Strategic Change Implementation and Performance Loss in the Front Lines

Adopting a frontline employee (FLE) perspective, this study models a performance loss process during an organization's strategic change implementation. The process is activated by changes in unit management's emphases on cost containment and revenue-generating strategies and is governed by FLE detachment. The authors also examine an intervention mechanism for mitigating performance loss by including the influence of FLE participation in change decisions. The model is tested with data from five service organizations that employ 843 FLEs. The results indicate that (1) FLE detachment is effective in separating out the negative and positive effects of change, (2) FLE change perceptions are sensitive to the focus of strategic change (cost containment versus revenue enhancement strategies), and (3) FLE participation significantly enhances the positive effects of change and mitigates performance loss.

hange is fundamental to a modern business organization as a means to keep up with evolving market demands and to stay competitive (Day 1994). However, implementing strategic change is a double-edged sword because it simultaneously generates expected performance gain and unexpected performance loss (Brown 2005; Kennedy, Goolsby, and Arnould 2003; Simester et al. 2000). When unexpected performance loss dominates or drains away expected performance gain, change becomes ineffective. Moreover, the coexistence of performance gain and loss is likely to yield confounded evidence for strategic change outcomes. Organizations may fail to maximize the performance benefits of strategic change because they either do not detect the presence of performance loss or fail to diagnose and mitigate the loss. It is not surprising that extant research provides evidence of equivocal effects of change that are either positive (e.g., Siguaw, Brown, and Widing 1994) or negative (e.g., Harris and Ogbonna 2000). To our knowledge, no study has offered a theoretical or empirical approach for identifying and isolating performance loss during strategic change implementation.

To realize the performance benefits of strategic change, an organization must detect and diagnose performance loss in change implementation. This requires identifying a medi-

Jun Ye is Assistant Professor of Marketing, Lundquist College of Business, University of Oregon (e-mail: junye@uoregon.edu). Detelina Marinova is Assistant Professor of Marketing, University of Missouri at Columbia (e-mail: marinovad@missouri.edu). Jagdip Singh is Professor of Marketing, Marketing and Policy Studies Department, Weatherhead School of Management, Case Western Reserve University (e-mail: jxs16@po.cwru.edu). This article is based on data collected as part of National Science Foundation grant (No. SES-0080567) awarded to Professors Jagdip Singh and Gil Preuss, with Sister Nancy Linenkugel. The basic work on this article was completed as part of the first-paper requirement of Jun Ye's doctoral studies at Case Western Reserve University.

To read and contribute to reader and author dialogue on JM, visit http://www.marketingpower.com/jmblog. ating process that is activated by change implementation and results only in performance decrements, which we refer to here as the "performance loss mechanism." This definition has two implications. First, this mediating mechanism acts as a pathway for performance loss and allows for the partialing out of performance gain as the direct pathway from change implementation to performance. Second, it emphasizes and captures a useful distinction between performance loss as an outcome (how much is the loss?) and performance loss as a mechanism (why did loss occur?). Making such a distinction allows for a diagnosis of the loss. To our knowledge, prior research has neither explicitly examined performance loss pathways nor conceptualized performance loss as an outcome–process duality.

Diagnosing performance loss allows for consideration of managerial interventions that suppress performance losses while maintaining performance gains (Kennedy, Goolsby, and Arnould 2003; Simester et al. 2000). Such interventions involve moderators that can curtail or even shut down performance loss mechanisms. Moderating interventions are especially relevant for service organizations. A recent meta-analysis indicates that the positive relationship between a market orientation and performance outcomes is weaker in service organizations than in manufacturing firms (.26 versus .37; see Kirca, Jayachandran, and Bearden 2005). A reason for this weak relationship is the challenge of executing change at customer interfaces (Brown 2005). These interfaces involve frontline employees (FLEs) as the last link to the customer in the chain of top-down change implementation (Harris and Ogbonna 2000). Previous studies have suggested that even well-intentioned change strategies can be subverted by the detachment and defiance of FLEs (Kennedy, Goolsby, and Arnould 2003). We reason that unless FLEs respond positively to change efforts, performance loss will be unavoidable. To date, no research has systematically studied the change implementation process from an FLE perspective.

This study examines the performance consequences of change implementation by (1) modeling the mechanism of

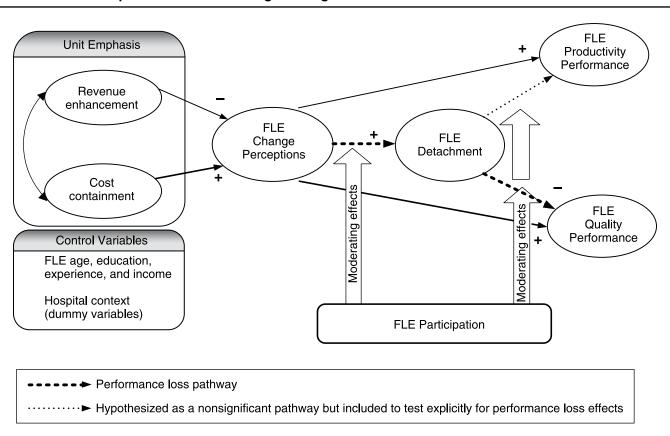
performance loss in strategic change implementation and (2) examining interventions for managing the resultant performance loss. Four aspects of the study are noteworthy. First, we draw from alienation theory and posit a mediation mechanism governed by FLE detachment to isolate performance loss from performance gain in change implementation. The mediating mechanism captures performance loss that results in negative effects on quality performance. Second, we conceptualize the moderating role of FLEperceived participation in stemming performance loss. Drawing on goal-setting theory and the coping literature, we propose that FLE participation moderates the mediating effect of detachment by diminishing the positive effect of change on detachment and suppressing the negative effect of detachment on quality performance. Third, we situate the study within FLE cognitions and responses to shifts in service organizations' strategic emphasis (cost containment versus revenue enhancement). Fourth, we empirically test the posited model using a sample of 843 FLEs from five service (health care) organizations. Overall, this study contributes to the literature by offering new insights into managing strategic change on the front lines of organizations.

Theory and Model

The conceptual framework has three distinct but interconnected components (see Figure 1). The first component,

change perceptions, is conceptualized as an FLE's assessment of the degree to which his or her job expectations, work practices, and/or work unit lack stability and consistency over time (Armenakis and Bedeian 1999; Siguaw, Brown, and Widing 1994). We further propose a work unit's strategic emphasis on cost and revenue as potential antecedents of FLE change perceptions (Rust, Moorman, and Dickson 2002). The second component involves mechanisms that link FLE change perceptions and performance outcomes. This component is represented by direct, positive pathways from FLE change perception to FLE performance outcome (shown as bold arrows) and negative pathways that are mediated by FLE detachment (shown as dashed arrows). We include productivity and quality as distinct dimensions of FLE performance outcomes. Productivity refers to FLE performance in increasing the outputinput ratio of frontline work through effective cost control and enhanced efficiency, whereas quality is related to FLE performance in enhancing the quality of output for frontline work by attending to customer needs and concerns in service encounters (Singh 2000). The third component involves mitigating performance loss through FLEperceived participation. We posit that FLE participation curbs performance loss in quality performance by reducing FLE detachment due to change and suppressing the negative influence of FLE detachment on quality performance.

FIGURE 1
The Proposed Model for Strategic Change and Performance Loss in the Front Lines



Antecedents of FLE Change Perceptions

We consider cost and revenue emphases as possible strategies that an organization adopts to respond to its evolving markets, though the proposed model is flexible and could encompass other strategies. Following the services literature, we posit that FLEs in face-to-face service settings perceive an increasing emphasis on revenue enhancement as sustaining stability and consistency. As Rust, Moorman, and Dickson (2002) demonstrate, organizations that achieve high levels of quality performance are characterized by strategic emphasis on revenue generation. In turn, FLEs, who are in the front lines of executing service strategy, have traditionally embraced revenue generation goals and service quality values. Theoretical support for this assertion comes from the literature on schemas as embedded belief structures (Fiske and Taylor 1984) and the assimilation-contrast theory (Martin, Seta, and Crelia 1990; Meyers-Levy and Sternthal 1993). The dominant schema and experience of FLEs in face-to-face service settings is based on providing high-quality customer service (e.g., Donavan, Brown, and Mowen 2004; Schneider and Bowen 1984). Because a revenue-emphasis strategy focuses on customer service, it is consistent with FLEs' preexisting cognitive schemas and is unlikely to be associated with a perception of disruptive change. That is, revenue-dominant strategies assimilate into FLEs' schemas of customer service and promote stability.

However, survival in the presence of intense competition and technology advances has forced a shift toward cost containment or a more balanced quality-productivity approach to service delivery. In view of the quality-productivity literature, which indicates that FLEs experience trade-offs between quality and productivity goals (Oliva and Sterman 2001; Singh 2000; Weinberg 2003), we expect that an enhanced cost emphasis will result in increased change perceptions for FLEs. That is, a dominant cost-emphasis strategy presents information and demands that run counter to the cognitive schema of FLEs in face-to-face settings, thus posing a contrast effect. As a result, a dominant cost emphasis is hypothesized to be change promoting and disruptive. Specifically,

H₁: The more a unit management is believed to emphasize cost containment relative to revenue enhancement strategies, the greater are FLE perceptions of change.

Change Perceptions and Performance Loss Mechanism: The Mediating Role of Detachment

As we noted previously, the extant literature is marked by inconsistency regarding the consequences of change implementation, reporting effects on performance ranging from positive (e.g., Armenakis and Bedeian 1999; Siguaw, Brown, and Widing 1994) to negative (e.g., Gilmore, Shea, and Useem 1997; Harris and Ogbonna 2000). We posit a performance loss process governed by FLE detachment as a key mediator to isolate the negative effects of change implementation. In turn, the direct effects of change represent its performance gains or positive influence on performance. The use of a mediating mechanism to separate negative and positive effects has parallels in the stress literature. Stres-

sors (e.g., change) can have both positive ("eustress") and negative ("distress") effects on performance. To isolate these effects, researchers have included burnout as a key mediator in the stressor-performance link to demonstrate that the distress effect is modeled by the mediating mechanism whereas the eustress effect is captured by the direct effect of stressors on performance in this mediating model (Singh, Goolsby, and Rhoads 1994). Likewise, drawing from the work-alienation literature, we conceptualize detachment as a specific psychological condition in which people tend to cope with stress (e.g., change at work) by depersonalizing their work environment, often through a cynical, callous, and uncaring attitude toward others (Maslach and Jackson 1981). We argue that the mediated effect through FLE detachment captures performance loss, which involves two pathways: (1) change perceptions (causal factor) \rightarrow FLE detachment (intervening) and (2) FLE detachment \rightarrow performance (outcome). We discuss these pathways next.

On perceiving change, individual FLEs must make sense of the change, evaluate the implications of the change for their work routines and demands, and figure out possible coping strategies. Studies on the consequences of strategic change provide support for its potential to generate FLE detachment (Maslach and Jackson 1981; Piderit 2000; Schabracq and Cooper 1998). When change initiatives disrupt job expectations, work practices, and/or unit management, FLEs are likely to experience higher stress because of uncertainty about the expectations for and demands of their role performance (Nadler 1982). The more dramatic the change, the less useful are the situated roles, the higher is the uncertainty, and the greater is the experienced stress (Isabella 1990; Nadler 1982). The feeling of uncertainty and stress inherent in revising situated roles is likely to result in greater detachment (Maslach and Jackson 1981; Schabracq and Cooper 1998). In addition, employees' detachment may originate from their coping with change. Frontline employees may resist changes proposed by management because they disagree about the necessity for change or its direction. As Piderit (2000) reports, unfavorable responses to change might be motivated by the best of intentions. When change initiatives fail to account for employees' viewpoints, FLEs are likely to feel neglected, withdraw cognitively, and become unwilling to engage in work.

Moreover, FLE detachment is associated with performance decrements (McHugh 1997). Several studies have used the conservation-of-resources theory (Hobfoll and Freedy 1993) to identify motivational arguments to support this association. Specifically, detachment is indicative of work conditions that overwhelm the coping capacities of the individual, fostering avoidance attitudes and dispositions toward the job and the organization (Bettencourt and Brown 2003; Singh, Goolsby, and Rhoads 1994). The avoidance attitudes and dispositions are characteristic of motivational disengagement from work (Kahn 1990). Performing work activities that require overcoming motivational impediments of disengagement is effortful and draws heavily on individual resources (Hobfoll and Freedy 1993).

Because people are prone to conserving rather than expending resources, FLE detachment is posited to negatively influence performance outcomes. In a meta-analysis, Lee and Ashforth (1996) find consistent support for the negative association of detachment and performance. Likewise, Fogarty and colleagues (2000) provide support for this assertion in a sample of accounting FLEs. However, few previous studies have distinguished between productivity and quality dimensions of performance. Because productivity is more easily measured and monitored than performance quality, Singh (2000) argues and provides evidence that stressed frontline employees attempt to maintain their productivity, though their performance quality exhibits significant decrements. In other words, FLEs appear to deploy their coping resources to maintain their productivity levels despite experienced detachment. Thus, we posit that detachment produces loss effects for FLE quality but not productivity performance.

H₂: FLE detachment mediates the negative effects of change perceptions on quality performance such that (a) FLE change perceptions are positively related to feelings of detachment and (b) FLE detachment is negatively related to quality performance.

Direct Effects of Change Perceptions

We posit that change perceptions are associated with positive, direct effects on productivity and quality performance after we account for the performance loss pathway. Strategic change is usually triggered in response to a firm's dissatisfaction with current processes and/or outcomes (Dunphy 1996). As such, the underlying motivation for implementing change processes is to positively enhance FLEs' productivity and quality performance. To date, most studies have failed to find unequivocal support for positive effects because these effects are confounded with potential negative effects of change, resulting in overall weak or null effects. As we discussed previously, the explicit modeling of a performance loss pathway alleviates these confounding effects of change. Thus, we posit that the intended positive effects of strategic change emerge after accounting for performance loss through the mediating role of detachment.

H₃: FLE perceptions of change are positively related to (a) productivity performance and (b) quality performance.

Managing Performance Loss: The Moderating Role of FLE Participation

The success of change efforts depends not only on their content and focus but also on organizational interventions in strategic change implementation (Armenakis and Bedeian 1999; Hendry 1996). A particularly relevant organizational intervention is employee participation (Armenakis, Harris, and Mossholder 1993; Pasmore and Fagans 1992). Drawing on the high-involvement work practices literature (Hackman and Oldham 1980), we define FLE participation as employees' perceptions of their collective involvement in developing and implementing change initiatives and decisions that influence their work units. Note that in accordance with the notion of psychological climate,

FLE participation is a subjective assessment of employees and not a work characteristic designed by managers (thus, it is perceived). It is operationally relevant at the work-unit level and is based on how employees as collectives rather than as individuals engage in change decision making and implementation.

We posit that FLE participation moderates the relationship of change perceptions to detachment and the relationship of detachment to performance through distinct mechanisms. Specifically, the change–detachment moderation is based on the logic that FLE participation influences how employees make sense of change in their work environment and how this sense making shapes their goal setting and commitment (Erez and Arad 1986; Locke and Latham 2002). The moderation of the detachment–performance relationship is based on the coping literature and how FLE participation provides employees with coping resources to mitigate the negative effect of detachment (Heaney, Price, and Rafferty 1995; Singh 2000; Spector 1986).

Participation moderates the change perceptionsdetachment relationship. We reason that FLE participation moderates the association between change perceptions and detachment by activating three goal-related processes: social, motivational, and cognitive mechanisms (Erez and Arad 1986). First, a social mechanism is operative because participation enhances FLE involvement in goal setting and decision making (Bennet 1955), facilitates a sense of procedural justice among FLEs (Renn 1998), and overcomes FLEs' resistance to change, thus suppressing FLE detachment. Second, a motivational mechanism is supported because FLE participation affords a sense of control over the change process, which increases employees' goal acceptance and commitment and thus supports positive attitudes toward the job and organization (Erez, Earley, and Hulin 1985). Third, a cognitive mechanism is activated because FLE participation allows for expression of individual opinions, sharing of information, responding to questions, and engagement in a discourse. As a result, FLE participation is likely to improve employees' understanding of a change and its implications for individual employees (Locke and Latham 2002). Consequently, FLEs are less likely to experience a sense of isolation, unfairness, and ambiguity and are more likely to accept the change and show commitment to the change efforts.

 H_{4a} : The greater the FLE participation, the less positive is the influence of change perceptions on detachment.

Participation moderates the detachment—quality performance relationship. We posit that FLE participation evokes a coping mechanism that buffers the individual employee from the negative effect of detachment on quality performance. When dealing with the stress fostered by change, FLEs need coping resources to help them self-regulate and arrest the dysfunctional effects of stress on performance. The participation in change decisions is one such coping resource. Research has demonstrated that employee participation in decision making increases perceived control and efficacy cognitions, which in turn enhance employee ability and motivation to cope with stress (Heaney, Price, and Raf-

ferty 1995; Lazarus and Folkman 1984; Spector 1986). For example, Singh (2000) examines a "buffering" mechanism for the effect of perceived control on FLE job outcomes. In this mechanism, both the presence and the functionality of perceived control are derived from participation and act to weaken the link between perceived stress and job performance. Likewise, we expect that coping resources enabled by FLE participation are likely to activate a buffering effect such that participation suppresses the negative impact of detachment on quality performance.

H_{4b}: The greater the FLE participation, the less negative is the impact of detachment on quality performance.

Method

Research Setting

We selected the nonprofit health care sector as the setting for our study. Similar to other service industries, the health care industry is facing turbulent institutional, competitive, and market environments that require hospital units to adapt and alter strategic practices. Hospital units are forced to maintain a balance between delivering high-quality care and running an efficient operation to achieve modest profits under highly regulated and constrained payment structures (Fennell and Alexander 1993; O'Connor and Shewchuk 1995). In response to these market trends, hospitals have implemented many change strategies that enable individual units to focus on cost containment and control (Kumar, Subramanian, and Strandholm 2002). At the same time, advances in medical technology, treatments, and care practices require that hospitals continually invest in individual units that enhance the quality of patient care in terms of both objective (e.g., Joint Commission on Accreditation of Healthcare Organizations) and subjective (e.g., patient satisfaction) criteria. Together, the preceding cost containment and revenue-enhancing responses trigger changes that highlight the underlying tension between the cost and revenue motivations (Kumar, Subramanian, and Strandholm 2002). Thus, hospitals provided a relevant context for our study. Five not-for-profit hospitals in the northeastern United States were contacted for participation.

Sampling

Overall, we selected 3626 hospital FLEs with direct patient interactions for this study. Each FLE was mailed a question-naire packet that included (1) a letter describing the purpose of the study, (2) a seven-page questionnaire, (3) a return postage-paid envelope, and (4) a lottery card incentive for one of three cash prizes. We promised all FLEs confidentiality to facilitate candid responses and followed up with a second mailing of the survey to all unit employees.

In all, we received 1649 responses; response rates ranged from 41% in Hospital 4 to 57% in Hospital 1 (average = 45%). Of these responses, 251 were not usable because (1) data were missing, (2) data were of poor quality (e.g., lack of variation), or (3) the returned survey had never been delivered. From the remaining 1398 employee

responses, we chose responses by registered nurses and licensed practical nurses who actually delivered health care service to and had direct contact with patients as our final study sample. We ruled out employees with clerical, technical, or backroom positions. Such employees have limited contact with patients and rarely provide direct health care service to them. Therefore, our usable sample size was 843.

Table 1 summarizes the sample profile. Approximately 95% of these employees were female. Because nursing has traditionally been female dominated, this is not unusual. More than half of the respondents had a college degree, most were less than 46 years of age (65%), and approximately 46% had more than 16 years of hospital experience. Nearly 60% were full-time employees who worked on the day shift, and the median salary was between \$30,000 and \$49,999. To examine sample homogeneity over the five hospitals, we examined distributional variability in terms of FLEs' age, education, income, and tenure. In terms of variability in mean values, we found significant differences for age (F = 3.03, p < .05), education (F = 12.9, p < .01), and income (F = 19.93, p < .01) but not for tenure (F = 1.92, p >.05). In terms of variability in variances, we found significant differences using a Levene test for equality of variances for age (4.89, p < .01), education (25.94, p < .01), income (18.06, p < .01), and tenure (5.74, p < .01). To account for sample heterogeneity, rule out alternative explanations, and mitigate omitted variable problems, we included individual FLE (e.g., age, education, experience, income) and contextual (e.g., hospital dummies) factors as control variables in our analysis.

Measurements

As much as possible, we relied on construct measures available in the literature that could be adapted for the study's context. The Appendix provides the specific items we used.

Unit cost and revenue emphases. We developed the scales for unit cost and revenue emphases following a procedure that Spector (1992) outlines, which involve (1) construct definition based on the literature, (2) construct interpretation and item generation based on the literature, (3) item refinement using think-aloud exercises and pretests, and (4) scale and psychometric analysis based on largescale quantitative work. After the think-aloud exercise and pretest based on interviews with FLEs in different units at four of the five hospital locations and chief executive officers, unit managers, and administrators at all hospital locations, we developed five items each to measure different organizational practices that reflected unit cost and revenue emphases. To provide a reasonable bandwidth for these constructs, we selected the items to represent somewhat different practices with a common theme related to the focal strategic emphasis. We subsequently excluded two revenue items and one cost item because of low factor loadings. We used a five-point "strongly disagree/strongly agree" Likert scale for all items.

Mediators and moderators. We measured change perceptions as the degree of change perceived by FLEs in the following six aspects of unit functioning: (1) unit practices, (2) unit leadership, (3) assigned tasks, (4) general unit

TABLE 1
Demographic Profile of FLEs Across the Five Hospital Settings

	H1 (%)	H2 (%)	H3 (%)	H4 (%)	H5 (%)	All (%)
Age						
≤35	35	34	26	18	34	32
36–45	37	30	35	32	28	33
46–55	25	21	31	37	30	28
≥56	3	15	8	13	8	7
Shift						
Day	61	56	62	50	58	59
Evening	14	23	9	25	19	16
Night	25	21	29	25	23	25
Gender						
Male	7	0	5	3	5	5
Female	93	100	95	97	95	95
Total Hospital Experience						
<u>. </u>	23	31	20	16	21	22
6–15	37	18	26	35	35	32
≥16	40	51	54	49	44	46
Employed in the Present Hospital						
≤5	35	43	32	35	35	35
6–15	41	16	29	24	28	32
≥16	24	41	39	41	37	33
Income						
<\$10,000	2	9	8	3	5	5
\$10,000-\$29,999	11	42	28	16	22	21
\$30,000-\$49,999	72	49	61	81	58	64
≥\$50,000	15	0	3	0	15	10
Education						
High school, tech certificate	2	26	3	8	7	7
Associate degree	30	21	49	25	51	39
College, graduate school	68	53	48	67	42	54
Job Title						
Registered nurse	95	70	96	100	85	90
Licensed practical nurse	5	30	4	0	15	10

expectations, (5) criteria for performance evaluation and promotion, and (6) unit organization. We used a five-point "strongly disagree/strongly agree" Likert scale. We assessed detachment with a four-item scale adapted from the work of Maslach and Jackson (1981). Because detachment captures avoidance dispositions toward some objects, the items were keyed to relevant objects in the FLEs' work environment, including patients, colleagues, unit management, and top management. We believed that explicitly including these relevant objects would provide a more valid representation of the detachment construct. We measured perceived participation with four items adapted from the work of Pugh and Hickson (1976). We used a five-point "never/very frequently" Likert scale to measure the detachment and participation items. Because of poor factor loadings, we deleted one item each from the detachment and participation scales.

Performance outcomes. Three approaches have been used for collecting performance data: (1) supervisor, (2)

customer, and (3) self-report ratings. Of these approaches, customer ratings are considered the most appropriate in frontline settings with significant customer contact. However, current medical privacy laws do not permit hospitals to release patient information to third parties, which makes it nearly impossible to collect primary data from patients and match them with individual FLEs. In a series of studies, Churchill and Peter (1984) and Schneider and colleagues (1996) demonstrate that though supervisor ratings correlate poorly, self-report ratings of frontline service workers correlate well with customer ratings of service delivered. Thus, we used self-report measures of different performance outcomes. Realizing the potential for common method bias, we employed procedures to mitigate its effects (to be discussed). We assessed two performance outcomes—the productivity (three items) and quality performance (four items) of FLEs-by adapting scales used in prior research (Singh 2000). For each dimension, we used a seven-point "lowest 20%/top 5%" Likert scale.

Method of Analysis

Measurement model analysis. We assessed the psychometric properties of study constructs using a confirmatory factor analysis (CFA) of the items corresponding to all the constructs. We secured the necessary psychometric evidence of convergent and discriminant validity by using structural equations modeling (SEM) approaches with EQS software (MacCallum and Austin 2000).

Structural model analysis. After the measurement analysis, we tested the hypothesized model by conducting a multigroup analysis based on the level of FLE-perceived participation (Cohen et al. 2003). Although this multigroup approach loses information by categorizing a continuous variable, the alternative approach—using interaction terms with the continuous measure of participation—assumes homogeneity of moderator effects through the range of observed participation scores. Because of our diverse sample in multiple hospitals, it was likely that the moderating effect of participation varied depending on its level. As such, we divided the overall sample into three subsamples that corresponded to respondents' low, medium, and high levels of participation. We then conducted a multigroup analysis with the high- and low-participation groups by simultaneously estimating the following equations:

$$\begin{split} +\beta_4 D_2 +\beta_5 D_3 +\beta_6 D_4 +\beta_7 AGE +\beta_8 EDU \\ +\beta_9 EXP +\beta_{10} INC +\beta_{11} CMF +\epsilon, \end{split}$$
 (2) DETACH = $\alpha_0 +\alpha_1 UCOST +\alpha_2 UREVE \\ +\alpha_3 CHANGE +\alpha_4 D_1 +\alpha_5 D_2 +\alpha_6 D_3 \\ +\alpha_7 D_4 +\alpha_8 AGE +\alpha_9 EDU +\alpha_{10} EXP \\ +\alpha_{11} INC +\alpha_{12} CMF +\zeta, \end{split}$ (3) QUALITY = $\theta_0 +\theta_1 CHANGE +\theta_2 DETACH +\theta_3 D_1 \\ +\theta_4 D_2 +\theta_5 D_3 +\theta_6 D_4 +\theta_7 AGE +\theta_8 EDU \\ +\theta_9 EXP +\theta_{10} INC +\theta_{11} CMF +\varsigma, \text{ and} \end{split}$

CHANGE = $\beta_0 + \beta_1 UCOST + \beta_2 UREVE + \beta_3 D_1$

(4)
$$\begin{split} PRODTY &= \eta_0 + \eta_1 CHANGE + \eta_2 DETACH + \eta_3 D_1 \\ &+ \eta_4 D_2 + \eta_5 D_3 + \eta_6 D_4 + \eta_7 AGE + \eta_8 EDU \\ &+ \eta_9 EXP + \eta_{10} INC + \eta_{11} CMF + \mu, \end{split}$$

where CHANGE, DETACH, QUALTY, and PRODTY indicate the constructs of change perceptions, detachment, quality, and productivity, respectively. Likewise, UCOST and UREVE represent unit cost and revenue emphasis. Several control variables were also specified, including D1–D4 as hospital dummies and AGE, EDU (education), EXP (hospital experience), INC (annual income), and CMF (common method factor; we discuss this in greater detail subsequently).

Key analytical issues. In estimating and testing hypothesized coefficients, we specifically addressed issues pertaining to (1) the differential impacts of unit revenue and cost strategic emphases, (2) common method bias, (3) the mod-

eling of latent means, and (4) tests for moderated mediation. In terms of the first issue, our hypotheses involve testing the degree to which change strategies are dominated by an emphasis on cost relative to revenue. Although difference scores are often used to test such differential effects, this procedure is problematic (Peter, Churchill, and Brown 1993). We used an alternative approach based on the work of Edwards (1995) in which we initially constrained the coefficients for the corresponding cost and revenue emphasis to be equal in absolute value (to account for opposite sign) and checked the validity of the constraints by examining the Lagrange-multiplier (LM) test statistics associated with the imposed constraint. If the LM test produced significant results and nonoverlapping confidence intervals, we released the constraints and reestimated the model.

With regard to common method bias, because our study focuses on FLEs' self-reported data, we recognized the potential for such bias and took several steps to minimize its effects. First, in designing the survey instrument, we followed Feldman and Lynch's (1988) recommendations for countering "self-generated validity" by careful placement of survey questions, extensive pretesting with the subject population, and use of linguistic terms and phrases naturally used by the respondents. We ensured that the focal constructs did not appear in the hypothesized order (antecedents \rightarrow mediating variables \rightarrow consequences). Second, we modeled common method bias following procedures that Lindell and Whitney (2001) and Podsakoff and colleagues (2003) outline. Specifically, we explicitly estimated a common method factor in which each manifest item was hypothesized to have an equal loading on the method factor in addition to a loading on its theoretic construct. To provide a reasonable representation of this common method, we followed Lindell and Whitney's (2001) recommendation to include in the model other constructs that share the same common method because they were included in the survey but were not included in the proposed model. For this study, we included four additional constructs-institutional forces, market forces, customer rejection, and customer relationship effort—measured by three, three, and two items, respectively. Finally, we included the estimated common method factor in each of the structural equations estimated. Doing this partialed the variance due to the common method factor out of the estimated structural coefficients.

In terms of estimating the latent mean, we recognized that the posited hypotheses for moderation by participation involved a simultaneous multigroup analysis. As Ployhart and Oswald (2004) outline, accurate modeling of structural equations in multigroup analysis requires estimation of both intercepts (latent means) and coefficients (regression paths) because both are likely to differ across groups. For this purpose, we adapted Polyhart and Oswald's means and covariance structure (MACS) analysis procedures by simultaneously estimating (1) factor loadings that relate observed indicants to their hypothesized latent factors and a common method factor, (2) latent factor and indicator means, (3) constraints on hypothesized factor loadings across groups to test for measurement equivalence across groups, and (4) hypothesized relationships among latent factors after we

ensured measurement equivalence. In accordance with the MACS procedure, the latent mean in one of the groups (low participation) is set to zero to provide a baseline for comparison. Moreover, because they provide control over measurement error, common method bias, and measurement nonequivalence, the MACS procedures were appropriate for our moderation analysis. The statistics for fit and hypothesis testing were similar to those typically used for SEM models.

With regard to testing moderated mediation, the hypothesized model includes mediation effects of detachment that are moderated by participation. To test these moderated mediation hypotheses, we followed the approach that Muller, Judd, and Yzerbyt (2005) outline. This approach involves a series of tests that explicitly examine whether a proposed moderator significantly moderates the influence of (1) the antecedent on the intervening variable and (2) the intervening variable on the outcome. We tested the two paths involved in the mediation for significance using Shrout and Bolger's (2002) approach. This approach amends Baron and Kenny's (1986) conventional approach to account for distal antecedents within an SEM approach (cf. James, Mulaik, and Brett 2006). Shrout and Bolger's (2002) approach does not take the condition of a significant path from the antecedent to the outcome as a necessary first step for testing mediation hypothesis. Instead, support for the antecedent-intervening relationship and the intervening-outcome relationship is sufficient for mediation, especially when distal antecedents are considered, as in our study. For implementing the moderated mediation tests, we used a set of nested models; the null effect was the common baseline for comparison. We initially tested each path in the two moderator groups for null effects (by constraining to zero) using an LM test. If the hypotheses fail to be rejected in both groups, both paths are set equal, and there is no support for moderation. In contrast, if the hypotheses are differentially rejected (only in one group), the appropriate path is freely estimated, and moderation is supported. Finally, if the hypotheses are rejected in both groups, both paths are freely estimated and tested for equality. If the equality hypothesis is rejected in this analysis, moderation is supported.

Results

Measurement Model Analysis

Tables 2 and 3 summarize the construct intercorrelations and CFA results. Each indicator is specified to load on its hypothesized latent factor. In overall model fit, the hypothesized model yields a chi-square of 789.02 (d.f. = 278, p < .01). Because the chi-square statistic is known to be overly sensitive to sample size (MacCallum and Austin 2000), incremental (e.g., normed fit index [NFI], comparative fit index [CFI]) and absolute goodness-of-fit indicators (e.g., standardized root mean square residual [SRMR], root mean square error of approximation [RMSEA]) are given greater prominence in evaluating model fit. Here, the NFI and CFI are .92 and .95, respectively (i.e., greater than .90, the recommended value for reasonable fit). Likewise, the SRMR is .052, and the RMSEA is .047 (90% confidence interval:

.043–.051), indicating that the discrepancies are marginal and narrowly bounded. Finally, the nonnnormed fit index (NNFI)—an index that balances fit and parsimony—is .94, indicating that the hypothesized linkages among the measures and their respective constructs not only provide a good fit to the data but also yield a parsimonious model.

Tables 2 and 3 provide further support for discriminant and convergent validity of the study constructs. Note that, without exception, the estimated loadings are large and significant (t-values > 8, p < .01). However, the composite reliabilities, which we calculated using Fornell and Larcker's (1981) approach, for three constructs—unit cost emphasis, revenue emphasis, and detachment—do not exceed .70, the commonly used norm for acceptable psychometrics, though the estimated reliabilities invariably exceed .60. In keeping with this, the variance-extracted estimates for all but these three constructs exceed .50, the threshold value that Fornell and Larcker recommend. This suggests that three constructs have marginal reliabilities. As we noted previously, we selected measures for these constructs, recognizing the trade-offs between reliability and validity (Churchill and Peter 1984). As such, despite the marginal reliabilities for some constructs, all study constructs provide evidence of acceptable discriminant validity without any exceptions. For example, the intercorrelations among the composites in Table 2 reveal that the highest correlation involves participation and a unit revenue emphasis (r = .38), indicating that no two constructs share more than 16% of their variance. Moreover, the correlation between the composites for unit cost and revenue emphasis is .34 (<12% shared variance), dispelling any concern that these constructs may lack discriminant validity. Recall that we noted that cost and revenue emphases may represent conceptually contrasting sources of FLE change perceptions. Table 3, which is based on correlations corrected for measurement error, provides further support for the discriminant validity of the study constructs. Without exception, variance-extracted estimates for each construct exceed its average of variance shared with any other study construct. Even when the more conservative criterion of maximum variance shared between any two constructs is used, the condition of variance extracted exceeding variance shared is upheld (Fornell and Larcker 1981), as Table 3 shows.

Structural Model Analysis

We first fit the hypothesized model, including a common method factor, to the data for low and high participation in a simultaneous multigroup analysis. Recall that we planned to use the MACS procedures and have each construct item load on its own hypothesized factor and on a common method factor. In accordance with the work of Lindell and Whitney (2001), we constrained the common method factor loadings to be equal in the low- and high-participation groups to indicate that the method factor was common to corresponding items. To test for measurement equivalence, we compared an unconstrained model in which the hypothesized measurement loadings were freely estimated with a constrained model in which they were set equal between groups. This comparison produced the following change-in-fit statistics: $\Delta \chi^2 = 34.32$, $\Delta d.f. = 24$, p = .08.

TABLE 2
Summary Statistics and Intercorrelations for the Study Constructs

	1	2	3	4	5	6	7
Unit cost emphasis	1.00						
2. Unit revenue emphasis	.34*	1.00*					
3. Change perception	.04	- .18*	1.00*				
4. Detachment	10 *	28*	.32*	1.00			
5. Participation	.15*	.38*	30*	31*	1.00		
6. Productivity performance	.22*	.04	.07	07	.05	1.00	
7. Quality performance	.07	03	.00	−.15 *	.06	.37*	1.00
M	2.98	2.57	2.78	2.42	2.84	4.07	5.80
SD	.73	.72	.89	.77	.83	1.30	1.13

^{*}Correlation is significant at the .01 level (two-tailed).

This change in chi-square suggested that the measurements were equivalent for the low- and high-participation groups, and the differences, if any, could not be reasonably attributed to measurement differences. Likewise, to test whether the common method factor extracted significant systematic variance, we compared the proposed model with a constrained model (method loadings set to zero), obtaining the following change-in-fit statistics: $\Delta \chi^2 = 39.20$, $\Delta d.f. = 10$, p < .01. This indicated the significance of common method bias and supported modeling it to partial out its effects. When we allowed for measurement equivalence and the common method factor, the posited model in the low- and high-participation groups produced the following fit statistics from the MACS procedures: $\chi^2 = 2831.58$, d.f. = 1766, p < .01; NNFI = .99; NFI = .98; CFI = .99; SRMR = .063; and RMSEA = .044 (90% confidence interval = .041-.048; see Table 4). In accordance with both absolute and relative fit criteria for acceptable models, these results indicate that the posited model accounted for the systematic covariation in the data. Moreover, the estimated coefficients appear to be substantively reasonable, with acceptable standard errors. Thus, the preceding fit statistics provide confidence in the posited model and estimated coefficients for hypothesis testing and interpretation.

Antecedents of FLE change perceptions. In both the high-participation and the low-participation groups, unit cost emphasis was positively related (β_1 = .27, p < .01) to FLEs' change perceptions, and revenue emphasis was negatively related to those change perceptions (β_2 = -.27, p < .01). This pattern of findings supports H_1 , in that an increasing emphasis on cost enhances FLEs' change perceptions, but an increasing emphasis on revenue promotes stability and reduces FLEs' change perceptions. In addition, we estimated that FLEs in the high-participation group would have a lower latent mean score for change perceptions than the FLEs in the low-participation group (Δ lm = -.26, p < .01, where Δ lm refers to the estimated difference in latent means).

Performance loss mechanism: the mediating effect of detachment. In the low-participation group, FLEs' change perceptions had a positive influence on detachment (α_3 = .26, p < .01), and detachment had a negative influence on quality performance ($\theta_2 = -.37$, p < .01). Thus, H₂ was supported in the low-participation group. In the high-

participation group, H_2 was not supported. Neither the influence of FLEs' change perceptions on detachment (α_3 = .01, p > .10) nor the effect of detachment on quality performance (θ_2 = .16, p > .10) was sufficiently large to attain significance. Notably, the estimated latent mean for FLE detachment in the high-participation group was lower than that for the low-participation group (Δ lm = -.45), though this difference was of borderline significance (p < .10).

In accordance with the work of Shrout and Bolger (2002), the mediation hypothesis is supported if both the antecedent \rightarrow intervening and the intervening \rightarrow outcome coefficients are significant. From the preceding estimated coefficients (see Table 4), the mediation hypothesis for detachment appeared to be plausible for the low-participation group (both paths were significant at p < .01) but not for the high-participation group (neither path was significant). We formally test the implied moderated mediation subsequently.

Direct effects of change perceptions. The direct influence of change perceptions on FLE productivity in both the low-participation ($\eta_1 = .06$, p > .10) and the high-participation groups ($\eta_1 = .06$, p > .10) was nonsignificant. Thus, H_{3a} was not supported. However, FLE change perceptions were positively related to quality performance in the low-participation group ($\theta_1 = .32$, p < .05) but not in the high-participation group ($\theta_1 = .01$, p > .10). Thus, H_{3b} was partially supported. Moreover, note that the level of quality performance is significantly higher in the high-participation than the low-participation group ($\Delta Im = .59$, p < .05). In contrast, the level of productivity performance is statistically invariant for the two participation groups.

Moderating effect of participation. Although the preceding results provide support for the moderation effect of participation on the change \rightarrow detachment and the detachment \rightarrow quality linkages, here we provide formal tests for this moderated mediation. For the change \rightarrow detachment path, imposing formal constraints suggested that this path was statistically no different from zero for the high-participation group (χ^2 = .40, p = .53) but strongly discrepant from zero for the low-participation group (χ^2 = 11.59, p = .01). Moreover, because the influence of FLE change perceptions on detachment was positive for low participation (α_3 = .26) and zero for high participation, H_{4a} was supported. Likewise, the detachment \rightarrow quality perfor-

TABLE 3
Results from the CFA of Study Constructs

	Loadinga	t-Value	Reliabilityc	Variance Extracted ^d	Average Variance Shared (Maximum) ^e
Unit Cost Emphasis			.66	.33	.08 (.30)
Ucost1	.57	<u>b</u>			,
Ucost3	.52	10.32			
Ucost4	.68	11.68			
Ucost5	.50	10.11			
Unit Revenue Emphasis			.65	.38	.14 (.30)
Ureve1	.77	<u> </u>			,
Ureve2	.51	11.62			
Ureve4	.56	12.43			
Change Perception			.88	.54	.08 (.24)
Chang1	.61	<u> </u>			,
Chang2	.54	13.51			
Chang3	.79	17.82			
Chang4	.87	18.94			
Chang5	.74	16.99			
Chang6	.82	18.24			
Detachment			.61	.36	.14 (.29)
Deta1	.42	<u> </u>			` ,
Deta3	.53	8.75			
Deta4	.75	9.36			
Perceived Participation			.77	.54	.13 (.29)
Partic1	.53	<u> </u>			, ,
Partic2	.79	14.37			
Partic4	.84	14.42			
Productivity Performance			.89	.74	.04 (.11)
PPerf1	.93	b			- ()
PPerf2	.96	40.22			
PPerf3	.65	22.45			
Quality Performance			.94	.80	.02 (.11)
QPerf1	.87	<u> </u>	-		- ()
QPerf2	.89	36.40			
QPerf3	.93	39.41			
QPerf4	.88	35.56			

 $[\]alpha$ The estimates are standardized coefficients (all p < .01) and t-values from maximum likelihood solution using EQS.

mance path failed to distinguish statistically from zero for the high-participation group ($\chi^2 = .26$, p = .61) but was highly discrepant from zero for the low-participation group ($\chi^2 = 4.60$, p = .03). This pattern of findings also provides support for H_{4b} because the detachment \rightarrow quality performance coefficient was negative for low participation ($\theta_2 = -.37$) but zero for high participation. Thus, the mediation effect of detachment is absent for high participation but highly significant for low participation.

Discussion

This study focuses on the mechanisms through which strategic change initiatives affect frontline performance. We used an FLE perspective to (1) examine the influence of cost containment and revenue enhancement strategies on FLE change perceptions and performance outcomes, (2) isolate the negative (from the positive) consequences of strategic change to identify processes involved in performance loss, and (3) test the moderating role of FLE participation in mitigating performance losses. The focus on FLEs is a unique aspect of our research. We argued that performance loss in the front lines undermines the potential for realization of market and competitive advantages from an organization's strategic change initiatives (Harris and Ogbonna 2000). The findings provide new insights and guidelines for tackling implementation challenges of strategic change in organizations.

This study is subject to several limitations. First, the sample limits the generalizability of our findings to not-forprofit health care organizations. Although nothing in the

bThe corresponding coefficient was fixed to set the metric of the latent construct.

Estimated composite reliability in line with Fornell and Larcker (1981).

destimated variance extracted by the corresponding latent construct from its hypothesized indicators in line with Fornell and Larcker (1981).

eAverage of the variance shared between the corresponding latent construct and all other constructs of study. The maximum variance shared is in parentheses.

Estimated Coefficients for the Moderating Influence of FLE Participation in Market-Driven Change Processes **TABLE 4**

		Med	diator			Performance Outcome	e Outcome	
	Change Pe	Change Perceptions	Detac	Detachment	Productivity	tivity	Ø	Quality
	Low Participation	High Participation	Low Participation	High Participation	Low Participation	High Participation	Low Participation	High Participation
Independent Variables Latent mean (intercept)a Unit cost	b .27 (4.32)	26 (-4.16) .27 (4.32)		45 (-1.68) .42 (2.55)	ا ٦	01 (12) 	ا ٦	.59 (1.79)
Unit revenue Change perceptions Detachment	27 (-4.32) 27 (-4.32) 	27 (-4.32) 27 (-4.32) 	09 (96) 26 (2.99)		.06 (.59) .02 (.18)	.06 (.59) .02 (.18)	.32 (2.71) 37 (–2.08)	.01 (.08) 16 (-1.11)
Control Variables Common method factor Dummy1 Dummy2 Dummy3 Age Education Hospital experience Income	.04 (.47) 07 (-1.05) 06 (62) .02 (.21) .05 (1.63) 02 (72) .00 (.04) 03 (78)	.22 (2.03) 07 (-1.05) 06 (62) .02 (.21) .05 (1.63) 02 (72) .00 (.03) 03 (78)	.24 (2.21) .27 (3.07) .15 (1.51) -03 (-36) -05 (-1.47) -03 (-96) -03 (-96) .11 (1.73)	.60 (7.77) .27 (3.07) .15 (1.51) 03 (36) 05 (-1.47) 03 (96) .07 (2.40) .05 (.84)	28 (-1.57) 10 (91) .02 (.17) 44 (-2.88) .04 (.86) .01 (.39) .05 (1.55)	02 (17) 10 (91) .02 (.17) 02 (15) .04 (.86) .01 (.39) .05 (1.55)	02 (13) .12 (1.18) .10 (.71) .02 (.14) .00 (.01) 00 (03) .04 (1.36)	01 (05) .12 (1.18) .10 (.71) .02 (.14) .00 (.01) 00 (.03) .04 (1.36) 01 (10)
R2	.10	.24	.46	68.	.15	.00	80:	.02

a The significance test of latent mean is based on test at the .10 level. The significance test of effect coefficients is based on test at the .05 level. b This coefficient was constrained to zero to provide a baseline for comparison of latent means. Notes: The results reported are unstandardized coefficients followed by standard error in parentheses. Coefficients significant at p = .05 are in bold.

proposed model hinders its application to other organizational settings, empirical evidence beyond the current setting is lacking. For future studies, researchers might consider extending the proposed model to for-profit organizations and examining the robustness of reported findings. Second, the study is based on a cross-sectional, self-report design. Using "objective" data from customers or credible key informants to confirm the reported findings would likely be useful. We made systematic efforts to mitigate the potential for common method bias by (1) designing and pretesting the survey instrument to counter self-generated validity, (2) explicitly modeling a common method factor, and (3) partialing out the effect of the common method factor from the estimated structural coefficients. Third, research employing longitudinal designs that allow tracing of change processes over time will extend the implications of the current work. Longitudinal studies can provide useful evidence for the evolution of the positive and negative pathways as FLEs learn to cope with change. Fourth, this research focused on a single moderator, participation, to examine the contingent effects of change perceptions. Examination of other potential moderators that are supported by theory and point to managerial action is warranted. Fifth, we recognize that the measures of unit cost emphasis, revenue emphasis, and detachment have less than desirable levels of construct variance. Although future studies could focus on refining these scales, we show that the construct variance is robust and not confounded with other measures (average variances extracted > shared variance). Sixth, the makeup of our sample is mostly female. We recognize that women are more heavily represented in health care service settings, but further research should examine performance loss and strategic change in other, genderdiverse contexts. Finally, in the chosen health care setting, we did not address the role of physicians in change implementation, because they are usually not hospital employees and are less regulated by hospitals' strategic change emphases. However, we recognize that physicians are important agents of change implementation and respond to changing practices in hospitals. Further research should consider focusing on such groups to enrich the understanding of strategic change implementation and performance loss mechanisms. Despite these limitations, the results we obtained provide useful insights into mechanisms of change perceptions and performance loss in the front lines of organizations.

Cost Emphasis Induces Change Perceptions and Detachment, and Revenue Emphasis Curbs Both

Cost containment and revenue enhancement have received attention in the marketing literature as possible strategies for organizational profitability and competitiveness (Rust, Moorman, and Dickson 2002; Mittal et al. 2005). Our study contributes to this body of work by providing evidence for the influence of these strategies on FLE attitudes and performance. Organizational performance and, thus, profitability is, to some extent, contingent on FLE performance. Understanding how cost- and revenue-emphasis strategies shape FLE performance can provide useful insights into

when and why a revenue- (cost-) emphasis strategy enhances (diminishes) organizational profitability.

Our study reports that a cost-emphasis strategy induces FLEs' change perceptions, regardless of the level of these employees' participation in change decisions. In contrast, a revenue-emphasis strategy curbs FLE change perceptions, and this influence is unperturbed by FLE participation. We anticipated this pattern on the basis of assimilation-contrast logic and premises about the dominant schemas of FLEs. We reasoned that service employees, who self-select themselves into this career with daily face-to-face customer contact, tend to be customer oriented and have empathy toward customers (Donavan, Brown, and Moven 2004; Schneider and Bowen 1984). Thus, these FLEs' dominant schemas are likely focused on quality and consistent with a revenueemphasis strategy, which usually has enhancement of quality as an aim, at least in service settings (Rust, Moorman, and Dickson 2002). The assimilation of a strategic focus on revenue emphasis into FLEs' dominant schemas is supported by the former's negative effect on FLE change perceptions (-.27, p < .05). This result implies that FLEs perceive an increasing focus on revenue emphasis as diminishing their change assessments. Using a contrast logic, we reasoned that a strategic focus on cost containment would be likely to conflict with FLEs' dominant schemas because it presents counterdemands and evokes the potential for productivity-quality trade-offs. The results support this contrast hypothesis, as evidenced by the positive effect of a strategic cost emphasis on FLE change perceptions (.27, p <.05). Notably, the promoting effect of a strategic cost emphasis is statistically invariant in absolute value from the curbing effect of a strategic revenue emphasis on FLE change perceptions. This absence of significant variance suggests that managers can neutralize the inducing effect of cost emphasis by concurrently and commensurately increasing their emphasis on revenue enhancement.

Our findings suggest that the dysfunctional effects of a cost emphasis are not limited to inducing FLE change perceptions. Rather, a strategy of cost emphasis also contributes to FLE detachment, just as a strategy of revenue emphasis diminishes FLE detachment. However, these effects are contingent on the level of FLE participation in change decisions. Specifically, these effects are significant for the high-participation group (.42 and -.30, p < .05) but are nonsignificant for the low-participation group. Because a significant, direct effect from antecedent to outcome reflects unmediated influence, these results suggest that the influence of strategic emphases on detachment is fully mediated by FLE change perceptions for the lowparticipation group but only partially mediated for the highparticipation group. Thus, after we account for the mediated effect through change perceptions, the total effect of a cost emphasis on FLE detachment is .42 for the highparticipation group and only .23 for the low-participation group. Likewise, the total effect of a revenue emphasis on FLE detachment is -.30 for the high-participation group and only -.16 for the low-participation group. Two implications follow from this finding. First, with enhanced FLE participation in change decisions, the influence of strategic emphases on FLE detachment is increased, not diminished. Apparently, participation provides FLEs with clarity about their unit's strategic emphasis and thus highlights assimilation and contrast effects relative to FLEs' dominant schema for quality. Second, the neutralizing effect of revenue emphasis does not match the detachment-promoting effect of a cost emphasis for both the low- and high-participation groups (.23 versus –.16 and .42 versus –.30). Specifically, managers would need to increase their emphasis on revenue enhancement by a factor of 140% to neutralize a unit increase in cost emphasis. Thus, FLE participation in change decisions increases managerial challenges in navigating between strategic emphases that respond to market demands and neutralizing their dysfunctional effects.

Detachment Isolates Performance Loss Processes

Rather than arguing that the weight of theory and evidence favors either a positive or a negative effect of change perceptions on performance, we reasoned that both effects are present simultaneously. In our view, change is a doubleedged sword that guides the flow of FLE effort toward functional outcomes while depleting FLE motivation through its dysfunctional effects. Thus, the key question is not whether change has positive or negative effects on performance; rather, the question is, What is the relative magnitude of its positive and negative effects on performance? Answering this question requires isolation of the positive and negative effects of change. Drawing on the separation of eustress and distress in stress research, we posited a mediation mechanism governed by FLE detachment to separate the positive and negative effects of change perceptions on performance. We hypothesized that the positive and negative effects would be reflected in the unmediated and mediated effects, respectively. We referred to the latter as a "performance loss process."

The study's findings provide robust evidence that strategic change initiatives in organizations foster change processes that include performance loss and positive pathways that are substantively distinct and differentially maintained. First, change perceptions increase detachment from work for FLEs with low participation in change decisions. In turn, FLEs' detachment is associated with significant decrements in quality performance. This indicates that change perceptions activate a performance loss pathway maintained by detachment. Second, change perceptions have a direct, positive effect on quality in the low-participation group. This effect of change perceptions emerges after we account for the performance loss effects captured by FLE detachment. Thus, detachment mediates the negative effect of change perceptions in the low-participation group but not in the high-participation group. This finding is consistent with the schema of FLEs, who traditionally give priority to quality and may not be on board with change initiatives based on low perceived participation. Explicitly capturing performance loss effects through detachment enabled us to isolate the direct, positive effect of change on service quality.

By separating out the positive and negative effects of change, our study extends and addresses anomalies of prior research. Focusing on quality improvement initiatives, Rust, Moorman, and Dickson (2002) find a positive effect of

revenue emphasis but no effect of cost emphasis on organizational performance. In a follow-up study, Mittal and colleagues (2005) report that a cost emphasis can also have a positive effect on firm performance, but achieving this effect requires successfully managing both the cost- and the revenue-emphasis strategies. Our research adds to this work by adopting an FLE perspective and providing the insight that a cost-driven strategic change triggers two counteracting effects—a direct, positive effect on quality performance and a negative, indirect effect that enhances FLEs' detachment. The evidence of simultaneous positive and negative pathways clarifies why previous research has shown mixed results for the implementation of market-driven strategies. Although Ruekert and Walker (1987) note the potential for trade-offs in implementing such strategies, this study is one of the first to provide supporting empirical evidence in a service context.

Participation Mitigates Performance Loss and Enhances Quality Performance

For theory and practice alike, the advantage of separating the positive and negative effects of change is to hypothesize and, if supported, implement interventions that mitigate the negative effects and bolster the positive effects. We hypothesized FLE participation as one variable for advancing theory and practice in this direction. Specifically, we posited that participation moderates the mediating mechanism involved in performance loss by mitigating the effects of (1) FLE change perceptions on detachment and (2) FLE detachment on quality performance. Prior studies provide ample evidence that FLE participation enhances FLE performance and attitudes through its motivational, social, and cognitive mechanisms (Locke and Latham 2002). Although the contribution of this study stems from the moderating hypothesis for mitigating performance loss, we tested both the direct and the moderating effects to provide a complete understanding of participation effects.

Our findings provide unequivocal support for the moderating hypothesis. Frontline employee participation promotes two mechanisms that appear to be essential for managing performance loss. First, change perceptions significantly and positively influenced FLE detachment only in the low-participation group. For the high-participation group, this effect was nonsignificant. Thus, it appears that participation improves employees' understanding of change and its implications for individual employees. Consequently, FLEs are less likely to experience detachment and more likely to accept the change. Second, when detachment took place, it had a significant, negative effect on quality performance only in the low-participation group. When participation was high, this effect was nonsignificant. Apparently, participation provides FLEs with coping resources to self-regulate and arrest the dysfunctional effects of detachment on performance. Thus, with low levels of participation, performance losses substantially undermine implementation. In contrast, high FLE participation effectively curtails, and often shuts down, the loss pathways of change, thus enabling the positive pathways to yield functional outcomes. An implication of these findings is that organizations that fail to mobilize FLEs' participation risk enhanced

levels of counteracting effects that will likely undermine the performance payoffs of strategic change initiatives. Our data in Table 2 show that for the five hospitals we included in the study, employee participation was low and, possibly, was an underappreciated resource (M = 2.84 on a five-point scale, SD = .83).

Moreover, our study confirms that FLE participation bolsters FLE attitudes and performance. As evident from the first row of Table 4, the estimated latent means for FLE change perceptions and detachment are lower for the highparticipation group than for the low-participation group (-.26 and -.45, respectively). Likewise, the latent mean for quality performance is higher for the high- than the lowparticipation group (.59). Notably, productivity performance was not affected by FLE participation. We argued that because productivity performance is more easily measured and monitored than quality performance, FLEs will try to maintain their productivity to expected levels, curtailing its sensitivity to participation (and detachment). This formulation suggests that FLE participation motivates employees to higher levels of quality performance while mitigating the level of FLE change perceptions and the mediating mechanism involved in performance loss processes.

Conclusion

Managerially, it pays to attend to change processes in the front lines of organizations when implementing strategic change. Strategic initiatives are ultimately carried out by FLEs who reside at the interface with the customer in the chain of top-down change processes. Without a careful

understanding of when and why shifts in strategic emphases promote FLE change perceptions, foster detachment, and undermine performance, the expected performance outcome of strategic change is not guaranteed. This research suggests that when FLEs are not involved in the goal-setting and decision-making process of strategic change, detachment and subsequent performance loss occur. Managers may want to promote FLE participation not only because it fosters functional FLE attitudes and quality performance but also because it mitigates performance loss. Such managerial interventions minimize the negative effects fostered by FLE detachment.

In conclusion, this study contributes to the literature on the implementation challenges presented by strategic change in organizations. On a broader scale, Day (1994) characterizes such implementation challenges as the difference between a market-driven strategy and a market-driven organization. This study provides evidence that when a firm is organizing to be market driven, different strategic emphases (cost/revenue) translate into qualitatively different (positive/negative) effects on FLE performance. To our knowledge, this is the first study that is successful in empirically separating the positive and negative effects of strategic change and in identifying moderators that mitigate performance loss but leave positive pathways intact (or enhanced). Although we conducted our study in a not-forprofit service industry, we can expect that similar mechanisms operate for other organizations undergoing marketdriven changes. We hope that the proposed model offers a fertile ground for future theorizing about and practice in market-driven organizations.

APPENDIX Operational Items Used to Measure Study Constructs

In the unit/department where I work ...

U	nit	Cost	Emp	hasisa
---	-----	------	-----	--------

Ucost1	New innovations are regularly adopted to
	reduced hospital costs.
Ucost2c	Managers use patient care cost data to
	make changes in unit practices.
Ucost3	Workers are asked to make physicians
	aware of cost implication of patient care
	decisions.
Ucost4	Training programs emphasize cost control
	in job-related decisions.
Ucost5	Strict cost control systems are in place
	for most of the things that we do.

Unit Revenue Emphasisa

Dilli Hevenue	Liipiiasis
Ureve1	Managers implement initiatives that bring
	new source of revenue.
Ureve2	New technologies are regularly adopted
	that allow our unit to offer new patient services.
Ureve3c	Health care workers provide ideas for
0.0.00	expanding patient care services.
Ureve4	Health care workers are appropriately
	recognized for developing new sources of
	revenue.
Ureve5 ^c	Managers closely monitor the financial success of new patient care initiatives.
	success of new patient care initiatives.

Change Perceptiona

Chang1	The way we do things in our
	unit/department keeps changing.
Chang2	Employees can never tell when they are
	going to have a new manager.
Chang3	You never know when your job is going to
	change in this unit/department.
Chang4	The only thing you can be sure of in this
-	unit is that something is going to change.
Chang5	Our unit keeps changing the criteria for
J	performance evaluation and promotion.
Chang6	It seems like we are always reorganizing.
J -	3, 3, 3, 3, 3

Concerning yourself, in the last 12 months, how often have you felt that ...

Detachmentb

Deta1	You sometimes treat patients as if they
	were impersonal "objects."
Deta2c	You are becoming hardened toward your
	management.
Deta3	You are sometimes insensitive toward
	your colleagues.
Deta4	You are becoming less sympathetic
	toward your top management.

APPENDIX Continued

Rate your performances of	over the last i	12 months on
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In your unit over the past 12 months, how often ...

Perceived Participation^b

Productivity Performanced
PPerf1 Controlling costs of care.
PPerf2 Saving money and resources.
PPerf3 Meeting productivity targets.

Partic1 Have formal employee problem solving teams addressed major changes?

Partic2

Have managers sought input from employees to implement unit changes?

Partic3c

Have employees taken the initiatives to

improve the way work gets done?

Partic4 Have employees and managers made

major decisions together?

QPerf1 Delivering high-quality medical care to

patients.

QPerf2 Helping to address patient concerns.

QPerf3 Providing high levels of patient

satisfaction.

QPerf4 Building trust with patient.

Notes: (R) = reverse scored.

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Quality Performanced

^aFive-point Likert scale ranging from "strongly disagree" to "strongly agree."

bFive-point Likert scale ranging from "never" to "very frequently."

cltem deleted because of poor measurement properties.

dSeven-point Likert scale ranging from "lowest 20%" to "top 5%."

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