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ORGANIZATIONAL FACTORS AND BAD NEWS REPORTING ON TROUBLED IT PROJECTS

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Abstract

An individual’s reluctance to report bad news about a troubled IT project has been found to be an important contributor to project failure. While there are a variety of factors influencing the reluctance to report, prior IS research has mainly focused on situational factors rather than personal and organizational factors. In this paper, we examine the effects of certain organizational factors on an individual’s reporting behavior within the rubric of the basic whistle-blowing model adapted from Dozier and Miceli (1985). Specifically, we investigate how organizational structures/policies and managerial practices affect the organizational climate of silence. This study also examines how the climate of silence interacts with the three decision steps in the basic whistle-blowing model.

Keywords:
IT project management, bad news reporting, whistle-blowing, organizational silence, employee silence, climate of silence.

Introduction

Project failure has been a serious problem in the information systems field. A recent global survey shows that IT projects are still prone to failure nowadays (Zarrella et al. 2005). While many reasons for IT project failure have been identified, a project member’s reluctance to report bad news about the true status of the project has been recently recognized as a factor that may contribute to IT project failure (Tan et al. 2003). If an IT project member withholds bad news about a project from senior management, the troubled project can escalate and become a runaway project. On the other hand, if the true status of a troubled project is reported to senior management, there is a chance that some actions can be taken to turn around the project, or abandon it if necessary. Prior research suggests, however, that, while some evidence of pending failure may be apparent to project members in the lower ranks, this bad news sometimes fails to be communicated up the hierarchy (Keil and Robey 1999).

In this paper, we examine an individual’s bad news reporting in troubled IT projects. Although bad news reporting in the IS context has not been widely investigated, it has recently received more research attention. IS scholars have theoretically identified and empirically tested potential factors influencing an individual’s bad news reporting in a troubled IT project context. For example, Smith and Keil (2003) have identified four situational factors and many moderating factors based on a thorough literature review. Empirical research in this area is limited, however, and has focused almost exclusively on a small set of situational and personal factors that affect the reporting behavior in the IS context. In order to provide more insight into the relationships between influential factors and bad news reporting, this research evaluates the effects of organizational factors on bad news reporting.

Morrison and Milliken (2000) theoretically developed two major organizational forces that may directly lead to an organizational climate of silence in their model of organizational silence. The two forces are organizational structures/policies and managerial practices. More specifically, they identified centralization of decision making and lack of formal upward feedback mechanisms as the two organizational factors in the ‘organizational structures/policies’ force, and tendency to reject or respond negatively to dissent or negative feedback and lack of informal solicitation of negative feedback as another two organizational factors in the ‘managerial practices’ force.

In this research, we adopted the organizational factors theoretically developed by Morrison and Milliken (2000), and tested the relationships among those factors, a climate of silence, and bad news reporting. In order to investigate how the organizational factors contribute to the climate of silence, we manipulated the two organizational forces in a controlled laboratory experiment by developing four scenarios with two different levels for each force.

This study represents the first time that the two organizational forces have been empirically investigated using a theoretically grounded model. The remainder of the paper is organized into four sections. First, we briefly review the relevant literature, focusing on organizational silence, whistle-blowing, and bad news reporting. Next, we introduce our research model and hypotheses. Then, we briefly describe our research methodology and some expected contributions.
Background

Organizational Silence

Morrison and Milliken (2000) have noted that “many organizations are caught in an apparent paradox in which most employees know the truth about certain issues and problems within the organization yet dare not speak that truth to their superiors.” They refer to this as organizational silence or employee silence. While this silence phenomenon has been discussed with different labels such as the MUM effect (or its opposite, whistle-blowing), the notion of organizational silence has recently received research attention in the management literature (Milliken et al. 2003). Organizational silence is different from the other related bodies of work (e.g., the MUM effect and whistle-blowing) in terms of its approach to understanding the silence phenomenon. While the MUM effect and whistle-blowing literatures emphasize an individual employee’s reporting decision, organizational silence focuses more on collective-level dynamics. Additionally, organizational silence represents a more inclusive approach to characterizing the silence phenomenon in an organization. For example, while whistle-blowing seems to be limited to a wrongdoing situation, the notion of organizational silence is not limited to any specific context, but covers widespread withholding of information about potential problems or issues by employees (Morrison and Milliken 2000). In this research, we have adopted this inclusive approach from the organizational silence literature in defining bad news reporting in organizational settings. In doing so, we are not limiting the origin of bad news to wrongdoing, but instead extending it to any potential problems or issues.

In addition to its inclusive approach, the organizational silence literature is focused on organizational forces, rather than individual-level antecedents. Morrison and Milliken (2000) theoretically developed a model of how silence unfolds within organizations. Their model suggests that managers’ fear of negative feedback and a set of implicit managerial beliefs give rise to organizational structures/policies and managerial practices that impede the upward flow of information, which contribute to a climate of silence (meaning widely shared perceptions among individuals that speaking up about problems or issues is fruitless and/or even dangerous). Such a climate will lead to employee silence rather than voice. In this study, we are interested in how the two organizational forces influence employee silence through a climate of silence.

Basic Whistle-Blowing Model as Three Decision Steps of Reporting

While the organizational silence literature provides a rich explanation of the antecedents leading to employee silence and the effects of employee silence, it does not specify how an employee decides whether to exercise voice or remain silent. In this study, we understand that employee silence is a consequence of an employee’s decision to report or not, and we examine how employees make a decision to report (= voice) or not (= silence).

Figure 1 shows the central decision-making model from the whistle-blowing literature, which provides the basic theoretical framework of an individual’s reporting decision steps (Miceli and Near 1992). Dozier and Miceli (1985) argued that once an individual is aware of a problem (i.e., recognition), he or she assesses whether the status ought to be reported (i.e., assessment), then considers whether he or she is responsible for reporting (i.e., responsibility), which in turn influences his or her willingness to report (i.e., choice of action). IS researchers have adopted this model as a general outline of individual decision-making regarding bad news reporting and have found support for the model in a variety of experimental contexts (Smith and Keil 2003; Smith et al. 2001). Thus, we also adopt the central decision-making model as a building block for developing an expanded model with organizational forces.

![Figure 1. Basic Whistle-Blowing Model](adapted from Dozier and Miceli (1985))

Bad News Reporting and Influencing Factors

A variety of factors at different levels influencing bad news reporting have been identified in the IS literature. Smith and Keil (2003) have theoretically identified four important situational factors that can affect an individual’s bad news reporting: risk, time pressure, level of behavioral immorality, and information asymmetry, which have been empirically tested and confirmed in the IS literature (Keil et al. 2004; Park et al. 2006; Smith et al. 2001). While prior research has speculated about the relationship between personal factors and bad news reporting (Dozier and Miceli 1985; Smith et al. 2001), there has been little empirical work on personal factors in the bad news reporting context. One recent study has theoretically identified and empirically tested the effects of two personal factors (i.e., morality and willingness to
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communicate) on bad news reporting in the IT project context. Thus, prior IS research on bad news reporting has mainly focused on situational and personal factors, rather than organizational factors.

Morrison and Milliken (2000) have developed a model of organizational silence, in which two organizational forces were theoretically identified. According to their theoretical model, the two organizational factors generate a climate of silence in an organization, which in turn leads to employee silence, i.e., employees’ decision to report or not. The theoretical model of employee silence with two organizational forces has not been empirically tested. In this study, we empirically investigate how the two organizational forces, which have been theoretically developed by Morrison and Milliken (2000), affect an individual’s decision to report bad news or not in troubled IT projects.

In sum, we adopt the notion of organizational silence to understand why and how individuals decide not to report bad news (= silence) in troubled IT projects. We examine ‘why’ in terms of the two organizational forces (i.e., organizational structures/policies and managerial practices) theoretically developed by Morrison and Milliken (2000) and ‘how’ in terms of the three decision steps of reporting specified in the basic whistle-blowing model (Dozier and Miceli 1985). In the next section, we describe our research model and hypotheses, which are followed by a discussion of our methodology and expected contributions.

Research Model

Prior research has identified numerous factors as having the potential to affect bad new reporting in a troubled IT project (Smith and Keil 2003). Since it would appear impossible for any one study to empirically test all of the factors, the approach that has been taken to date involves testing a small number of factors at a time and seeing how they are related to bad news reporting. In this study, we follow this approach, testing how two organizational forces lead to a climate of silence, which in turn affects bad news reporting. We have selected organizational structures/policies and managerial practices that we believe to be important, but which have yet to be empirically tested in the context of the basic whistle-blowing model. We explicitly state seven hypotheses corresponding to the seven paths in the research model, as depicted in Figure 2.

![Figure 2. Research Model](image)

Central Decision-Making Model

The top row of Figure 2 represents the central decision-making model grounded in the whistle-blowing literature. We adopt two hypotheses in the whistle-blowing model that were shown to hold in recent research (Keil et al. 2004), and retest them in the research model as a replication.

The whistle-blowing literature posits that the individual will make two distinct assessments of whether the bad news ought to be reported and the personal responsibility to report the bad news (Dozier and Miceli 1985), but they are inherently related. Other things being equal, an individual’s stronger assessment that status information ought to be reported will be reflected in a stronger feeling of personal responsibility for reporting. Thus, we state the following hypothesis.

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Hypothesis 1. A stronger assessment that information ought to be communicated will be reflected in a higher assessed level of personal responsibility for reporting.

Following the line of argument from the whistle-blowing literature (Miceli and Near 1992), personal responsibility should have a direct effect on willingness to report bad news. In addition, this causal relationship between personal responsibility and willingness to report have been empirically tested and confirmed in the IS literature (Keil et al. 2004; Smith et al. 2001) Thus, we state the following hypothesis.

Hypothesis 2. Higher levels of assessed personal responsibility will be associated with higher/more willingness to report bad status news.

We now turn to the situational and individual factors that influence the central model.

Climate of Silence

Organizations seem to establish and maintain climates and cultures that support employee voice or silence. Some empirical work actually shows the relationship between organizational climate and reporting in the whistle-blowing context. For example, Baucus, Near, and Miceli (1985) found that people were more likely to report wrongdoing internally than to remain silent or report it externally when the organizational culture was more supportive of whistle-blowing, i.e., less retaliatory. Blackburn (1988) and Graham (1986) also suggested that more supportive, organizational climates would give rise to more whistle-blowing. In addition, Miceli and Near (1992, p. 158) argued from the literature that organizational climate could affect all of the decision steps in the basic whistle-blowing model.

Morrison and Milliken have characterized a climate of silence by two shared beliefs. One is that speaking up about problems in the organization is not worth the effort, and the other is that voicing one’s opinions and concerns is dangerous. They also argue that, when a climate of silence exists in an organization, its employees’ dominant response will be silence rather than voice. While they focused on how and what organizational forces lead to a climate of silence, they did not specify how a climate of silence leads to employee silence. In this study, we consider employee silence as an employee’s decision of silence, and adopt the basic whistle-blowing model (Dozier and Miceli 1985) to understand the silence decision steps. Thus, we examine the effect of a climate of silence on employee silence within the rubric of the basic whistle-blowing model.

While organizational climate has been tested as an organizational factor indirectly affecting an individual’s willingness to report bad news through the assessment of his/her personal responsibility to report (Keil et al. 2004), its direct effect on the willingness to report and the assessment of whether the status ought to be reported have not been hypothosized nor empirically tested before. According to the whistle-blowing literature (Miceli and Near 1992), however, organizational climate and culture would produce more or less wrongdoing, i.e., stronger or weaker assessment of whether the wrongdoing ought to be reported. Thus, it is reasonable to assume that a climate of silence in an organization may affect an individual’s assessment of the project’s status, and we state the following hypothesis.

Hypothesis 3: When a greater climate of silence is present, individuals are less likely to assess that negative information ought to be reported.

Keil and his colleagues (2004) have hypothesized the relationship between organizational climate and personal responsibility for reporting, based on agency theory and the whistle-blowing literature. They have empirically confirmed the effect of organizational climate on an individual’s assessment of personal responsibility to report. In this study, we also test this relationship, but we measure a climate of silence with two different measures developed from the organizational silence literature. Thus,

Hypothesis 4: When a greater climate of silence is present, individuals are less likely to assess a personal responsibility to report a project’s status.

The effect of organizational climate on choice of action (= willingness to report) in the whistle-blowing context has been theoretically developed and empirically confirmed (Dozier and Miceli 1985; Miceli and Near 1992). In particular, it is believed that, when an organization climate of silence exists, the dominant choice within the organization is for employees to withhold their opinions and concerns about organizational problems (Morrison and Milliken 2000). Thus, a climate of silence seems to directly affect an individual’s choice of silence, and we state the following hypothesis.

Hypothesis 5: When a greater climate of silence is present, individuals are less willing to report bad news.

Organizational Forces

While a climate of silence has been discussed as an antecedent of bad news reporting (Keil et al. 2004), there has been little research on organizational factors leading to the climate of silence in an organization. One recent study has developed a theoretical model of organizational silence in which two organizational forces giving rise to a climate of silence have been identified (Morrison and Milliken 2000). In this research, we examine two such factors that have been theoretically proposed, but have not been empirically evaluated to determine their respective influence on a climate of silence and bad news reporting: organizational structures/policies and managerial practices.
Organizational Structures and Policies

There exist some features of organizational structures and policies that discourage upward information flow in an organization. Two such common structural features are centralization of decision making and lack of formal upward feedback mechanisms (Morrison and Milliken 2000). The former means that managers do not involve employees in decision-making processes because they may believe that employees are opportunistic and not knowledgeable (Hall 1982). The latter means that the organization is unlikely to have procedures such as systematic surveying or polling to solicit employee feedback after decision-making. This is because there may be a tendency to believe that employee feedback is of little value or because negative upward feedback may be seen as a challenge to managers (Morrison and Milliken 2000).

Morrison and Milliken (2000) theoretically argue that the two features above can represent such organizational structures and policies as not facilitating or discouraging upward information flow in an organization, which lead to a climate of silence. While a few other studies have proposed the theoretical argument (Milliken et al. 2003), there has been no empirical research on the causal relationship between such organizational structures and policies and an organizational climate of silence. Thus, we state the following hypothesis.

**Hypothesis 6:** Organizational structures and policies either not facilitating or discouraging upward information flow will lead to a greater climate of silence in the organization.

Managerial Practices

Morrison and Milliken (2000) have identified two types of managerial practices that impede upward communication in an organization: tendency to reject or respond negatively to dissent or negative feedback and lack of informal solicitation of negative feedback. These managerial practices are significantly related to employee silence. For example, an interviewee in an exploratory study of employee silence mentioned, “I raised a concern about some policies and I was told to shut up … I would have pursued the issue further but presently I can’t afford to risk my job” (Milliken et al. 2003). It shows that a manager’s rejecting or discounting opinions and feedback from employees can lead to employee silence. Additionally, managers who believe that employees are self-interested and ill informed are not likely to engage in informal feedback seeking from subordinates (Vancouver and Morrison 1995). In this case, employees may receive some cue that speaking up is not welcome, and withhold their opinions (Saunders et al. 1992). Thus, both types of managerial practices may contribute to employee silence (Morrison and Milliken 2000).

According to Morrison and Milliken’s theoretical model of organizational silence (2000), the two types of managerial practices above directly give rise to a climate of silence in an organization, which in turn leads to employee silence. However, the causal relationship between such managerial practices and a climate of silence has not been empirically investigated before. Thus, we state the following hypothesis.

**H7:** Managerial practices impeding upward communication will lead to a greater climate of silence in the organization.

In summary, while prior research has theoretically suggested that such organizational forces as organizational structures/policies and managerial practices may lead to a climate of silence, the relationships have not been empirically studied. In addition, those two organizational forces have not been examined in the bad news reporting context. Notably, while a climate of silence has been discussed once in the context of bad news reporting on IT projects (Keil et al. 2004; Park et al. 2006; Smith et al. 2001), the full nature of the relationship between a climate of silence and bad new reporting has not been empirically investigated within the rubric of the whistle-blowing model. In this study, we empirically examine how the two organizational forces lead to an organizational climate of silence and how the climate of silence exerts its influence in the central decision model from whistle-blowing theory depicted in Figure 2.

Research Methodology

A laboratory experiment based on hypothetical scenarios is conducted to test the causal relationships between constructs in the research model. This hypothetical scenario approach is a good methodological option (Straub and Karahanna 1998) because this study aims to evaluate a project member’s decision of reporting bad news across a wide range of IT project situations in the real world. The experiment involves a two-factor, four-cell design with two exogenous variables (organizational structures/policies and managerial practices) that are manipulated independently at two levels. We develop four treatment scenarios as well as three items for assessing one construct for which we are unable to identify reliable and valid measures. This research is targeting 150 practitioners as subjects from multiple IT departments or companies.

Scenario and Procedure

Each subject will be asked to read a short scenario about a troubled software project. Organizational structures/policies are manipulated by specifying the company’s structural features. For the strict structure manipulation, the subject will be informed that the company is of high centralization of decision making and has no formal mechanisms for
conveying upward feedback. For the non-strict structure manipulation, the subject will be informed that the company is of high decentralization of decision making and has many formal mechanisms for conveying upward feedback. Managerial practices will be manipulated by specifying the project manager’s communication type. For the upward communication encouraging manager manipulation, the subject will be informed that the project manager tends to accept and respond positively to bad news from subordinates, and informally seeks negative feedback from subordinates. For the non-upward communication discouraging manager manipulation, the subject will be informed that the project manager tends to reject and respond negatively to bad news from subordinates, and never informally seeks any negative feedback from subordinates.

Following refinement of the scenario and measures, a web-based role-playing experiment will be conducted. Subjects will be randomly assigned to one of the four treatment conditions obtained by varying the two organizational factors. The experimental procedure will consist of two parts. In the first part, after subjects access and agree to the informed consent form on the web, they will receive the scenario corresponding to their respective treatment condition and will be asked to read the scenario. In the second part, subjects will be asked to complete a questionnaire that measures their willingness to report bad news and their perceptions of the climate of silence; their assessments of whether the information concerning the project ought to be reported; their assessments of whether they had a personal responsibility to report the information; and a series of manipulation checks. They will also be asked to provide some basic demographic information.

Analysis

In addition to descriptive statistics, Partial Least Squares (PLS) analysis will be used for measurement validation and for evaluating the hypothesized paths in the research model. PLS is an advanced statistical method that allows optimal empirical assessment of a structural model together with its measurement model. A measurement model links each construct with a set of indicators measuring that construct while a structural model represents a network of causal relationships linking multiple constructs. The measurement model must be established by examining the psychometric properties of the measures before testing the structural model.

PLS analysis is considered appropriate for testing theoretical models in the early stages of development. This study is an initial attempt to empirically test a theoretically developed model on reporting behavior with organizational factors in the troubled software project context. In addition, PLS analysis was appropriate for this study because it places minimal demands on sample size, measurement scales, and distributional assumptions (Chin 1998; Fornell and Bookstein 1982) and because it has been used in previous studies involving the reporting behavior in troubled software projects (Keil et al. 2004; Park et al. 2006; Smith et al. 2001).

Expected Contributions

Our study is expected to make a significant contribution to the existing body of knowledge in several different ways. First, this research extends the study of an organizational climate of silence in the bad news reporting context. While one previous study has tested organizational culture (conducive or not conducive to reporting) and found it to have a significant effect on the assessment of personal responsibility to report (Keil et al. 2004), there has been no investigation of the effect of organizational climate effect on the first antecedent (= assessment of whether the status ought to be reported) and the ultimate dependent variable (= willingness to report) in the basic decision model, which will be examined in this study.

Another significant contribution would be the extension of the basic reporting model through the introduction and testing of two organizational factors theoretically derived from the organizational silence literature – organizational structures/policies and managerial practices. These organizational factors have not been studied empirically in the context of bad news reporting, and this will be the first study including and testing those factors as the antecedents of the organizational climate of silence. Clearly, incorporating the organizational factors will allow us to construct a richer model of bad news reporting, and will provide a solid foundation for future research.
References