

Can Organizational Practices Inadvertently Silence Potential Whistleblowers?

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This study examines how employee perceptions of organizational ethics, safety practices, and manager-subordinate relationships might influence employees' silence in regards to workplace hazards using a sample of 178 workers in the mining, manufacturing, and petrochemical industries. The findings support a model in which employee perceptions of endangerment by their organization and fear of retaliation for whistleblowing mediate the relationship between manager-subordinate relationships and the practice of withholding negative (and sometimes vital) information from organizational management. Results suggest that even with high quality superior/subordinate relationships, employees may still withhold important information due to the overall perception of the current safety climate.

"Every day in America, 12 people go to work and never come home. Every year in America, 3.3 million people suffer a workplace injury from which they may never recover. These are preventable tragedies that disable our workers, devastate our families, and damage our economy."

– Secretary of Labor Hilda Solis, April 28, 2011

In the wake of a string of tragedies including the Deepwater Horizon disaster, Massey Energy mine collapse, and recent West Texas fertilizer plant explosion, the current state of workplace safety is an area of concern for many. The safety and welfare of the employees at work is a major concern for organizations. It is often considered that the responsibility of promoting and maintaining a safe work environment is an ethical responsibility of managers. Although this statement may appear to some as a given, there has been little research in this area (Credo, Armenakis, Field, & Young, 2010). Managers' actions and reactions concerning safety issues may build a culture that either encourages or discourages employees to take an active role in ensuring a safe workplace (Zohar & Luria, 2005). The identification and reporting of safety issues is the primary method of preventing safety incidents in the workplace, yet

employees often fail to report unsafe conditions, choosing instead to keep silent. The behavior of silence is sometimes categorized as the mum effect, which occurs when an individual attempts to avoid, omit or sugarcoat a negative message (Rosen & Tesser, 1970). In fact, Ramingwong and Sajeew called the mum effect the 'code of silence' (2007). The current study explores employee silence in the context of organizations' ethical culture. Specifically, this study examines the extent to which employees' exchange relationships with superiors can influence those employees' tendency to keep silent, and how employee fear of management retaliation and management's placing of employees in harm's way can influence that link.

BACKGROUND

Though there appears to be little empirical evidence for the relationship between employee-supervisor relations, ethics-related employee perceptions, and silence, there is no shortage of anecdotal evidence. For example, on January 28, 1986, when the space shuttle Challenger exploded shortly after liftoff, killing all seven crew members, there were immediate concerns about the causes of the explosion. Testimony by Roger Biosjoly and other engineers working at Morton-Thiokol, Inc. (MTI), the booster contractor, revealed that MTI management had been alerted to the cold weather adversely affecting the O-ring booster joints well in advance of the decision to launch (Biosjoly, Curtis, & Mellican, 1989). Employees reported that the seals would not be functional in cold weather, but MTI management classified the document as company private so it never reached NASA (Biosjoly et al., 1989). Not only did MTI management disregard safety warnings from its engineers, it retaliated against these organizational whistleblowers by ordering them to keep quiet and eventually firing employees who tried to blow the whistle. This example illustrates an organizational practice of coercing employees to remain silent using fear of retaliation. Situations like these call to question how organizational culture, and more specifically, the relationship with management, may influence employee willingness to share negative or undesirable information.

More recently, BP, the British multinational oil and gas-company, has been in the spotlight after putting employees in harm's way and ignoring repeated safety warnings from employees. After years of noncompliance, an OSHA investigation in 2004 revealed dangerous levels of pipeline corrosion in BP's Prudhoe Bay pipeline, as well as management pressure for employees to falsify data (Lustgarten & Knutson, 2010). The report also warned against an aggressive management style that put pressure on contractors to avoid reporting unfavorable safety metrics. Rather than address the report, BP continued its usual practices. As a result, the Prudhoe Bay pipeline burst in 2006, spilling over 200,000 gallons of petroleum product into a protected area of Alaskan wilderness (Lustgarten & Knutson, 2010). Another BP explosion in 2008 blew a 28-foot section of gas line over 1000 feet in the air. This time, BP had fired an inspector just weeks after reprimanding him for reporting what BP alleged was a minor and superficial crack in the line (Lustgarten & Knutson, 2010). Aggressive organizational cultures like BP's that punish employees who blow the whistle may contribute to employee fear of management retaliation against whistleblowers. Using this example, it may be reasoned that BP's Deepwater Horizon catastrophe in the Gulf of Mexico, which killed 12 employees and caused immeasurable damage to the fragile gulf coast ecosystem, could have been prevented if employees weren't conditioned to be afraid to speak up and sound the alarm or blow the whistle when they first learned of a safety risk or dangerous situation.

The current study is aimed at identifying constructs affected by an employee's organizational perceptions, particularly perceptions of organizational leadership and safety culture, and how these perceptions may influence an employee's tendency to remain silent or withhold information. Employees may be reluctant to share negative information when there is a weak manager-employee exchange relationship. We also examined employee endangerment and whistleblower retaliation to assess employee perceptions of management safety-based ethics practices. These may be possible mediators between employee-management relations (in the form of Leader-Member Exchange) and employee withholding of negative information (Credo et al., 2010).

Employee Silence

Of growing concerns for organization is when individuals are not willing to report negative information to those that may have the ability to remediate the situation or halt the project before disastrous outcomes. Instances of employee silence have been empirically studied in a variety of contexts. Keil and Robey (2001) found that software engineering project failures may in part be due to silence developed from an escalation of commitment. Additionally, Keil and Robley (2001) stated “many internal auditors remain mum instead of asserting their responsibility to report bad news” due to the potential risks associated with speaking up (p. 92). While keeping silent may be a mechanism of self-preservation, there are many situations when quite the opposite is true. In the case of safety matters, employee silence may have serious or even deadly consequences. Some of the more disastrous examples of the consequences of employee silence, as mentioned previously, include the BP Deepwater Horizon catastrophe and the space shuttle Challenger incident. Despite the apparent connections between the mum effect and safety breaches, no previous studies have quantitatively explored this link.

LMX and Employee Silence

A common framework for mum research has focused on the relationship between employees and superiors (Cox et al., 2011). Based on this framework, Leader-Member Exchange (LMX) is a variable of primary interest in the current study. LMX research revolves around the idea that different types of relationships exist between leaders and subordinates (Dansereau, Graen, & Haga, 1975). According to LMX theory, relationships between supervisors and subordinates range from low quality to high quality, with the quality of the relationship increasing with mutual liking, trust, respect, and influence (Berneth, Armenakis, Feild, Giles, & Walker, 2007; Dansereau et al., 1975). Since organizational leaders are direct representatives and shapers of the organizational culture to employees and mum behaviors are more prevalent in negative organizational settings (Marler et al., 2012), there should be a strong relationship between levels of LMX and the degree of employee silence. Furthermore, trust and respect are essential to open communication, particularly upward communication from employee to supervisor, and thus, situations with low levels of trust and communication (measured in LMX) may lead to a greater likelihood that employees will withhold information.

For example, with both NASA and BP, upward communication was kept mum when subordinates failed to report safety issues because of the culture, particularly the ethical culture, of the organization. These instances highlight the importance of organizational culture, particularly in regards to ethics, in the reporting or failure to report negative, but sometimes crucial, information. When an organization suffers from a string of successive unethical decisions, it is more likely that an organization is defined by a culture that fails to prioritize ethics. An organization that assumes ethics is not a priority will likely reflect this attitude through its value system; in such situations, employee value systems may put a negative emphasis on reporting problems, especially when the deeper organizational assumptions deny the importance of reporting safety problems (Schein, 2006).

Credo et al. (2010) proposed that an organization’s safety culture may be integrally related to its ethics culture. In such a scenario, employee assumptions about management attitudes towards employees who report safety problems are likely to eventually manifest themselves as mum behaviors in employees. The unfortunate consequence of employee silence is a communication breakdown between management and the very individuals who could prevent a safety breach or loss of life.

Additionally, Credo et al., (2010), describe safety-based ethical culture as having six dimensions, all of which are perceived by employees as representative of an organization’s ethics, particularly in work environments where safety is an everyday concern. In addition to dimensions assessed in previous ethical culture and climate scales, such as dishonesty, favoritism, management rule-breaking, and management responsibility neglect, the scale includes the unique dimensions of whistleblower retaliation and employee endangerment. Of particular interest in the current study are the two latter dimensions, due to their unique applicability to the operative-type work environments targeted in this study.

The Influence of Employee Endangerment

When organizations put employees in harm's way, employees tend to develop a unique set of perceptions about the organization's underlying motives (Zohar & Luria, 2005). Particularly, managers and supervisors are the direct organizational agents responsible for conveying a message to employees of what standards are acceptable in terms of day to day safety practices. There is a paucity of research linking employee perceptions of endangerment with employee perceptions of overall support (Dickson, Smith, Grojean, & Ehrhart, 2001). Dickson et al. (2001) observed a positive association between ethical work climates and positive employee attitudes including morale. In addition, Credo, Armenakis, Ianuzzi, and Wright, (2010b) found a positive relationship between employee perceptions of ethics and employee perceptions of organizational support. These studies demonstrate a negative relationship between employee perceptions of being put in harm's way and perceptions of overall support from the organization. These employee perceptions of being put in harm's way, or Employee Endangerment (EE), may be affected by additional elements of an organization's underlying culture, including employee-supervisor relations. The support an organization's leadership gives its employees may come in a variety of forms, including availability of appropriate safety equipment, adequate levels of safety instructions and training, and reasonable time constraints to avoid pressure to cut corners or take unsafe shortcuts. An effort by leaders to minimize perceptions by subordinates of Employee Endangerment (EE) is likely to be viewed by employees as supportive, so the more employees are aware of actions by supervisors to ensure its employees are safe from physical harm, the higher the levels of Leader-Member Exchange should be. An effort by management to minimize perceptions by employees of Employee Endangerment is likely to be viewed by employees as positive, which should increase employee openness about communication, and decrease employee mum behaviors. Additionally, since organizational leaders are primarily responsible for the delivery of the message concerning EE, employee perceptions of EE may mediate the relationship between LMX and employee silence.

Hypothesis 1: Perceptions of Employee Endangerment will mediate the relationship between Leader-Member Exchange and employee silence.

The Influence of Whistleblower Retaliation

Whistleblower Retaliation measures expectations of repercussions after divulging information about unsafe or unethical situations (i.e., blowing the whistle) in an organizational setting (Credo et al. 2010b). Organizational repercussions for whistleblowers can be as mild as a negative sentiment from members of an individual's organization or as severe as losing a job or being blacklisted in an industry (Credo et al., 2010b). Regardless of these responses, it is not unusual for employees to seek ways to avoid these negative consequences. One such avoidance strategy is keeping quiet. If employees believe that the act of whistleblowing will result in some form of retaliation, employees may be more likely to decide to keep quiet about the negative news.

Numerous studies have shown negative organizational outcomes as a result of low levels of employee perceptions of support from their managers and supervisors, but no studies have empirically examined the link between employee fears of whistleblower retaliation with employee attitudes concerning manager-subordinate exchanges. (Bernerth et al., 2007; Rhoades & Eisenberger, 2002). As discussed above in relation to the Employee Endangerment dimension of safety-based ethical organizational culture, managers and supervisors are primary communicators of the safety and ethics message from the organization to employees. This role of managers may similarly influence employee expectations of fear of Whistleblower Retaliation. Employees with positive exchange relationships with their supervisors may be less likely to fear retaliation from that same supervisor after reporting negative news. We therefore expect employee fear of Whistleblower Retaliation to mediate the relationship between LMX and employee silence.

Hypothesis 2: Whistleblower Retaliation will mediate the relationship between Leader-Member Exchange and employee silence.

METHODOLOGY

Participants

The data collection service Zoomerang was utilized, which recruits from a diverse population of over 30 million US-based respondents. Although Zoomerang includes safeguards to avoid low-quality data, we also included specific items to verify that respondents were not randomly responding and actually worked in a job role and organization that met our criteria. All participants worked in the mining, manufacturing and drilling industries.

Procedure

The sample of 178 participants was 53% female and the average age was 48.5 years. The race-ethnic makeup of the participants was predominately Caucasian (90%), followed by African American (5%) and Asian (3%). The industry makeup was predominantly manufacturing and mining related. All information collected was anonymously provided.

Measures

We administered a questionnaire designed to assess participants' feelings about their organization, jobs, and supervisors. Responses to the scales included in the study were recorded using a five-point Likert-type response format, with 1 = *strongly disagree*, 2 = *somewhat disagree*, 3 = *neither agree nor disagree*, 4 = *somewhat agree*, and 5 = *strongly agree*.

A four-item scale was used to measure *Employee Endangerment*. Items were taken from the Employee Endangerment subscale in Credo et al.'s (2010b) Ethics Safety Scale (e.g., "You are asked to do things that are not safe"). Coefficient α for the four-item scale was .91.

A five-item scale was used to measure *Whistleblower Retaliation*. Items were taken from the Whistleblower Retaliation subscale in Credo et al.'s (2010b) Ethics Safety Scale (e.g., "You may be retaliated against for reporting ethics violations"). Coefficient α for the five-item scale was .94.

Leader-Member Exchange (LMX) was measured with the Graen and Uhl-Bien (1982) LMX-7 scale (e.g., "You have an effective working relationship with your supervisor"). The scale is designed to assess relationship quality between supervisors and subordinates. Coefficient α for the scale was .72.

To assess *employee silence*, three items from Cox, Marler, Simmering, and Totten's (2011) *mum* scale were used. The scale is designed to assess an individual propensity to omit or avoid sharing negative information. In this study, the focus was on sharing information concerning safety (e.g., "When I have negative information to share at the workplace, I find ways to get out of telling the information"). Coefficient α for the scale was .90.

Table 1 presents the means, standard deviations, correlations, and coefficient alphas for all variables included in the model. A correlation matrix was generated to test the strength of relationships between variables. All expected correlations were significant.

TABLE 1
DESCRIPTIVE STATISTICS AND CORRELATIONS

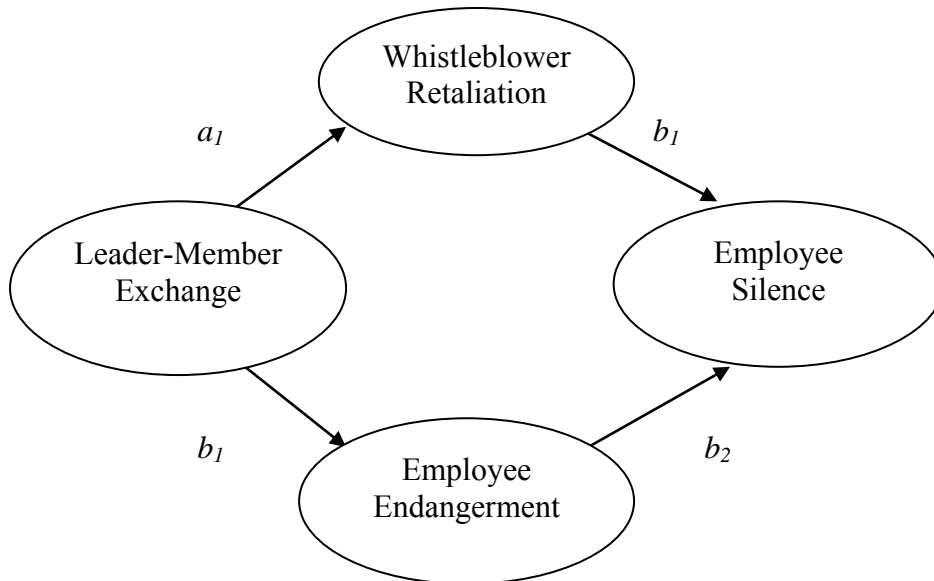
<u>Variables</u>	<u>Mean</u>	<u>SD</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
1. Employee Silence	2.59	.92	(.90)			
2. Leader Member Exchange	3.70	.88	-.26**	(.72)		
3. Whistle Blower Retaliation	2.33	1.14	.45**	-.46**	(.94)	
4. Employee Endangerment	2.18	1.10	.47**	-.47**	.80**	(.91)

n= 178; ** $p < .00$; Alphas are reported on the diagonal.

ANALYSES

We took a two-step approach to investigating the data. Examination of the bivariate correlations revealed a negative correlation between leader-member exchange (LMX) and employee silence ($r = .26, p < .01$). Further investigation revealed the EE ($r = -.47, p < .01$), WR ($r = -.46, p < .01$) were significantly negatively correlated with the independent variable, LMX. Significant positive correlations between the dependent variable, employee silence and both hypothesized mediating variables, EE ($r = .47, p < .01$) and WR ($r = .45, p < .01$).

FIGURE 1
HYPOTHESIZED MODEL



For the multiple mediation test, we used the recommendations of Preacher and Hayes (2008), allowing us to test all mediation effects simultaneously. With this method, the statistical significance of the indirect effect of the predictor variable on the outcomes variable through the mediator(s) are evaluated; whereby, a , b , c , and c' represent unstandardized regression coefficients. For our model, a_i represents the direct association between LMX and each mediator variable; b_i represents the direct association between each mediator and employee silence; c represents the total effect between LMX and employee silence; and c' represents the direct effect between LMX and employee silence. The product, $a_i b_i$ represents the indirect effect between LMX and employee silence operating through EE and WR. Full mediation is said to be present when c is reduced by $a_i b_i$ to a nonsignificant c' . The bootstrapping technique was utilized to compute bias-corrected confidence intervals at the 95% level for the indirect effect through each mediator using $z = 5000$ bootstrap samples.

RESULTS

Following Preacher and Hayes' (2008) method for multiple mediation, we found that the model tested was fully mediated. We examined the confidence intervals for each mediator. The indirect effect is significant and mediation can be said to present if zero falls outside of the 95% confidence interval. The confidence interval for the mediating variable EE (-.22, -.04) excluded zero, which is evidence of a significant indirect effect and mediation. The confidence interval for the mediating variable WR (.25, .01) excluded zero, which is also evidence of a significant indirect effect. In addition, the mediation analysis shows that indirect effects of EE ($a_1b_1 = -.11, s.e. = .04, p < .05$) and WR ($a_2b_2 = -.10, s.e. = .06, p < .05$) were significant. The direct effect (c') from LMX to employee silence was -0.3 with a standard error of 0.7. ($p = .72$). This non-significant result suggests that the mediating variables fully mediate the relationship between LMX and employee silence (Adj. $R^2 = .25$). Therefore, support is present for Hypotheses 1, in that EE mediates the relationship between LMX and employee silence. Hypothesis 2 is supported in that WR was found to be a significant mediator of LMX and employee silence.

Common method variance (CMV) was assessed with the Harman single-factor test, described by Podsakoff, MacKenzie, Lee, and Podsakoff. (2003). This test involves a factor analysis to determine whether all factors load onto one single factor. Results showed that CMV did not account for associations between variables of interest. Furthermore, we followed Podsakoff et al.'s (2003) suggestions to assure participants that their anonymity would be protected.

DISCUSSION

As of yet, no simple technique that has been developed to examine the drivers of employee silence and the mum effect. One contribution of the current study is the introduction of several possible antecedents to the such withholding of information. The findings from this study reveal that employees' tendency remain silent may be directly related to their perceptions of the supervisors' ethical values concerning safety. Organizational leaders at all levels can take heed of these findings and act conscientiously in regards to the ethical and safety perceptions, as well as the level of quality of exchanges between employees and organizational leadership. Additionally, perhaps the most important outcome of this study is the increased understanding of some of the problems associated with reporting channels for whistleblowing. While these hotlines and "anonymous" reporting systems may seem to protect employee interests at first glance, there can be unforeseen consequences to the whistleblowers if the utmost care is not used with the investigation process. Management should consider first the value of anonymity and then the creation of a climate that allows employees to raise concerns without fear of losing face or retaliation.

As with any study, this study is not without its weaknesses. Although measures were taken to ensure a representative sample, the procedure inherently involved a level of randomness and potential bias. The responses are from single sources which may increase the study's risk of common method variance. Additionally, the sensitive topics included in the study may have increased participant fear of open and honest responding; however, the use of an online anonymous survey was intended to minimize this risk and enable respondents to truthfully answer all questions.

Future research on employee silence and the entire spectrum of the mum effect and its relationship with ethical safety cultures is warranted. One area to examine may be the relationship of reported safety incidents to the prevalence of the mum effect. A second area of research may involve the evaluation of supervisors' safety-related intentions compared to employee perceptions of those supervisors' safety-related attitudes. Self-awareness among managers may be a catalyst for driving change in the ethical safety culture of an organization. The authors hope the current study can help spur continuing research in the area of ethical and safety-focused organizational cultures.

CONCLUSION

This study is valuable to academics and practitioners alike as it elucidates the sometimes fragile process of whistleblowing. Even with a strong leadership presence, our results show that employees may still be apt to remain silent on issues when there are retaliation or endangerment concerns. In sum, organizational leaders must look beyond just the relationships with subordinates in creating an environment conducive for employee voice. The results herein support the consideration of a culture that promotes not only physical safety, but also emotional well-being.

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