The impact of chief executive officer optimism on hospital strategic decision making

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Background: Previous strategic decision making research has focused mostly on the analytical positioning approach, which broadly emphasizes an alignment between rationality and the external environment. In this study, we propose that hospital chief executive optimism (or the general tendency to expect positive future outcomes) will moderate the relationship between comprehensively rational decision-making process and organizational performance.
Purpose: The purpose of this study was to explore the impact that dispositional optimism has on the well-established relationship between rational decision-making processes and organizational performance. Specifically, we hypothesized that optimism will moderate the relationship between the level of rationality and the organization's performance. We further suggest that this relationship will be more negative for those with high, as opposed to low, optimism.
Methods: We surveyed 168 hospital CEOs and used moderated hierarchical regression methods to statically test our hypothesis.
Findings: On the basis of a survey study of 168 hospital CEOs, we found evidence of a complex interplay of optimism in the rationality–organizational performance relationship. More specifically, we found that the two-way interactions between optimism and rational decision making were negatively associated with performance and that where optimism was the highest, the rationality–performance relationship was the most negative. Executive optimism was positively associated with organizational performance. We also found that greater perceived environmental turbulence, when interacting with optimism, did not have a significant interaction effect on the rationality–performance relationship.
Practice Implications: These findings suggest potential for broader participation in strategic processes and the use of organizational development techniques that assess executive disposition and traits for recruitment processes, because CEO optimism influences hospital-level processes. Research implications include incorporating greater use of behavior and cognition constructs to better depict decision-making processes in complex organizations like hospitals.

Key words: optimism, rationality, strategic decision making

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Introduction and Overview

U.S. hospitals continue to face dynamic environments, partially from recent changes in the political and regulatory reforms oriented toward accountable care and also due to continuous threats from new forms of competition. Other external factors are also contributing to greater dynamism, such as continuous technological change, changes in social trends and population demographics, and overall complexity in the industry (Swayne, Duncan, & Ginter, 2009). Health care industry complexity will require greater emphasis on strategic decision making (SDM) of senior leadership to improve performance in both health quality of care and cost efficiency (Alexander, Hearld, Jiang, &

Fraser, 2007). This is a difficult change for an industry such as health care, which McKinsey Consulting says is "under siege" to provide "leadership that thinks strategically, builds quality, and aligns doctors with the goals of hospitals" (Grote, Mango, & Sutaria, 2007).

The health care industry is notably different in many regards from traditional industries. For instance, many hospitals are part of a much larger system or network, where decisions are often centralized at the system level. As such, key decisions are not made locally, which obviously reduces decision autonomy (Provan, 1984). The dominance of one powerful internal stakeholder (i.e., the physician) in major investment decisions about service lines and strategic planning overall also limits the chief executive officer's (CEO's) decision independence (Daake & Anthony, 2000). Despite these notable differences, the industry's level of dynamism, focus on performance, and competitive dynamics make it ideal for studies on strategy processes.

To improve decision making effectively in the changing health care arena, we may have to think about strategic decisions differently. Nearly 20 years ago, management scholars proposed a more comprehensive research agenda for SDM "…by opening up our conceptions of cognition…" (Eisenhardt & Zbaracki, 1992). Whereas behavioral researchers have found that cognitive constructs such as optimism could bias daily decision processes by short-circuiting the choice selection and evaluation process, conceptions of cognition have been largely ignored in SDM research. Specifically, we have not made progress on understanding the role that optimism plays in high-stakes strategic decision processes, except for limited research focused on entrepreneurial organizational behavior (e.g., Hmieleski & Baron, 2009). There have been very few studies on this subject focused across industries and virtually none in the health care industry.

On the other hand, in terms of strategic process-oriented research, there has been considerable effort to examine the link between rationality in organizational decision processes and the organization's performance. Fredrickson and Mitchell (1984) and Fredrickson and Iaquinto (1989) found that the more comprehensively rational decision processes tended to be positively associated with higher performance in stable environments and negatively related in unstable environments. This conflict creates an uncertain relationship between the two constructs, and the environment has been isolated primarily as the confounding variable, ignoring the impact of individual cognition.

From the SDM perspective, one emerging concept that could prove interesting and insightful is dispositional optimism. Optimism could produce "delusions of success," where organizations pursue flawed mergers, bad ideas, and risky strategies (Lovallo & Kahneman, 2003). Optimism clearly is an important concept, but does it really delude hospital executives and change the nature of the process–performance relationship? Currently, we have only anecdotal evidence and zero empirical support for its interaction with SDM processes. In this research, our intent was to revisit the rationality–performance relationship by introducing an alternative explanatory cognitive variable-optimism. In essence, we sought to understand if optimism moderates the relationship between rationality and performance in SDM. We chose health care as the industry due to its high level of environmental dynamism.

We used the lens of rationality and cognitive theory to examine this three-construct relationship (process–optimism–performance). We believe that this contributes to the literature for a number of reasons. First and most importantly, although scholars have studied the decision-making process–performance linkage, nobody has explored the moderating role of executive optimism on this relationship. Understanding these interactions can help us gain a richer perspective on organizational decision making by incorporating a cognitive construct in strategy research. Specifically, our study attempts to understand how an executive's outlook and disposition moderates the nature of the decision process–organization performance relationship.

Second, there have been very few studies on the role of optimism in strategy, and none specifically in the health care industry. The uniqueness of the industry in terms of balancing regulations, shrinking reimbursements, changing federal policies, and demands for improved costs and quality makes this an interesting context for exploring optimism. The unique aspects of the health care industry contribute to this study's focus. This research provides insight into both industry context and strategic process.

Third, we believe that our theoretical contribution within this domain is significant because it builds on limitations identified by numerous scholars in SDM research which rely on normative models with largely untested assumptions related to managerial cognition (e.g., Forbes, 2007; Langley, 1990). Others have suggested that strategic management research should integrate executive cognition and behavior in examining links between decision process, strategy, environment, and structure (Schwenk, 1988). Eisenhardt and Zbaracki (1992) particularly stated that strategy research has not departed significantly from a stage based on immature paradigms and incomplete assumptions. Hodgkinson and Starbuck (2008) pointed out that the area of managerial cognitive frames (i.e., how managers interpret and process information) has been relatively underexplored and has constrained decision-making research. We selected optimism here as one specific aspect of cognition because researchers have suggested that inherently positive or negative outlooks can have a profound impact on how decisions are made and which choices are selected (Costa-Font, Mossialos, & Rudisill, 2009; Lowe & Ziedonis, 2006). In this article, we intended to build on the gaps and recommendations from previous

research by focusing on the process–optimism–performance relationship in SDM. We chose the health care industry for its overall complexity and high levels of environmental dynamism.

Theory and Hypothesis

The majority of research on SDM has focused largely on consumer and manufacturing industries, largely discounting the dynamic health care industry. However, the industry is ripe for research in this area. As Porter and Teisberg (2006, p. 150) state, there is a "strategy vacuum in health care delivery" due to broad service lines, narrow service delivery approaches, and localized geographic focus. Others have suggested that the dominance of physicians, changes in customer (patient) access to quality information, and a move toward greater accountability require greater innovation by policy makers and administrators (Herzlinger, 2006). To make the necessary changes, hospitals will need to not only craft a better strategy but also encourage leaders that can foster optimism, passion, and commitment (Burt, 2005). Ford-Eickhoff, Plowman, and McDaniel (2011) suggest that SDM is one of the key drivers of hospital performance. They further argue that strategic processes can be enhanced by participation from the hospital board and that greater diversity leads to a more externally oriented strategic focus. Our research builds on this concept of SDM but specifically examines optimism and its impact on hospital performance and rational decision processes. In the next section, we will discuss the key theoretical components of the research.

Rationality and Performance

Rationality is defined by the *Oxford English Dictionary* as the ability of a person to think "clearly, sensibly, and logically" or in "accordance with reason and logic" (Oxford, 2010). In management research, rationality is conceptualized largely by the use of information for selecting optimal alternatives given organizational-level goals (Miller & Friesen, 1983). Rational individuals interpret and evaluate choices based on their preferences, expectations, and consequences (March, 1994). Therefore, more rational individuals in organizations require greater information and use higher levels of processing and analysis to make the most informed choice, which is referred to commonly as *comprehensiveness* (Dean & Sharfman, 1993). Comprehensively rational processes are typified by a more encompassing search for alternatives and thorough analyses of data (Fredrickson & Mitchell, 1984). Studies have shown that the level of comprehensive rationality (comprehensiveness) is positively associated with organization performance in many environments (Fredrickson & Iaquinto, 1989).

The alternative to a comprehensive process has traditionally been described as "incremental." Intuition, fragmentation, and emergent strategy are all characteristics of this extreme, which yields a less than systematic, decentralized approach to decision making. Incrementalism is rooted in the idea of cognitive limitations where individuals cannot process all of the information available to them because of bounds or limits on their rationality (March, 1994). Consequently, there is a long-standing debate about whether executives make strategy by analytical, well-thought-out process (rational) or if they merely emerge through less controlled and defined process (incremental).

Uncertainty, specifically environmental uncertainty, is a confounding variable hypothesized to partially explain when organizations would be more likely to rely on comprehensive or incremental processes. The greater the perceived uncertainty, the more likely the organization will be to have less rational processes. For instance, Eisenhardt (1989) has examined this relationship in dynamic and unstable environments, where uncertainty is the greatest, and found that more rational processes prevail in times of greater dynamism. Similarly, in more stable environments, comprehensive processes are most productive (Fredrickson & Mitchell, 1984). Numerous scholars have attempted to examine this process–relationship performance over time, controlling primarily for the uncertainty in the external environment, and found contradictory findings (Goll & Rasheed, 1997). These contradictions have not been reconciled, which suggests that there are other more explanatory constructs that need to be included in the research design to more richly depict the process–performance relationship. Cognition, and specifically optimism, is one such construct with potential.

Optimism and SDM

Behavior studies have long criticized the limitation of rational decision models in which individuals (actors) usually enter decision situations with explicitly known objectives, collect comprehensive information, and select the optimal action to maximize their returns (e.g., Mintzberg, Raisinghani, & Theoret, 1976; Nutt, 1984). Researchers have reported that individuals are just as likely to engage in a process that reduces or eliminates decision steps through cognitive simplification. We know that an individual's personality and disposition influence cognitive behavior, and therefore, consequently, executive disposition could influence strategic behaviors as well. Therefore, we posit that executive optimism can alter decision process by influencing organizational goal setting and information search processes, which in turn affects the tendency to use either more or less rationality in their decision making.

Generically, optimism is defined as "hopefulness and confidence about the future or the success of something" (Oxford, 2010). We are most interested in dispositional

optimism (i.e., permanent characteristics) versus situational optimism (i.e., temporary state induced by the current environment or situation). Optimism can influence motivation level, which is positively associated with more complex goal setting and attainment (Covington, 2000). For example, research on optimism with entrepreneurs has shown that optimism creates lofty or unattainable goals that ultimately have negative overall outcomes (Lovallo & Kahneman, 2003).

In decision-making research, optimism might lead one to cut short the search process when choosing from a set of alternatives. For example, optimistic individuals search until they reach the first attractive alternative, at which point the search stops and that option is chosen. Theories of cognition state that individuals differ in their beliefs concerning cause–effect relationships and variation in preferences concerning various goals and optimism for their decisions (Miller, 1987).

Optimism has been shown to be positively related to aspiration (i.e., greater optimism in individuals is associated with higher aspirations). Researchers have suggested that when an organization operates below an anticipated aspiration level, decision makers seek ways to change and improve their strategic decisions to achieve their target performance (Chen & Miller, 2007). On one hand, the probability of change in SDM decreases as organization performance improves relative to optimism (Greve, 1998). On the other hand, organizations that achieve aspirations tend to devote less effort in exhaustingly scanning the environment and gathering information to develop new rational strategic decision to maximize their returns (March, 1994). Because optimism could distort an individuals' rational thoughts, cognitive research would therefore suggest that optimism could influence the use of rationality in SDM process.

The Moderating Effect of Optimism on the Process–Performance Relationship

Despite researchers' efforts at better measuring the environmental impact on the process–performance relationship, there are still significant opportunities to explain the contradictions in the association between rationality and performance. We believe that there is a much more complex interplay of variables in understanding the nature of SDM. Specifically, because optimism influences the outlook of an individual, which in turn affects the information search and selection process, we believe that optimism will influence the relationship between rationality and organization performance.

Carver and Scheier (2002) found that high optimism levels tend to motivate individuals to approach challenges with enthusiasm and persistence. In a dynamic environment where decisions are taken with limited information and under time constraints, individuals may not have the capacity to capture all possible alternatives and optimize their processes. For example, during emergent customer demand change or technology shift, executives may favor fast decision making based on incrementalism, experience, instincts, or a few cues or inputs that may seem relevant. It is posited that value exists in not using too much information. In some context, simple incremental decision rules could perform as well or better than more sophisticated comprehensively rational forms of decision making.

Nevertheless, when managers oversimplify their task and rely highly on less rational decision making, there is a possibility that they may ignore a large proportion of valuable information that might be critical for organizational success. This view is in line with prior literature on entrepreneur optimism. For example, Geers and Lassiter (2002) suggested that individuals with high optimism levels tend to hold unrealistic expectations, discount negative information, and mentally reconstruct experiences to avoid contradictions. This may lead to serious bias and detrimental effects on the judgment and decision making of individuals and likely result in negative outcomes in return (Geers & Lassiter, 2002).

Hodgkinson and Starbuck (2008) showed that managers' predictions or outlook of the future is shaped by past performance, which in turn has cognitive implications. Incremental decision making can help individuals improve their decision speed and efficiency to cope with a fast-changing environment. Whereas extreme high levels of incremental decision making will lead to overwhelming simplification of information cues, this could negatively affect organizational performance.

On the basis of previous research on cognitive theory and rationality in general, we propose the following hypothesis

> Dispositional optimism moderates the relationship between the level of SDM rationality and the organization's performance. The relationship will be more negative for those with high, as opposed to low, optimism.

Research Design

Sample and Procedures

We chose as our sample hospitals from the health care industry (SIC 8062, general hospitals). Specifically, we examined individual hospitals as the unit of analysis, not the health system or network they might belong to (if any). The health care industry has relatively low levels of new entrants but high rates of technological change and marginal annual growth rates. It is also highly complex, is highly regulated, and is characterized by extreme levels of competition from new organizational

forms, such as for-profit stand-alone clinics and emergency centers. We chose the for-profit subset of this population because we are exploring organizational performance using an economic measure of performance. The total number of U.S. for-profit hospitals in this industry is approximately 810. The population was identified through the American Hospital Association 2008 Annual Hospital Directory.

Because this study concerns itself with SDM, the target respondent is the CEO. We developed a brief survey instrument and electronically distributed this to the hospital CEO of the entire sample in November 2008. We instructed top executives to respond to the questions on behalf of their role as executive in their current organization. Nearly 100 of the surveys were undeliverable due to inadequate contact information. We sent a follow-up reminder to all hospitals at the 3- and 4-week point. The survey was closed at the end of the fifth week. We received 168 completed responses, for an overall response rate of 21%, which is consistent with most organizational research. The average age of the respondents was 57 years, with a range from 39 to 73 years. More executives were men (53%) than women. The average size of the organization was 293 beds. We examined the differences between the responding and nonresponding organizations on the basis of both performance and size, and in both cases, the results were nonsignificant.

Instrument and Variables

The questionnaire operationalized three sets of variables: rationality in decision-making process, optimism, and perceptions of environmental turbulence.

Rational decision making. To assess the level of comprehensiveness, we adopted the four items used in both the Miller (1987) and the Goll and Rasheed (1997) studies for analysis of rational decision-making frameworks. These questions were measured on a Likert scale of 1 (*strongly agree*) to 5 (*strongly disagree*). Four questions were asked to measure the degree to which the executive explicitly (a) systematically searches for alternatives in strategic decision processes; (b) utilizes analytical techniques in their strategic decisions, as opposed to guidelines or rules of thumb; (c) relies primarily on analytical reasoning in the decision process, as opposed to judgment; and (d) relies on the formal output of a decision support group, as opposed to intuition or gut. In this scale, higher scores indicate a more rational process, and a lower score indicates greater incrementalism. We define strategic decisions as those involving significant investment and influence the direction for the organization. The four questions showed high internal reliability, with a Cronbach alpha = .81.

Optimism. Dispositional optimism was measured with a proven instrument that has been utilized in dozens of studies to assess optimism about the future, called the Life Orientation Test-Revised (Carver & Scheier, 2002). The Life Orientation Test-Revised asks six questions, such as "Overall, I expect more good things to happen to me than bad" and "I'm always optimistic about my future." The questions were measured using a 5-point Likert scale ranging from *strongly disagree* to *strongly agree*. Higher scores represent higher dispositional optimism, and lower scores represent reduced levels of optimism. Internal consistency was high with these questions (Cronbach's $\alpha = .77$).

Organizational performance. Performance was measured as the hospital's most recent year's return on assets (ROA). Although there are numerous other measures of organizational performance, such as Tobin's Q, market share, or revenue growth, ROA is one of the most commonly used in most organizational research. We calculated ROA as net operating income divided by total assets. We used forward lagged ($t + 1$) performance data collected after survey administration to improve our ability to understand causality. Therefore, we used the financial performance ending 1 year after the survey was administered to allow for changes in strategic performance occurring from the previous year's decision processes. We matched the respondent's organization against a propriety financial database specific to the hospital industry (American Hospital Directory). We tested for both skewness and kurtosis, and our dataset met the criteria for normality.

Perceived environmental turbulence. Because we are dealing with cognition and disposition, we chose to use a subjective perception of environmental turbulence than a calculation using measures such as turnover or change in industry revenue. Subjective managerial perceptions, versus objective environmental characteristics, have been shown to be a better reflection of how managers make strategic decisions (Milliken, 1987). To measure the perceived certainty of the environment, we adopted three questions from the Miller and Friesen (1983) survey research that used Likert scales to assess predictability or turbulence based on perceived competitor activities in the local market, the rate of innovation in products and services, and the ability to predict customer needs and preferences. We calculated an index using the means of the three questions. These were measured on a 5-point Likert scale, where lower scores indicate more certainty and higher scores reflect greater uncertainty (i.e., higher turbulence). Internal consistency on these questions was also high (Cronbach's $\alpha = .71$).

Control variables. Organization-level control variables included prior performance of the organization and organizational size. We controlled for size of the organization by using a common measure of size or capacity of the organization (number of inpatient beds) in the year the survey data were collected. We standardized this by adjusting

for the population mean size for the same year. Prior performance was measured as an average of the 2 prior years' ROA. Because we measured individual levels of optimism, we used two individual control variables—age (in years) and gender (0 = female, 1 = male). Because we used ROA as measures for prior and current performance, we examined closely the normality of these data and tested for serial correlation using the Durbin–Watson test and found no evidence of serial correlation at the 95% confidence level in our regressions. In addition, the correlation between the prior and current organizational performance was not statistically significant. We suspect that this is largely due to the increasing investments in new assets for hospitals during the last decade, which is nearly double the growth rate in assets, accompanied by a declining trend in operating margins during the same time (Medicare Payment Advisory Commission, 2010). Although the relationship was positive (r = .07), it was not statistically significant.

Data Analyses

We employed moderated hierarchical regression as the primary statistical procedure. We developed one model to examine the primary, control, and independent variables and a second model to explore the moderating interaction effects of these variables together on decision making. We standardized all independent variables for the regression and mean centered the predictor variables prior to plotting the interaction effects. We analyzed the standard errors for the individual variables and the models overall, and all were sufficiently low. We present these in Table 2 with the models.

Results

Table 1 shows the descriptive statistics and the bivariate Pearson product–moment correlations for the variables in the study. Table 2 provides the results of the moderated regression analysis with two models. Model 1 presents the control and independent variables; Model 2 presents these plus the interaction effects. We will describe the results of the analyses as they relate to our hypothesis.

Our research question revolves around the role of optimism as a moderating variable on the rationality–performance relationship. Therefore, our principal concern was not the main effects of these variables but the interaction effects, although we will discuss both. However, as

Table 2

Moderated hierarchical regression analysis

Variable	Model 1	Model 2
Individual control variables		
Executive age	0.00	0.00
Gender	0.02	0.41
Independent variables		
Prior performance	0.01	0.05
Organizational size	0.00	0.00
Optimism	0.32**	1.46**
Rational DM	0.14*	0.33
Environmental turbulence	−0.16*	−0.64*
Two-way interactions		
Optimism × Rational DM		−0.49*
Optimism × Environment		0.13
Rational DM × Environment		0.34
F	3.62**	3.77**
R^2	.14	.21
Adjusted R^2	.10	.15
SE	0.94	3.43

Note. Standardized coefficients, n = 168. DM = decision making.

*p < .05.
**p < .01.

Table 1

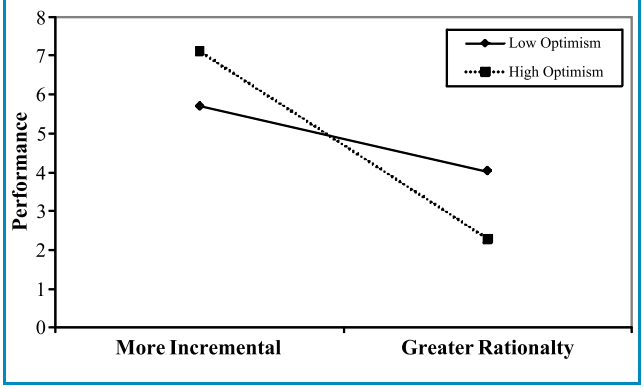
Descriptive statistics and correlations (n = 168)

Variable	M	SD	1	2	3	4	5	6
1. Executive age	56.93	9.82						
2. Prior performance	5.31	5.35	−.03					
3. Organization size	238.42	97.05	−.01	−.08				
4. Optimism	3.10	1.18	−.03	.11	.02			
5. Environmental turbulence	3.14	1.44	−.15*	.12	.12	.02		
6. Rationality	3.13	1.38	−.07	−.15*	−.04	.09	.70	
7. Performance	4.95	4.06	.03	.07	−.05	.30**	−.15*	.08

*p < .05.
**p < .01.

Figure 1

Interaction effects of optimism on performance



seen in the correlation matrix, optimism alone did have a direct effect on both comprehensiveness and organizational performance. Optimism was positively related to performance but negatively related to rationality (i.e., more optimism was associated with greater incremental SDM processes). As shown in Model 1, all three of the primary variables were independently associated with organizational performance. Optimism specifically had the highest coefficient ($\beta = .32$, $p < .01$) with ROA in that model.

Our hypothesis proposes that optimism moderates the relationship between SDM rationality and organizational performance, and specifically, where optimism is high, the relationship will be stronger negatively. As shown in Model 2 of the hierarchical regression results, the interaction with performance is negative and significant ($\beta = -.49$, $p < .05$). To better understand the nature of this relationship, we mean centered the predictor variables and plotted the interaction effect. This graph is shown in Figure 1. The slope of the line for the high optimism is much steeper negatively than those with lower levels of optimism. It suggests that the relationship between rationality and performance is stronger (although negative) for those with high (vs. low) levels of optimism. Therefore, our findings support our hypothesis.

Discussion

Strategic decision process research has somewhat stagnated on the strategy–structure–environment and has been slow to incorporate cognitive constructs of the chief decision makers in the organization. Most significant process-oriented research has focused on the extent to which decision processes exhibit comprehensiveness, which refers to a thorough, exhaustive search for alternatives and a systematic construction of goals (Huff & Reger, 1987). Most of the research analyzing rationality and performance have modeled the influence of various environmental dimensions such as munificence and dynamism. In this research, we build on this rationality theory by incorporating a cognitive concept of dispositional optimism and reexamining the rationality–performance relationship.

Disposition, and optimism specifically, has been generally ignored in the bulk of strategy research, although limited behavioral decision research has attempted to explore other areas of cognition and behavior. Optimism, however, has recently been a key construct in exploring performance differentials in entrepreneurial environments (Hmieleski & Baron, 2009). This research is the first to combine all three aspects—process, performance, and optimism. Our main ideas are that executives exhibit varying levels of inherent optimism and that this disposition influences decision makers' perceptions because of cognitive limitations or simply because of their institutional roles and rule-following behaviors (March, 1994). Therefore, we expected to find that optimism is associated with higher levels of incrementalism (i.e., less comprehensively rational processes) and that, individually, these will moderate the relationship with organizational performance. We found support that optimism is a strong moderator of the relationship.

Obviously, SDM represents one of the most complex organizational processes in hospitals and health care organizations. Here, we introduced an individual cognitive component, which, when viewed in terms of interaction with rationality, had a negative association with organizational performance. Specifically, when an organization reported greater use of comprehensively rational processes, in concert with highly optimistic executives, the overall performance tended to be lower than the alternative (more incremental processes with less optimistic executives). This offers a completely different perspective on the rationality–performance relationship than what has been previously assessed by simply measuring external environment. This suggests a moderating effect of optimism on the rationality–performance relationship.

Although research has long suggested that managers rarely act consistently rational because of cognitive capacity (e.g., March, 1994), there has been very little mainstream integration of cognitive and behavior constructs in strategy research. The results of this study suggest that dispositional traits, such as optimism, could offer more explanation for the lack of rationality in SDM than previously thought.

The results of our analyses supported our primary hypothesis that optimism moderates the rationality–performance relationship. Individuals who exhibit higher levels of optimism are more likely to be engaged in more incremental SDM. Optimism was also associated with higher levels of organizational performance. Of course, an alternative explanation might be that executives in more successful companies generally have more reason to be optimistic. This certainly makes sense, but technically, that type of

optimism is more *situational* than *dispositional*, and the instrument we used measured inherent optimism that is not the result of the performance in the most recent periods. The perception of environmental turbulence, however, is negatively related to performance.

We subsequently used two-way interaction analyses to further explore the rationality–optimism–performance relationships. What we discovered was that the relationship between rational decision making and performance is most negative where optimism is high and is much less pronounced when optimism is low.

These results imply that optimism does somehow influence both performance and the rationality–performance relationship. In each of our regression models, we find that, individually and as a moderating interaction variable, optimism is significant. Of course, these results have to be interpreted with some caution. Obviously, optimism does not cause better performance directly, but it could stimulate executives to look more comprehensively at opportunities or set more aggressive goals. Of course, because we are lacking long-term data, we cannot make any causal inferences about the direction of these relationships, even though we controlled for previous performance (i.e., that good performance does not lead executives to be more optimistic). We would suggest that future research in this area identify other dispositional tendencies of chief executives to better understand other dimensions that have an impact on SDM.

From a theoretical perspective, these results are intriguing because they offer an initial indication of the potential effect of optimism in strategic process. Future research should examine behavior and cognition from other perspectives to understand their influence on decision-making processes and to more richly understand SDM. Cognitive theories emphasizing learning and adaptation might be useful for future research to understand if executives can alter or adapt their inherent dispositions that might impact how SDM processes are employed in organizations. Optimism, typically seen as a "bias" that distorts decision processes and short circuits the search for alternatives and evaluation process, was found to have a negative influence on performance, but only when acting in concert with other variables. Our study finds, however, that although greater optimism is associated with a propensity to rely on more incremental processes, the interaction between optimism and organizational performance is still negative but less dramatic. This relationship is interesting and deserves greater focus.

There are limitations to this study of course. First, although the health care industry is quite dynamic and complex, it is not representative of all industries. Assessing multiple industries would provide more generalizability beyond this study. Specific to health care, there are many strategic performance measures that hospitals must concentrate on; we chose only one measure of organization economic performance. Future studies should incorporate a measure of quality of care, such as patient safety or adherence to Centers for Medicare and Medicaid Services core measures as well.

We also relied on inputs from only one respondent in an organization and at only one point in time. Our focus here is limited to SDM, and as a proxy for this, we surveyed only the CEOs. Obviously, strategic decisions are not the result of just one individual (but a pattern of decisions from multiple people and levels of the organization), and this could be an extension for further research. Future studies should try to explore results with the top management team at multiple longitudinal points in time.

In conclusion, this study will hopefully encourage other researchers to move beyond the current research generically focused on analytical positioning (i.e., strategy, structure, and environment). Although cognitive processes have long been known to influence decision making, very little empirical evidence has been collected to explore the relationship between these cognitive and behavioral constructs in decision making. Our research suggests that optimism moderates the relationship between organization performance and decision process. The incorporation of a multidimensional cognitive approach could help to provide much more rich insights into how SDM really occurs in organizations and to produce better estimates of their impact on decision outcomes and organizational performance.

Practice Implications

There are several ramifications of these findings for practitioners. First, hospital executives should be aware of their inherent disposition or traits. Although this sounds obvious, many individuals are not mindful that their disposition could influence organizational decision processes and not just personal ones. If an individual is generally pessimistic in his or her outlook, this trait is a result of both genetic and learned attributes that develop over time. However, decision makers at the strategic level make significant decisions that affect employees, patients, and other stakeholders. Understanding that individuals' disposition could (positively or negatively) influence how they approach a problem, confront an issue, or choose among alternatives even in high-stakes strategic processes is vital for senior leadership. Executives' ability to ascertain that their own disposition could be influencing the nature of the organization's SDM requires maturity and self-reflection, but it ultimately could result in more effective organizational processes and performance.

These findings also suggest greater opportunities for organizational development practices that assess managerial talent during the recruitment phases for CEOs and senior leadership. Behavioral profiles and tests that include cognition and disposition might be beneficial to align the

executive's disposition to the organizational culture and vision. Various phases of an organization's life cycle might necessitate different traits and disposition from their senior leadership, and so matching optimism traits for a particular organization is appropriate.

These results also suggest a need for broader participation in SDM. If one person selects alternatives partially because of his or her inherent disposition, there would appear to be a need for offsetting or balancing this through a more comprehensive and inclusive strategic planning and management process. A well-functioning top management team would be beneficial to balance the individual levels of disposition that might influence decision process and outcomes. Including other stakeholders in strategy processes would also be advantageous.

Finally, there are ramifications for hospital board of directors. Because one of the board's primary duties is selecting and assessing the CEO, the dispositional traits of the CEO should be examined for alignment with the organization's, and the boards,' goals and vision on a regular basis. Director-level participation in SDM processes should also be encouraged to help control for the effects on decision outcomes that individual optimism (and potentially other dispositional traits) has on the process. Active and fully engaged board members must monitor the CEO's pattern of decisions and attempt to recognize when hubris or personality might influence their choices. In this complex and ever-turbulent health care arena, better understanding about the nature of the SDM process will help hospitals survive and thrive.

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