

Employee evaluation of leader-initiated crisis preparation

Marcus Selart
Svein Tvedt Johansen
Synnøve Nesse



SNF

Et selskap i NHH-miljøet

**SAMFUNNS - OG
NÆRINGSLIVSFORSKNING AS**

*Institute for Research in Economics
and Business Administration*

SNF

Samfunns- og næringslivsforskning AS

- er et selskap i NHH-miljøet med oppgave å initiere, organisere og utføre eksterntfinansiert forskning. Norges Handelshøyskole, Universitetet i Bergen og Stiftelsen SNF er aksjonærer. Virksomheten drives med basis i egen stab og fagmiljøene ved NHH og Institutt for økonomi (UiB).

SNF er Norges største og tyngste forskningsmiljø innen anvendt økonomisk-administrativ forskning, og har gode samarbeidsrelasjoner til andre forskningsmiljøer i Norge og utlandet. SNF utfører forskning og forskningsbaserte utredninger for sentrale beslutningstakere i privat og offentlig sektor. Forskingen organiseres i programmer og prosjekter av langsiktig og mer kortsiktig karakter. Alle publikasjoner er offentlig tilgjengelig.

SNF

Institute for Research in Economics and Business Administration

- is a company within the NHH group. Its objective is to initiate, organize and conduct externally financed research. The company shareholders are the Norwegian School of Economics and Business Administration (NHH), the University of Bergen (UiB) and the SNF Foundation. Research is carried out by SNF's own staff as well as faculty members at NHH and the Department of Economics at UiB.

SNF is Norway's largest and leading research environment within applied economic administrative research. It has excellent working relations with other research environments in Norway as well as abroad. SNF conducts research and prepares research-based reports for major decision-makers both in the private and the public sector. Research is organized in programmes and projects on a long-term as well as a short-term basis. All our publications are publicly available.

Working Paper No 35/12

**Employee evaluation of leader-initiated
crisis preparation**

by

**Marcus Selart
Svein Tvedt Johansen
Synnøve Nesse**

SNF project no 1306 “Crisis, Restructuring and Growth”

CRISIS, RESTRUCTURING AND GROWTH

This working paper is one of a series of papers and reports published by the Institute for Research in Economics and Business Administration (SNF) as part of its research programme “Crisis, Restructuring and Growth”. The aim of the programme is to map the causes of the crisis and the subsequent real economic downturn, and to identify and analyze the consequences for restructuring needs and ability as well as the consequences for the long-term economic growth in Norway and other western countries. The programme is part of a major initiative by the NHH environment and is conducted in collaboration with The Norwegian Ministry of Trade and Industry, The Research Council of Norway, The Confederation of Norwegian Enterprise/ABELIA and Sparebanken Vest/Bergen Chamber of Trade and Industry/Stavanger Chamber of Trade and Industry.

INSTITUTE FOR RESEARCH IN ECONOMICS AND BUSINESS ADMINISTRATION
BERGEN, OCTOBER 2012
ISSN 1503-2140

© Materialet er vernet etter åndsverkloven. Uten uttrykkelig samtykke er eksemplarframstilling som utskrift og annen kopiering bare tillatt når det er hjemlet i lov (kopiering til privat bruk, sitat o.l.) eller avtale med Kopinor (www.kopinor.no)
Utnyttelse i strid med lov eller avtale kan medføre erstatnings- og straffeansvar.

Employee evaluation of leader-initiated crisis preparation

Marcus Selart¹, Svein Tvedt Johansen², Synnøve Nesse¹

¹*Norwegian School of Economics*

²*Harstad University College*

Abstract

Crisis prevention plans are usually evaluated based on their effects in terms of preventing or limiting organizational crisis. In this survey-based study, the focus was instead on how such plans influence employees' reactions in terms of risk perception and well-being. Five different organizations were addressed in the study. Hypothesis 1 tested the assumption that leadership crisis preparation would lead to lower perceived risk among the employees. Hypothesis 2 tested the conjecture that it would also lead to a higher degree of well-being. Both hypotheses were supported. The results and their implications are discussed.

The last decade has seen a strong emphasis on crisis management (Mitroff, 2001, 2005; Gillespie & Dietz, 2009). A crisis can be described in many ways. Taking a number of features into account it is defined here as an important threat to people that can have negative consequences, if not handled properly (Coombs, 2007a, 2007b, 2007c). It has been suggested that a crisis can create three related threats: (1) public safety, (2) financial loss, and (3) reputation loss (Coombs, 2007a, 2007b, 2007c). These are often interrelated such that industrial accidents may create damage to the reputation of an organization and thus cause financial losses. In fact, all crises threaten to tarnish an organization's reputation, since a crisis reflects poorly on it (Dilenschneider, 2000; Coombs, 2007a, 2007b, 2007c).

The scope of effective crisis management is to deal with the threats sequentially. The most urgent concern relates to public safety. First, when the issues that belong to this area have been remedied, a shift of focus to reputation issues and financial concerns can be made. The ultimate goal of all crisis management is to protect the organizations from threats and/or reduce the impact felt by threats (Coombs, 2007a, 2007b, 2007c).

According to Egelhoff & Sen (1992) crises arise when there is a major incongruence between the expectations of a corporation and what happens in the environment. A Crisis "(1) threatens high-priority values of the organization, (2) presents a restricted amount of time in which a response can be made, and (3) is unexpected or unanticipated by the organization" (Herman, 1963: 64).

Crises affect the organization and its different constituencies as well as the social environment surrounding the organization. They can incur irreparable damage to local communities, shareholders and employees who may face cutbacks and even layoffs.

Organizational crises moreover often entail a loss of trust and ensuing distrust on the part of employees who may be less willing to engage in trust-informed behavior including information sharing, collaboration and extra-role behavior (Dirks & Ferrin, 2002). Crisis also threatens the legitimacy of the organization (Gillespie & Dietz, 2009). This threat is aggravated by intensified media scrutiny and social media sites capable of spreading negative information around the world in an instant.

In this article, the focus is thus on how crisis preparation among leaders is carried out and communicated to the rest of the organization and what impact this has on the risk perception and psychological well-being of the employees.

It is better to prevent crises than handle them when they are fully developed. As a result, numerous organizations have invested heavily in crisis prevention plans that (i) seek to prevent crisis in the first place, and (ii) help deal with crisis when they do happen.

Crisis prevention plans are elaborate and often costly. So far their primary justification has been to prevent and handle crises. In line with this, most of the research on crisis prevention and crisis prevention plans has been on how they help organizations prevent a potential crisis to develop into a full blown crisis (Schenker-Wicki, Inauen & Olivares, 2010).

Yet, crisis prevention plans have effects that go beyond prevention. Such plans can affect employees' perception of risk as well as employees' general sense of well-being, regardless of any impending or actual crises.

An important phase of the crisis management process is the pre-crisis phase. Much research has been devoted to the management of crisis events after they have occurred, as opposed to the prevention of these situations (Seeger and Ulmer, 2001; Simola, 2003; Ulmer and Sellnow, 2000). To some extent, the research that exists in this area has focused on the impact that leadership integrity could have on organizational culture, and the emergence of crisis situations (Cummings and Anton, 1990; Schwartz, 2000; Sims and Brinkman, 2002). Other research has considered particular ethical theories for prevention activities (Simola, 2005b).

In the pre-crisis phase, prevention plays an important part since it involves seeking to reduce known risks that could lead to a crisis. There is recent research showing that organizations are better able to handle crises when they (1) have a crisis management plan that is updated at least annually, (2) have a designated crisis management team, (3) conduct exercises to test the plans and teams at least annually, and (4) pre-draft some crises messages (Barton, 2001; Coombs, 2006, 2007a, 2007b, 2007c). Planning and preparation are prerequisites for organizations to be able to react faster and to make more effective decisions.

A crisis management plan specifies important contact information, reminders of what ought to be done in a crisis and guidelines for how the crisis response should be documented. It is not a

step-by-step guide but rather a reference tool (Barton, 2001; Fearn-Banks, 2001; Coombs, 2006, 2007a, 2007b, 2007c).

It has been common practice in industry to establish an operational level emergency response plan (ERP) together with an emergency response organization (ERO). These have usually been based both on legislative and branch standards. Training has been carried out regularly. The scenarios have typically described human-technology interaction crises, that is, accidents and fires etc.

However, most organizations have started to apply a wider perspective that also considers strategic concerns. Hence, there has been a development of a legitimate concern for business continuity (BC) as an important aspect of strategic crisis management (Herbane, Elliott, and Swartz, 2004; Simola, 2005a). Business continuity is all about taking planned and rehearsed steps to protect the business and its stakeholders (Herbane, Elliott, and Swartz, 2004). This is needed in order to aid the organizations' ability to recover and increase their chances of survival when facing a crisis.

The rational for crisis preparation

Organizations are sometimes seen as more or less perfect, but they have their faults (Bauman, 2010). Due to planning mistakes, ignored procedures or simply chance, an organization is capable of harming their employees. It is therefore believed that leading an organization through a crisis requires rational decision making guided by an ethical approach (Snyder, Hall, Robertson, Jansinski, & Miller, 2006; Bauman, 2010). It is imperative that ethical considerations are part of any crisis management strategy. The application of a strictly "economic" or rational approach may produce greater resentment and reputation damage (Bauman, 2010; Hosmer, 1996; Snyder et al., 2006).

An alternative approach may, for instance, focus on the ethics of care (Simola, 2003). Taking this approach into account, practitioners and scholars should develop risk management models and recommendations to identify, prevent, and prepare for crises before they happen (Francis & Armstrong, 2003; Simola, 2005b). An ethic of care emphasizes strong relations with others and the fulfilling of responsibilities (Simola, 2003). It has been specified by

Gilligan (1982) how one's actions may influence the feelings of others. To consider the feelings of others is important for maintaining relationships (Tronto, 1993). Fulfilling responsibilities to others is also important in this context. Hence, according to Simola (2003) an ethic of care is more occupied with fulfilling conflicting responsibilities to different people than with fulfilling conflicting rights among them. Solving moral problems is less about impartiality and standards and more about the complex features intrinsic to relationships among people (Bauman, 2010; Simola, 2003).

An ethics of care is therefore to quite a large degree pre-occupied with maintaining and enhancing relationships, as well as with the understanding and responding to the feelings and needs of others in their particular contexts. Also important is the ability to find creative ways of fulfilling responsibilities both to others and to self, even in the face of seemingly divergent or conflicting needs (Simola, 2005b).

The key issue here is really the relationship between leadership and employees. The way leadership is handling the pre-crisis phase most often has an impact on its relationship with the employees. Such a relationship may be seen as a psychological contract. A psychological contract represents the mutual beliefs, perceptions, and informal obligations between the leadership and the employees. It governs the dynamics of the relationship and defines how the work is to be done on a detailed level. It has been proposed by Lester, Kickul, and Bergmann (2007) that a high level of environmental uncertainty caused by changes can lead to a perception in employees of an eroding, transitional psychological contract, and that the leadership is not fulfilling their side of the contract. This can lead to a perception that the leadership does not value the relationship which in turn can have a detrimental impact on the employee's organizational commitment. Feelings of stress and lack of well-being may develop as a result of this.

The effects of crisis preparation on employees

We argue that leadership behavior in the pre-crisis phase to a high degree is linked to risk perception among the employees. As will be seen, the concepts of "risk perception" and "trust" are highly interconnected. The relationship between risk and trust has been analyzed by different quarters. According to Das & Teng (2004), perceived risk is equaled with the assessed probabilities of not having desirable results. The perspective implies that risk and

subjective trust are seen as inverse dimensions in the sense that high subjective risk equals low trust and low subjective risk equals high trust.

A complementary perspective has been launched by Mayer, Davis & Schoorman (1995). They describe perceived risk as a trustor's beliefs about gains and losses outside of the relationship with a particular trustee. Frewer (2003) has suggested that trust is associated with perceptions of accuracy, knowledge, and concern with public welfare. Distrust, on the other hand, is connected to perceptions of information manipulation, bias, and poor past performance. Thus, risk does not only influence the level of trust but also what trust is all about. Different social situations are believed to have an impact on what characteristics of a trustworthy or not trustworthy person are highlighted (Mayer, Davis, & Schoorman, 1995).

When faced with risky situations, employees most often internalize information from trusted sources. Hence, this information is bound to influence them on how to perceive and respond (Frewer, 2003; Cvetkovich and Lofstedt, 1999, Maule, 2008). In contrast to this, information from distrusted sources is likely to be disregarded as unreliable or self-serving. Such information may therefore result in attitudes opposite to those intended (Frewer, 2003). As a result, the effectiveness of risk communication might be seriously reduced (Renn, 1998, Rowe and Frewer, 2005).

It is argued by Van den Bos and Lind (2002) that people have a fundamental need to feel certain about their world and their place within it and that too much uncertainty threatens the meaning of existence. Uncertainty deprives one of confidence in how to behave and what to expect from the environment. Moreover, it has been found that uncertain individuals often become more rigid and close-minded about their attitudes, values, and identifications (McGregor, Zanna, Holmes, & Spencer, 2001). A key observation by Van den Bos and Lind (2002) is that fairness information may reduce high levels of experienced uncertainty. This is because fairness reduces individuals' anxiety about being excluded or exploited by the organization (see also Lind & Van den Bos, 2002; Thau, Aquino, & Wittek, 2007).

Well developed crisis prevention plans are likely to influence employees' risk perception for several reasons. First, information about crisis prevention plans suggests to employees that procedures are in place to handle eventual crises. Thus, such information advocates that crises are manageable and will be dealt with in a satisfactory manner.

The better the crisis prevention plans the more likely the organization is in its capability of preventing and handling such crises. To the extent that employees are aware of such plans, they should contribute to reduce employees' perception of risk. This is since the plans are likely to reduce the likelihood for aversive outcomes and thus diminish the consequences of crises.

Several studies show how risk and a general loss of control lead people to seek information that can help reduce uncertainty (Slovic, 2000). Information about crisis prevention plans constitutes one such source. Thus, information about crisis prevention is likely to satisfy employees' needs for control and information (Greenberger & Strasser, 1991).

Second, information about risk prevention plans also provides information about the leader and the organization that commissioned such plans. To employees, crisis prevention plans might provide information about a leader's trustworthiness in terms of ability (crisis prevention plans signals competence and awareness of risks), integrity (crisis prevention plans suggest that leaders adhere to societal standards and act responsibly) and benevolence (crisis prevention plans suggest that leaders care about their employees who are likely to be affected by the crises).

Employees' trust in leaders in turn is likely to reduce risk perception as employees feel confident that the leader will be capable of handling the crisis, will adhere to values that employees hold important and will care about the well-being of employees.

Last, but not least, the existence of crisis prevention plans suggests that a situation is normal, foreseeable and controllable and is likely to support normalcy beliefs and reduce a experience of ambiguity often associated with organizational crises and change (McKnight, Cummings & Chervany, 1998; Garfinkel, 1963). Based on this reasoning we state the following:

Hypothesis 1:

Information about crisis preparedness will be associated with lower perceived risk among employees.

When an employee's role in the organization is clearly defined and understood, and when expectations upon the individual are also clear and non-conflicting, stress can be kept to a minimum (Selart & Johansen, 2011). Role ambiguity is seen to be major source of stress. This

is a concept that has rendered a lot of research historically (Warshaw, 1979; Schaubroeck, Ganster, Sime, and Ditman, 1993; Breugh and Colihan, 1994; Beehr, 1995; Frone, Russell and Cooper, 1995). Role ambiguity arises when employees do not have a clear picture of their work objectives, their colleagues' expectations of them and the responsibilities of their job. Often this ambiguity results simply because the leadership does not communicate to the employee what his or her role will be in a potential crisis situation. If the contents of a crisis management plan are not communicated by the leadership to the employees, ambiguity is bound to occur. The employee just doesn't know how he or she fits into the plan and is unsure due to this. Such leadership behavior might therefore serve to create a temporary state of role ambiguity. The stress indicators found to relate to role ambiguity are depressed mood, lowered self-esteem, life dissatisfaction and low motivation.

Perceived risk is in itself likely to constitute a threat to a general sense of well-being. Higher perceived risk is likely to activate more stress-symptoms as employees worry about the potential negative outcomes.

However, crisis prevention plans might also signal that the management of the organization takes an interest in the employees. Elaborative crisis prevention plans suggest that the management of the organization cares about their employees and values the relationship to them. This is likely to undergird a sense of inclusion and belonging which is essential to employees and to people in general (Tyler & DeGoey, 1996; Baumeister & Leary, 1995). Hence, based on this reasoning we suggest that

Hypothesis 2:

Information about crisis preparedness will be associated with a higher degree of well-being among employees.

Method

Participants

Five different organizations participated in the study. Two of these belonged to the private sector and three were members of the public sector. In each organization, 20 employees took part in the study. Thus, a total of 100 questionnaires were handed out to the employees. The response rate was 97%. In addition, each manager of health and safety at the organizations completed a specially designed questionnaire. This aimed at measuring the quality level of the organization's crisis preparedness. All of these five managers completed the questionnaire. Of the 97 employees who responded to the survey 56 were men and 41 women. These participants were between 19 and 63 years and had a mean age of 45.1 years.

Materials

The study used two questionnaires. In both of these, structured response options were applied which were designed using Likert scales. In order to get respondents to consider the various statements, we chose to make use of four possible answers: strongly agree, partially agree, partially disagree and strongly disagree. One of the questionnaires was designed for those responsible for health and safety in the workplace/department. This was built around twelve statements which sought to find out how the crisis preparedness looked like at the company. The questionnaire designed for the employees was built around 30 statements. These focused on the employees' knowledge of the organization's crisis preparedness, how they felt in general, and how safe they felt in their workplace. Furthermore, there were a number of issues concerning the employees' gender, age, number of years employed at the organization and position held.

To be able to formulate the statements in the questionnaire designed for the health and safety managers we used official regulations in this area. The same sources were applied in order to formulate ten of the statements in the employee questionnaire. These statements were included in order to explore what knowledge the employees had about the crisis preparedness at the workplace. Examples include: 1. I am satisfied with the information on crisis preparedness at my company, 2. I get information about the crises that arise in my workplace,

3. I know what my organization's crisis preparedness means, 4. I know what is required of me in a crisis, and 5. At a crisis in my work, I know what support is available for the employees.

In addition ten statements were applied in order to find out the well-being of the employees. These focused on both mental and physical health, and were formulated based on research on well-being and psychosomatic symptoms (Sivertsson, 2000). Examples include: 1. I get the social support I need from my colleagues, 2. I like it in my workplace, 3. I'm happy with my life, 4. I feel for the most part happy, and 5. I like to go to my work.

Which risks the employees experienced at work were investigated by means of an additional ten statements about risk perception. Examples include: 1. I feel safe in my workplace, 2. I believe that in my workplace employees are well prepared for a crisis, 3. My job feels unsafe, 4. I rely on the crisis preparedness at my workplace, and 5. Security is good in my workplace.

In order to explore the reliability of all statement categories we applied the Cronbach's alpha measure. For knowledge of the organization's crisis preparedness a value of $\alpha = .90$ was recorded, for well-being $\alpha = .80$, and for risk perception $\alpha = .74$.

Procedure

To find companies that were willing to participate in the study, we made phone-calls in the area. We had set as a requirement that organizations should have at least 50 employees. At first contact by phone, we asked to speak with the personnel manager at the company. Thereafter, we announced our study and its purpose. All companies had the opportunity to see both questionnaires and then decide whether they wanted to participate or not. These two documents and other information were subsequently sent to the organizations via e-mail. Then we contacted the organizations in order to arrange a time for distribution of the questionnaires.

A pilot study was conducted at a public sector organization in order to pre-test the questionnaires, get feedback, and examine whether there were any statements that could be misunderstood. After the pilot study was performed, we chose to expand the questionnaire's information section that explained what we meant by crisis preparedness and where we also gave examples of crises that may arise in the workplace.

The data collection was arranged such that the questionnaires were distributed and collected by two project assistants. All employees received the same information and were given the opportunity to ask questions. We also enclosed relevant phone numbers so that participants could take contact if possible ambiguities and questions emerged.

In order to categorize the companies and place them in groups of less good, good, and very good crisis preparedness, we used the questionnaires designed for the health and safety managers and the resulting scores for each of these. The maximum score was 48. Organizations who achieved less than 24 points were put in the group of organizations with less good crisis preparedness. Those who reached the score in the range of 24-36 were placed in the group of organizations with good crisis preparedness, and those who achieved 36-48 points were placed into the group of organizations with very good crisis preparedness.

Results

The fit of the data to the normal distribution was examined to see if we could use parametric tests. The basic descriptive statistics for key variables are revealed in Table 1. A stepwise multiple regression analysis, with risk perception as the dependent variable and age, gender, and employee awareness of crisis preparedness as independent variables was conducted. This showed that employees' knowledge of crisis preparedness was a significant predictor of the risk that they perceived at work ($F(1, 96) = 75.56, p < .001$). For all predictors the joint R^2_{adj} was 0,36.

There was also a significant effect of employees' knowledge of the organization's crisis preparedness and their perceived well-being ($F(1, 96) = 8.18, p < .05$). In this stepwise multiple regression analysis employees' perceived well-being was used as the dependent variable and age, gender, and employee awareness of crisis preparedness were again applied as independent variables. For all predictors the joint R^2_{adj} was 0,16.

Table 1

A two-way analysis of variance was conducted with the degree of crisis preparedness at the organization (less good, good or very good) and employee gender as independent variables. Risk perception was applied as the dependent variable. The analysis revealed a main effect of degree of crisis preparedness on risk perception ($F(2, 96) = 7.14, p < .001$) (see Table 2).

Table 2

By using a Post Hoc Test (Tukey HSD), with risk perception as the dependent variable, a significant difference between the organizations with good and the very good crisis preparedness was established ($p = .019$). The mean difference was 0.38 and $SD = 0.14$. There was also a tendency for a significant difference between the organizations with less good and good crisis preparedness ($p = .063$). The mean difference was 0.39 and $SD = 0.17$.

An additional two-way analysis of variance was carried out using the same independent variables as in the former one. This time, experienced well-being was used as the dependent variable. A main effect of degree of crisis preparedness on well-being could be observed ($F(2, 96) = 6.09, p < .005$) (see Table 3).

Table 3

By using a Post Hoc Test (Tukey HSD), with experienced well-being as the dependent variable, a significant difference between the organizations with less good and good crisis preparedness could be established ($p = .049$). The mean difference was 0.32 and $SD = 0.13$.

Discussion

We found that crisis preparedness was associated both with lower perceived risk (Hypothesis 1) as well as with increased well-being (Hypothesis 2) among the employees. Thus, both hypotheses were supported

This suggests that crisis preparedness, accomplished in the form of well developed crisis prevention plans, has effects that extend beyond the intended purposes of preventing or accommodating crises. The findings thus introduce new and different arguments for implementing crisis prevention plans. Even in the absence of any actual or impending crises, crisis preparedness still may have important and valuable effects on employees' well-being. This, in turn, is likely to have other beneficial effects for employees and the organization alike.

The paper and its findings contribute to different literatures. First, it contributes to the crisis management literature by describing a new set of outcome variables as well as a new set of relationships between crisis preparedness, risk perception, and employee well-being (Barton, 2001; Coombs, 2006, 2007a; Quarantelli, 1988).

Second, the paper can also be seen as contributing to the literature on work psychology and, more specifically, to our understanding of the mechanisms that govern work satisfaction and well-being in the organization. In this realm, crisis preparedness can be viewed as one of several contextual variables that influence well-being in the workplace (Ilies, Schwind, & Heller, 2007; Brief & Weiss, 2002).

Finally, the findings can also be related to the literature on trust in organizations, and more specifically, to how managers can initiate and develop employees' perception of leaders as trustworthy (Dirks, 2006; Dirks & Ferrin, 2002; Whitener, Brodt, Korsgaard & Werner, 1998). In this capacity, crisis preparedness plans constitute a policy that on the one hand fosters trustworthy behavior, including greater transparency, and simultaneously signifies managerial trustworthiness (Whitener et al. 1998).

While the results are promising, more research is needed in order to develop a better understanding of how crisis prevention plans influence risk perception and well-being. A cross sectional design like the one used in the present study has obvious limitations in that it can establish co-variation but not causality. Future studies should seek to rule out the possibility of spurious relationships and confounding variables.

Thus crisis preparedness is likely to show a positive correlation with a set of other factors that may in themselves reduce employees' perception of risk as well as increase their sense of well-being: Organizations that score high on crisis preparedness may also be managed by

leaders who are more capable, benevolent, and in possession of greater integrity than other organizations.

There may also be a positive relationship between crisis preparedness and the general management of the organization in that well-prepared organizations might be synonymous with better managed organizations. Well-managed and orderly organizations constitute a more predictable and controllable environment that is likely to reduce employees' perception of risk as well as promoting general well-being (Hodson, 2004). As such, crisis preparedness may be more a symptom of a well-run organization than a causal factor in its own right. As a result, future studies will need to control for confounding variables of the type described above.

The effects of crisis preparedness plans on risk perception and general well-being might also be likely to involve different mediating processes and be influenced by different contextual moderators. Thus, crisis prevention plans might have a direct effect on employees' risk perception in which case the circumstances surrounding the implementation of the plans are irrelevant. However, the effects of crisis prevention plans might also stem from the effects such plans have on employees' view of their leaders. Here, employees' attributions about the management's motives for implementing crisis prevention plans are likely to influence the effects of such plans on perceived risk and general well-being.

In this context, crisis prevention plans become indicative of management's benevolence, competence, and integrity. Nevertheless, the effects of such plans will likely depend on employees' attribution regarding managements' motives for initiating such plans. Where such plans are viewed as reflecting external pressure (as when being legally mandated) the informational value of the plans diminishes as do the effects of crisis prevention plans on employees' perception of leaders' trustworthiness (Jones & Davis, 1965). As a result, mandatory crisis management plans might enable organizations to reap some of the rewards described here, but not all, since mandatory plans reveal little or nothing about a leader's motivations and intentions.

The findings suggest that the complexity of the plans matters for how they are perceived. Thus, more elaborate crisis management plans have a tendency to result in more positive effects on risk perception and general well-being. Yet, the results reveal little about how the specific content or design of such plans influence risk-perception. Nor does the study look at

the effects of how such plans are communicated in the organization. Future studies may seek to explore how variation with respect to content, organization and dissemination of such plans influence employees' risk perception, trust in managers, and general well-being.

Hence, future studies should seek to (i) establish the time order of effects by studying risk perception and well-being before and after the introduction of crisis prevention plans, (ii) control for spurious relationships by introducing measures of potential confounding variables (preferably from independent informants) about, for instance, the competence and trustworthiness of management, (iii) seek to establish different paths through which crisis prevention plans can influence risk perception and general well-being.

Finally, new studies should eventually move on to test the impacts of different types of crisis prevention or even different forms of communicating crisis prevention plans on employee risk perception and well-being. Together these steps should enable us to develop more confident inferences about the effects of crisis preparedness and crisis management plans. A finer grained understanding of the effects should also enable organizations to design and use crisis management plans in ways that optimize their effects on employees risk perception and well-being.

Table 1. Descriptive statistics on employees' knowledge of the organization's crisis preparedness, risk perception in the workplace and perceived well-being

	M	SD	N
Knowledge of the organization's crisis management	2,34	0,73	97
Risk perception in the workplace	2,81	0,65	97
Perceived well-being	3,23	0,50	97

Table 2. Descriptive statistics on the organizational level of crisis preparedness and employee risk perception

Organizational level of crisis preparedness	N	M	SD
Less good	19	2,97	0,68
Good	38	2,58	0,60
Very good	40	2,96	0,65

Table 3. Descriptive statistics on the organizational level of crisis preparedness and employee well-being

Organizational level of crisis preparedness	N	M	SD
Less good	19	3,42	0,55
Good	38	3,10	0,54
Very good	40	3,24	0,40

References

- Barton, L. (2001). *Crisis in Organizations II*. Cincinnati, OH: College Divisions South-Western.
- Bauman, D. C. (2010). Evaluating ethical approaches to crisis leadership: Insights from unintentional harm research. *Journal of Business Ethics*, 98, 281-295.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497-529.
- Beehr, T. A. (1995). *Psychological Stress in the Workplace*. London: Routledge.
- Breaugh, J. A., & Colihan, J. P. (1994). Measuring facets of job ambiguity: Construct validity evidence. *Journal of Applied Psychology*, 79, 191-202.
- Brief, A. P., & Weiss, H. M. (2002). Affect in the workplace. *Annual Review of Psychology*, 53, 279-307.
- Coombs, W. T., (2006). *Code Red in the Boardroom*. Westport, CN: Praeger.
- Coombs, W. T. (2007a). Crisis management and communications. Institute for Public Relations.
- Coombs, W. T. (2007b). *Ongoing Crisis Communication: Planning, Managing, and Responding*. Los Angeles: Sage Publications.
- Coombs, W. T. (2007c). Protecting organization reputations during a crisis: The development and application of situational crisis communication theory. *Corporate Reputation Review*, 10, 1-14.
- Cummings, L. L., & Anton, R. J. (1990). The logical and appreciative dimensions of accountability. In S. Shrivastava, D. L. Cooperrider & Associates (Eds.), *Appreciative Management and Leadership: The Power of Positive Thought and Action in Organizations*. San Francisco: Jossey Bass.
- Cvetkovich, G., & Lofstedt, R. E., (1999). *Social Trust and the Management of Risk*: London: earthscan.
- Das, T. K., & Teng, B. S. (2004). The risk-based view of trust: A conceptual framework. *Journal of Business and Psychology*, 19, 85-116.
- Dilenschneider, R. L. (2000). *The Corporate Communications Bible: Everything you Need to Know to Become a Public Relations Expert*. Beverly Hills: New Millennium.
- Dirks, K. T. (2006). Three fundamental questions regarding trust in leaders. In R. Bachmann & A. Zaheer (Eds.), *Handbook of Trust Research* (pp. 15-28). Cheltenham, UK: Edward Elgar.

- Dirks, K. T., & Ferrin, D. I. (2002). Trust in leadership: Meta-analytic findings and implications for organizational research. *Journal of Applied Psychology*, 87, 611-628.
- Egelhoff, W. G., & Sen, F. (1992). An information-processing model of crisis management. *Management Communication Quarterly*, 5, 443-484.
- Fearn-Banks, K. (2001). *Crisis Communications: A Casebook Approach*. Mahwah, NJ: Lawrence Erlbaum.
- Francis, R., & Armstrong, A. (2003). Ethics as a risk management strategy: The Australian Experience. *Journal of Business Ethics*, 45, 375-385.
- Frewer, L. J. (2003). Trust, transparency, and social context: Implications for the social amplification of risk. In N. Pidgeon., R. E. Kasperson., and P. Slovic (Eds.), *The Social Amplification of Risk*. Cambridge: Cambridge University Press.
- Frone, M. R., Russel, M., & Cooper, M. L. (1995). Job stressors, job involvement, and employee health: A test of identity theory. *Journal of Occupational and Organizational Psychology*, 68, 1-11.
- Garfinkel, H. (1963). A conception of, and experiments with "trust" as a condition of stable concerted actions. In O. J. Harvey (Ed.), *Motivation and social interaction* (pp. 187-238). New York: Ronald Press.
- Gillespie, N., & Dietz, G. (2009). Trust repair after an organization-level failure. *Academy of Management Review*, 34, 127-145.
- Gilligan, C. (1982) *In a Different Voice*. Boston, MA: Harvard University Press.
- Greenberger, D. B., & Strasser, S. (1991). The role of situational and dispositional factors in the enhancement of personal control in organizations. In L. L. Cummings and B. M. Staw (Eds.), *Research in Organizational Behavior*, Vol. 13. Greenwich, CN: JAI Press.
- Herbane, B., Elliot, D., & Swartz, E. M. (2004). Business continuity management: Time for a strategic role? *Long Range Planning*, 37, 435-457.
- Hermann, C. F. (1963). Some consequences of crisis which limit the viability of organizations. *Administrative Science Quarterly*, 8, 61-82.
- Hodson, R. (2004). Organizational trustworthiness: Findings from the population of organizational ethnographies. *Organization Science*, 15, 432-445.
- Hosmer, L. T. (1996). *The Ethics of Management*, Vol. 3 (Irwin, Chicago, IL).
- Ilies, R., Schwind, K. M., & Heller, D. (2007). Employee well-being: A multilevel model linking work and nonwork domains. *European Journal of Work and Organizational Psychology*, 16, 326-341.
- Jones, E. E., & Davis, K. E. (1965). From acts to dispositions: The attribution process in social psychology. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology*, Vol 2. New York: Academic Press.

- Lester, S. W.; Kickul, J.; Bergmann, T. J. (2007). Managing employee perceptions of the psychological contract over time: The role of employer social accounts and contract fulfillment. *Journal of Organizational Behavior*, 28, 191-208.
- Lind, E. A., & Van den Bos, K. (2002). When fairness works: Toward a general theory of uncertainty management. In B. M. Staw and R. M. Kramer (eds.), *Research in Organizational Behavior, Volume 24*. Greenwich CT: JAI Press.
- Maule, A. J. (2008). Risk communication in organizations. In G. Hodgkinson and W. H. Starbuck (Eds.), *The Oxford Handbook of Organizational Decision Making*. Oxford: Oxford University Press.
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrated model of organizational trust. *Academy of Management Review*, 20, 709-734.
- McGregor, I., Zanna, M. P., Holmes, J. G., & Spencer, S. J. (2001). Compensatory conviction in the face of personal uncertainty: Going to extremes and being oneself. *Journal of Personality and Social Psychology*, 80, 472-488.
- McKnight, D. H., Cummings, L. L., & Chervany, N. L. (1998). Initial trust formation in new organizational relationships. *Academy of Management Review*, 23, 473-490.
- Mitroff, I. I. (2001). *Managing Crises Before They Happen: What Every Executive & Manager Needs to Know About Crisis Management* (American Management Association, NY: New York).
- Mitroff, I. I. (2005). *Why Some Companies Emerge Stronger and Better From a Crisis: 7 Essential Lessons for Surviving Disaster* (American Management Association, New York, NY).
- Quarantelli, E. L. (1988). Disaster crisis management: A summary of research findings. *Journal of Management Studies*, 25, 373-385.
- Renn, O. (1998). The role of risk communication and public dialogue for improving risk management. *Risk, Decision, and Policy*, 3, 5-30.
- Rowe, G., & Frewer, L. J. (2005). A typology of public engagement methods. *Science, Technology, and Human Values*, 30, 251-290.
- Schaubroeck, J., Ganster, D. C., Sime, W. E., & Ditman, D. (1993). A field experiment testing supervisory role clarification. *Personnel Psychology*, 46, 1-25.
- Schenker-Wicki, A., Inauen, M., & Olivares, M. (2010). Unmastered risks: From crisis to catastrophe. An economic and management insight. *Journal of Business Research*, 63, 337-346.
- Schwartz, P. (2000). When good companies do bad things. *Strategy & Leadership*, 28, 4-11.
- Seeger, M. W., & Ulmer, R. R. (2001). Virtuous responses to organizational crisis: Aaron Feuerstein and Milt Cole. *Journal of Business Ethics*, 31, 369-376.

- Selart, M., & Johansen, S. T. (2011). Ethical decision making in organizations: The role of leadership stress. *Journal of Business Ethics*, 99, 129-143,
- Simola, S. K. (2003). Ethics of justice and care in corporate crisis management. *Journal of Business Ethics*, 46, 351-361.
- Simola, S. K. (2005a). Organizational crisis management: Overview and opportunities. *Consulting Psychology: Practice and Research*, 57, 180-195.
- Simola, S. K. (2005b). Concepts of care in organizational crisis prevention. *Journal of Business Ethics*, 62, 341-353.
- Sims, R. R., & Brinkman, J. (2002). Leaders as role models: The case of John Gutfreund at Salomon Brothers. *Journal of Business Ethics*, 35, 327-339.
- Sivertsson, T. (2000). *Debriefing – Krisstöd – En väg till bättre arbetsmiljö (Debriefing – Crisis Support – A path to a better worklife environment)*. Stockholm: Arbetarskyddsstyrelsen.
- Slovic, P. (2000). *The Perception of Risk*. London: Earthscan Publications.
- Snyder, P., Hall, M., Robertson, J., Jansinski, T., & Miller, J. S. (2006). Ethical rationality: A strategic approach to organizational crisis. *Journal of Business Ethics*, 63, 371-383.
- Thau, S., Aquino, K., & Wittek, R. (2007). An extension of uncertainty management theory to the self: The relation between justice, social comparison orientation, and antisocial work behaviors. *Journal of Applied Psychology*, 92, 250-258.
- Tronto, J. H. (1993). *Moral Boundaries: A Political Argument for an Ethic of Care*. London: Routledge.
- Tyler, T. R., & Degoey, P. (1996). Trust in organizational authorities: The influence of motive attributions on willingness to accept decisions. In R. Kramer & T. R. Tyler (Eds.), *Trust in Organizations: Frontiers of Theory and Research* (pp. 331-356). Thousand Oaks, CA: Sage.
- Ulmer, R. R., & Sellnow, T. L. (2000). Consistent questions of ambiguity in organizational crisis communication: Jack in the Box as a case study. *Journal of Business Ethics*, 25, 143-155.
- Van den Bos, K., & Lind, A. E. (2002). Uncertainty management by means of fairness judgments. *Advances in Experimental Social Psychology*, 34, 1-60
- Warshaw, L. J. (1979). *Managing Stress*. Reading, MA: Addison-Wesley.
- Whitener, E. M., Brodt, S. E., Korsgaard, M. A., & Werner, J. M. (1998). Managers as initiators of trust: An exchange relationship framework for understanding managerial trustworthy behavior. *Academy of Management Review*, 23, 513-530.

**PUBLICATIONS WITHIN SNF'S RESEARCH PROGRAMME "CRISIS,
RESTRUCTURING AND GROWTH"**

2010-

- Marcus Selart
Svein T. Johansen
Synnøve Nesse
*Employee evaluation of leader-initiated crisis
preparation*
SNF Working Paper No 35/12
- Eirik S. Knudsen
Lasse B. Lien
*Knowledge investments in recessions:
The effects of demand and credit*
SNF Working Paper No 34/12
- Per Heum
Eva Benedicte Norman
Victor D. Norman
Linda Orvedal
*Tørrskodd Vestland - Arbeidsmarkedsvirkninger av
ferjefritt samband Bergen-Stavanger*
SNF Working Paper No 33/12
- Geir Drage Berentsen
Bård Støve
Dag Tjøstheim
Tommy Nordbø
*Recognizing and visualizing copulas: an approach using local
Gaussian approximation*
SNF Working Paper No 12/12
- Siri Sollid Robstad
Ingvild Almås
Modernisert men urettferdig folketrygd?
SNF Working Paper No 04/12
- Per Heum
Hvordan vurdere godheten i næringspolitiske virkemidler?
SNF Working Paper No 03/12
- Øystein Thøgersen
Pengepolitikkenes evolusjon
SNF Working Paper No 36/11
- Guttorm Schjelderup
Sekretessejurisdiksjoner, korrupsjon og økonomisk kriminalitet
SNF Working Paper No 33/11
- Lasse B. Lien
Tore Hillestad
Recession, HR and change
SNF Working Paper No 20/11
- Eirik S. Knudsen
*Shadow of trouble: The effect of pre-recession characteristics on
the severity of recession impact*
SNF Working Paper No 19/11
- Bård Støve
Dag Tjøstheim
Karl Ove Hufthammer
*Using local Gaussian correlation in a nonlinear
re-examination of financial contagion*
SNF Working Paper No 14/11
- Armando J. Garcia Pires
Tom Stephan Jensen
*Effects of flat tax reforms on economic growth
in the OECD countries*
SNF Working Paper No 12/11

Kirsten Foss

How do economic crises impact firm boundaries?
European Management Review, Vol. 7, No. 4, pp. 217-227,
2010

Kjell G. Nyborg
Per Östberg

Liquidity, ideas and the financial crisis
SNF Working Paper No 17/10

Lasse B. Lien

Recessions across industries: a survey
SNF Working Paper No 16/10

Ingvild Almås
Gernot Doppelhofer
Jens Chr. Haatvedt
Jan Tore Klovland
Krisztina Molnar
Øystein Thøgersen

Crisis, restructuring and growth: A macroeconomic perspective
SNF Report No 05/10

Crisis prevention plans are usually evaluated based on their effects in terms of preventing or limiting organizational crisis. In this survey-based study, the focus was instead on how such plans influence employees' reactions in terms of risk perception and well-being. Five different organizations were addressed in the study. Hypothesis 1 tested the assumption that leadership crisis preparation would lead to lower perceived risk among the employees. Hypothesis 2 tested the conjecture that it would also lead to a higher degree of well-being. Both hypotheses were supported. The results and their implications are discussed.



Et selskap i NHH-miljøet

**SAMFUNNS - OG
NÆRINGS- OG LIVSFORSKNING AS**

*Institute for Research in Economics
and Business Administration*

Breviksvæien 40
N-5045 Bergen
Norway
Phone: (+47) 55 95 95 00
Fax: (+47) 55 95 94 39
E-mail: publikasjon@snf.no
Internet: <http://www.snf.no/>

Trykk: Allkopi Bergen