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Article

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Employee Participation in Organizational Change: Investigating the Effects of Proactive vs. Reactive Implementation of Downsizing in Swedish Hospitals**

Whereas employee participation is generally conceived to facilitate implementation of organizational change, only limited research has investigated whether it may reduce the negative effects of downsizing. The present study compares two Swedish hospitals that implemented downsizing in different ways. While there were no major differences in stressors between hospitals, proactive implementation was associated with more employee participation. Moreover, employee participation variables were positively associated with employee work attitudes and well-being at both hospitals. These findings provide insights concerning the importance of a long-term strategic implementation of organizational change.

Mitarbeiterbeteiligung im organisationalen Wandel: Die Effekte proaktiver vs. reaktiver Implementierung von Downsizing in schwedischen Krankenhäusern

Von Mitarbeiterbeteiligung wird gewöhnlich erwartet, dass sie die Implementierung von organisationalem Wandel unterstützt. Dagegen finden sich nur wenige Untersuchungen zur Frage, ob dadurch die negativen Effekte von Downsizing reduziert werden. Die vorliegende Untersuchung vergleicht zwei schwedische Krankenhäuser, in denen Downsizing auf proaktivem bzw. reaktivem Wege implementiert wurde. Zwar finden sich zwischen den Krankenhäusern keine größeren Unterschiede in den Stressoren, aber bei der proaktiven Implementierung waren die Mitarbeiter stärker beteiligt. Mitarbeiterbeteiligung korrelierte positiv mit Arbeitseinstellungen und Wohlbefinden der Mitarbeiter in beiden Krankenhäusern. Die Ergebnisse geben Hinweise auf die Bedeutung der langfristige-strategischen Implementierung von organisationalem Wandel.

Key words: **Organizational Change, Work Attitudes, Well-being,
Organizational Justice, Health Care**

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Over the past decades, downsizing and other structural reforms (e.g., mergers, acquisitions, and privatizations) have become increasingly characteristic of organizations in most countries (e.g., Burke/Cooper 2000; Gowing/Kraft/Quick 1998; Parker 2003). The accelerating rate of organizational change in modern working life has also gradually affected the health-care organizations in their strivings for economic savings and improved effectiveness (Cunningham et al. 2002). This trend to rationalize the public sector, sometimes labeled “new public management” (Ferlie et al. 1996), has influenced the health care sector in most industrialized countries. In Sweden, the most visible examples concern privatizations and slimming of health care organizations through cost savings and downsizing (Falkenberg et al. in press; Öhrming/Sverke 2001, 2003).

However, even though the consequences of organizational restructuring and downsizing are well-documented (e.g., Armstrong-Stassen 2005; Brockner 1990; Greenglass/Burke 2001; Hellgren/Näswall/Sverke 2005), less is known about how such negative effects may be reduced. Since the effectiveness of any downsizing process ultimately depends on the reactions of the downsizing survivors (Kozlowski et al. 1993; Pfeffer 1998), a crucial issue concerns how the organizational change process is implemented. A widely embraced observation is that fair treatment of employees, with ample opportunities for participation in the process of change, may facilitate implementation of organizational restructuring (e.g., Heller et al. 1998; Hellgren/Sverke 2001; Hopkins/Weathington 2006).

Despite the fact that a proactive, strategic approach to downsizing not only may improve employee opportunities for participation but also result in less detrimental effects of downsizing (Judge et al. 1999; Kozlowski et al. 1993; Parker/Chmiel/Wall 1997), only a few studies have compared the consequences of different ways to implement downsizing (e.g., Fairhurst/Cooren/Cahill 2002; Iverson/Zatzick 2007; Kalimo/Taris/Shaufeli 2003; Sadhev 2003). Moreover, most studies have tended to focus on only one or a few aspects of employee participation in the change process. Factors that have been proposed to be important for successful implementation include, for instance, change-specific organizational justice (Kernan/Hanges 2002), participation in the change process (Wanberg/Banas 2000), attitudes towards organizational change (Neiva/Ros/das Graças Torres da Paz 2005), and commitment to change (Herscovitch/Meyer 2002). Since there is a lack of studies investigating the relative importance of different aspects of employee participation, more research is needed to understand how different downsizing processes actually affect the staff, and in turn, the vitality of the organization. Such knowledge can be used in future research on downsizing and organizational change, as well as by practitioners working with organizational strategies for change.

The present study presents an attempt at evaluating two different strategies used to implement downsizing by comparing two Swedish hospitals with different types of ownership. One of the hospitals was, as the first hospital in Sweden, transformed into a non-profit stock company in 1994. By virtue of its independent role, this hospital could use its own strategies for increasing productivity, implement downsizing proactively, and involve the staff in the change process. The other hospital, which was run as a traditional public administration unit, had to implement downsizing reactively ac-

According to the decisions made by the health care authorities. By comparing proactive and reactive implementation of downsizing in hospitals, the study adds to existing research on downsizing by investigating personnel reductions in the context of health care and ownership change.

The first objective of the present study was to investigate how downsizing-related stressors (job insecurity, role ambiguity, role overload, and role conflict) and employee participation (justice, participation in decision-making, attitudes towards downsizing, and commitment to change), as well as attitudinal (organizational commitment and job satisfaction) and health outcomes (mental health complaints and emotional exhaustion), differ between hospitals using proactive and reactive implementation. The second aim was to investigate how stressors and participation relate to attitudinal and health-related outcomes and, in addition, to what extent the effects differ between organizations characterized by different implementation strategies.

Downsizing

According to a widely known definition, downsizing can be characterized as a “deliberate organizational decision to reduce the workforce that is intended to improve organizational performance” (Kozlowski et al. 1993, 267), or as a “purposeful reduction in the size of an organization’s workforce” (Spreitzer/Mishra 2002, 707). As noted in previous research (e.g., Covin 1993; Nutt 2007), downsizing tends to focus more on financial efficiency goals than human effectiveness goals and, because it is typically based on little or no employee participation, people will be treated poorly. The individuals who lose their jobs are obviously the most affected by downsizing. However, since downsizing results in a reduced workforce, research has also highlighted the consequences for the remaining personnel (the “survivors”). Despite the fact that management typically expects workforce reductions to improve organizational efficiency (Cameron/Freeman/Mishra 1991), it is well-known that downsizing, in addition to having adverse effects for those who lose their jobs, may lead to loss of human capital (Pfeffer 1998) and increased stress among the survivors (Ashford, 1988; Hellgren et al. 2005; Kivimäki et al. 2000; Quinlan 2007).

Job insecurity represents one of the most frequently investigated stressors in the context of organizational change and downsizing (e.g., De Witte 1999; Sverke/Hellgren 2002). By definition, job insecurity contains elements of unpredictability concerning the future existence of the present job (Greenhalgh/Rosenblatt, 1984). Previous studies have also concluded that job insecurity perceptions are associated with organizational downsizing, both in a short-term perspective as well as in a long-term perspective (e.g., Moore/Grunberg/Greenberg 2006). In addition, numerous studies (e.g., Ashford/Lee/Bobko 1989; Brockner et al. 1992; Hellgren/Sverke 2003), including a meta-analysis (Sverke/Hellgren/Näswall 2002), suggest that worry about future job loss is associated with impaired work attitudes and well-being.

Research also indicates that other stressful characteristics tend to emerge when work has to be carried out by fewer employees (Hellgren/Sverke 2001; Hopkins/Weathington 2006; Pfeffer 1998). By definition, downsizing implies that the organization is left with fewer employees who are expected to put in their best effort in a manner that enhances organizational productivity (Kets de Vries/Balazs 1997). It has

been shown, for instance, that workload, role conflict, and role ambiguity tend to be high among the remaining staff after downsizing (Hellgren et al. 2005; Parker et al. 1997; Tombaugh/White 1990). Workload reflects the perception of having too much work to do in the time available (Beehr/Walsh/Taber 1976). Role conflict concerns the experience of having to deal with conflicting terms, instructions, and/or demands in the work environment (Rizzo/House/Lirtzman 1970). Role ambiguity relates to the individual's experience of not knowing what is expected of her at work (Caplan 1971). Research consistently shows that such stressors are associated with more negative consequences for the employees; the downsizing survivors have to do more with fewer resources, their work load increases, and uncertainty regarding task performance is likely to occur (Bean/Hamilton 2006; Moore et al. 2006; Quinlan 2007).

Despite these generally negative effects of downsizing, we argue that staff cuts which are carried out proactively will result in fewer of these stressors, since the change is implemented only after careful planning and according to clear strategies. Based on this, we propose the following hypothesis:

Hypothesis 1: Mean levels in downsizing-related stressors are higher in organizations that implement downsizing reactively than in those that do it proactively.

Along similar lines, since stressors could be expected to be more prevalent in organizations following a more reactive approach to downsizing, it is plausible that strain outcomes also are higher in such organizations. Hence, we predict:

Hypothesis 2: (a) Mean levels in employee work attitudes are lower, and (b) mean levels in strain are higher, in organizations that implement downsizing reactively than in those that do it proactively.

We also expect downsizing-related stressors to have negative effects for employees undergoing either type of downsizing process, as suggested by much of previous research. This leads us to test the following:

Hypothesis 3: Downsizing-related stressors are (a) negatively related to employee work attitudes and (b) positively related to strain.

Since there is so little previous research on different ways of implementing downsizing, we are unable to state any formal hypotheses regarding differences in the strength of the relations between stressors and outcomes. However, we investigate these relations separately for proactive and reactive downsizing, allowing for the study of differing effects in these two types of change.

Employee participation

Organizational downsizing, as indicated in a growing body of research, is a complex phenomenon that can be implemented in various ways (e.g., Kozlowski et al. 1993; Parker et al. 1997; Sadhev 2003; Shaw/Barrett-Power 1997). Most often, this type of organizational change is implemented in a reactive way, as a short-term response to relatively immediate financial needs (Cameron et al. 1991). As observed by Kozlowski et al. (1993, 306), downsizing is typically carried out "without concern for process and outcome consistency with business strategy, mission and goals, or with requisite organizational culture and values." It is therefore not surprising that workforce reduc-

tions have been found to be associated with increased demands and, in turn, impaired work attitudes and well-being among the employees (Armstrong-Stassen 2005; Ashford 1988; Burke/Cooper 2000; Pfeffer 1998).

However, whereas many organizations tend to implement downsizing in a reactive way, using standard operating procedures as a response to environmental pressures, others are able to use a more proactive and long-term approach. This type of implementation, which has been labeled “right-sizing” (Hitt et al. 1994) and “strategic downsizing” (Kozlowski et al. 1993), typically involves the protection of core competencies through the emphasis on teamwork, training, and leadership. Parker et al. (1997, 291) described this implementation as a “planned approach [to downsizing] that aims to promote organizational benefits while minimizing negative individual impact.”

A core characteristic of such proactive implementation of downsizing is employee participation. As noted in the literature (e.g., Heller et al. 1998; Mikkelsen/Saksvik/Landsbergis 2000), employee participation is important for the success of any kind of organizational change. It may involve experiences of fair treatment and participation in decision-making over the course of the organizational change process, and, hence, result in more positive attitudes towards organizational change as such (Heller et al. 1998; Kozlowski et al. 1993). Indeed, effective communication, respectful treatment and employee involvement have been suggested to characterize more successful implementations of downsizing (Marks 1993; Mikkelsen et al. 2000; Parker et al. 1997; Pfeffer 1998).

Long-term explicit goals, careful monitoring, and stronger employee participation in decision-making may not only result in stronger perceptions of justice and less negative views on the change process among the survivors (e.g., Brockner 1990; Heller et al. 1998; Hopkins/Weathington 2006), which is an important goal in itself. Such proactive implementation of downsizing may also make the consequences of workforce reductions less negative. Literature reviews suggest that participation has beneficial consequences for employee attitudes and well-being (Heller et al. 1998; Schweiger/Leana, 1986). In line with this, Mikkelsen et al. (2000) found that participatory interventions were associated with positive effects on work-related stress, job characteristics, and learning climate. Similarly, perceptions of fair treatment in connection with redundancies appear to be associated with more positive work attitudes and greater well-being (Brockner 1990; Davy/Kinicki/Scheck 1991; Hopkins/Weathington 2006).

Hence, to the extent implementation is associated with more positive perceptions of the change process, such as increased organizational justice, stronger employee participation, and more positive attitudes towards cost savings, employees of organizations implementing downsizing in a proactive way could be expected to react with less adverse work attitudes and well-being (Brockner 1990; Iverson 1996; Makawatsukul/Kleiner 2003; Nutt 2007; Parker et al. 1997). Based on this, we test the following hypothesis:

Hypothesis 4: Mean levels in employee participation are higher in organizations that implement downsizing proactively than in those that do it reactively.

Based on previous evidence we also suggest that those who are involved in the organization's plans and are allowed to express their views during the downsizing process will react less negatively than those who are not allowed to participate in the change process. In this context we test the following hypothesis:

Hypothesis 5: Employee participation is (a) positively related to employee work attitudes and (b) negatively related to strain.

As in the case of downsizing-related stressors, we investigate whether an organization implementing downsizing in a more proactive way differs from a more reactive organization in terms of the magnitudes of the relations between participation and the outcomes. However, we do not state any explicit hypotheses regarding these differences; rather, we analyze these relations separately for each type of organization.

Method

Downsizing in Swedish hospitals

Since the late 1980s, Swedish health care has been characterized by radical change. Various reforms regarding the political government of the health care sector, the internal management of hospitals, and the organization of work have been implemented (SOU 1993: 38). These changes have been motivated by political considerations as well as by economic decline and budgetary restrictions in the public sector (Öhrming/Sverke 2001, 2003). Creation of quasi-markets, expanded competition between producers of health care, and introduction of an increased freedom of choice for patients has served as important ingredients in the changed conditions for the health care industry (Jonsson 1993). In this respect, a distinction has been made between purchasers (politicians) and providers (e.g., hospitals, local physicians) of care.

The empirical material for the present study comes from a questionnaire survey among the nursing staff of two Swedish emergency hospital undergoing transformation. Both these hospitals are located in the Stockholm area, and are under the supervision of the Stockholm County Council. In 1996, the political leadership of the Stockholm County Council decided to reduce costs in the health care services by 17 percent over the three succeeding years. For the acute care hospitals these changes involved, despite the declining financial situation, increased flexibility regarding the organization of the health care provided (Öhrming/Sverke 2001; Spri 1994). Savings were achieved through ward closures and mergers, but standard layoffs were relatively infrequent since the changes took place in a period characterized by high demand for health care personnel on the labor market.

Although the two hospitals included in the study were both facing downsizing, they differed in terms of how the cost savings were to be obtained. One of the hospitals, a traditional public administration unit, was forced to implement downsizing in a reactive way, according to the instructions and recommendations provided by the county council. With its limited independence vis-à-vis the county council, the hospital demonstrated a more reactive stance towards the issuing of goals, which meant that the responsibility for choice of direction was left to the heads of clinical departments. As a consequence, cost savings were handled from a short-term perspective, and explicit goals for internal activities were infrequent. The other hospital, a stock company

owned by the county, was able to implement downsizing in a more strategic, proactive way. The status of the stock company, involving a board of directors as a filter between the hospital and the local authorities, provided the hospital management with great flexibility in determining how to accomplish savings, deciding what specialties to focus on, developing explicit goals, and building a long-term strategy. The formulation of goals led to extensive discussions about the hospital's mission and to a more visible leadership (Öhrming/Sverke 2001, 2003; Sverke/Hellgren/Öhrming 1999).

The two hospitals were not only located in the same geographic region, but they were also of similar size. At the time of data collection, the proactive hospital had 278 beds and employed some 1500 individuals, while the reactive hospital had 1200 employees and 252 beds. In addition, the hospitals had similar medical specialties, although there were some variations. It is important to note that even though both hospitals had to accomplish quite substantial cost savings, layoffs were rather infrequent. Both hospitals were bound by Swedish labor law regulations and the same collective agreements, which means that both organizations treated the personnel in similar ways. The major difference, then, concerned the way downsizing was implemented.

Samples and procedure

The data collection took place in late 1998, in the midst of the restructuring processes at the proactive hospital (i.e., the non-profit stock company) and the reactive hospital (i.e., the public administration unit). Questionnaires were mailed to the home addresses of all nurses (assistant and registered) employed by the two hospitals, accompanied by a letter which described the general purpose of the research, explained that participation in the study was voluntary, and assured that responses would be treated confidentially. A total of three reminders (one of which included a questionnaire) were sent out to increase the response rate. Questionnaires were returned to the research team in reply-postage paid envelopes.

Proactive hospital. Out of the 752 nurses at the hospital run as a non-profit stock company, a total of 441 returned their questionnaires for a response rate of 59 percent. After correction for internal attrition, an effective sample of 338 nurses with complete data in all study variables remained. The mean age was 40 years (SD=10), the average organizational tenure 9 years (SD=9), and the proportion of women was 89 percent.

Reactive hospital. There were 717 nurses at the public administration hospital, 459 of whom returned their questionnaires (64 percent). Listwise deletion of missing data resulted in an effective sample of 378 nurses with complete data on all variables used in the study. Participants' mean age was 43 years (SD=10). They had worked at the hospital for an average of 14 years (SD=9). Women comprised 91 percent of the sample.

Measures

Unless otherwise stated, responses on the study variables were obtained on a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Variable indexes were constructed by averaging over the relevant items after reverse scored items had been recoded. In addition to age (in years), organizational tenure (in years), and gender

(0=man, 1=woman), which serve as control variables, the measures used in the present study concern downsizing stressors, employee participation variables as well as attitudinal and health-related outcomes. Variable inter-correlations for the two samples are presented in Table 1.

Table 1: Variable intercorrelations for the proactive (above diagonal) and the reactive hospital (below diagonal)

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Control variables															
1. Age		.11	.56	.02	-.06	.01	-.08	.04	-.13	.05	.08	.18	.06	.12	.02
2. Gender (woman)	.15		.12	-.11	-.18	-.06	-.22	.06	.13	.10	.13	.10	.16	-.15	-.11
3. Organizational tenure	.56	.20		-.03	-.11	-.12	-.14	.16	.06	.18	.19	.31	.14	-.05	-.07
Downsizing stressors															
4. Job insecurity	-.09	-.01	.06		.28	.23	.41	-.29	-.24	-.34	-.33	-.18	-.25	.22	.18
5. Role ambiguity	-.15	-.09	-.16	.13		.26	.55	-.30	-.40	-.31	-.41	-.36	-.46	.42	.32
6. Role overload	-.07	.09	.01	.13	.18		.51	-.31	-.38	-.38	-.37	-.22	-.34	.37	.60
7. Role conflict	-.07	-.03	-.11	.26	.44	.40		-.37	-.47	-.41	-.51	-.37	-.46	.43	.48
Employee participation															
8. Organizational justice	.12	-.07	.07	-.19	-.07	-.23	-.14		.41	.70	.56	.39	.41	-.31	-.32
9. Participation in decision-making	.04	.04	-.00	-.17	-.37	-.28	-.35	.20		.42	.44	.40	.52	-.36	-.44
10. Attitude towards downsizing	.20	-.05	.11	-.16	-.12	-.32	-.22	.60	.20		.67	.46	.40	-.32	-.35
11. Commitment to change	.22	.03	.14	-.11	-.20	-.29	-.28	.41	.20	.53		.58	.51	-.39	-.49
Outcome variables															
12. Organizational commitment	.24	.01	.16	-.09	-.28	-.17	-.22	.35	.35	.33	.41		.65	-.29	-.32
13. Job satisfaction	.19	.13	.08	-.16	-.45	-.29	-.39	.18	.43	.22	.29	.55		-.44	-.54
14. Mental health complaints	.04	.05	.08	.20	.27	-.29	.34	-.08	-.34	-.07	-.14	-.14	-.37		.62
15. Emotional exhaustion	-.05	.08	.09	.18	.28	.49	.45	-.11	-.34	-.19	-.23	-.26	-.52	.55	

Proactive hospital: for $r \geq .11, p < .05$ (N = 338) / Reactive hospital: for $r \geq .10, p < .05$ (N = 378).

Downsizing stressors. The assessment of job insecurity was based on Ashford et al.'s (1989) scale, which reflects perceived threats to the total job. Rather than asking the respondents how unlikely or likely it was that they would lose their jobs, the ten items were redrafted into statements (e.g., "I may be laid off permanently"). The coefficient alpha reliability was satisfactory for the proactive ($\alpha = .84$) as well as the reactive hospital ($\alpha = .79$). Role ambiguity was assessed using four items (e.g., "There exist no clear, planned goals and objectives for my job") from Caplan (1971) and Rizzo, House, and Lirtzman (1970), with a reliability estimate of .72 at both hospitals. Role overload was measured with three items developed by Beehr, Walsh, and Taber (1976). A sample item is "It fairly often happens that I have to work under a heavy time pressure", and the reliability was satisfactory ($\alpha = .80$ and .78 for the two hospitals, respectively). Role conflict was measured using a slightly modified version of the Rizzo et al. (1970) scale. The five items (e.g., "I do things that are apt to be accepted by one person and not accepted by others") evidenced satisfactory internal consistency for the proactive ($\alpha = .79$) as well as the reactive hospital ($\alpha = .74$).

Employee participation. Four items reflecting employee perceptions of fair treatment during the reorganization process were used for the measurement of change-specific *organizational justice* (e.g., “The organization carried out the cost savings in a way that was just and fair”). The scale, derived from Brockner et al. (1992), demonstrated adequate reliability ($\alpha = .76$ at the proactive hospital and $.78$ at the reactive hospital). *Participation in decision-making* over the course of the downsizing process was assessed with a three-item index (Hellgren/Sverke 2001). A sample item is “Employees were encouraged to participate when important decisions were made in this organizational unit”, and the reliability estimates were satisfactory ($\alpha = .79$ for both hospitals). We measured *attitudes towards downsizing* using a scale developed for the present study (e.g., “It was necessary to carry through the reductions in order to improve effectiveness”). The six items demonstrated adequate internal consistency ($\alpha = .82$ and $.76$ for the two hospitals, respectively). *Commitment to change* was included to obtain an estimate of the nurses' commitment to the goals of the downsizing process. The scale consisted of eight items (e.g., “Quite frankly, I don't care if I achieve the goals of the hospital's cost savings or not”; reverse coded) based on Hollenbeck et al.'s (1989) goal commitment scale. The items were slightly modified (i.e., “this goal” was replaced throughout by “the hospital's cost savings”). The scale yielded reliability estimates of $.81$ (proactive hospital) and $.72$ (reactive hospital).

Outcome variables. The study included measures of both work-related attitudes and well-being as outcomes. *Organizational commitment* was assessed using Allen and Meyer's (1990) eight-item measure of affective attachment to the organization (e.g., “This organization has a great deal of personal meaning to me”). The scale demonstrated adequate reliability for the proactive ($\alpha = .84$) as well as the reactive hospital ($\alpha = .78$). *Job satisfaction* was measured with three items capturing an overall contentment with the present job (Hellgren/Sverke 2001). The scale was adopted from Brayfield and Rothe (1951) and contains items like “I am satisfied with my job” ($\alpha = .90$ and $.86$ for the two hospitals, respectively). To assess *mental health complaints*, we used the 12-indicator version of the General Health Questionnaire (GHQ-12; Goldberg, 1979). In this scale, which is a screening test developed for the purpose of detecting non-psychiatric health symptoms, the items are scored on a four-interval response mode ranging from 0 (no perceptions of mental health complaints) to 3 (frequently perceived health complaints). Internal consistency reliability was $.83$ for both hospitals. *Emotional exhaustion* was measured using the Maslach Burnout Inventory (MBI-HSS; Maslach/Jackson/Leiter 1996), translated to Swedish by Hallsten (1985). The nine items making up this burnout dimension (e.g., “I feel emotionally drained from my work”) yielded adequate reliability estimates ($\alpha = .89$ for the proactive hospital and $\alpha = .85$ for the reactive).

Results

Mean differences

Multivariate analysis of variance with covariates (MANCOVA) was used to examine if employees at the proactive and reactive hospitals differed with respect to downsizing-related stressors, using age, gender, and organizational tenure as covariates (see Table 2). There was a significant multivariate effect of hospital ($F[4,708]=13.59, p<.001$) indicating that implementation strategy was associated with different mean levels in

downsizing stressors (in addition, the multivariate F tests for the three covariates were all significant). In accordance with Hypothesis 1, follow-up univariate F tests revealed that the nurses at the public administration unit, which was forced to implement downsizing in a reactive way, reported significantly higher levels of job insecurity, role ambiguity, and role conflict as compared to their colleagues at the public stock company, which was able to implement downsizing proactively. There was no difference, however, between hospitals in terms of workload.

Table 2: Means (standard deviations) and tests for mean differences between the two hospitals

Variable	Proactive hospital	Reactive hospital	Univariate F tests				Eta ² (hospital)
			Age	Gender	Tenure	Hospital	
Downsizing stressors							
Job insecurity	1.74 (0.71)	2.15 (0.77)	2.32	2.53	2.54	46.46***	0.08
Role ambiguity	1.70 (0.69)	1.79 (0.70)	0.53	8.90**	5.38*	7.03**	0.04
Role overload	3.67 (0.96)	3.58 (0.97)	0.07	0.39	0.99	0.92	0.01
Role conflict	2.27 (0.89)	2.35 (0.86)	0.00	8.45**	5.60*	4.02*	0.03
Employee participation							
Organizational justice	2.75 (0.74)	2.25 (0.81)	0.53	0.62	4.32*	82.49***	0.10
Participation in decision-making	3.46 (1.04)	3.22 (1.09)	3.28	4.78**	1.69	9.79**	0.02
Attitude towards downsizing	2.78 (0.76)	2.15 (0.67)	2.13	0.02	5.32*	156.41***	0.18
Commitment to change	3.20 (0.67)	2.70 (0.63)	3.11	2.23	6.51*	126.43***	0.16
Outcome variables							
Organizational commitment	2.80 (0.79)	2.54 (0.72)	7.13***	0.16	13.53***	37.61***	0.05
Job satisfaction	3.91 (0.99)	3.76 (0.98)	4.54*	11.85***	0.55	7.59**	0.01
Mental health complaints	0.72 (0.39)	0.73 (0.39)	2.47	2.25	0.43	0.09	0.00
Emotional exhaustion	2.43 (0.88)	2.46 (0.78)	0.34	0.30	0.45	0.19	0.00

* $p < .05$, ** $p < .01$, *** $p < .001$

Degrees of freedom for univariate F tests: 1,711

Scale range 1–5 for all variables except mental health complaints (0–3).

Table 2 presents mean values also for the employee participation variables. Again MANCOVA procedures revealed an overall difference between hospitals (Multivariate $F[4,708]=45.35$, $p < .001$), and there were significant multivariate effects of all covariates here as well. In accordance with Hypothesis 4, nurses at the proactive hospital reported more opportunities for participation in the change process in comparison with the nurses at the reactive hospital, as reflected in significant univariate effects for all

employee participation variables. The major difference between hospitals concerned employee attitudes toward the change process; whereas the mean values were below the scale midpoint for both organizations, attitudes toward downsizing were significantly more positive at the proactive hospital. In addition, nurses at the proactive hospital also reported higher levels of organizational justice, more participation in decision-making, and stronger commitment to the change process as compared to the nurses at the reactive hospital.

MANCOVA procedures were also used to test for mean differences in the outcome variables (see Table 2). There was an overall difference in work attitudes and strain between the hospitals (Multivariate $F[4,708]=9.99, p<.001$), and again the multivariate effects of all covariates were significant. As proposed in Hypothesis 2a, mean levels in organizational commitment and job satisfaction were higher at the hospital that implemented downsizing strategically. However, contrary to the prediction in Hypothesis 2b, there were no differences between hospitals in mental health complaints or emotional exhaustion.

Effects of demands and participation on employee attitudes and well-being

The next set of analyses concerned the prediction of attitudinal and health-related outcomes from downsizing-related stressors (Hypothesis 3) and employee participation (Hypothesis 5), after controlling for demographic characteristics. Hierarchical multiple regression analyses were conducted separately for the two hospitals, in which demographic control variables were entered in the first step. The stressors were entered in the second step to examine their relative importance for the outcomes, while the employee participation variables were entered in the final step. Table 3 presents the results of these tests.

The demographic control variables, entered in the first step, accounted for 10% of the variance in organizational commitment at the proactive hospital and 6% at the reactive hospital. The downsizing stressors entered in Step 2 explained an additional 14% and 8% of the variance at the two hospitals, respectively. Contrary to predictions, none of the downsizing-related stressors predicted organizational commitment at the proactive hospital, and only role ambiguity evidenced a negative effect at the reactive organization. The employee participation variables that were entered in the third step of the equation added yet another 19% (proactive hospital) and 17% (reactive hospital) to the explained variance. In accordance with Hypothesis 5a, participation in decision-making over the course of downsizing and commitment to change had positive relations with organizational commitment at both hospitals. In addition, organizational justice emerged as a significant predictor at the public administration unit, which was characterized by a reactive implementation of downsizing, while attitude towards downsizing failed to reach significance at both hospitals. In total, the model variables explained 43% of the variance in organizational commitment at the proactive hospital and 31% at the reactive hospital.

In terms of job satisfaction, the demographic variables accounted for 4% (proactive hospital) and 5% (reactive hospital). The downsizing stressors added another 25% to the explained variance at both organizations. Role ambiguity again emerged as a significant predictor, this time at both hospitals, and the relationship was negative.

One additional stressor (role conflict) evidenced a negative effect at the reactive hospital. When the employee participation variables were added in Step 3, after controlling for demographics and stressors, the proportion of explained variance increased with 13 units at the proactive hospital and 5 units at the reactive hospital. Participation in decision-making and commitment to change once again evidenced positive relations with the criterion at both hospitals. In total, the model variables accounted for 42% of the variance in satisfaction at the proactive hospital and 35% at the reactive.

Table 3: Results of multiple regression analyses predicting work-related attitudes and strain for the two hospitals (standardized regression coefficients from the last step)

Predictor	Organizational commitment		Job satisfaction		Mental health complaints		Emotional exhaustion	
	Proactive	Reactive	Proactive	Reactive	Proactive	Reactive	Proactive	Reactive
Step 1: Control variables								
Age	.08	.13*	.07	.14*	.18**	.05	.01	-.08
Gender (woman)	-.03	-.03	.04	.10*	-.06	.05	-.03	.06
Organizational tenure	.16**	.02	-.00	-.09	-.04	.06	.05	.16**
<i>R</i> ² change	.10***	.06***	.04***	.05***	.06***	.01	.02	.03*
Step 2: Downsizing stressors								
Job insecurity	.04	.04	-.01	-.01	-.01	.10*	-.06	.03
Role ambiguity	-.10	-.12*	-.18***	-.26***	.22***	.12*	.02	.08
Role overload	.07	.05	-.06	-.09	.16**	.16**	.43***	.32***
Role conflict	-.02	-.01	-.05	-.12*	.13	.15**	.09	.24***
<i>R</i> ² change	.14***	.08***	.25***	.25***	.24***	.18***	.38***	.32***
Step 3: Employee participation								
Organizational justice	-.00	.18***	.11	.02	-.07	.01	-.03	.06
Participation in decision-making	.19***	.23***	.28***	.23***	-.04	-.19***	-.14**	-.14**
Attitude towards downsizing	.08	.03	-.07	-.00	.03	.09	.13*	.01
Commitment to change	.39***	.24***	.24***	.10*	-.14*	-.05	-.32***	-.06
<i>R</i> ² change	.19***	.17***	.13***	.05***	.02**	.03**	.07***	.02*
<i>Model R</i> ²	.43***	.31***	.42***	.35***	.32***	.22***	.47***	.37***

* $p < .05$, ** $p < .01$, *** $p < .001$

After controlling for demographic variables, which accounted for marginal shares of the variance in mental health complaints, the proportion of explained variance increased with 24% and 18% at the proactive and reactive hospitals, respectively, when the stressors were added in Step 2. Role ambiguity and role conflict predicted mental health complaints at the proactive hospital, whereas all four stressors were positively related to the criterion at the reactive hospital. The employee participation variables had less impact, with only one predictor for each of the hospitals evidencing a significant relation with mental health complaints. Commitment to change (at the proactive hospital) and participation in decision-making (at the reactive hospital) were associated

with fewer mental complaints. The participation variables added only 2-3% to the variance explained, and in total, the model variables accounted for 32% (proactive hospital) and 22% (reactive hospital) of the variance in mental health complaints.

In the analysis involving predictors of emotional exhaustion, the demographic control variables again accounted for marginal proportions of the variance. In the second step, when the downsizing stressors were entered, the percentage of explained variance increased with 38 and 32 units at the proactive and reactive organization, respectively. Role overload (both hospitals) and role conflict (only the reactive organization) were associated with higher levels of emotional exhaustion. The employee participation variables contributed to explaining an additional 7% (proactive hospital) and 2% (reactive hospital), after controlling for demographics and stressors. Participation in decision-making during the downsizing process was negatively related to exhaustion at both hospitals. In addition, attitude towards downsizing and commitment to change emerged as significant predictors at the proactive organization. A total of 47% (proactive hospital) and 37% (reactive hospital) of the variance in emotional exhaustion were accounted for by the model variables.

Discussion

Given that very little research has compared the consequences of different strategies of implementing downsizing, the first objective of the present study was to investigate how proactive and reactive implementation are related to employees' experiences of the change process, with a particular focus on downsizing-related stressors and employee participation. Questionnaire data from the nursing staff of two Swedish acute care hospitals undergoing downsizing were used to shed light on this issue. While one of the hospitals, organized as a public non-profit company, had great opportunities of proactively deciding how to obtain the cost savings demanded by the local authorities, the other, a traditional public administration unit, was forced to face downsizing in a more reactive, short-term manner.

In accordance with theoretical arguments (e.g., Kozlowski et al. 1993) and empirical research (e.g., Hopkins/Weathington 2006; Mikkelsen et al. 2000; Parker et al. 1997), the results indicate that proactive implementation is associated with less detrimental consequences as compared to reactive implementation. Our first hypothesis proposed that mean levels in downsizing stressors are higher in organizations that implement downsizing reactively. In accordance with this prediction, nurses at the proactive hospital reported less job insecurity, role ambiguity, and role conflict than their colleagues at the reactive hospital, even though there were no differences in role overloaded. Moreover, nurses at the proactive hospital experienced more opportunities for participation and more favorable perceptions of the change process (Hypothesis 4). Organizational justice, participation in the change process, attitudes towards downsizing, and commitment to obtaining the goals of the restructuring were all significantly more positive among nurses at the proactive organization (i.e., the public stock company) in comparison with nurses at the reactive organization (i.e., the public administration unit). However, whereas mean levels in attitudinal outcomes were higher at the proactive organization, thus supporting Hypothesis 5a, there were, in contrast to Hypothesis 5b, no differences between hospi-

tals in the strain variables. As suggested by previous research (e.g., Bean/Hamilton 2006; Covin/Kilmann 1990; Heller et al. 1998; Mikkelsen et al. 2000), employees' experiences of large-scale change appear to be more positive when management encourages employee participation, a long-term proactive vision for the organization is developed, and there is a wide-spread recognition of a strong business-related need for change.

Although proactive implementation of organizational downsizing appears to reduce employee role stress and promote more employee involvement in the change process, there is a lack of systematic research investigating to what extent such factors may affect employee work attitudes and well-being. Hence, the second objective of the study was to investigate the potential effects of downsizing stressors and employee participation on attitudinal and health-related outcomes, and, moreover, to explore to what extent such effects differ between organizations characterized by different implementation strategies. In accordance with predictions, downsizing-related stressors were negatively associated with work attitudes and positively related to health complaints at both hospitals, while employee participation evidenced opposite relations with the outcomes.

Our results suggest that different stressors associated with downsizing may be of different importance for different outcomes. Role ambiguity was the downsizing characteristic most systematically linked to the outcome variables. Previous research has documented negative effects of role ambiguity among hospital employees in general (e.g., Pozner/Randolph 1980), but the stronger effect sizes overall among nurses at the reactive hospital may be explained by the lack of clear organizational goals at this hospital. Along similar lines, role conflict was associated with less job satisfaction and more mental health complaints as well as emotional exhaustion at the reactive hospital, whereas it was unrelated to all outcomes at the proactive organization. In accordance with previous research (e.g., Parker et al. 1997), a high workload was associated with mental health complaints as well as emotional exhaustion at both hospitals, but the lack of effects on work attitudes was unexpected (e.g., Mathieu/Zajac 1990). The fact that job insecurity was unrelated to all outcome variables (with the exception of a positive effect on mental health complaints at the reactive hospital) was unexpected given the meta-analysis results (Sverke et al. 2002) showing that insecurity is related to work attitudes and well-being. It has been noted (Hellgren/Sverke 2001), however, that the effects of job insecurity are likely to diminish once other stressors are considered, and it is plausible that the favorable labor market situation for nurses in the period of data collection may have made job insecurity a minor factor underlying employee attitudes and well-being.

Among the employee participation variables, participation in decision-making was the factor most consistently related to the outcomes. With the exception of the non-significant relation with mental health complaints at the proactive organization, participation in decision-making was associated with more positive work attitudes and fewer health problems at both hospitals. This finding supports the notion of employee participation as one of the major explanations of successful organizational change (e.g., Heller et al. 1998; Mikkelsen et al. 2000). The fact that commitment to change was consistently related to attitudes and health in a similar way at the proactive hospi-

tal, whereas it was of less importance to work attitudes and even unrelated to the health indicators at the reactive organization, underscores the notion that envisioning a broad support for long-term goals and sensemaking regarding the necessities and reasons behind the change is a central characteristic of proactive downsizing implementation (e.g., Bean/Hamilton 2006; Herscovitch/Meyer 2002; Kozlowski et al. 1993). Given the results of previous research (e.g., Brockner 1990; Hopkins/Weathington 2006; Kalimo et al. 2003), the lack of effects of organizational justice and attitudes towards downsizing were unexpected. It appears that the importance of these factors decrease when participation in decision-making and commitment to change are taken into account.

Limitations

As with all research, the results of the present study may have been affected by a number of factors, thus potentially leading to some bias in the conclusions drawn. One such limitation is that the data were collected only at a single point in time. One obvious limitation of a cross-sectional design is that it makes it impossible to draw conclusions in terms of the direction of causality. Not only does the cross-sectional design impede the analysis of temporal precedence of predictors on outcome variables, but the lack of baseline level data also prohibits us from inferring that the more favorable downsizing characteristics and change perceptions at the proactive hospital developed as a function of the long-term strategies characteristic of this hospital. However, even a cross-sectional study provides an indication of differences between groups and relations between variables (Spector 1994), and this study constitutes an important step towards increased knowledge about downsizing in the context of ownership change. It should also be noted that whereas we were unable to control for baseline levels in the variables, we compared two hospitals that were of like size, located in the same region, and had similar medical specialties. In doing so, the present study adds to the existing research that has investigated differences between different ways to implement organizational change (e.g., Fairhurst et al. 2002; Kalimo et al. 2003).

Another limitation is that the data were collected in one particular country and among employees in a specific occupation at a time when there was a shortage of nurses on the labor market. Hence, the present results need replication using longitudinal data collected in a variety of industrial sectors and in different countries.

Conclusions

Despite these limitations, the present results still provide some important insights. Given the limited number of studies to have investigated different strategies of implementing downsizing (e.g., Iverson/Zatzick 2007; Sadhev 2003), our results contribute to the existing knowledge by providing support for the notion that a proactive stance towards change is likely to avoid some of the negative effects on employees (e.g., Kozlowski et al. 1993; Parker et al. 1997). Moreover, while studies on employee participation have typically focused on only one or a few specific factors, the present study included four different factors and, hence, expands the understanding of the relative importance of various aspects of employee participation. The finding that participation in decision-making and commitment to change were found to be more im-

portant for attitudinal and health-related outcomes than justice perceptions and attitudes towards change may be of great use to managers planning for organizational change. As suggested by numerous authors (e.g., Bean/Hamilton 2006; Beer, Eisenstat/Spector 1990; Cunningham et al. 2002; Mikkelsen et al. 2000; Noer 1993; Novelli/Kirkman/Shapiro 1995; Pfeffer 1998), it appears crucial for organizations facing downsizing to allow for employees to take part in the identification of the problems the organization faces as well as in the development of a shared vision of how to organize in order to create wide-spread commitment to the pursuing of organizational goals in the long-term perspective (Van Knippenberg/Martin/Tyler 2006). To the extent this is accomplished, employees' attitudes and well-being are likely to be more positive, thus facilitating for the organization to reverse decline.

To conclude, while it could be argued that the fact our data were collected in the late 1990s makes the present findings of limited relevance, downsizing continues to take its toll on health care organizations. By detecting lower levels of stressors and higher levels of employee participation in the hospital that implemented downsizing proactively, and by identifying types of employee participation that may be more effective than others, the present findings could be of great value to health care managers and practitioners.

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