment, the more likely they are to achieve a Lawrence and Lorsch type of fit. As a result, much research has been devoted to enhancing perceptual accuracy.

Perceptual accuracy would appear to be the decision-making characteristic that distinguishes those organizations that indiscriminately follow a bandwagon from those that do not. And decision support structures and systems would appear to lead to greater accuracy and, thus, to less indiscriminate behavior. Despite the appeal of these traditional arguments, research results from studies testing these ideas have not been highly convincing. In this article we have argued for further specification of traditional decision-making models. We have described why it is that decision structures intended to enhance perceptual accuracy will tend to have little impact if mindlessness is the norm.

One contribution of this paper is that it complements and extends macrolevel theories of bandwagon behaviors by identifying the microlevel characteristics of the decision context and of decision makers that influence why a given firm will resist following bandwagon behaviors. If decision makers mindfully assess both the external environment and their internal capabilities, they are likely to join a bandwagon only if it is advantageous to their specific circumstances.

Second, our discussion of the dangers of focusing directly on achieving accuracy adds value in the form of a seemingly paradoxical prescription. To achieve real-time accuracy, decision makers must adopt a mindset that tends to lead to multiple and changing interpretations of surrounding events. Variable interpretations may, in fact, signal mindfulness and a dynamic and real-time form of accuracy rather than a lack of accuracy. Prior research laid the groundwork for this by describing the three characteristics of mindfulness. Our study has refined and operationalized the construct by extending it from the context of highly reliable organizations to the scanning, interpretation, and behavior processes of organizational decision makers in general. It represents the first attempt to model the interactions between mindfulness as a decision maker characteristic and decision struc-

tures, and to show the impact of those interactions on decision outcomes.

Finally, the paper contributes to the understanding of why studies examining the relationship between decision structures and perceptual accuracy have been able to explain very little variance. We have argued that people will resist the adoption and use of appropriate decision structures if mindlessness is the norm. And contrary to the arguments of Weick and his colleagues (1999), we have proposed that underspecified structures cannot produce mindfulness. As such, our framework both complements and extends prior work on the links between decision structures and perceptual accuracy.

Throughout the paper we have used illustrations from health care. However, we propose that the framework developed here is as relevant to other bandwagon phenomena as it is to the health care trends noted. For example, our propositions might just as well be applied to 1990s total quality initiatives, to re-engineering bandwagons across industries, or to the recent dot.com investment and disinvestment trends.

### Directions for Future Research

We have developed an initial framework for understanding the relationship between mindfulness and decision-making processes in organizations. We encourage future research that elaborates on this framework. A number of interesting avenues exist for future work. For example, researchers might define and model the construct of mindfulness at the level of the group or organization. How do the outcomes of the mindfulness of senior decision makers compare to those of the mindfulness that is widely distributed among individuals throughout the organization? How is such organizational mindfulness developed, under what conditions is it most valuable, and what are the barriers to achieving it?

In extending the construct of individual mindfulness (Langer, 1989, 1997) to the level of organizations, Weick and his colleagues (1999) imply widespread adoption and dispersion of mindfulness among an organization's members. Such widespread dispersion may be both more possible to achieve and more valuable in some organizations than in others, with high-reliability organizations anchoring an extreme end of the continuum. Future research must determine

whether and when mindfulness is most valuable for organizations to cultivate. We also need to know more about how widespread mindfulness must be among decision makers in order to produce positive outcomes, as well as the costs and returns of the investment required to produce this level of mindfulness. It seems obvious that the huge investment to produce greater mindfulness would be justified by the serious consequences of failure in the high-reliability organizations that were the focus of the Weick et al. (1999) study (e.g., nuclear power generation plants, air traffic control systems). A similar argument might be made for many health care organizations. Further clarification of the relative costs of developing mindfulness and a demonstration of the associated returns would be useful in specifying the range of organizational settings where such investment would be appropriate.

We need empirical evidence as to whether the processes we have described lead to enhanced mindfulness, as we have proposed, and whether they interact with decision-making processes, as we have suggested. We have attempted to specify these relationships in a way that allows empirical testing. For example, does enhanced mindfulness lead to expanded scanning, which then leads to more context-relevant interpretations and decision making, as we have argued, or does mindfulness more directly affect interpretation and decision-making processes without the intervening effects on scanning? Do commitment to resilience, preoccupation with both failure and success, and reluctance to simplify have an additive impact on mindfulness, as we have suggested?

Three sets of variables are central to testing the relationships suggested in our propositions: (1) measures of mindfulness, (2) operationalization of the three processes we propose lead to mindfulness, and (3) operationalization of the proposed outcomes of mindful decision processes. One might operationalize evidence of mindfulness as the ability and tendency of managers to make distinctions and, thus, create/refine categories not common to their competitors. Similarly, measures of openness to and interest in new information, as well as an awareness of multiple possibilities not typically considered by competitors, would provide evidence of the presence of mindfulness.

It is not likely that evidence of the three processes leading to mindfulness (reluctance to simplify, commitment to resilience, and preoccupation with both success and failure) can be obtained through direct questioning. Given that these processes are general predispositions, rather than specific behaviors, people may not be highly conscious of their own level of engagement in them. Evidence of these sources of mindfulness should therefore be collected from multiple sources and compared for reliability. Managers' self-reports should be supplemented with others' reports about them, as well as researcher observation over time.

Finally, we have proposed that varying degrees of mindfulness impact the decision-making process in ways that produce greater decision maker discrimination in the face of bandwagons. That is, more mindful scanning and interpretation lead to the ability to distinguish between the value of bandwagon behaviors for a particular circumstance and the value that others have attributed to them. Mindful outcomes defined in this way allow the possibility that mindfulness may sometimes result in following bandwagon behaviors, if those behaviors are perceived as uniquely valuable. Relevant outcome measures, thus, cannot be "followed the bandwagon" or "did not follow the bandwagon." Rather, outcome measures should be based on expert opinions about the level of managerial discernment and insight into the unique circumstances of a particular firm in relation to bandwagon behaviors.

### **Implications for Practice**

We have proposed that the benefits of mindfulness include (1) expanded scanning, (2) context-relevant interpretation of internal and external conditions, and (3) discriminating decisions vis-à-vis bandwagons. If the benefits of mindfulness are so apparent, why is there so much seemingly mindless behavior, such as that reflected in many fad bandwagons? The natural progression for most organizational decision makers, without specific intervention, would seem to be toward mindlessness, for two reasons. First, it requires less of the hard work associated with independent thought and leadership. This argument is consistent with Bertrand Russell's position that "most people would rather die than think" (as quoted in Wilson &

Wilson, 1998: 6). Second, mindfulness minimizes personal risk by providing a ready justification for less than successful leadership choices. It is therefore not entirely surprising that many decision makers adopt a relatively mindless follow-the-bandwagon orientation.

Our framework offers practical guidance for organizational decision makers interested in developing greater mindfulness. First, a preoccupation with either success or failure alone is not likely to lead to effective and discriminating decision making. Rather, decision makers' preoccupation with failure *along with a preoccupation with success* leads to greater mindfulness. The implication for leaders is that paradoxical thinking must become a norm in their decision processes. Along with great positive visions for success, leaders must develop a focus on the dangers lurking around every corner.

Another extension of prior work that has direct implications for practice involves the appropriate level of specification of decision support structures. Weick et al. (1999) propose that underspecified structures lead to enhanced mindfulness. We argue that this is likely to be so only when decision makers are mindful to begin with. We suggest that combining mindlessness with underspecified structures is a sure recipe for loss of control, irresponsibility, and unaccountability.

Scanning, interpretation, and decision-making outcomes reciprocally influence one another. This means that the manner in which decisions are ultimately made seems likely to impact the mindfulness of those involved in subsequent scanning processes. For example, to the degree that individuals engaged in scanning processes witness decision makers choosing to blindly follow current bandwagon practices rather than rely on the mindful information that they have provided, they are likely to recognize the futility of their efforts and reduce the level of hard work required to maintain their mindful contributions.

Our discussion of the effects of mindfulness on decision processes and outcomes has highlighted not only the tenuous nature of mindfulness but also the numerous ways it can be reinforced. We have argued that mindfulness leads to expanded scanning, which, in turn, leads to more context-relevant interpretations and more discriminating decision behavior. The resulting success, if left unchecked, will tend to lead to overconfidence and less subsequent mindful-

ness. If left unsupported by continuous reluctance to simplify, commitment to resilience, and preoccupation with failure as well as success, mindfulness might lead to sufficient success to undermine and destroy the mindful processes that created it.

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