

Mad as Hell or Scared Stiff?  
The Effects of Value Conflict and Emotions on Potential Whistle-Blowers

by

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Abstract

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This dissertation extends the classical whistle-blowing scholarship by proposing a new model that incorporates the effects of value conflict and emotions (“hot” cognitions) on whistle-blowing decisions. It interweaves the traditional literature on whistle-blowing with the cognitive appraisal approach to emotions and the value pluralism model to account for what have historically seemed to be irrational, impulsive or self-defeating decisions by potential whistle-blowers. It also identifies multiple whistle-blowing decision paths and a juncture of path divergence. These findings are important because existing whistle-blowing models assume “cold,” subjectively rational judgments and a common path for all potential whistle-blowers.

The project finds that anger at wrongful activities drives individuals to make internal reports to management. Management rebuffs anger these individuals further, but keep them focused on stopping the wrongful activities and lead them to blow the whistle through channels that they view as having the authority to do so. Retaliation by management shifts individuals’ focus away from helping their organizations or victims

and toward attaining retribution. Rather than increasing individuals' fear and inhibiting future whistle-blowing behaviors, retaliation galvanizes individuals to pursue justice. Strongly held values deemed threatened by the wrongful activities or management's response also propel individuals to make external whistle-blowing reports.

The project identifies two categories of "organizational loyalty disrupters" that facilitate decisions to blow the whistle by altering individuals' cost-benefit analyses and perceived value conflicts: role model and partners, and "significant others." These environmental elements have not been part of whistle-blowing models to date. The project also highlights that individuals do not always conduct cost-benefit analyses as they decide whether or not to whistle-blow, and that their analyses are often inaccurate, challenging existing theory.

The dissertation takes a multimethod approach to understanding whistle-blowing decision paths. It makes an important methodological contribution because it is based on in-depth interviews covering 60 whistle-blowing and "inactive observation" episodes. The interview data are used for theory development and are analyzed using qualitative and quantitative techniques. Set-theoretic methodology is employed for the first time on a "micro" organizational behavior phenomenon. The interview data are complemented by laboratory experiment that tests the relationships uncovered through the interviews.

For Sylvia

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## CHAPTER 1: INTRODUCTION

While I am convinced that I am motivated by a deep sense of moral indignation, I am equally motivated by a deep personal feeling of resentment.

The cost of violating one's sense of professional integrity must be weighted against possible economic loss in determining one's course of action. Peace of mind is intangible, but very important.

(Nader, Petkas & Blackwell, 1972)

These sentences, spoken by real whistle-blowers, highlight how value-laden and emotionally charged the decision to speak out against perceived wrongdoing can be. Despite this, scholars have largely ignored the important role of values and emotions in shaping the whistle-blowing decision process. Instead, they have focused on more easily measured predictors, like demographics, individual differences and organizational or situational characteristics (Miceli & Near, 1992). This oversight is important because scholars have failed to identify consistent predictors of whistle-blowing and because values and emotions have been shown to influence cognition, judgments and behaviors in response to wrongdoing in non-whistle-blowing contexts (e.g., Weiner, et al., 1982; Weiner, 1985, 1986; Weiner, et al., 1987; Fiske and Tetlock, 1997; Goldberg, et al., 1999; Tetlock, et al., 2000).

My dissertation addresses this gap in the literature by interweaving the traditional literature on whistle-blowing with the social-functional value pluralism model and the cognitive appraisal approach to emotions (Tetlock, 1986; Smith & Ellsworth, 1985). My approach allows me to make several theoretical contributions. First, I introduce “hot”

cognitions (in particular, value conflict and emotions) to the study of whistle-blowing through a new model of the whistle-blowing decision process that recognizes the reciprocal influence of “hot” and “cold” cognitions on behavior. Specifically, my work views the value conflicts and emotions that potential whistle-blowers experience following their discovery of wrongdoing in their organizations as predictors of their future judgments and actions. Thus, my model complements Gundlach, et al.’s (2003) social information processing model of whistle-blowing, with its focus on emotions and attributions, and extends it by incorporating the value conflict and emotions that observers experience after they make attributions of responsibility for wrongdoing.

Second, I identify multiple paths to whistle-blowing behavior, beyond the one most commonly considered by scholars (Miceli & Near, 1992). Research on emotions suggests that each distinct emotion or combination of emotions is likely to have a distinct impact on the unfolding of the whistle-blowing process (Ellsworth & Smith, 1988). Because I identify the different emotions that are active among potential whistle-blowers as they move through their decision processes, I have uncovered several whistle-blowing paths, as well as junctures of path divergence. This discovery is important for the advancement of scholarship. The existing models of whistle-blowing posit a uniform decision path for all potential whistle-blowers, and this singularity may have contributed to scholars’ difficulty in identifying consistent predictors of whistle-blowing behaviors. I stress that it is not my intention to predict which potential whistle-blowers will experience which emotions or value conflicts. Rather, my goal is to understand how different paths may unfold, depending on the values and emotions that are active in a given situation.

Thus, and third, my model accounts for what have historically seemed to be irrational, impulsive or self-defeating decisions and behaviors by potential whistle-blowers (Gundlach, et al., 2003). Risky decisions, like the decision to blow the whistle, feature ambiguity and emotion, which “can lead to behavior which **appears** irrational, foolish, or unintelligent to others” (McLain & Keenan, 1999:258; emphasis added). My research suggests how to fit risky decisions and behaviors into new paradigms that may extend beyond the whistle-blowing domain. Gundlach, Douglas & Martinko have argued that “the most fruitful area of research [within whistle-blowing] is the investigation of how...emotions shape whistle-blowing decisions” (2003: 116).

Finally, my model suggests that organizational action can push an individual toward a whistle-blowing decision. Rather than discouraging whistle-blowing, retaliation and ostracism provoke anger in potential whistle-blowers and shift their cost-benefit analyses in ways that actually make whistle-blowing a more appealing or less risky option. My findings lend strong support to the presence of a person-situation interaction and indicate that, in some cases, the environment may be a stronger force than individual differences in propelling whistle-blowing decisions and behaviors (Mischel, 1968; Treviño, 1986).

In addition to my four theoretical contributions, I make two methodological contributions through my use of (1) in-depth interviews with whistle-blowers and “inactive observers” (individuals who witness objectionable activities but choose not to report them); and (2) set-theoretic analyses of these interviews. Interview data have never been used

systematically to understand the dissent or whistle-blowing process. Rather, interviews and case studies have served primarily as inspiration to potential whistle-blowers (e.g., illustrations of the public good that emerges from whistle-blowing episodes), documentation of the retaliation that whistle-blowers have faced from managers and peers, and illustrations of various facets of whistle-blowing law (Nader, Petkas & Blackwell, 1972; Westin, 1981; Elliston, Keenan, Lockhart, & van Schaick, 1985; Glazer & Glazer, 1989; Scammell, 2004). In contrast, my interviews track which value conflicts and emotions are most common and active during the whistle-blowing decision-making process and establish preliminary associations between these conflicts and emotions on one hand and whistle-blowing decisions on the other.

Set-theoretic analysis, also known as the diversity-oriented approach, focuses on configurations of causes that produce an outcome, rather than on the independent effects of causes (Ragin, 2000; Fiss, 2007). Thus, it is an appropriate methodology when causality in the phenomenon under study is both multiple (i.e., when an outcome has more than one cause) and conjunctive (i.e., when these causes work together to produce the outcome). The diversity-oriented approach is well suited to study of whistle-blowing, especially given the failure of individual variables to predict whistle-blowing behavior. The methodology is common in the fields of political science and sociology, as well as in “macro” organizational behavior studies (e.g., Kogut & Ragin, 2006; Skaaning, 2007; Stokke, 2007; Vis, Woldendorp & Keman, 2007). However, it has not been applied to a “micro” organizational behavior or social psychological phenomenon, until my dissertation.

In sum, my dissertation makes several contributions: (1) it documents for the first time the value conflict and emotions experienced by potential whistle-blowers; (2) it demonstrates that whistle-blowing episodes can unfold in multiple ways, beyond the traditional model; (3) it accounts for behaviors previously not understood by scholars; (4) it suggests that organizations play a larger role in driving whistle-blowing decisions than previously believed; and (5) it harnesses unique and novel methodologies that capture the diversity and texture of whistle-blowing episodes.

This dissertation proceeds as follows. In Chapter 2, I introduce my preliminary working theory and hypotheses regarding the roles of value conflict and emotion on whistle-blowing decisions, and I unveil my deductive model of the whistle-blowing process. I review existing theories of dissent and whistle-blowing, summarize current findings regarding the predictors of these phenomena, and make the case for including value conflict and emotion in whistle-blowing models. In Chapter 3, I present a qualitative analysis of my fieldwork with whistle-blowers and inactive observers. I also propose new grounded theory and hypotheses regarding whistle-blowing and its predictors, as they emerged during the interview process. The theory is summarized in a revised, inductive model of the whistle-blowing decision process. In Chapter 4, I present a set-theoretic analysis of the interview data based on the fs/QCA (fuzzy set/Qualitative Comparative Analysis) software package. The analysis yields a quantitative test of the deduced and emergent hypotheses. In Chapter 5, I present three dynamic whistle-blowing decision paths and case studies of three prototypical potential whistle-blowers. Chapter 6 describes

a laboratory experiment in which I tested some of the relationships revealed by the interviews. This chapter completes my triangulated approach to understanding the whistle-blowing decision process. Chapter 7 contains conclusions and thoughts for future directions that research into the whistle-blowing decision process may take.

## **CHAPTER 2:**

### **LITERATURE REVIEW, THEORY AND DEDUCTIVE HYPOTHESES**

**Principled Organizational Dissent and Whistle-Blowing.** To put whistle-blowing into theoretical context, we must begin by looking at the literature on principled organizational dissent, with which whistle-blowing scholarship shares a theoretical heritage and a conceptual grounding.

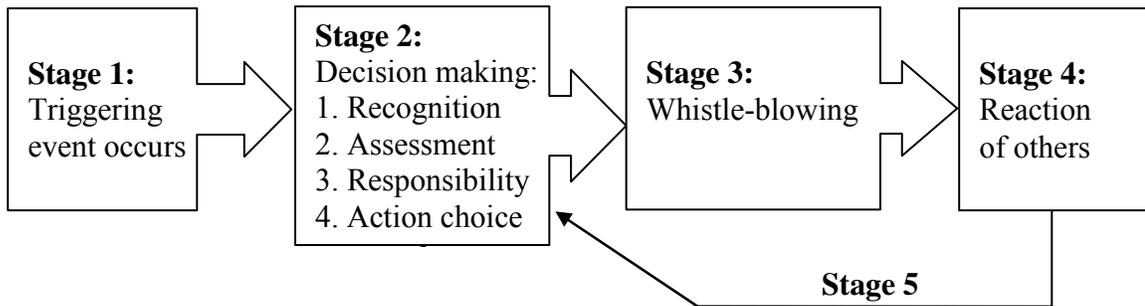
Principled organizational dissent and whistle-blowing are both forms of “voice,” attempts to change organizational practices, policies and outputs by appealing to a higher authority (Hirschman, 1970; Rusbult, Farrell, Rogers & Mainous, 1988). Principled organizational dissent is “the effort by individuals in the workplace to protest and/or to change the organizational status quo because of their conscientious objection to current policy or practice” (Graham, 1986: 2). Whistle-blowing is defined more narrowly as “the disclosure by an organization’s member [or former member] of illegal, immoral or illegitimate practices under the control of their employers to persons or organizations that might be able to effect action” (Miceli & Near, 1992: 15).

These definitions highlight that whistle-blowing is just one possible form of principled organizational dissent. Whistle-blowing involves a disclosure, while principled organizational dissent does not necessarily entail one. Principled organizational dissent can be a protest of known practices to informed parties. Also, whistle-blowing is limited to disagreements about the legality or ethicality of focal activities, while principled

organizational dissent's broader definition allows for disagreements about the efficiency of focal activities, as well. Finally, the aim of whistle-blowing is to halt an objectionable activity, while principled organizational dissent can also be undertaken to register a protest without the explicit goal or expectation of ending a particular practice or policy. Despite these differences, whistle-blowing is the most prominent example in the literature of principled organizational dissent.

Both principled organizational dissent and whistle-blowing models draw on theories of moral judgment, bystander intervention, power/dependence and expectancy for their predictions (Kohlberg, 1969; Latané & Darley, 1970; Pfeffer & Salancik, 1978; Vroom, 1964). Figure 1 contains the most widely held model of the whistle-blowing process: The trigger event occurs in Stage 1. The observer recognizes the event as problematic and decides what action to take in Stage 2, and then acts in Stage 3. The process shifts to the organization in Stage 4, as it reacts to the report. Stage 5 returns the process to the observer (now the whistle-blower) and involves his/her assessment of the organization's response and a decision regarding future activities (e.g., further escalation, silence) (cf. Dozier and Miceli, 1985; Graham, 1986; Greenberger, et al., 1987; McLain and Keenan, 1999; Miceli and Near, 1985, 1991, 1992; Near and Miceli, 1985, 1987; and Parmerlee, et al., 1982).

**Figure 1: The Classical Whistle-Blowing Process**

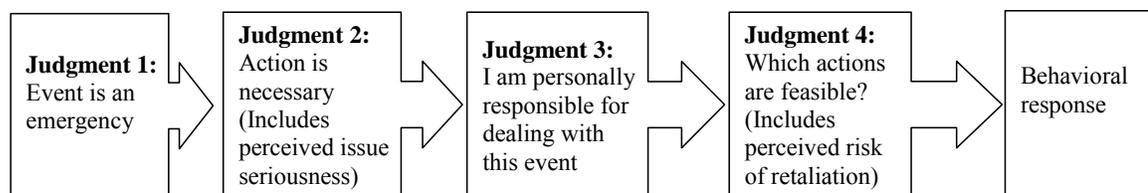


Source: Near & Miceli (1985, 1987); Miceli & Near (1991, 1992); Dozier & Miceli (1985).

My dissertation focuses on Stage 2, the decision-making stage. Rooted in bystander intervention theory, this stage is believed to comprise four distinct, though not necessarily sequential, judgments (see Figure 2) (Latané & Darley, 1970). First is the judgment or recognition that the observed activities are problematic. Second is an assessment about whether the activities are deserving of action, including an assessment of the seriousness of the consequences. Third is the determination that one is personally responsible to act. Fourth is the judgment of what action is possible and appropriate, including an assessment of opportunity costs and benefits and the perceived risks of retaliation.

**Figure 2: The Decision-Making Stage of the Classical Whistle-Blowing Process**

**(Stage 2)**



Source: Near & Miceli (1987); Miceli, Roach & Near (1988); Dozier & Miceli (1985); Graham (1986); Latané & Darley (1970); McLain & Keenan (1999).

Each of these judgments is said to be informed by different factors. Problem recognition can be colored by group norms regarding right and wrong, access to information and moral development (Greenberger, Miceli & Cohen, 1987; McLain & Keenan, 1999; Kohlberg, 1969). Issue assessment may be shaped by characteristics of the activity itself (e.g., its frequency) or by others' reactions to the activity; for example, the perceived apathy of others may inhibit one's own response (Jones, 1991; Latané & Darley, 1970). The assumption of personal responsibility to respond can be enhanced by high moral reasoning or mitigated by a "diffusion of responsibility" if there are many other observers (Kohlberg, 1969; Latané & Darley, 1970). Action choice is based on a cost-benefit analysis involving perceived self-efficacy and perceived risk of retaliation (Pfeffer & Salancik, 1978).

What is important to note about this model and the principled organizational dissent model is that all the judgments and decisions are presumed to be subjectively rational calculations (Miceli & Near, 1992; March & Simon, 1958). The voice literature takes a similarly "economic" perspective, with alternatives, investments and perceived efficacy among the hypothesized predictors of exercising one's voice (Hirschman, 1970; Farrell & Peterson, 1982; Withey & Cooper, 1989; Parker, 1993).

Yet there is reason to expect that values and emotions influence the dissent process, as well. Santee & Maslach (1982) understood dissent to have a value-expressive and self-defining function. They argued that personal satisfaction can result from stating one's

values and acting consistently with them (cf. Festinger, 1957). And, indeed, they found that self-concept predicts dissent in “strong” situations, where behavior is circumscribed and the costs of deviance are high, because these situations provide opportunities for self-definition (Bowers, 1973). (Self-concept is less predictive of dissent in “weak” situations.) Whistle-blowing situations may constitute “strong” situations, depending on the organizational climate, the perceived threat of retaliation and group norms regarding the wrongdoing and reporting.

As an important component of attitude importance, values have also been found to play a role in deliberative processing (Fazio, 1990). People are particularly likely to use strongly held beliefs and values in information-processing, decision-making and action in “consequential choice situations” that require strategic planning (Boninger, Krosnick & Berent, 1995: 62). Whistle-blowing situations may represent situations that entail potentially high consequences and demand carefully thought-out courses of action.

Political activism, a form of voice and dissent and thus a distant cousin of whistle-blowing, is driven by values and emotions, as well (Gurr, 1970). Both grievances, which contain an emotional component, and competing demands, which feature value conflict, have been found to motivate activist behavior (Opp, 1988; Gilbert, 1988).

Finally, of all the individual differences hypothesized to be predictive of whistle-blowing, only one—a value—has consistently predicted whistle-blowing behavior: positive attitudes toward whistle-blowing (Near & Miceli, 1996). Job satisfaction—an affective

variable—has been found to increase the likelihood of voice behaviors (Rusbult, Farrell, Rogers & Mainous, 1988; Withey & Cooper, 1989; LePine & Van Dyne, 1998). On the flip side, the list of inconclusive predictors of whistle-blowing includes such individual differences as assertiveness, authoritarianism, self-esteem, moral reasoning, internal locus of control, self-monitoring, Machiavellianism, religiosity and self-righteousness (Adams-Roy & Barling, 1998; Barnett, Bass & Brown, 1996; Brabeck, 1984; Brewer & Selden, 1998; Chiu, 2003; De Dreu & De Vries, 1997; Fritzsche & Becker, 1984; Jos, Tompkins & Hays, 1989; Keenan, 1995; McCutcheon, 2000; Miceli & Near, 1984, 1988, 1992; Miceli, Dozier & Near, 1991; Miceli, Roach & Near, 1988, Near & Miceli, 1996).

**Deductive model of whistle-blowing.** My preliminary working model of the whistle-blowing decision process appears in Figure 3. I propose that the judgments and assessments made in the traditional Stage 2 will bequeath strong or weak value conflict on potential whistle-blowers and will engender emotional responses (including potentially neutral emotional responses) from them. These two elements will inform whistle-blowing decisions and behaviors. I make the case for including values and emotions in the whistle-blowing decision model in the sections that follow.

My dissertation focuses on the post-assessment stages of the decision process (i.e., the transition from Stage 2 to Stage 3 in the traditional whistle-blowing and principled organizational dissent models). However, my model envisions a role for emotions at the transition from Stage 1 to Stage 2, as well. Evidence for this role abounds. Take, for example, the assessment that an event is an emergency. Traditional models of whistle-

blowing and principled organizational dissent posit that variables such as conformity pressures and pluralistic ignorance determine whether an individual identifies a wrongdoing as such (Latané & Darley, 1970; Greenberger, Miceli & Cohen, 1987; Miceli & Near, 1992). But they overlook the potential role of emotions and the attribution process that emotions may trigger (Gundlach, et al., 2003).

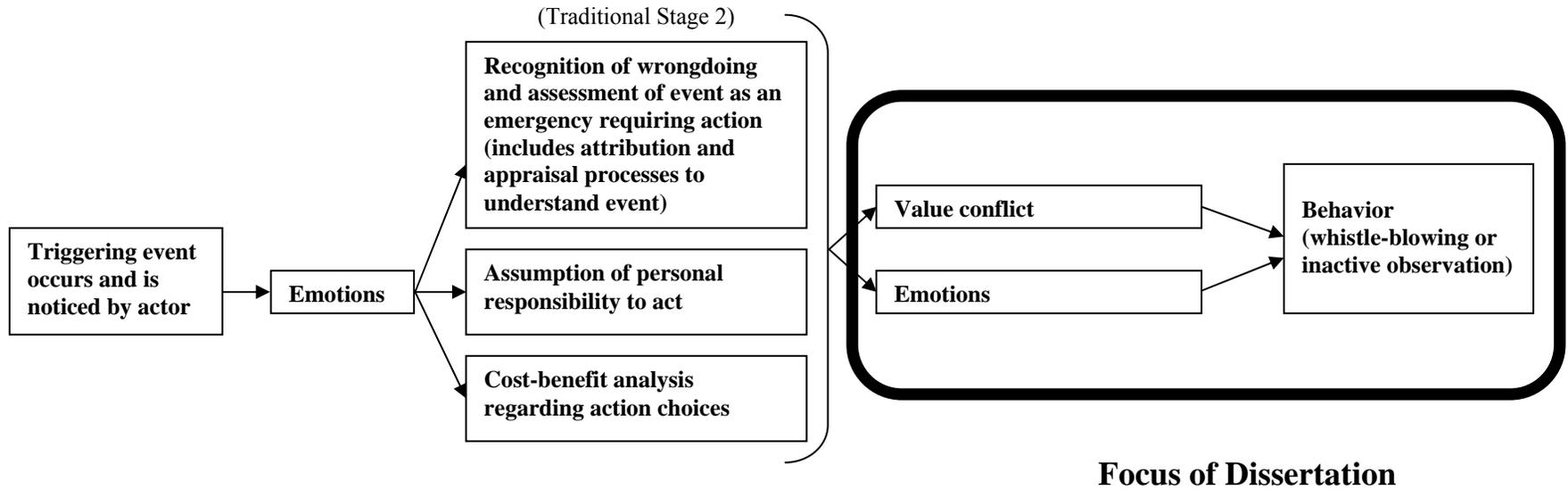
The social-functional approach to emotions and judgments holds that emotions help direct attention toward problems and opportunities (Goldberg, Lerner & Tetlock, 1999). This attentional shift is especially likely when the problem or opportunity is relevant to one's own goals or needs (Heider, 1958). Attribution theory asserts that causal search begins when one's expectations are violated or when one is motivated to solve a problem (Heider, 1958). Emotions can also initiate an attribution process (Weiner, 1985, 1986). Thus, if an observed wrongdoing violates one's expectations of the activities that should be occurring at one's organization, it may trigger surprise (among other emotions) and set off a search for the causes of the wrongdoing, particularly if the activities are viewed as self-relevant to the observer.

Similarly, action choice decisions are conceived in the existing literature as being driven by rational cost-benefit calculations and assessments of the risk of retaliation by managers and/or peers (Pfeffer & Salancik, 1978; Farrell & Peterson, 1982). However, emotions can inform these assessments of risk, as well. Lerner & Keltner (2000, 2001) found that anger leads to more optimistic risk assessments, while fear leads to more pessimistic expectations. They posit that each emotion's unique appraisal profile yields

different “appraisal tendencies,” propensities to judge future events in line with the appraisal dimensions of that particular emotion (Smith & Ellsworth, 1985). Thus, the different emotions or combinations of emotions that may be sparked by the discovery of a wrongdoing may inform different judgments regarding the riskiness of various response options. Further, emotions may cause individuals to disregard their risk assessments or not engage in risk assessments to begin with—behaviors that represent departures from traditional conceptions of rationality.

These brief examples demonstrate the important role of emotions in the whistle-blowing decision process and attest to the research opportunities that remain on new models of whistle-blowing and principled organizational dissent.

**Figure 3: Preliminary Working Model of the Whistle-Blowing Decision Process**



**Values and value conflict.** Values are abstract ideals that people hold about how they and others should (or should not) behave (Rokeach, 1968). Values function as standards by which people judge “which beliefs, attitudes, values and actions of others are worth challenging, protesting...[or] trying to influence or change” (Rokeach, 1973:13).

Tetlock’s (1986) value pluralism model (VPM) proposes that conflicts between (a) important and (b) approximately equally important values will spur individuals to think and act effortfully to resolve the conflict. This idea is derived from Abelson (1959), who held that belief dilemmas arise when two objects are salient and generate intense affect in an individual.

Value conflicts require difficult trade-offs, which decision-makers generally try to avoid (Abelson, 1959; Tetlock, 1986). Trade-offs are unpleasant for cognitive, political and affective reasons (Tetlock, 1986; Tetlock, Peterson & Lerner, 1996). On the cognitive side, it is often difficult to weigh the positives and negatives of a set of alternatives because there is no common metric for translating one value into another (i.e., the values are “incommensurable”). Trade-offs are often difficult to justify politically, particularly to those who perceive themselves to have “lost out.” As for affect, individuals find it dissonant and threatening to their self-esteem to acknowledge that they are capable of compromising basic values (Tetlock, 1986, 2000).

There are several ways to avoid making trade-off decisions. The simplest solution, available when the conflicting values are of unequal strength, involves denial and

bolstering (Abelson, 1959). In brief, the decision-maker denies the less important value and bolsters the more important one, a process Festinger (1964) dubbed “spreading apart the attractiveness of the alternatives” for post-decision dissonance reduction and Schroder (1971) called “exaggerating the scaled distances between discrepant stimuli.” Liberman & Chaiken (1991) found that low value conflict leads to attitude polarization because of the push toward consistency-driven thought.

For moderate value conflict, the decision-maker may try to screen options based on the most important value, then the next-most-important value, etc. (a.k.a. elimination by aspects – Tversky, 1972). Schroder (1971) pointed out that decision-makers may adopt wider latitudes of rejection than of acceptance when winnowing alternatives.

The most intense levels of value conflict engender integrated strategies that specify the conditions under which one or another value should prevail, consider when reasonable individuals would assign different weights to the same values, and place the conflict in a broader, systemic context (Tetlock, Peterson & Lerner, 1996). Abelson identified a process of “transcendence” for “chronically insoluble” dilemmas, in which conflicting parts of dyads are imbedded in a new concept that is instrumental to a higher purpose (1959: 351).

Potential dissenters and whistle-blowers who observe activities that they consider wrongful may experience a value conflict as they decide if and how to respond. For example, if the conclusion of their “recognition and assessment” judgments is that a

wrongdoing is due to controllable and intentional acts by company officials, they may have conflicting loyalties to the public welfare and their employer (Graham, 1986). They may try to balance perceived moral/ethical obligations with their commitment to support their families (Jensen, 1987). They may hold strong allegiances to extra-organizational principles, like the right to free speech or a professional code of ethics (Rothschild & Miethe, 1994; Van Dyne, Cummings & McLean Parks, 1995; Graham, 1986). Whistle-blowers in Brewer & Selden (1998) reported feeling an “extended sense of responsibility” when confronted with a moral or ethical dilemma.

Value conflict may engender an internal cost-benefit analysis for potential whistle-blowers, with the costs and benefits defined in terms of the emotions that individuals believe they would feel upon defending or favoring one value over another. For example, potential whistle-blowers may be torn between potential pride for adhering to religious imperatives to report wrongdoing and potential fear of violating religious injunctions against libel or slander (see, for example, Leff, 2007).

I predict that strong value conflicts like those described above will impede decisions to engage in whistle-blowing because individuals will not identify an obvious “right answer” to the wrongful activities. Thus,

**H1:** Strong value conflict leads to inactive observation.

Weak trade-offs are easier to resolve. Extrapolating the inverse of strong value conflict, weak value conflict exists when (a) neither value active in a situation is important or (b) one value is significantly more important than another (Tetlock, 1986). In this case, the relative attractiveness of the alternatives is irrelevant or clear to the decision-maker (respectively), behavior should tend toward the more strongly held value (if one exists), and post-decisional dissonance should be low (Festinger, 1964; Liberman & Chaiken, 1991).

Potential dissenters and whistle-blowers may experience weak value conflict that favors whistle-blowing if their loyalty to the public welfare or their allegiance to extra-organizational principles is significantly stronger than their loyalty to their employer (Rothschild & Miethe, 1994; Van Dyne, Cummings & McLean Parks, 1995; Graham, 1986). This decision may be colloquially called the “I knew I had to” phenomenon. On the other hand, potential dissenters and whistle-blowers may experience weak value conflict that favors inactive observation if their commitment to their organization or workgroup significantly surpasses their commitment to customer or stakeholder welfare. This decision may be colloquially called the “I knew I shouldn’t” phenomenon.

In terms of emotions, weak value conflict may be expressed by potential whistle-blowers in terms of the guilt they believe they would feel for neglecting the needs of potential victims if they did not disclose wrongful activities (“I wouldn’t be able to live with myself”) or the pride they believe they would feel for acting consistently with their self-image if they made a whistle-blowing disclosure (“I must be true to myself”).

I predict that weak value conflicts like those described above will facilitate decisions to engage in whistle-blowing or remain an inactive observer, depending on which value is dominant, because individuals will identify an obvious “right answer” to the wrongful activities. Thus,

**H2:** Weak value conflict leads to behavior that is consistent with the dominant value (to blow the whistle or remain silent).

**Emotions.** Scholars have focused on the cognitive and political implications of trade-off decisions and have mentioned only in passing the motivational power of affect and emotions. However, there is evidence that affective states do indeed influence trade-off decisions. In particular, extreme situations, which feature strong emotional states, threats to important values and the possibility of significant gains or losses, enhance the desire for cognitive closure (Isen & Patrick, 1983; Isen & Geva, 1987; Suedfeld, 1992).

All three of these elements are features of whistle-blowing situations. My dissertation focuses on threats to important values and two specific strong emotional states: anger and fear. My decision to focus on anger and fear is based on existing theoretical and empirical work: Potential whistle-blowers often express anger, even outrage, at the violations they have uncovered (Westin, 1981; Rothschild & Miethe, 1994). This anger may be directed at the perpetrator specifically, at peers or at the organization overall, depending on the circumstances. Fear of retaliation emerges as a concern of potential whistle-blowers in

many case studies and surveys, and avoidance of retaliation is a prominent theme on whistle-blowing advice and advocacy websites (Miceli & Near, 1984; Keenan, 1995; Miceli, Roach & Near, 1988; Government Accountability Project, 2006; Kohn, Kohn & Colapinto, 2006; Project on Government Oversight, 2006).

The cognitive appraisal approach to emotions is applicable to the study of whistle-blowing because it addresses the ways in which potential whistle-blowers' appraisals of their environments – i.e., how their different emotional responses to perceived wrongdoing – may affect their future actions (Smith & Ellsworth, 1985). The cognitive appraisal approach holds that different emotions are associated with differences in the way individuals appraise their circumstances. Smith & Ellsworth (1985) identify six appraisal dimensions: pleasantness, self/other responsibility, attentional activity, anticipated effort, certainty and agency (i.e., human/situational control). Cognitive appraisal scholars have investigated not only the predictors of specific emotions, but also the effects of these emotions on future judgments (Keltner, Ellsworth & Edwards, 1993; Tiedens & Linton, 2001). Lerner & Keltner (2000, 2001) posit that each emotion yields its own “appraisal tendency,” or propensity to judge future events in line with the appraisal dimensions of that particular emotion.

Besides their theoretical and empirical relevance to the whistle-blowing context, anger and fear are convenient objects of study because they are distinguishable from one another on only one of the six appraisal dimensions: certainty (cf. Frijda, Kuipers & ter Schure, 1989). Anger is associated with feelings of certainty about past events and future

outcomes, while fear is associated with feelings of uncertainty about past events and future outcomes.

Smith & Ellsworth (1985) and Lerner & Keltner (2000) hold that anger and fear also differ on the dimension of agency, with anger resulting from events believed to be under human control and fear resulting from events believed to stem from circumstances beyond anyone's control, like fate, the weather and natural disasters. However, fear in the whistle-blowing context refers to the fear of retaliation, which is controlled by human agents, managers or peers. Therefore, the control dimension as defined by these scholars does not distinguish anger from fear in the whistle-blowing context.

Lazarus (1991) outlined profiles of anger and fear that I have summarized and customized for the whistle-blowing context in Figure 4. Anger is characterized in this scheme by the tendency toward confrontation, with the goal of restoring order. Ellsworth & Smith (1988) found that anger motivates action aimed at the removal of an obstacle. Anger also features expectations of efficacy in this endeavor. Fear, on the other hand, is characterized by the tendency toward flight, with the goal of evading negative outcomes. It features uncertainty regarding one's efficacy versus the environment.

**Figure 4: Profiles of Anger and Fear**

	<u>Anger</u>	<u>Fear</u>
<b>Core Relational Theme</b>	A demeaning offense against me and mine	Immediate, concrete and overwhelming physical danger
<b>Expectations/Certainty</b>	Positive about environmental response to action	Uncertain
<b>Action Tendency</b>	Approach / attack	Avoidance / escape
<b>WB Manifestation</b>	Outrage at violation	Fear of retaliation
<b>Target in WB Context</b>	Organization, perpetrators, peers	Management, peers

(Based on Lazarus, 1991)

Potential whistle-blowers whose dominant response to observed wrongful activities is anger may therefore be inclined to engage the perpetrators or powerful authorities in influence attempts to convince them to halt the activities, given their expectations of success. Potential whistle-blowers whose dominant response to observed wrongful activities is fear of retaliation if they try to halt the activities may be inclined toward inaction and self-preservation behaviors, given their lack of confidence in their own persuasiveness and in management’s support for their disclosure. Thus,

**H3:** Anger at observed wrongful activities leads to whistle-blowing.

**H4:** Fear of retaliation leads to inactive observation.

**Interaction effects of values and emotions.** Whistle-blowers may respond to wrongful activities as “moral guardians” with weak (or no) value conflict. Serious norm transgressions, like crimes, combined with escape of punishment by the perpetrator, generate anger in observers that yields a particularly harsh mindset dubbed the “intuitive prosecutor” (Goldberg, Lerner & Tetlock, 1999). Intuitive prosecutors use simpler and more punitive attribution heuristics for inferring responsibility and remain vigilant as long as perpetrators elude punishment.

One important difference between whistle-blowing situations and intuitive prosecutor situations is that the crime in a whistle-blowing situation may not yet have been revealed, so its committer may not yet have escaped punishment. Nevertheless, both situations are driven by anger at ongoing violations and feature individuals with weak value conflict about defending the social or moral order. Thus, I predict an interaction effect between anger and weak value conflict that favors whistle-blowing as follows:

**H5:** Anger at observed wrongful activities strengthens the main effect of weak value conflict that favors whistle-blowing, increasing the likelihood of whistle-blowing.

The theory of threat-rigidity proposes that events with potentially negative or harmful consequences may generate a reversion to well-learned behaviors among individuals, groups and organizations (Staw, Sandelands & Dutton, 1981). At the individual level,

stress, anxiety and physiological arousal are posited to restrict information-processing and constrict control such that individuals rely on prior expectations and belief structures.

Individuals who fear retaliation for making a whistle-blowing disclosure fit the description of threatened individuals provided above. Potential whistle-blowers whose prior value systems are inclined toward inactive observation may decide to remain silent (their dominant response) when they fear that their jobs and reputations would be at stake if they spoke up. Thus, I predict an interaction effect between fear and weak value conflict that favors inactive observation as follows:

**H6:** Fear of retaliation strengthens the main effect of weak value conflict that favors inactive observation, increasing the likelihood of inactive observation.

### **CHAPTER 3: FIELD STUDY AND QUALITATIVE ANALYSIS**

As chronicled in Chapters 1 and 2, much has been written about how observers of organizational wrongdoing decide whether or not to blow the whistle. Most of this research has focused on “subjectively rational” assessments as part of cost-benefit analyses that balance potential retaliation against the possibility of positive change (March & Simon, 1958; Miceli & Near, 1992). Little conceptual or empirical work focuses on non-rational components of the decision process.

Building blocks for a process model of whistle-blowing decision-making are to be found in Miceli & Near (1992) and Gundlach, Douglas & Martinko (2003). However, neither specifies a role for both values and emotions or entertains the possibility of equifinality, the idea that multiple paths can lead to the same outcome. My dissertation advances such a framework and identifies multiple whistle-blowing decision paths, rather than the single one defined to date. Further, it is an important first step toward a grounded and testable model of a whistle-blowing decision process that is simultaneously “hot” and “cold.”

My research program combines deductive and inductive strategies to develop and test a model of the whistle-blowing decision process and, more broadly, of principled organizational dissent. My choice of case studies derived from qualitative interviews as my dataset is based on the fact that individuals who have lived through the whistle-blowing and dissent processes yield a first-hand perspective of the phenomena that laboratory participants cannot match. Informants can speak at length, free-associate and

vary elements of their speech during in-depth interviews. This texture yields much richer measures of emotion and value conflict and a better sense of their evolution over time.

This chapter describes the case studies I collected; introduces new, emergent predictors that my deductive reasoning had not anticipated and evidence that challenges some fundamental tenets of the classical whistle-blowing decision model; and elaborates a whistle-blowing process model and junctures of path divergence grounded in the data.

My data suggest that potential whistle-blowers may not engage in cost-benefit analyses or may engage in flawed (i.e., inaccurate) analyses, in contrast to the classical model. Thus, outcomes can vary from deliberate, strategic actions based on accurate assessments to deliberate, strategic actions based on inaccurate assessments to reflexive actions. Further, my data indicate that whistle-blowing decision models should be expanded to include emotions, value conflicts and various disruptors of organizational loyalty as major components. Finally, the data highlight the role of organizational actions in unintentionally facilitating whistle-blowing disclosures. Following the logic of induction, I explain the method before presenting my revised model.

## **METHOD**

**Informants.** I interviewed for this study 50 individuals who either made whistle-blowing disclosures or chose to remain inactive observers regarding perceived wrongful activities at their organizations. I used a combination of gatekeeper referrals and the snowballing

technique to identify and recruit informants. Gatekeepers were founders and leaders of whistle-blower advocacy groups, private attorneys and personal contacts who directed me to potential informants. In addition, some informants referred me to individuals they knew from work or through whistle-blower support groups for their professions.

I selected informants for inclusion in the study based on two criteria. First was their conformity with the legal definition of whistle-blowing. The Whistleblower Protection Act of 1989 defines a whistle-blower as a government worker, government contractor or private citizen who discloses illegality, abuse of authority, gross waste or mismanagement, or substantial and specific danger to public health or safety (Library of Congress, 1989). The predominant scholarly definition of a whistle-blower—an organization member or former member who discloses “illegal, immoral or illegitimate practices under the control of their employers to persons or organizations that might be able to effect action”—is broader, as it includes “immoral” practices (Miceli & Near, 1992: 15). Thus, I chose a more conservative definition of whistle-blowing than the scholarly literature allows. Second was individuals’ ability—from legal, self-expression and time-constraint perspectives—to speak freely and openly about their episode.

I conducted screening interviews with 65 potential informants to determine their fit with my study criteria. I eliminated 15 potential informants: three for reasons of fit (they did not meet the legal definition of a whistle-blower), two because of legal constraints (their participation might have jeopardized ongoing legal proceedings against their (former)

employers), two for being incoherent in their self-expression, and eight over scheduling difficulties. Thus, I interviewed 50 of 65 potential informants, for a yield of 77%.

Informants comprised 40 men and 10 women aged 25-61 at the time of the focal episode, with an average age of 45. About half were married at the time of the focal episode, and about half had school-age children. Informants averaged 17.7 years of professional work experience at the time of the focal episode, with an average tenure in their position of 5.7 years and an average tenure at their organization of 7.5 years. About 55% supervised others at work. Almost all (93%) had degrees beyond the bachelor's level, and 20% had doctoral- or post-doctoral degrees. Forty-one informants worked in the public sector (i.e., in the U.S. federal government, a U.S. state-level government or a nongovernmental organization), and nine worked in the private sector. Informants were primarily white-collar workers; only three held blue-collar jobs at the time of the focal episode. No effects were found for these demographic variables, and they are not discussed further.

Some readers may have preferred that I obtain "matched pairs" of whistle-blowers and inactive observers: pairs of individuals who observed the same activities from which one member chose to report and the other chose to remain silent. Because they differ only on the dependent variable of interest, matched pairs are believed to help control for nuisance variables. In the whistle-blowing context, matched pairs may control for factors like organizational climate and the nature of the wrongdoing itself.

However, matching designs have risks of their own, including the “systematic unmatching” of pair members with respect to other unidentified nuisance variables and the generation of subpopulations that differ systematically from the overall population of interest (Meehl, 1970). In addition, matching would have necessitated a heavier reliance on the snowballing technique of informant recruitment, as the first member of a pair would have had to refer me to his or her match. My informant population would therefore have been limited to colleagues who were sympathetic or neutral toward the referring informant’s perspective. Further, on a practical level, informants who had been ostracized by peers or whose episode had occurred in the distant past were unable to refer matches. Thus, I would have had to remove those informants from my sample. For these reasons, I used a combination of the gatekeeper and snowballing recruitment techniques, rather than an exclusive reliance on the latter.

**Episodes.** The 50 informants provided data on 60 episodes, 47 whistle-blowing episodes and 13 inactive observation episodes. Thirty-eight informants provided whistle-blowing episodes only, three informants provided inactive observation episodes only, and nine informants provided both whistle-blowing and inactive observation episodes (including one informant who provided two inactive observation episodes). The number of informants providing both types of episodes is small because most whistle-blowing informants claimed that they either had never been in a similar situation before (i.e., had never had another opportunity to decide whether or not to whistle-blow) or had always advocated for change in similar situations (i.e., had never been inactive observers).

I collected data on three categories of organizational wrongdoing to obtain a diverse sample of whistle-blowing and inactive observation triggers: waste, fraud or abuse; national security threats; and public health or safety threats. I sought diversity because constant elements observed in a heterogeneous sample offer firmer grounding for a general model of whistle-blowing than do constant elements observed in a homogenous sample. The 60 episodes I selected were distributed as follows: waste, fraud or abuse:  $n = 14$ ; national security threat:  $n = 13$ ; public health or safety threat:  $n = 27$ ; national security threat plus public health or safety threat:  $n = 5$ ; waste, fraud or abuse plus public health or safety threat:  $n = 1$ . I do not provide details of the wrongful activities beyond this high-level summary to protect the confidentiality and anonymity of the informants.

**Data sources: Initial contacts.** My initial contacts with informants and gatekeepers produced facts (e.g., dates, durations) and feelings (e.g., anger, betrayal) about the whistle-blowing decision process and individual legal cases regarding retaliation. When I was the one initiating contact with a potential informant, I would begin by introducing myself and my project, indicating who had referred me to him or her for participation, and then provide a brief synopsis of my project and the requirements for participation. If the individual expressed interest in being interviewed, I would undertake the initial screening, and if the interviewee passed the screening, we would schedule a mutually convenient time for an in-depth interview. When the potential informant would initiate contact with me, having been referred by a gatekeeper or another informant, I typically did not have to introduce myself or the project, as the referring party had covered that information with the referee. In those cases, I would ask probing questions to gauge the

individuals' appropriateness for this study before scheduling an interview. I also did not have to ask those individuals if they would agree to be interviewed, as they were volunteering. Most initial contacts occurred over email, though some were by telephone.

**Data sources: Semi-structured interviews.** Interviews were conducted in person and via telephone from June 2006 to June 2007 and lasted 24-167 minutes each, with an average duration of 81 minutes. A total of 68 hours of interviews were held. All informants were interviewed once, and all interviews were recorded and transcribed.

The semi-structured interviews followed the protocol provided in Figure 5. The primarily open-ended questions guided conversations about how informants' decisions to make (or not make) a whistle-blowing disclosure unfolded. The protocol covered details of the wrongful activities, the informant's cognitive, emotional and behavioral responses to the activities, including assessments of alternative courses of action, as well as values-based thoughts triggered by the episode.

There were three key junctures of focus: when the informant learned about or discovered the wrongful activities, when the informant decided to disclose (or not disclose) the activities to a supervisor, and when the informant decided to make (or not make) an external whistle-blowing disclosure. I focused on these three points in time because they represented the moments most likely to generate deliberations and decisions regarding one's response to the wrongdoing.

In most interviews, informants set the stage by providing background data, such as their tenure and professional experience, and then described in detail the trigger activities and why they perceived them to be wrongful. Informants enumerated the chain of internal reports they made (if any) and the response they met (if any), as well as the external reports they made (if any). Along the way, informants were asked to recall the emotions they felt at the three critical junctures. They also described the values that came into play as they moved through their decision process. The informants and I were guided—rather than rigidly constrained—by the prepared questions. I pursued unexpected but interesting topics, since this was an inductive study.

Informants expressed strong emotions during interviews, especially anger, contempt, outrage and disbelief. Some cried or choked up at specific junctures. Working with these informants required a more complex exchange relationship than does research with less emotionally charged informants. In return for providing data, informants hoped that I would listen with concern and caring to the history of their whistle-blowing episodes, be sympathetic and provide feedback. Most informants told me that I was the only person aside from their attorneys who had listened to their entire stories. Many told me they found the interview process cathartic. Several put me on their email distribution lists to follow their legal proceedings or receive updates from their professional support groups. Almost all asked for copies of my final dissertation in order to “learn about ourselves.”

## Figure 5: Interview Protocol

### I. Basic Information

1. Personal demographic information: age, gender, marital status, race/ethnicity, education level
2. Organizational demographic information: public/private organization, title, rank, supervisory/professional status, tenure at organization, tenure in job
3. Whistle-blowing decisions: report vs. no report, anonymous vs. identified, internal-only vs. external-only vs. internal first, then external

### II. Facts of the Wrongdoing

4. Please describe the activities you observed.
5. What kind of violation did these activities represent (legal, ethical, social norms)?
6. Who was harmed by the activities? How serious were the consequences to the victims?
7. Who benefited from the activities? How advantageous were the consequences?
8. Were the activities the isolated work of a person or few people or an organized effort by the organization?

### III. Response to Wrongdoing

9. Describe the sequence of events through which you became aware of the activities and your decision to report/not report it.
10. How did you feel when you first learned of the activities? Did this feeling change over time?
11. Some people describe their decisions as immediate gut-level phenomena, while others describe them as things that evolved over time. How would you characterize your decision?
12. At the time, did you see any (potential) positive effects of the activities? What were they?

### IV. Value Conflict

13. Did the activities violate any of your personal or professional values/principles? Which? What was it like to experience this violation?
14. Would not reporting/reporting the activities have violated any of your personal or professional values/principles? Which?
15. Would not reporting/reporting the activities have conflicted with any of your personal or professional responsibilities? Which?
16. How did you balance these values/principles and responsibilities?
17. Did you consider the potential consequences to yourself (positive or negative) of making/not making a report? What did you expect might happen? How likely did you think these consequences were? What was it like to consider these consequences?
18. Did you consider the potential consequences to society or to the organization of your making/not making a report? What did you expect might happen? How likely did you think these consequences were? How did it feel to consider these consequences?
19. How did you balance these potential consequences?

### V. Action Choices and Alternatives

20. Why didn't you wait for someone else to report the activities?
21. Did you believe someone else should report the activities? On what basis?
22. What would have convinced you not to report/to report?

### VI. Previous Experiences

23. Had you ever chosen to make/not make a whistle-blowing disclosure before? (If so, repeat I-V for that episode.)

**Data sources: Web-based survey.** After the interview, I sent each informant a link to a website that contained scale-based (i.e., quantitative) measures of their emotional responses at the three critical junctures outlined above. Informants provided self-ratings for 25 emotional states at each of three junctures of the whistle-blowing episode (see Figure 6). Informants were instructed to “picture the place or situation [of each juncture] and RE-EXPERIENCE THE EMOTIONS YOU WERE FEELING AT THAT TIME. Then, rate [on a 1-9 scale] the extent to which each of the adjectives that follow describes how you felt then” (emphasis in the original).

**Figure 6: Emotion Self-Report Items From Web-Based Survey**

1. First, think back to when you FIRST OBSERVED THE WRONGDOING. Please rate the extent to which each of the following adjectives describes how you were feeling AS YOU WITNESSED THE ACTIVITIES.
  
2. Next, please recall the FIRST TIME YOU REPORTED THE WRONGDOING TO A SUPERVISOR. Please rate the extent to which each of the following adjectives describes how you were feeling AS YOU DECIDED TO MAKE THAT FIRST REPORT.
  
3. Last, please recall the first time you reported the activities in a way that YOU RECOGNIZED/ IDENTIFIED AS A WHISTLE-BLOWING ACT. Please rate the extent to which each of the following adjectives describes how you were feeling AS YOU DECIDED TO BLOW THE WHISTLE.

___ Afraid	___ Challenged	___ Frustrated	___ Proud
___ Amused	___ Confident	___ Guilty	___ Relieved
___ Angry	___ Contemptuous	___ Happy	___ Resentful
___ Apathetic	___ Disgusted	___ Hopeful	___ Resigned
___ Ashamed	___ Elated	___ Interested	___ Sad
___ Bored	___ Expectant	___ Nervous	___ Scornful
			___ Surprised

**Data sources: Records.** Informants were eager to share documentation they had collected about their cases, and both gatekeepers and informants added me to their email distribution lists for whistle-blowing-related news and updates. Most of the time, informants offered to send me their materials before I got to ask for them. Documentation included transcripts of legal proceedings, media accounts of individuals' cases and evidence the informants had collected regarding the wrongful activities. This information was especially useful for clarifying factual items that were unclear from the interviews and for verifying the accuracy of informants' recall of events.

**Qualitative analysis.** Data collection and analysis were guided by the recommendations of Glaser & Strauss (1967), Strauss & Corbin (1998), Miles & Huberman (1994) and Yin (2003). I began the project by developing a working framework based on the existing literatures on whistle-blowing, principled organizational dissent, voice, value conflict and emotions and on informal conversations and pilot interviews with gatekeepers. For example, the conversations and pilot interviews suggested that the three junctures enumerated above would be the most fruitful for investigation. Gatekeepers also alluded to the lack of viability of a matched-pair study design.

I engaged in a continuous comparison of my emerging model and the evidence throughout the data collection process. Some elements suggested by the literature and my prior intuitions could be grounded in the data, while some could not. Further, some elements that I had not anticipated and others that challenged existing theories of whistle-blowing and principled organizational dissent emerged as important model components.

The result is a grounded theory of the whistle-blowing decision process that is more comprehensive and explains more cases than preceding theories, even though it does not fit (and should not be expected to fit) all of the qualitative evidence perfectly.

**Limitations.** This paper may offer the most complete description to date of the whistle-blowing decision process, but it also has limitations. First, this research was inductive. The products were models, not tests of models. Deductive research is needed to assess the strength of the empirical support for this framework. Initial attempts appear in Chapters 4 and 6.

Second, the model proposed here likely does not describe all whistle-blowers or all inactive observers. My informants were predominantly public-sector workers ( $n = 41$  vs.  $n = 9$  private-sector workers). Thus, my model may generalize to public-sector cases of whistle-blowing and inactive observation better than to private-sector cases, despite the contention of Callahan & Dworkin (1994) that one can generalize between public- and private-sector employees (see Chapter 6 for more on this). Even if it could be established that I had studied a representative sample of whistle-blowers and inactive observers, it would still be difficult to make definitive inferences about inactive observers since my dataset contains a much higher number of whistle-blowing episodes ( $n = 47$ ) than inactive observation cases ( $n = 13$ ). Future studies should strive for a more balanced set of cases.

Third, the study relies on recalled, rather than immediate, emotions. Retrospective accounts of affect have sometimes been found to be inaccurate on an absolute basis. While people can recall the relative frequency of positive and negative emotions, they often overestimate the intensity of emotions felt in the past, particularly negative emotions (Thomas & Diener, 1990). In addition, there is evidence that people reconstruct their memory of past emotions according to their current appraisals of the event that originally elicited the emotion (Ross, 1989; Levine, 1997).

Nevertheless, recalled emotions are elicited extensively in studies of emotion, psychotherapy and personal histories, and scholars have devised methods that mitigate the faultiness of recalled emotions (Weiner, Graham & Chandler, 1982; Levine, 1997; Lerner & Keltner, 2001). The first is to supplement studies based on recalled emotion with studies that manipulate emotions in real-time (e.g., Ellsworth & Smith, 1988; Smith, Haynes, Lazarus & Pope, 1993). I do this in Chapter 6. The second is to triangulate on the original emotion by asking for different types of recall. My interview protocol incorporates the recommendations of Frijda, Kuipers & ter Schure (1989), Ellsworth & Smith (1988), Keltner, Ellsworth & Edwards (1993) and Schwarz (2005) by: (1) identifying past emotions by specific circumstances (e.g., “how did you feel when ...”); (2) asking informants to transport themselves back in time (e.g., “Try to recall [past experience *x*]. Think back and **re-experience the emotions** that you were feeling during this experience. Rate how well [a set of emotional adjectives] describe how you were feeling while **actually experiencing** this past situation” (emphasis added)); (3) asking for **how** an event occurred, rather than **why** it occurred (“how” questions get informants to

relive an event, including re-experiencing the emotions they felt at the time, while “why” questions induce informants to analyze the event from a distance); and (4) breaking events into a series of episodes, asking informants to describe each episode in detail and rate their feelings about just that episode.

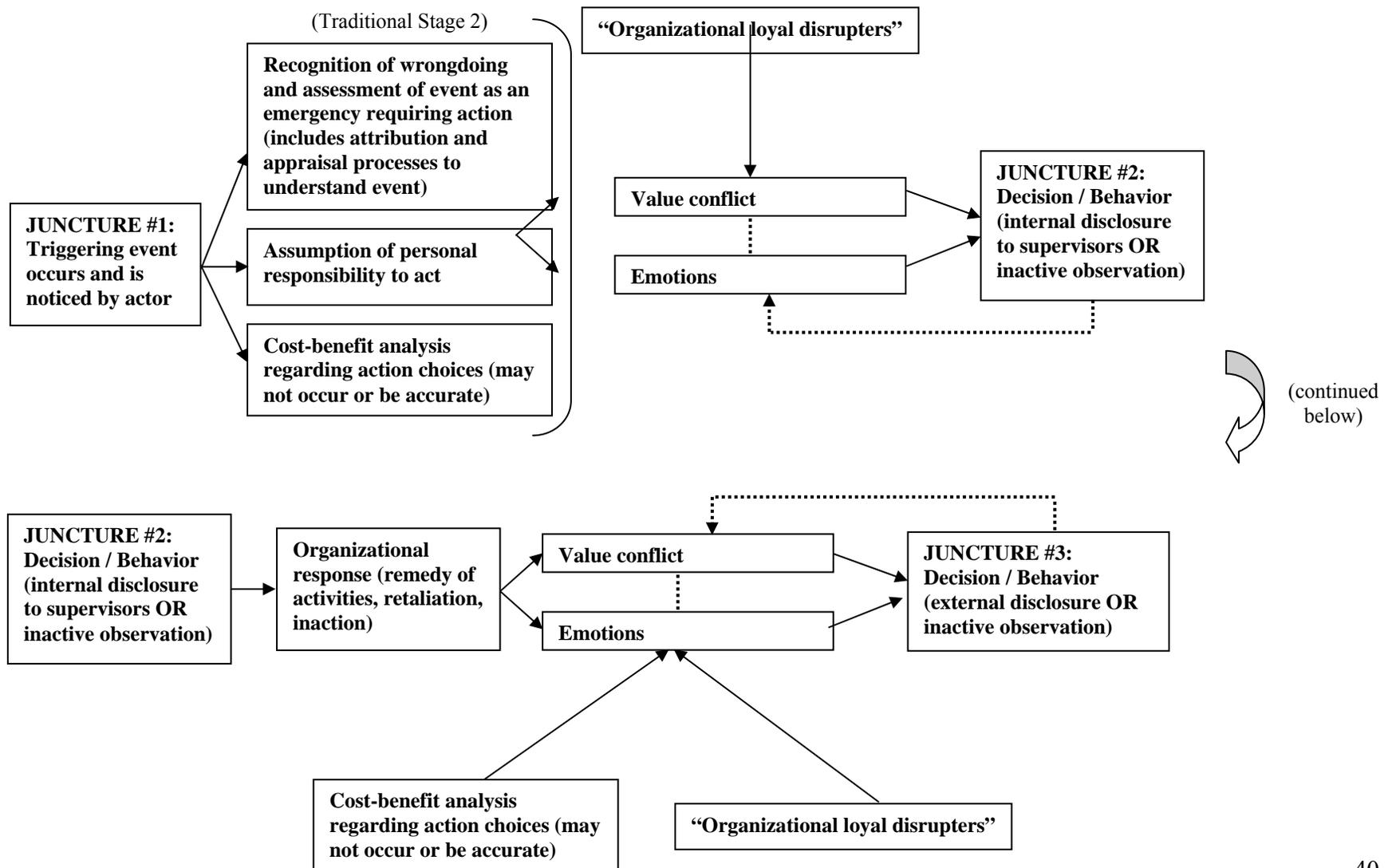
### **INDUCTIVE MODEL OF THE WHISTLE-BLOWING DECISION PROCESS**

Figure 7 displays my emergent model of the whistle-blowing decision process. The model focuses on value conflict, emotions and environmental elements that influence potential whistle-blowers’ responses to perceived organizational wrongdoing.

The model depicts a sequence of three critical junctures in which members first have a private response to observed activities, then decide to make (or not make) internal whistle-blowing reports to supervisors, and finally decide to make (or not make) external whistle-blowing disclosures to authorities like oversight or watchdog agencies, law enforcement or the news media. The progression of disclosure decisions is influenced by organizational actions and environmental elements outside the organization’s control, both of which inform potential whistle-blowers’ value conflicts, emotions and assessments of the costs and benefits of escalating disclosures.

The text following Figure 7 walks through the model juncture by juncture, outlining the value conflicts and emotions that individuals experience at each decision point, as well as the organizational actions and environmental elements that influence these responses.

**Figure 7: Emergent Model of the Whistle-Blowing Decision Process**



(continued below)

### **Juncture 1: Observation of Wrongful Activities**

The first juncture, as in the classical model, is a trigger event that is noticed by the focal individual. If the individual recognizes the event as a wrongdoing and perceives the consequences for potential victims as an emergency, as the classical model proposes, he may experience a value conflict as he reconciles his perspective on the organizational culture with his individual sense of right and wrong. The recognition may also engender an emotional response, perhaps based on the individual's attribution of responsibility for the wrongful activities (cf. Gundlach, Douglas & Martinko, 2003).

**Value conflict: Weak conflict against the wrongful activities.** Informants listed a variety of core values that were violated by the activities. Some, particularly public-sector employees, held their organizations to a high ethical standard: "I came with a true belief that these organizations...must be much better than ordinary corporations." Others expressed a commitment to customers: "Patient advocacy was always number one on my list of priorities." Informants did not try to justify or understand the wrongful activities from the perspective of their organization or the perpetrators. Rather, it was clear to them that the activities were wrong and threatened their professions: "I thought, 'Wait a minute, this is an affront to my profession. My profession is supposed to be an honorable profession, where integrity is a premium.'"

**Emotion: Primarily anger.** Most informants experienced moderate to high levels of anger upon observing the wrongful activities. This was due to their perception that the activities challenged their core values. Consistent with Gundlach, Douglas & Martinko

(2003), some informants' attributions of responsibility and intent to their organizations contributed to their anger response. Anger was directed at both the perpetrators and the perpetrators of the wrongful activities.

I became aware that I was dealing with something that was preventable, and I felt anger...[The] superficial kind of concern that the hierarchy had for [customers]...caused me some disillusionment, but it was mainly that undercurrent of anger. I was just POed at the people that would do that.

[I felt]...a sense of rage...that my fellow veterans were potentially being betrayed by their government.

## **Juncture 2: Decision to Report (or Not Report) Wrongful Activities to Supervisor**

**Value conflict: Weak conflict favoring report to supervisor.** Juncture 2 was generally devoid of strong value conflict. Most informants were puzzled by the question of how they “decided” to report to a supervisor, claiming it was the obvious thing to do. Indeed, only three informants did not report wrongful activities to their supervisors: two skipped this step and went straight to external authorities, and one was an inactive observer.

Here, role responsibility, codes of ethics and legal obligations dominated informants' responses. This finding supported the classical model's contention that an individual assumes personal responsibility to act against the wrongdoing. It is also consistent with Morrison's (1994) contention that employees are more likely to perform organizational citizenship behaviors that they view as being in-role (Organ, 1990).

I have the duty to report on any compromises of the [constituencies] that I protect. You cannot be a [profession] and turn it on one day and turn it off

the next. It doesn't work that way. You must do everything according to the book or there is no point in your being-...even going to work.

**Emotion: Primarily hope.** The primary emotion at this juncture was hope, as informants were generally confident that their supervisors would agree with their perspectives on the wrongful activities and take action to halt them:

At the time I thought that I would get a fair hearing, and then there would be some actions. And I was prepared to help them in any way, using whatever expertise I had.

My hope was that my boss and other people might realize that maybe something was a little awry there.

I assumed, once I turned that report in, that things would change.

My expectation was that the [supervisor] would take the lead and look into it, and decide...that [the perpetrator] would be transferred.

**Cost-benefit analysis: Generally absent, and inaccurate if they occurred.** In contrast to the classical model, cost-benefit analyses did not always occur at the second juncture, as individuals were confident of their supervisor's positive response. When cost-benefit analyses did occur, they were often inaccurate, underestimating the possibility or severity of retaliation or overestimating one's ability to prevail in the face of retaliation. The classical model does not acknowledge the possibility that a cost-benefit analysis might not occur or that a cost-benefit analysis might be flawed (i.e., inaccurate).

I expected that there would be swift justice with gratitude. I [didn't have] a backup plan because I was so naïve I thought for sure that I would prevail. And, if anything, I thought I might be promoted because of what I did.

I expected to be supported by my management, not undercut, falsely accused and blamed... They double-crossed me.

I should've been astute enough to see what was happening...but I had enough of a documentation trail and enough people working with me that were supportive that had the technical expertise. I've got records, I've got...reports...you know? This isn't just my opinion...All the data I had pointed in one direction...and they were just ignored.

### **Juncture 3: Decision to Make (or Not Make) a Whistle-Blowing Disclosure**

**Emotion: Primarily anger.** The primary emotional response at this juncture was anger.

By this point, most informants had faced either inaction or retaliation by management in response to their internal advocacy.

Anger over management inaction led to a desire for accountability and results. These informants most often focused on the potential victims of the wrongdoing and the larger principles at stake:

[Management needed] a slap. They need to know how to behave appropriately, you know? They're doing it because of greed. I mean, they could have done things better, but it was expensive and they were trying to save...They could have done it differently, with much less threat, but it would have cost more. So, f--k 'em. They deserve a slap. They deserve to be punished.

You know, there's no word in English for how [I] feel. Outrage doesn't do it. Not only outrage at the prostitution of a profession, but outrage at...a Constitutional crisis of the first order...It's getting really, really hard, but really more important...to get the word out.

Some informants focused on the perpetrators of the wrongdoing and on “poetic” justice

(Tripp, Bies & Aquino, 2002):

The only consolation I have is...when the terrorists attack, that...they actually do succeed in hitting Capitol Hill. And those Congressmen that survive,...I'll be the first one to visit them...at the burn unit at the hospital...with a truckload of roses, with a little note on it, saying, 'I told you bastards about this, and you people didn't do jack s--t'...I actually have less contempt for the terrorists than I do for the politicians and the bureaucrats that are responsible for this mess.

Other informants were angered by the retaliation they had suffered:

I was very angry that people were making crap up about me and trying to destroy my character.

I was livid...I said, 'You're a friggin' quack. You're taking orders from them. You are a disgrace to your profession. You have no right practicing as a psychologist'...I just let him have it...I was angry.

Anger over retaliation led to a desire for revenge and catharsis. This response is consistent with the literature on psychological contract violation: Informants' assessments that their organizations had violated their contracts with employees contributed to an affective response in those individuals (anger, disillusionment, betrayal) and shifted their focus away from citizenship behaviors and toward rule enforcement (Rousseau & McLean Parks, 1993; Morrison & Robinson, 1997; Tyler, 1999).

Informants in this situation most often focused on the perpetrators or perpetrators of the

wrongdoing and on their organizations' responses to them personally, rather than on potential victims or organizations' concerns for that population.

When I heard that they were going after my security clearance,...I took a special delight in the fact that...I could force others to investigate something involving one of my employers.

I was out for accountability...I'm gonna hold these people accountable for their dirty deeds. Now, am I out for policy change? Well, yes, but it's beyond that now. If I'm truly going to be honest with you,...it really isn't just policy change; it's accountability. If all these people changed policy tomorrow, would I be happy? No way. These people have to be held accountable.

What was driving me was just the anger and the fatigue...The tiredness I got, the angrier I got. Like, I've had enough of this nonsense. This is really impacting my personal life. It's impacting my health. It's disrupting my sleep. It's gonna give me a stomach ulcer.

I was waking up and looking at myself in the mirror and thinking, 'I've got to tell somebody about this. I can't continue to work there in this kind of environment'...The hopelessness and the stress of...seeing it for what it was...but not standing up and saying that it was wrong, I believe that's where it really hurt me.

A small number of informants were able to separate their anger over the retaliation they experienced from their commitment to their organization and their initial cause.

I'm not angry with the [organization]. I'm trying to go back to the [organization]. I truly believe the [organization] is okay as an institution, but it's got a lot of systems that need to be changed. And that's all. I'm truly not somebody who's really angry. I'm just angry at why the systems don't work, why some individuals can do what they can do. It's not against the institution. I'm 100% with the institution; otherwise, why would I even bother? I'm not angry at the institution.

**Cost-benefit analysis: Driven by fear of retaliation, but not necessarily accurate.**

Some whistle-blower informants expressed fear of retaliation by management as they decided to make their external disclosures: “I had just lost one job, and I was afraid I would lose another. And then where would I go?” Others feared retaliation by coworkers, including a fear for physical safety: “I was lucky to leave the [organization] unhurt.” “I had thought about physical harm coming to me, . . . even to the extent that I would double-check my doors at night.” These individuals found creative ways to blow the whistle while trying to protect themselves: Some made disclosures via anonymous phone calls, faxes or mailed packages. Some identified themselves in what they believed were legally protected disclosures to members of the state or federal government. Some amassed large quantities of evidence. And some voluntarily resigned before making their disclosures. Thus, these informants’ perception of the risk of retaliation led them to adopt strategies that minimized these risks and tilted the cost-benefit analysis in favor of whistle-blowing.

Some informants feared retaliation so much that they decided to remain inactive observers. Their cost-benefit analyses included such inputs as assessments of self-efficacy at stopping the wrongdoing, the likelihood of retaliation and their ability to sustain the retaliation, as the classical model suggests. It is impossible to say whether these cost-benefit analyses were accurate or not, as the informants’ silence precluded an organizational response.

Why would I get myself fired over something that’s not going to change anything anyway, and [the wrongdoing] has been going on for this long, and I love this job otherwise?

[I] kept [my] head down, and what were my motives? [That] they would get me for sure in the next polygraph, so my very exciting career would be very short-lived. I would never be able to go back to this work.

Other informants included the same inputs in their cost-benefit analyses, but decided that they could sustain the retaliation and thus became whistle-blowers. Family security and personal comfort featured prominently among the inputs of these assessments:

Now, remember, I'm single. I don't have a family, I don't have children. That is a huge, huge factor in whistle-blowers. And I've talked to a lot of people whom I've tried to get to whistle-blow. And nine times out of ten, it's the one factor that prevents the person from whistle-blowing. It's his family. He has a family to support. I don't. If I had lost my job, who cares? I'll go find another one. I can eat peanut butter sandwiches for a month...I'm a survivor. If I've gotta live in my car for a month, who cares? But you can't think that way if you have a family.

I think that sometimes other people are afraid...I'm single...and I have no kids. At one point, I asked the union supervisor, 'If you were in my position, would you be doing the same things I am?' He said to me, 'In all honesty, I'm not sure. I'm near my retirement. I'm raising adolescent kids, and I'm going to need to send them to college. I have a mortgage. I'm not sure I would.' Whereas I didn't have those things...and so it just wasn't as critical for me. I didn't need as much income. I didn't have other people to think about...If I had a wife and a new baby or something, you know, maybe I wouldn't be so bold.

Whistle-blower informants said that they underestimated the severity of the retaliation they experienced or their financial, professional or emotional ability to weather it.

**Value conflict: Action choices tended toward dominant values.** Whistle-blower informants generally expressed weak value conflict that favored whistle-blowing. They cited unwavering senses of right and wrong, determination to “see things through” and

commitments to professional oaths and religious beliefs among the core values that outweighed all other considerations. These informants often rejected the suggestion that they engaged in cost-benefit analyses before making their disclosures, citing their overriding obligation to report.

I was raised by my father to obey the law. I am a [Smith]. We obey the law. When we look in the mirror and shave, are we proud of what we see?...Obeying the law includes taking action to report what we know is wrong. We have to do what is right.

People said, 'This isn't your fight, you can't win. You're going up against political appointees. Keep your mouth shut, just outlast them. You can't win this fight.' And that's not who I am. You fight the fight until the very end. One way or another. I'm gonna win.

I have no doubt [my motivation is] the oath that I took when I was a private in the Marine Corps to protect the Constitution at all costs. To protect our rights as U.S. citizens.

Other whistle-blowers expressed strong value conflict, torn between their commitment to their organizations and their commitment to the potential victims of the wrongful activities. Here is how one informant resolved this strong value conflict in favor of whistle-blowing:

My granddaughter was...four years old and it boiled down to this:...If I don't say a word to anybody..., I'm complicit and guilty of this cover-up...I ran this mental battle in my mind for two weeks. I'd say, '[Kate], I know that I should be protecting you and all other kids, but I have to protect my business. If I go public, [organization] is going to retaliate, and I can't let that happen'...And in my mind, [Kate] would say, 'Grandpa, don't you have any courage? Can [organization] close you down even though you're innocent?' And I'd say, 'You don't understand politics. Whether I'm innocent or not has nothing to do with it.' 'But, Grandpa,

don't you have the courage...to...fight these people?'...And back and forth, and back and forth. Every night when I went to bed, the final thought in my mind was my granddaughter saying, 'Grandpa, whatcha gonna do? Whatcha gonna do, Grandpa?' And I became so ashamed of myself as time went on. I couldn't even win my make-believe arguments with my four-year-old granddaughter.

**Inactive observers: Value conflict.** Some inactive observers reported feeling strong conflict between their perceived obligation to halt the wrongful activities and their perceived obligation to support their families. They expressed great concern for potential victims, but indicated that the cost of retaliation was too great for them to sustain:

I mean, guys are getting killed, you know? So, the thought occurred to me, 'I ought to...go down to the *New York Times*.' The *Times* was independent in those days and might actually have even printed [the evidence]. But we had three little kids at the time and had just bought a house,...the mortgage, our future...And I said to myself: 'Well, really, this is [not my] fight.' So, long story short, [I] kept [my] head down.

On the other hand, other inactive observers expressed weak value conflict that favored silence. They cited their own professional advancement as their driving commitment and minimized the importance of not reporting the wrongful activities:

I...decided that...not confronting the partners and trying to end the problem was not really that big a compromise of my values. Not doing that was more convenient for my business situation.

**Inactive observers: Anger.** Inactive observers did express disapproval of the wrongful activities, but less anger about them than the whistle-blowers did. Also, inactive observers sometimes received guidance from trusted and respected supervisors not to pursue the matters, rather than retaliation or inaction by management.

And I remember [my supervisor] just looked at me and kind of raised one eyebrow and said, ‘Do you want to say something to the [director] about it?’ And I...just...went back to my desk.

I was irritated, [but]...I was a little younger then. I guess I took my [supervisor’s] guidance and [said to myself], ‘Why is it that they’re not doing anything? Oh, well. They must know something I don’t know.’

### **Summary Across All Three Junctures**

**Emotion.** Anger was present primarily at the first and third junctures of informants’ episodes, less so at the second. Anger resulted from observers’ attributions of responsibility for the wrongdoing and from their experience of retaliation or inaction by those they had trusted would remedy the situation.

Two primary sources of anger emerged, and these different sources directed observers’ attention toward different goals and desired outcomes. Anger that resulted from management inaction maintained informants’ focus on stopping the perceived wrongdoing (protecting potential victims) and helping the organization (e.g., by protecting it from reputational damage or legal liability). Thus, “stymied” informants retained their goal of being good organizational (or professional or societal, etc.) citizens (Katz & Kahn, 1966; Organ, 1990; Morrison, 1994). On the other hand, anger that resulted from management retaliation shifted informants’ motivation away from helping victims or the organization and toward harming the organization. Thus, “targeted” informants abandoned their helping and citizenship goals and pursued retributive justice.

It is important to note that management guidance not to pursue further disclosures that appeared sympathetic and genuine often did succeed in preventing an anger response from informants and kept them inactive observers. Cynical managers may attempt to manage potential whistle-blowing episodes by occupying this middle ground between rebuff and retaliation. My interviews suggest that this strategy will be successful as long as managers are perceived as acting in good faith. However, the interviews also suggest that the consequences for organizations could be severe if potential whistle-blowers later determine that managers had been acting in bad faith.

Fear was present primarily at the third juncture and resulted from a cost-benefit analysis that considered the likelihood and severity of retaliation. Fear shifted informants' focus from their initial goal of stopping the perceived wrongdoing or helping their organizations toward self-preservation. For some, this meant inactive observation. But fear did not consistently inhibit whistle-blowing, contrary to my expectations. Rather, it drove some informants to devise self-protective strategies that lowered the perceived risks of retaliation and thus facilitated their decisions to blow the whistle.

**Value conflict.** Value conflict was strongest at the first and third junctures. Weak value conflict made action choices easier, whether the choice was toward whistle-blowing or inactive observation. Contrary to my expectations, strong value conflict did not preclude decisions in favor of whistle-blowing, but it did delay them as informants struggled toward those decisions. Further, inactive observers did not claim to have experienced strong value conflict, contrary to my expectations. It is possible that these informants

were retrospectively rationalizing their silence. Consider this inactive observer's frank confession: "I can't say that my conscience was wracked by this or that I feel very regretful. I feel embarrassed that I'm not feeling more regretful."

**Cost-benefit analysis.** Cost-benefit analyses appeared primarily at the third juncture and occasionally at the second juncture. However, contrary to the classical model, cost-benefit analyses did not occur in every decision episode. Some informants considered their reports to be in-role behavior and therefore did not anticipate the possibility of retaliation (cf. Miceli, Near & Schwenk, 1991). Others rejected the notion that they would have conducted a cost-benefit analysis under the circumstances. These informants deemed such assessments as "taboo trade-offs" that pit their most sacred values against the secular value of personal comfort (Fiske & Tetlock, 1997).

Further, cost-benefit analyses that were conducted were often flawed (i.e., inaccurate). Some informants expected a reward rather than retaliation for their internal disclosures (particularly those who believed they were engaging in in-role behavior); others correctly anticipated retaliation but erroneously expected to be vindicated. A third group of informants expected a different form of retaliation from the one they actually experienced, and a fourth group underestimated the severity of the retaliation, even if they correctly anticipated the form it took.

Thus, the evidence points to a relationship between the accuracy of cost-benefit analyses and whistle-blowing decisions that contradicts the classical model:

**H7:** Flawed cost-benefit analyses predict whistle-blowing, while accurate cost-benefit analyses predict inactive observation.

**Emergent Predictors of Whistle-Blowing**

My interviews revealed two situational elements present at the second and third junctures that may have fostered weak value conflict in favor of whistle-blowing. I call them “organizational loyalty disrupters.” These disrupters were individuals or situational attributes that diluted potential whistle-blowers’ felt connection to their organizations and weakened their inclination to protect employers from embarrassment. The disrupters achieved these outcomes by altering informants’ cost-benefit analyses, value conflicts and emotional responses to events (see Figure 8).

**Figure 8: Breakdown of Organizational Loyalty Disrupters**

<u>Type of Disrupter</u>	<u>N</u>	<u>N = WB</u>	<u>N = IO</u>
Role model	4	3	1
Partner	16	15	1
Both role model and partner	1	1	0
Neither role model nor partner	<u>39</u>	<u>28</u>	<u>11</u>
Total	60	47	13
Distal loyalty target	27	23	4
Visitor status	9	9	0
New supervisor	25	22	3
New to workgroup	19	13	6
No “significant other”	<u>9</u>	<u>5</u>	<u>4</u>
Total*	89	72	17

\* Totals in this section do not add up to 60, 47 and 13, as above, because 24 cases contained combinations of “significant others” (19 cases had two “significant others” and 5 cases had three “significant others”).

**Role models and partners.** The first set of “organizational loyalty disrupters” consisted of role models and partners. Five informants had whistle-blower role models within their organizations or professional associations who served as examples of what happens to whistle-blowers in their field or helped them navigate the organizational hierarchy and potential retaliatory waters. These role models helped individuals make more accurate cost-benefit analyses and, hence, prepare more effectively for retaliation.

Two informants had witnessed retaliation against colleagues who had previously blown the whistle on unrelated activities. These informants engaged in informed cost-benefit analyses regarding the likelihood, severity and types of retaliation they could expect for becoming whistle-blowers. One said, “I expected potential retaliation because of what happened to other people in my facility...the *modus operandi* is to try and snare you, to try and find something that you’ve done wrong.” On the advice of the role model, this informant carried a tape recorder at all times to be prepared to document retaliation during interactions with supervisors. A third informant got the following “wake-up call” from a role model:

I was a little naïve. I thought [the role model] just went their own way, and I didn’t realize [he had been fired]. It was only after the fact, when one of the managers sat down with me and said, ‘Don’t you know what happened to me?...I was shown the door. You need to wake up. You need to understand what’s going on.’ And that’s when I got smart. I had no idea.

Role models also prepared individuals for organizational inaction following their internal appeals. When one informant learned that management had rejected the claim that wrongdoing had occurred, the informant’s response was, “This is bulls--t. This is bulls--t.

This is your typical stuff.” The response indicates that the informant was one step ahead of the organization, as the informant knew that denial was the organization’s first line of defense. It also indicates that the organization’s rebuff made the informant angry and did not inhibit the informant from continuing to advocate for change.

Finally, role models revealed legal and whistle-blowing channels to informants and introduced informants to key contacts in sympathetic communities. One informant was referred to government representatives, journalists and legal counsel by one role model. Connections like these lowered the perceived cost of whistle-blowing, as informants were more confident that outside constituencies would and could support them.

Some organizations recognized the potential brokerage function of role models. One informant was prohibited by management from communicating with a colleague who had previously blown the whistle: “They assumed that if I was talking to [the role model], I was talking to the media.”

Seventeen informants had partners within or outside their organizations. Partners assisted in data collection and investigations regarding the wrongdoing or disclosure avenues; weakened informants’ value conflict by increasing informants’ commitment to values that supported whistle-blowing or reinforcing the primacy of certain values over others (i.e., spreading “the attractiveness of the alternatives”; Festinger, 1964); and facilitated access to legal channels and whistle-blowing targets.

Partners' identities were generally known to the focal individuals, but partners were sometimes anonymous tipsters. Following are quotes from two informants; the first had both identified and unidentified partners, the second had only unidentified tipsters:

I started getting stuff leaked to me. People started sending it in envelopes to my home, or people would call me up at night. People who hadn't talked to me when I'd left, who had been afraid to talk to me, started giving me calls late at night and giving me information from the inside. There were a lot of people who were aghast at what was going on, and they finally found their voice. As long as they could guarantee that I was not going to blow their cover, they would give me information. People in the highest levels started talking to me quite regularly.

I was getting fed information from probably a dozen different sources. Because at that time [management was] basically shutting me off over in the corner, so I couldn't get information on my own. So there were people under the table that were providing me information day in and day out...It would be in an envelope, it would be under my desk when I came in the morning, it would be under my door...To this day, I do not know [who the sources were].

The information-sharing that occurred between informants and their partners often stoked informants' anger at their organizations, as they understood that their employers had turned a willful blind eye to wrongful activities for some time. As one informant put it,

I joined up with a [partner]; we had a little bit of overlap in what we did, but we really didn't work with each other. [The partner told] me some of the problems that [the partner] had found [at an earlier time period] that I was finding [at a later time period], and so here's even more proof that [the organization] has been aware of this stuff for...years and hasn't done anything.

Some partners went public together as whistle-blowers, but most partners remained behind-the-scenes allies, their identities hidden from the public (even if they were known

to the informants). The latter partnerships forced my informants to engage in cost-benefit analyses as they considered their ability to be identified as whistle-blowers relative to their partners'. One informant recognized a partner's greater financial insecurity and commitment to his job as contributors to the partner's greater fear of retaliation, and the informant's own religious beliefs and commitments as contributors to the informant's lower fear of retaliation:

[My partner] loved his job, and that's why he didn't [go public as a whistle-blower]. I don't think he really pushed it because of that... [My partner also] had more financial considerations than [I] had. I have a belief in God, and I believe that if you do the right thing in your life and if you tell the truth and if you're a good, decent person, things always work out. Somehow, things have always worked out in my life.

One inactive observer attributed his/her decision to remain silent in part to a desire not to endanger a partner's interests. Thus, this informant engaged in both self- and other-directed cost-benefit analyses:

[The wrongdoer] was [a relative of my partner], and if there were any bad blood between the two of them, it wouldn't bode well for [my partner's] close relatives... I thought [whistle-blowing] was dangerous for [my partner]. And I thought the only danger in it for me was losing my job.

Partnerships leveraged each member's unique contacts and expertise for maximum effect. In some partnerships, one member did most of the data collection and the other did most of the outreach to sympathetic authorities. In others, partners introduced informants to whistle-blower legal advocacy groups with which they had established working relationships. Most of these division-of-labor partnerships comprised one member within

the focal organization and another member outside it who was knowledgeable about the wrongful activities and the industry landscape. Other partnerships featured members in different divisions of the same organization who shared intelligence about the organization's response to initial internal reports of the wrongful activities. One such partnership uncovered further wrongdoing by the organization that propelled both members to anger and a decision to begin external disclosures of the activities:

[My partner] discovered a guy who, in a hallway conversation, said, 'Yeah, I had to debunk [your] reports.' [My partner] was livid and read him the Riot Act because he simply didn't have the background [to do so]. And when [my partner] told me, I just exploded because I had gone to my manager in good faith and said, ... 'Not meaning to blindside you, but I really think the [organization] could wind up getting screwed in the end because this will come out, it is going to be a problem, it's not going to go away, so please have somebody look at it.' I went to him in good faith, and he took it to over to one of his manager pals... instead of taking to the people... that I'd asked him to, and they had blown it off. So, my next step was to really send a giant shock across the bow.

In sum, role models influenced informants' cost-benefit analyses only, while partners influenced informants' value conflicts, emotions and cost-benefit analyses. Role models improved the accuracy of informants' assessments of the risk of retaliation and enhanced informants' ability to prepare for and respond to retaliation. Partners weakened informants' value conflicts in favor of reporting and increased informants' anger at their organizations for the ways they had handled previous internal reports of the wrongful activities. All of these effects reduced informants' commitments to protecting their organizations' reputations by remaining inactive observers. Thus, I propose the following emergent hypotheses regarding role models and partners:

**H8:** Individuals who have a whistle-blower role model or partner are more likely to engage in cost-benefit analyses and in accurate cost-benefit analyses than are individuals who do not have a whistle-blower role model or partner.

**H9:** Individuals who have a whistle-blower role model or partner are more likely to blow the whistle than are individuals who do not have a whistle-blower role model or partner.

**“Significant others.”** The second set of “organizational loyalty disrupters” comprised allegiances to entities outside one’s workgroup. My interviews point to four types of “significant other” situations that interfered with the organizational or team loyalty deemed necessary by existing theory to maintain an individual as an inactive observer:

- (1) Distal loyalty targets, or stronger commitments to entities outside an organization than to the organization itself. These targets included professional oaths, codes of ethics and conduct, legal obligations and religious values (cf. Graham, 1986).
- (2) “Visitor” status in a workgroup. This occurred when an informant sat within one workgroup as a representative of another workgroup (e.g., a compliance officer in a sales department, a Government Accountability Office accountant assigned to the Department of Defense).

- (3) New supervisors who succeeded former supervisors with whom informants had had positive working relationships.
- (4) Short membership in a workgroup, such that commitment and loyalty to one's workgroup had not yet solidified (cf. Greenberger, Miceli & Cohen, 1987).

Twenty-seven informants (including 23 whistle-blowers) displayed strong commitments to entities, constituencies and ideals outside their organizations. These commitments weakened, if not eliminated, value conflicts regarding whether or not to blow the whistle (in favor of whistle-blowing). Public service informants spoke of their oath of office as an immutable obligation that trumped all others:

Interviewer: What...motivated you to report [the wrongful activities]?  
Informant: This is going to be a no-brainer. It's against the law. Plain and simple, it's against the law...I walked in, I took an oath. I was protecting the Constitution of the United States, and I was doing my job. Pretty basic.

When you come on board...in the government, you swear an oath to the Constitution and to defend it against enemies foreign and domestic. I'm not deciding you're an enemy. All I know is that I've got a bunch of rules. I am obligated to report various things under the circumstances...It's not a choice. I was actually told one time...that I should use a little more discretion when I pick and choose which rules to follow...That was the first time I'd ever heard that. You don't get to pick and choose which rules to follow.

If you take a look at the oath of office for a government official, we swear to uphold the laws and Constitution... You are not hired to get along with or to be liked by coworkers. You are hired to protect [U.S. citizens]. That's your first responsibility. Now, if you get along with people doing it,

that's fine. If you don't get along with people doing it, that's their problem. But your job...is to protect [U.S. citizens].

Public health informants spoke of their commitment to patients as their driving value:

In the end, for me, it was a matter of conscience...you have responsibility for your patients...I knew that if I [blew the whistle], things would be different. It wasn't something obscure. I would feel great guilt and responsibility [if I remained an inactive observer]...What I learned during my clinical training was a sense of responsibility for my patients...I mean, to remain quiet and not do anything..., I don't think I would've been able to sleep with that. You know, I had sleepless nights about 'are they gonna fire me?' but I would've had real sleepless nights had I basically gone along, because then I become part of the problem.

I was certainly doing something bold. But I've always been ethical and sensitive to ethical conduct, and I felt [making a whistle-blowing report] was within the bounds of ethical conduct. In contrast to...the potential harm to patients, I felt completely justified in taking the route that I did. Even if it rattled a few cages, I was willing to do that.

When I came [to the organization], I actually thought doctors were honest and medicine was an honorable profession, and that doctors really had a primary concern for the patient. I guess that's kind of idealistic...I was pretty idealistic and thought that was the primary concern.

I absolutely agree with doctors who say, 'We have the Hippocratic oath'...Through this experience, I learned a lot of things I had no idea at the beginning, and it has strengthened my resolve...If the system is corrupt, patients die. It is a patient care issue from the very beginning.

Some informants spoke of religious values as their primary basis for blowing the whistle:

I have an extremely strong sense of faith and ethics in a Christian context...along the lines of Martin Luther King or C.S. Lewis, a social justice orientation...And I believe, at the end of the day, this is what makes me...different from a lot of people you find in [my organization].

I'm a Christian, and I have a higher obligation to God than to anyone, government or military or any agency. And my ethics in handling the matter was always of the highest importance to me because ultimately we are all going to answer to God for our impunities. And I was not afraid to answer to God for what I was doing. One evening, when I was reading the Bible, I came across Psalm 271, and it convinced me that I needed to report what was going on. I wrestled with this for some months before I reported it because I knew I was going to open a can of worms. But finally I said, "Well, if God can't take care of me, then he's not God."

Nine informants (all whistle-blowers) were "visitors" in their work context and therefore felt allegiance to their primary organizations' or professions' missions, rather than to those of the workgroups in which they sat temporarily. For example, several informants were civilians in the military, others were sent from one government agency to another for short-term assignments, and some were health care professionals appointed to administrative or managerial functions at their organizations.

The third category of "organizational loyalty disrupters" featured informants whose supervisors had recently changed (25 informants, including 22 whistle-blowers). The contrast for the informants between the positive working relationships they had developed with the former supervisors and their difficult working relationships with the new supervisors inhibited any potential feelings of disloyalty by the informants for reporting perceived wrongdoing.

When I first started,...[my supervisor] was a wonderful person..., couldn't be more honest—I mean, everything was fine. And he was actually more than assisting me in cleaning up some of these things...And another person...came in as [supervisor]. As soon as [the new supervisor] had

gotten in town, he started trying to cut deals with people...who have a good deal of say over his position.

This case [the focus of the wrongdoing] was initiated...under the former [supervisor]. He was actually a good [supervisor] and really wanted to do the right thing. [But] the new [supervisor] was closer to [one of the parties in the case], much less willing to rock the boat. And he didn't want to see this case happen. He wanted it to go away. He wanted it to stop.

New supervisors sometimes not only failed to foster strong interpersonal ties with informants, but even disrupted informants' commitment to the organization as a whole.

Thus, they contributed to a “debinding” process between informants and their employers:

[A new supervisor] was named the new director of the program, and [the expected successor]...was summarily pushed aside...I watched [various forms of wrongdoing from the new management], so my conception of my role started to undergo fundamental change because, in [my organization], you trade your public voice, your public freedom of speech in your subject area for inside influence. And, for me, that only works if I feel represented by the leadership...And it got to a point where I did not feel represented at all by the leadership, and, in fact, I was in opposition to the leadership.

Finally, 19 informants (including 13 whistle-blowers) were new members of their workgroups, and thus did not yet hold loyalty to the group as an important value. These 19 informants averaged less than 2.0 years in their positions at the time of their episodes versus 18.3 years of professional work experience, while informants overall averaged 5.7 years and 17.7 years, respectively,  $t(58) = -4.622, p = .000$ .

Thus, I propose the following emergent hypotheses regarding “significant others”:

**H10:** Individuals with “significant others” are more likely to experience weak value conflict that favors whistle-blowing than are individuals who do not have “significant others.”

**H11:** Individuals with “significant others” are more likely to blow the whistle than are individuals who do not have “significant others.”

### **Summary of Emergent Predictors**

Retaliatory organizational actions against an individual who makes an internal whistle-blowing report can re-route that individual to a new path toward the decision to make an external whistle-blowing report that he or she might otherwise not have taken. This shift occurs because the retaliation fosters a different configuration of emotions in the individual or changes the inputs or accuracy of the individual’s cost-benefit analysis.

Role models can be particularly important when individuals face retaliation following an internal report. Role models educate potential whistle-blowers about what to expect next from management and how to prepare, and they connect them to resources that can support them if they make external whistle-blowing reports. By making the potential whistle-blowers “smarter” and better prepared, role models can mitigate the fears that these individuals have about external whistle-blowing, leaving anger as the primary emotion. Further, when the role models come from within the potential whistle-blowers’ organizations, the potential whistle-blowers may become galvanized not to let management “get away with” retaliation again.

Distal loyalty targets can also facilitate a focus on anger at the expense of fear. Potential whistle-blowers who experience retaliation following internal reports may be angered not only by their own suffering, but also by the perceived attack on their strongly held values. Consistent with Lazarus (1991), these individuals often feel that retaliation demeans the values that motivated their internal reports and that they have no choice but to defend those values by pursuing accountability for those responsible for the retaliation.

## **DISCUSSION**

The process model advanced here is a useful starting point for understanding how whistle-blowing decisions unfold. My data suggest that factors other than accurate, subjectively rational assessments propel an individual toward an action choice. Rather, the decision to make (or not make) a whistle-blowing disclosure frequently appears to involve inaccurate or non-rational judgments and a variety of values and emotions.

This chapter provided a juncture-based analysis of potential whistle-blowing episodes. For each of the three critical decision points, I presented the range of values and emotions that informants experienced and outlined their antecedents. Thus, it offered insights into the variety of possible outcomes of each juncture and therefore into the multiple paths that potential whistle-blowing episodes can take.

The next chapter takes a quantitative look at the same qualitative data using set-theoretic methodology to test the deductively and inductively derived hypotheses. The set-theoretic analysis provides another juncture-based look at whistle-blowing episodes and identifies the combinations of attributes, or variables, at each juncture that are associated with whistle-blowing or inactive observation outcomes. The combination of Chapters 3 and 4 provides multi-method support for the existence of the relationships discussed.

Chapter 5 brings together the qualitative and quantitative analyses by focusing on the three most common paths that emerged from the interviews and the set-theoretic tests. I present three case studies to illustrate the unique elements of each path and identify prototypes of whistle-blowers and inactive observers. The case studies bring the quotes from Chapter 3 and the configuration paths from Chapter 4 to life and highlight how situational elements and observers' responses at each juncture cause the paths to diverge. Thus, Chapter 3 zoomed in on each critical decision point in qualitative detail, Chapter 4 offers a quantitative look at each critical decision point, and Chapter 5 follows prototypical individuals as they traverse each decision path over time.

## CHAPTER 4: SET-THEORETIC ANALYSIS

“Fuzzy-set social science,” also known as the diversity-oriented approach to social research, is mostly commonly identified with Charles Ragin and his colleagues (and is the title of Ragin’s authoritative book on the subject; Ragin, 2000). Broadly speaking, set-theoretic analysis focuses on configurations of causes that produce an outcome (rather than individual causes in isolation), and fuzzy-set-theoretic analysis broadens the focus from dichotomous, all/nothing membership in the sets of causes that comprise these configurations (0/1) to allow for continuous degrees of causal set membership (from 0 to 1). In the interest of simplifying the language here, I use the term “set-theoretic” to refer to “fuzzy-set-theoretic,” and I use the terms “set-theoretic” and “diversity-oriented” interchangeably.

The point of departure between set-theoretic analysis and “conventional” correlational analysis is in their alternative models of causality. The set-theoretic approach holds that causality can be both multiple and conjunctive. In other words, an outcome can have more than one cause, and causes can work together to produce an outcome. Set-theoretic analyses look for these configurations of causes and do not try to pick apart the “unique” contribution of each individual causal factor on an outcome. The correlational approach, by contrast, views causality as a contest among independent variables to explain variation in an outcome, and it looks for the unique effects of each variable relative to the others.

These contrasting models of causality yield contrasting conceptions and operationalizations of predictors and outcomes. In correlational studies, causal or predictor variables are viewed as “analytically distinct aspects of cases” that compete with one another to explain variation in an outcome variable (Ragin, 2000: 15). Each “independent” variable is believed to be potentially sufficient to cause the outcome, or some increment of it, regardless of the values of other predictor variables (i.e., holding all else constant). Set-theoretic methods view cases as configurations of aspects that combine to yield an outcome. These configurations are expected to exhibit different features and lead to different outcomes depending on which aspects comprise them (Fiss, 2007). Therefore, causal conditions are relevant only in the context of their representation in a causal configuration.

Regarding outcomes, the goal of a correlational analysis is to determine why cases vary in displaying levels of an outcome. As a result, variance on an outcome variable is critical. However, the goal of a set-theoretic analysis is to understand how aspects are distributed across a “property space” and combine into “types” to produce different outcomes (Lazarsfeld, 1937). As a result, similarity on an outcome is critical. In fact, cases are selected for inclusion in a set-theoretic study based their shared outcome, as their shared causal conditions will then shed light on which factors are necessary and which are sufficient to produce that outcome. The logic behind this approach is similar to those of Yin’s (2003) pattern-matching technique and Miles & Huberman’s (1994) technique for analyzing cross-site qualitative data, which also look for common causes of

similar outcomes. Thus, the notion of equifinality—that different paths can lead to the same end—is central to the diversity-oriented approach.

Clearly, then, the diversity-oriented approach represents a new ontological and epistemological approach to social phenomena, as it proposes alternative ways to understand how social phenomena are constructed and why they unfold the way they do. The approach is particularly well suited for understanding stochastic (small-*n*) social phenomena with complex causality or equifinal paths, such as riots, revolutions and whistle-blowing. It is also easier to understand and interpret configurations in the set-theoretic milieu than the three- and four-way interactions that sometimes emerge in conventional regression-based studies. Not surprisingly, then, set-theoretic analyses are common in political science, sociology and some disciplines within macro-organizational behavior (e.g., Kogut & Ragin, 2006; Skaaning, 2007; Stokke, 2007; Vis, Woldendorp & Keman, 2007).

Set-theoretic methodology is used for both hypothesis-generation and hypothesis-testing. The technique offers an easier way to identify patterns and configurations across cases than traditional qualitative research methods provide, potentially accelerating the grounded theory hypothesis-generation process. Ragin's fuzzy-set Qualitative Comparative Analysis (fs/QCA 2.0) software package, which I use here, automates the manual scanning and sorting described by Glaser & Strauss (1967), Miles & Huberman (1994) and Yin (2003). (This software is free and downloadable at <http://www.u.arizona.edu/~cragin/fsQCA/software.shtml>; Ragin, Rubinson, Schaefer,

Anderson, Williams & Giesel, 2006.) Although no software package can match the “insights” of a human researcher, I present a set-theoretic analysis here as one part of a triangulation on the whistle-blowing decision process.

Hypothesis-testing is possible with the fs/QCA software because it allows researchers to analyze very-large- $n$  datasets quickly and easily. Datasets of  $n > 30$  lend themselves to hypothesis-testing via fs/QCA, particularly given the multiple attributes measured per case, and many set-theoretic papers feature tests on datasets of  $n > 100$ . I undertake hypothesis-testing on my dataset, as  $n = 60$ .

## **HYPOTHESES**

I tested a subset of the hypotheses that I derived deductively from existing theory (see Chapter 2) and that emerged from my qualitative interviews and grounded theory-building (see Chapter 3). Specifically, I tested the hypotheses that included whistle-blowing or inactive observation (behaviors, rather than cognitions and attitudes) as outcomes. I reproduce them here as a reminder for readers:

**H1:** Strong value conflict leads to inactive observation.

**H2:** Weak value conflict leads to behavior that is consistent with the dominant value (to blow the whistle or remain silent).

**H3:** Anger at observed wrongful activities leads to whistle-blowing.

**H4:** Fear of retaliation leads to inactive observation.

**H5:** Anger at observed wrongful activities strengthens the main effect of weak value conflict that favors whistle-blowing, increasing the likelihood of whistle-blowing.

**H6:** Fear of retaliation strengthens the main effect of weak value conflict that favors inactive observation, increasing the likelihood of inactive observation.

**H7:** Flawed cost-benefit analyses predict whistle-blowing, while accurate cost-benefit analyses predict inactive observation.

**H9:** Individuals who have a whistle-blower role model or partner are more likely to blow the whistle than are individuals who do not have a whistle-blower role model or partner.

**H11:** Individuals with “significant others” are more likely to blow the whistle than are individuals who do not have “significant others.”

## METHOD

**Informants and episodes.** The same 60 episodes that I collected through the semi-structured interviews described in Chapter 3 are analyzed here using fuzzy-set-theoretic methods. As a reminder, I collected 47 whistle-blowing episodes and 13 inactive observation episodes from 50 informants. Thirty-eight informants provided whistle-blowing episodes only, three informants provided inactive observation episodes only, and nine informants provided both whistle-blowing and inactive observation episodes (including one informant who provided two inactive observation episodes).

**Attributes.** Set-theoreticians speak of attributes or aspects, rather than variables. Attributes take the form of causal conditions, which act together in configurations, or the form of outcomes. In my study, “whistle-blowing disclosure” (WB) is the outcome, and “cost-benefit analysis,” (CB) “accurate cost-benefit analysis” (CBACC), “role model/partner” (RP), “significant other” (SO), “strong value conflict” (VC), “anger” (ANGER) and “fear” (FEAR) are the causal conditions.

**Set membership definitions.** Set-theoretic methodology is based on Boolean algebra, which features “crisp” sets and the concepts of “logical and” (depicted as \*), “logical or” (depicted as +) and “logical not” (depicted as ~ or as the lower-case rendition of the attribute name). As noted above, fuzzy-set-theoretic analysis extends the dichotomous crisp membership scores of 0/1 used in Boolean algebra to allow for more fluid membership in a set (Ragin, 2000).

The first step in fuzzy-set analysis is to define set membership for each attribute. Definitions are based on the researcher's knowledge of existing theory and findings. Three qualitative anchors are defined first: a set membership score of 1.00, representing full membership, a set membership score of 0.00, representing full non-membership, and a set membership score of 0.50, the crossover point, representing maximum ambiguity regarding membership. Then, interim points along the 0.00-1.00 continuum may be defined, as desired. Following Ragin (2000), I used a five-point scale of 0.00, 0.25, 0.50, 0.75 and 1.00, with 0.25 representing the state of being more out of a set than in it, and 0.75 representing the state of being more in a set than out of it. Figure 9 contains the set membership score definitions of the attributes included in this analysis.

**Score assignments.** Once the fuzzy-set membership scores are defined, they are assigned for each attribute of each case in the dataset. Set-theoretic analysis does simply transfer raw scale scores into continuous set membership scores because it holds that asymmetric qualitative breakpoints might exist along a continuous raw score spectrum. Key to the set membership score assignment process is the investigator's understanding of these breakpoints. For example, the range of GDP per capita within a set of countries might be \$100 to \$30,000, but the membership definitions for the set of "rich countries" (definitely out, more out than in, maximum ambiguity, more in than out, definitely in) do not necessarily break at regular intervals (e.g., "definitely out" might be defined as \$100-499, while "definitely in" might be defined as \$5,000-30,000), and the point of maximum ambiguity is not necessarily the mean or the median of the range (cf. Ragin, 2000).

For my study, two coders with no exposure to the study's hypotheses conducted the coding based on written transcripts of the interviews, following extensive training in fuzzy-set methodology and the fuzzy-set membership definitions outlined above. The coders provided set scores for the following attributes: "whistle-blowing disclosure" (WB), "cost-benefit analysis," (CB) "accurate cost-benefit analysis" (CBACC), "role model/partner" (RP), "significant other" (SO) and "strong value conflict" (VC). The coders agreed within 0.25 set membership points on more than 90% of the 960 items (5 attributes x 3 junctures x 60 episodes, plus 1 outcome x 60 episodes), and I used the average of their scores as the final set attribute scores. I resolved the discrepancies that exceeded 0.25 points by selecting the score that I believed more accurately reflected the case, based on my understanding of the theory, cases and methodology. This practice is consistent with Ragin (2000). Set scores for the attribute "no whistle-blowing disclosure" ( $\sim$  WB, or wb) were derived through logical negation:  $wb_i = 1 - WB_i$ .

Set scores for the attributes "anger" (ANGER) and "fear" (FEAR) were determined by a different, three-step, procedure. Informants had completed a web-based survey following their interviews that included self-ratings on 25 emotional states at each of three junctures of the whistle-blowing episode (i.e., at the time they witnessed the wrongful activities, at the first time they decided to report the activities to a supervisor, and at the time they decided to make (or not make) a whistle-blowing disclosure regarding the activities). Among these 25 emotional states were anger and fear. Forty-one of the 60 episodes had self-reported emotion scores; all 41 were whistle-blowers, 0 were inactive observers.

There were no significant demographic differences between respondents and non-respondents to the web-based survey. I took the self-reported scores for anger and fear at each juncture, for a total of six emotion scores (2 emotions x 3 episodes) per informant, as Step 1 in the emotion set membership score calculation process.

For Step 2, I had two coders with no exposure to the study's hypotheses rate the informants' emotional states at the same three junctures using the same scale the informants had used. I did this in order to guard against self-report biases. The raters coded all 60 episodes based on audio recordings of the interviews. The coders' inter-rater reliability was  $\alpha = 0.83$ , so I calculated their average score, for a total of six coder emotion scores per informant. The reliability of the coders' average scores with the 41 informants' self-reported scores was  $\alpha = 0.77$  for anger and  $\alpha = 0.75$  for fear. I used the self-reported emotion scores where they were available ( $n = 41$ ) and the coders' average scores where they were not ( $n = 19$ ).

Finally, for Step 3, I converted the six emotion scores into set membership scores. Emotion scores of 0.00-6.00 (out of 9.00) received a set membership score of 0, to reflect the absence of the emotion at that juncture, emotion scores of 7.00-9.00 received a set membership score of 1, to reflect the presence of the emotion at that juncture, and emotion scores of 6.01-6.99 received a set membership score of 0.50, to reflect maximum ambiguity about the presence or absence of the emotion at that juncture. (Note that these are asymmetric breakpoints, as discussed above.)

Thus, I had set membership scores for each of the seven causal conditions (cost-benefit analysis, (CB) accurate cost-benefit analysis (CBACC), role model/partner (RP), significant other (SO) and strong value conflict (VC), anger (ANGER) and fear (FEAR)) at each juncture, plus one outcome variable (whistle-blowing disclosure (WB)).

**Truth table creation.** The next step in fuzzy-set analysis is to create a truth table that specifies the outcome and causal conditions. A truth table has  $2^k$  rows, or configurations ( $k$  = number of causal conditions), representing all the theoretically possible configurations of attributes. In my case, the truth table had 128 rows for each juncture, representing  $2^7$  configurations of the seven causal conditions I specified. The truth table displays the number of cases in the dataset that have membership scores of 0.50 or more in each configuration (see, for example, the “Number” column in Figure 10). A membership score of 0.50 or more for a configuration requires that each attribute in the configuration receive a set score of at least 0.50 (based on the rules of “logical and”), i.e., that it be more in each attribute set than out of it. Thus, truth tables illustrate how limited the diversity of the actual phenomenon is relative to the theoretically possible diversity.

Truth tables also indicate the “consistency” of each configuration, the proportion of cases in each configuration that are consistent with the outcome (see, for example, the “Consistency” column in Figure 10). Investigators select consistency thresholds for their analyses based on their understanding of theory. Configurations with consistency scores above the threshold are marked with a “1” to indicate that they exhibit the outcome, while those with consistency scores below the threshold are marked with a “0” to indicate that

they do not exhibit the outcome. I selected 0.85 as my consistency threshold, following Ragin (2005).

**Figure 9: Set Membership Score Definitions**

<u>Attributes</u>	<u>Set Membership Score Definitions</u>
Whistle-Blowing Disclosure (WB)	<p>1.00 = A “stereotypical” whistle-blowing disclosure: an external report that occurs before the individual leaves the organization</p> <p>0.75 = An external report that occurs after the individual leaves the organization</p> <p>0.50 = Maximum ambiguity regarding membership in the set of people who made a “stereotypical” whistle-blowing disclosure</p> <p>0.25 = An internal report only, while the individual is still at the organization</p> <p>0.00 = A “not-at-all-stereotypical” whistle-blowing disclosure: no internal or external report</p>
Cost-Benefit Analysis (CB)	<p>1.00 = Conducted an explicit cost-benefit analysis</p> <p>0.50 = Maximum ambiguity regarding membership in the set of people who conducted a cost-benefit analysis</p> <p>0.00 = Did not conduct an explicit cost-benefit analysis</p>
Accurate Cost-Benefit Analysis (CBACC)	<p>1.00 = Conducted an accurate cost-benefit analysis</p> <p>0.75 = Conducted a cost-benefit that was more accurate than not accurate</p> <p>0.50 = Maximum ambiguity regarding membership in the set of people who conducted an accurate cost-benefit analysis</p> <p>0.25 = Conducted a cost-benefit that was more not accurate than accurate</p> <p>0.00 = Conducted a not-at-all accurate cost-benefit analysis</p>
Role Model/Partner (RP)	<p>1.00 = Had one (or more) whistle-blower role models or partners</p> <p>0.00 = Had no whistle-blower role models or partners</p>
“Significant Other” (SO)	<p>1.00 = Had one (or more) loyalty disrupters</p> <p>0.00 = Had no loyalty disrupters</p>
Strong Value Conflict (VC)	<p>1.00 = Experienced very strong value conflict</p> <p>0.75 = Experienced value conflict that was more strong than not strong</p> <p>0.50 = Maximum ambiguity regarding membership in the set of people with strong value conflict</p> <p>0.25 = Experienced value conflict that was more not strong than strong</p> <p>0.00 = Experienced value conflict that was not at all strong</p>
Anger (ANGER)	<p>1.00 = Full membership in the set of angry people at a particular juncture: Scored 7.00-9.00 on anger (on a scale of 1-9)</p> <p>0.50 = Maximum ambiguity regarding membership in the set of angry people at a particular juncture: Scored 6.01-6.99 on anger</p> <p>0.00 = Full non-membership in the set of angry people at a particular juncture: Scored 0.00-6.00 on anger</p>
Fear (FEAR)	<p>1.00 = Full membership in the set of fearful people at a particular juncture: Scored 7.00-9.00 on fear (on a scale of 1-9)</p> <p>0.50 = Maximum ambiguity regarding membership in the set of fearful people at a particular juncture: Scored 6.01-6.99 on fear</p> <p>0.00 = Full non-membership in the set of fearful people at a particular juncture: Scored 0.00-6.00 on fear</p>

## RESULTS: WHISTLE-BLOWING

**Overall emotion profile:** Paired sample t-tests based on the raw (non-set-theoretic) emotion scores indicate that informants felt significantly more anger than all other emotions at all three junctures, ( $M_{anger1} = 6.55$ ,  $M_{others1} = 3.90$ ,  $t(40) = 7.952$ ,  $p = .000$ ;  $M_{anger2} = 5.64$ ,  $M_{others2} = 3.93$ ,  $t(40) = 4.58$ ,  $p = .000$ ;  $M_{anger3} = 6.26$ ,  $M_{others3} = 4.08$ ,  $t(40) = 6.07$ ,  $p = .000$ ), but no more fear than other emotions at any of the three junctures, all  $ps > .05$ . Thus, informants were characterized more by anger than by fear or any other emotion across their episodes.

### **Juncture 1: Observation of Wrongful Activities**

**Truth table descriptive statistics.** Figure 10 contains the rows of the whistle-blowing truth table generated for Juncture 1 that were represented by my 60 cases. The first item to observe is the limited diversity of the phenomenon, as the cases populate just nine of the 128 (or  $2^7$ ) theoretically possible configurations. Clearly, there is not a random distribution across the property space. This is important because a random distribution would mean that ideography, rather than theory, would be most effective for understanding the whistle-blowing phenomenon.

Second, the nine populated configurations represent 28 of the 60 cases. Thirty-two cases did not reach the minimum configuration membership score of 0.50 and are excluded from further analysis. Third, eight of the nine configurations fall below the consistency threshold of 0.85. They are assigned whistle-blowing scores of “0” for the purposes of

further analysis, while the configuration with a consistency score above 0.85 is assigned a whistle-blowing score of “1.”

**Figure 10: Whistle-Blowing Outcome at Juncture 1 (Observation of Wrongful Activities)**

**Truth Table**

<u>Config</u>	<u>CB1</u>	<u>CBACC1</u>	<u>VC1</u>	<u>ANGER1</u>	<u>FEAR1</u>	<u>SO1</u>	<u>RP1</u>	<u>WB</u>	<u>Number</u>	<u>Consistency</u>
1	0	0	0	1	0	1	0	0	12	0.72
<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>5</b>	<b>0.90</b>
3	0	0	0	0	0	1	0	0	2	0.78
4	0	0	0	1	1	0	0	0	2	0.71
5	0	0	0	1	1	1	0	0	2	0.71
6	0	0	0	1	1	1	1	0	2	0.83
7	0	0	0	0	0	0	0	0	1	0.42
8	0	0	0	0	0	1	1	0	1	0.75
9	0	0	0	0	1	1	0	0	1	0.54
<b>Total</b>									<b>28</b>	

Key to reading the truth table: Configuration 2 consists of (a) no cost-benefit analysis; (b) no accurate cost-benefit analysis; (c) no strong value conflict; (d) anger; (e) no fear; (f) a “significant other”; and (g) a role model or partner at Juncture 1. Five cases in the dataset had set membership scores of at least 0.50 on each attribute in the configuration (“Number”). Ninety percent of them had outcomes consistent with whistle-blowing (i.e., received set membership scores of at least 0.50 on whistle-blowing).

Note: The bolded rows represent configurations that are sufficient for a whistle-blowing outcome at Juncture 1 ( $cb1 * cbacc1 * vc1 * ANGER1 * fear1 * SO1 * RP1$ ), and the shaded rows represent configurations that are necessary for a whistle-blowing outcome at Juncture 1 ( $ANGER1 * fear1 * RP1$ ).

### fs/QCA Results: Truth Table Analysis – Sufficiency

Model: WB = f(CB1, CBACC1, VC1, ANGER1, FEAR1, SO1, RP1)

Rows: 9  
 Algorithm: Quine-McCluskey  
 True: 1  
 0 Matrix: 0-CL  
 frequency cutoff: 1.00  
 consistency cutoff: 0.90

	<u>Raw Coverage</u>	<u>Unique Coverage</u>	<u>Consistency</u>
cb1*cbacc1*vc1*ANGER1*fear1*SO1*RP1	0.13	0.13	0.90
<b>Overall Solution</b>	<b>0.13</b>		<b>0.90</b>

Note: (1) ALL-CAPS indicate the presence of the causal condition, and small-caps indicate the absence of the causal condition. (2) “+” indicates *logical or*, while “\*” indicates *logical and*.

### fs/QCA Results: Truth Table Analysis – Necessity

Model: WB = f(CB1, CBACC1, VC1, ANGER1, FEAR1, SO1, RP1)

Rows: 9  
 Algorithm: Quine-McCluskey  
 True: 1  
 0 Matrix: 0-C  
 frequency cutoff: 1.00  
 consistency cutoff: 0.90

	<u>Raw Coverage</u>	<u>Unique Coverage</u>	<u>Consistency</u>
ANGER1*fear1*RP1	0.13	0.13	0.83
<b>Overall Solution</b>	<b>0.13</b>		<b>0.83</b>

Note: (1) ALL-CAPS indicate the presence of the causal condition, and small-caps indicate the absence of the causal condition. (2) “+” indicates *logical or*, while “\*” indicates *logical and*.

**Truth table analysis: Sufficiency.** The concept of sufficiency is one of two backbones of set-theoretic analysis (the second, necessity, is discussed in the next section).

Sufficiency analysis looks for causal conditions that agree in displaying the outcome. In other words, it identifies causal conditions  $x_1, x_2, \dots, x_n$  that are present whenever outcome  $y$  occurs. In mathematical terms, sufficiency occurs when set scores on the outcome are

greater than or equal to set scores on the causal condition, meaning that instances of the causal condition are a subset of instances of the outcome.

Set-theoretic analysis identifies one causal path at Juncture 1 that may be sufficient to generate a whistle-blowing outcome: no cost-benefit analysis (and, hence, no accurate cost-benefit analysis), no strong value conflict, anger, no fear, a “significant other” and a role model/partner ( $cb1*cbacc1*vc1*ANGER1*fear1*SO1*RP1$ ; see Figure 10). The “unique coverage” column indicates that this path explains 13% of the outcomes in the dataset. Coverage is a functional (though not a statistical) equivalent to  $R^2$  in traditional linear regression in describing the amount of the outcome explained by the causal conditions or configurations. Thus, it is a measure of the empirical relevance of a causal condition or configuration (Ragin, 2006).

Further,  $cb1*cbacc1*vc1*ANGER1*fear1*SO1*RP1$  has a consistency score of 0.90, meaning that 90% of the cases with this configuration have data consistent with the predicted outcome. Ragin (2006) holds that consistency scores below 75% undermine one’s claim that a subset relationship exists, so this consistency score is encouraging.

Ragin (2000) offers a variety of benchmarks to determine whether a consistency score is statistically significant. A sufficiency consistency score of 0.50 indicates that a configuration is “more often than not” sufficient for an outcome, a score of 0.65 indicates that a configuration is “usually” sufficient for an outcome, and a score of 0.80 indicates that a configuration is “almost always” sufficient for an outcome.

For datasets where many cases display the focal configuration (large- $N$  datasets), the score is evaluated via a  $z$  test for the difference between the observed proportion ( $P$ ) and a “population” proportion ( $p$ ) (in this case, the benchmark functions as the population), with  $z = ((P - p) - 1/2N) / (pq / N)^{1/2}$ , where  $q$  equals  $(1 - p)$  and  $N$  equals the number of cases displaying the configuration (Hays, 1981). Small- $N$  datasets like mine, where  $N < 30$ , are tested via the binominal probability test of

$$\binom{N}{r} p^r q^{N-r} ,$$

where  $r$  equals the number of cases displaying the outcome.

The consistency score of 0.90 for `cb1*cbacc1*vc1*ANGER1*fear1*SO1*RP1` is not significant using any benchmark when  $N = 5$ . Thus, no configuration of attributes is sufficient to cause a whistle-blowing outcome as far in advance as Juncture 1.

**Truth table analysis: Necessity.** Necessity analysis looks for the causal conditions that are always present whenever the outcome is present. In other words, it identifies causal conditions  $x_1, x_2, \dots, x_n$  without which outcome  $y$  will not occur. In mathematical terms, necessity occurs when set scores on the causal condition are greater than or equal to set scores on the outcome, meaning that instances of the outcome are a subset of instances of the causal condition.

Set-theoretic analysis identifies one causal path at Juncture 1 that may be necessary to generate a whistle-blowing outcome: anger, no fear and a role model/partner (ANGER1\*fear1\*RP1; see Figure 10). The “unique coverage” column indicates that this path explains 13% of the outcomes in the dataset. ANGER1\*fear1\*RP1 has a consistency score of 0.83, meaning that 83% of the cases with this configuration have data consistent with the predicted outcome. This is not a significant proportion using any benchmark when  $N = 5$ .

**Discussion.** The Juncture 1 findings imply that whistle-blowers are “made, not born.” No *a priori* “profile” stood out at the moment of observation of wrongdoing that is sufficient or necessary to lead of whistle-blowing, from an individual difference or situational perspective. The results lend support to the notion that organizational responses to internal disclosures are important contributors to whistle-blowing decisions, but evidence from Junctures 2 and 3 is needed to bear this out.

## **Juncture 2: Decision to Report Wrongful Activities to Supervisor**

**Truth table descriptive statistics.** Figure 11 contains the rows of the whistle-blowing truth table generated for Juncture 2 that were represented by my 60 cases. The cases populate nine of the 128 theoretically possible configurations, indicating a non-random distribution across the property space. The nine populated configurations represent 33 of the 60 cases, and one of these configurations met the consistency threshold of 0.85.

**Figure 11: Whistle-Blowing Outcome at Juncture 2 (Decision to Report Wrongful Activities to Supervisor)**

**Truth Table**

<u>Config</u>	<u>CB2</u>	<u>CBACC2</u>	<u>VC2</u>	<u>ANGER2</u>	<u>FEAR2</u>	<u>SO2</u>	<u>RP2</u>	<u>WB</u>	<u>Number</u>	<u>Consistency</u>
1	0	0	0	1	0	1	0	0	7	0.61
<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>6</b>	<b>0.93</b>
3	0	0	0	0	0	1	0	0	4	0.67
4	0	0	0	1	1	1	0	0	4	0.61
5	0	0	0	1	1	0	0	0	2	0.55
6	0	0	0	0	0	1	1	0	1	0.68
7	0	0	0	0	1	1	1	0	1	0.77
8	0	0	0	1	0	0	0	0	1	0.44
9	0	0	0	1	0	1	0	0	7	0.61
<b>Total</b>									<b>33</b>	

Key to reading the truth table: Configuration 2 consists of (a) no cost-benefit analysis; (b) no accurate cost-benefit analysis; (c) no strong value conflict; (d) anger; (e) no fear; (f) a “significant other”; and (g) a role model or partner at Juncture 2. Six cases in the dataset had set membership scores of at least 0.50 on each attribute in the configuration (“Number”). Ninety-three percent of them had outcomes consistent with whistle-blowing (i.e., received set membership scores of at least 0.50 on whistle-blowing).

Note: The bolded rows represent configurations that are sufficient for a whistle-blowing outcome at Juncture 2 (cb2\*cbacc2\*vc2\*ANGER2\*fear2\*SO2\*RP2), and the shaded rows represent configurations that are necessary for a whistle-blowing outcome at Juncture 2 (ANGER2\*RP2).

**fs/QCA Results: Truth Table Analysis – Sufficiency**

**Model: WB = f(CB2, CBACC2, VC2, ANGER2, FEAR2, SO2, RP2)**

Rows: 8  
 Algorithm: Quine-McCluskey  
 True: 1  
 0 Matrix: 0-CL  
 frequency cutoff: 1.00  
 consistency cutoff: 0.93

	<u>Raw Coverage</u>	<u>Unique Coverage</u>	<u>Consistency</u>
cb2*cbacc2*vc2*ANGER2*fear2*SO2*RP2	0.16	0.16	0.93
<b>Overall Solution</b>	<b>0.16</b>		<b>0.93</b>

Note: (1) ALL-CAPS indicate the presence of the causal condition, and small-caps indicate the absence of the causal condition. (2) “+” indicates *logical or*, while “\*” indicates *logical and*.

**fs/QCA Results: Truth Table Analysis – Necessity**

**Model: WB = f(CB2, CBACC2, VC2, ANGER2, FEAR2, SO2, RP2)**

Rows: 8  
 Algorithm: Quine-McCluskey  
 True: 1  
 0 Matrix: 0-C  
 frequency cutoff: 1.00  
 consistency cutoff: 0.93

	<u>Raw Coverage</u>	<u>Unique Coverage</u>	<u>Consistency</u>
ANGER2*RP2	0.28	0.28	0.88
<b>Overall Solution</b>	<b>0.28</b>		<b>0.88</b>

Note: (1) ALL-CAPS indicate the presence of the causal condition, and small-caps indicate the absence of the causal condition. (2) “+” indicates *logical or*, while “\*” indicates *logical and*.

**Truth table analysis: Sufficiency.** One causal path at Juncture 2 may be sufficient to generate a whistle-blowing outcome: no cost-benefit analysis (and, hence, no accurate cost-benefit analysis), no strong value conflict, anger, no fear, a “significant other” and a role model/partner (cb2\*cbacc2\*vc2\*ANGER2\*fear2\*SO2\*RP2; see Figure 11). This configuration is the same as the configuration identified at Juncture 1 as sufficient for a whistle-blowing disclosure. The configuration explains 16% of the outcomes in the dataset, and 93% of the cases with this configuration have data consistent with the predicted outcome. This is not a significant proportion using any benchmark when  $N = 6$ . Thus, no causal path is sufficient to cause a whistle-blowing outcome at Juncture 2.

**Truth table analysis: Necessity.** One causal path at Juncture 2 may be necessary to generate a whistle-blowing outcome: anger and a role model/partner (ANGER2\*RP2; see Figure 11). This configuration explains 28% of the outcomes in the dataset, but its consistency score of 0.88 is not a significant proportion using any benchmark when  $N = 6$ . Thus, no causal path is necessary to cause a whistle-blowing outcome at Juncture 2.

**Discussion.** The sufficiency findings for Juncture 2 lend further credence to the notion that organizational responses to internal reports are important components of whistle-blowing decisions. Remember that individuals at this juncture are just deciding to make internal reports. They still expect that their organizations will respond positively to the disclosures and move to halt the wrongful activities. As seen from the qualitative interviews, most individuals at this stage do not consider the possibility that their organization will not be receptive to their internal disclosures, and they do not make contingency plans regarding what they will do in the event of organizational inaction or retaliation. Thus, the finding that no configuration is sufficient to cause whistle-blowing at Juncture 2 is consistent with expectations.

The combined results from Junctures 1 and 2 are powerful indicators that path divergence between whistle-blowers and inactive observers occurs only after internal disclosures are made. Until then, one cannot distinguish one group from the other, and no configuration of attributes is consistently associated with the decision to blow the whistle.

### **Juncture 3: Decision to Make a Whistle-Blowing Disclosure**

**Truth table descriptive statistics.** Figure 12 contains the rows of the whistle-blowing truth table generated for Juncture 3 that were represented by my 60 cases. The cases populate 17 of the 128 theoretically possible configurations, indicating a non-random distribution across the property space. The 17 populated configurations represent 28 of the 60 cases, and nine of these configurations meet the consistency threshold of 0.85.

**Figure 12: Whistle-Blowing Outcome at Juncture 3 (Decision to Make a Whistle-Blowing Disclosure)**

**Truth Table**

<b>Config</b>	<b>CB3</b>	<b>CBACC3</b>	<b>VC3</b>	<b>ANGER3</b>	<b>FEAR3</b>	<b>SO3</b>	<b>RP3</b>	<b>WB</b>	<b>Number</b>	<b>Consistency</b>
<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>0.89</b>
<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>0.91</b>
<b>3</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>0.90</b>
<b>4</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>0.92</b>
<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>0.94</b>
<b>6</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>0.90</b>
7	1	0	0	1	1	1	0	0	2	0.75
8	0	0	0	1	0	0	0	1	1	1.00
<b>9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1.00</b>
10	0	0	0	1	1	1	0	0	1	0.81
11	1	0	0	0	1	0	0	0	1	0.63
<b>12</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0.90</b>
13	1	0	1	1	1	0	0	0	1	0.71
14	1	1	0	0	1	1	0	0	1	0.50
15	1	1	0	1	0	0	1	0	1	0.64
16	1	1	0	1	0	1	0	0	1	0.48
17	1	1	1	1	0	0	1	0	1	0.38
<b>Total</b>									<b>28</b>	

Key to reading the truth table: Configuration 2 consists of (a) a cost-benefit analysis; (b) no accurate cost-benefit analysis; (c) no strong value conflict; (d) anger; (e) fear; (f) a “significant other”; and (g) a role model or partner at Juncture 3. Three cases in the dataset had set membership scores of at least 0.50 on each attribute in the configuration (“Number”). Ninety-one percent of them had outcomes consistent with whistle-blowing (i.e., received set membership scores of at least 0.50 on whistle-blowing).

Note: The bolded rows represent configurations that are sufficient for a whistle-blowing outcome at Juncture 3 (cbacc3\*vc3\*ANGER3\*fear3\*SO3, cb3\*cbacc3\*vc3\*fear3\*SO3\*rp3, cb3\*cbacc3\*vc3\*ANGER3\*fear3\*SO3\*RP3 or CB3\*vc3\*ANGER3\*SO3\*RP3), and the shaded rows represent configurations that are necessary for a whistle-blowing outcome at Juncture 3 (cbacc3\*fear3 or SO3\*RP3).

### fs/QCA Results: Truth Table Analysis – Sufficiency

Model:  $WB = f(CB3, CBACC3, VC3, ANGER3, FEAR3, SO3, RP3)$

Rows: 17  
 Algorithm: Quine-McCluskey  
 True: 1  
 0 Matrix: 0-CL  
 frequency cutoff: 1.00  
 consistency cutoff: 0.89

	<u>Raw Coverage</u>	<u>Unique Coverage</u>	<u>Consistency</u>
cbacc3*vc3*ANGER3*fear3*SO3 +	0.30	0.05	0.89
cb3*cbacc3*vc3*fear3*SO3*rp3 +	0.22	0.05	0.94
cb3*cbacc3*vc3*ANGER3*fear3*SO3*RP3 +	0.18	0.02	1.00
CB3*vc3*ANGER3*SO3*RP3	0.29	0.21	0.90
<b>Overall Solution</b>	<b>0.58</b>		<b>0.94</b>

Note: (1) ALL-CAPS indicate the presence of the causal condition, and small-caps indicate the absence of the causal condition. (2) “+” indicates *logical or*, while “\*” indicates *logical and*.

### fs/QCA Results: Truth Table Analysis – Necessity

Model:  $WB = f(CB3, CBACC3, VC3, ANGER3, FEAR3, SO3, RP3)$

Rows: 17  
 Algorithm: Quine-McCluskey  
 True: 1  
 0 Matrix: 0-C  
 frequency cutoff: 1.00  
 consistency cutoff: 0.89

	<u>Raw Coverage</u>	<u>Unique Coverage</u>	<u>Consistency</u>
cbacc3*fear3 +	0.39	0.30	0.85
SO3*RP3	0.40	0.30	0.92
<b>Overall Solution</b>	<b>0.69</b>		<b>0.88</b>

Note: (1) ALL-CAPS indicate the presence of the causal condition, and small-caps indicate the absence of the causal condition. (2) “+” indicates *logical or*, while “\*” indicates *logical and*.

**Truth table analysis: Sufficiency.** Four causal paths at Juncture 3 may be sufficient to generate a whistle-blowing outcome: (1) no accurate cost-benefit analysis, no strong value conflict, anger, no fear and a “significant other” (cbacc3\*vc3\*ANGER3\*fear3\*SO3); (2) no cost-benefit analysis (and, hence, no accurate cost-benefit analysis), no

strong value conflict, no fear, a “significant other” and no role model/partner (cb3\*cbacc3\*vc3\*fear3\*SO3\*rp3); (3) no cost-benefit analysis (and, hence, no accurate cost-benefit analysis), no strong value conflict, anger, no fear, a “significant other” and a role model/partner (cb3\*cbacc3\*vc3\*ANGER3\*fear3\*SO3\*RP3); and (4) a cost-benefit analysis, no strong value conflict, anger, a “significant other” and a role model/partner (CB3\*vc3\*ANGER3\*SO3\*RP3; see Figure 12). The configurations explain 5%, 5%, 2%, and 21% of the outcomes in the dataset, respectively.

Configurations 1, 2 and 4 can be tested using the binomial probability test, as  $N = 7$ ,  $N = 5$  and  $N = 10$ , respectively. Configuration 4, CB3\*vc3\*ANGER3\*SO3\*RP3, with its consistency score of 90%, is marginally significant using a benchmark of 0.65 (usually sufficient) and  $N = 10$  ( $\alpha = .10$ ).

Configuration 3, cb3\*cbacc3\*vc3\*ANGER3\*fear3\*SO3\*RP3, must be tested with a veristic test of significance, given the very small number of cases it contains ( $N = 1$ ). A veristic test searches for disconfirming cases; if any are found, the tests fail. The consistency score of 1.00 for Configuration 3 means that no disconfirming cases exist.

Thus, two configurations are usually sufficient to cause a whistle-blowing outcome at Juncture 3: (1) a cost-benefit analysis, no strong value conflict, anger, a “significant other” and a role model/partner; and (2) no cost-benefit analysis (and, hence, no accurate cost-benefit analysis), no strong value conflict, anger, no fear, a “significant other” and a role model/partner:

**CB3\*vc3\*ANGER3\*SO3\*RP3 + cb3\*cbacc3\*vc3\*ANGER3\*fear3\*SO3\*RP3 → WB**

**Truth table analysis: Necessity.** Two causal paths at Juncture 3 may be necessary to generate a whistle-blowing outcome: (1) no accurate cost-benefit analysis and no fear; (cbacc3\*fear3) and (2) a “significant other” and a role model/partner (SO3\*RP3; see Figure 12). Each configuration explains 30% of the outcomes in the dataset. The consistency score of 0.85 for cbacc3\*fear3 is marginally significant using a benchmark of 0.50 (necessary more often than not) and  $N = 10$  ( $\alpha = .10$ ), based on a binomial probability test. The consistency score of 0.92 for SO3\*RP3 is marginally significant using the more stringent benchmark of 0.65 (usually necessary) and  $N = 11$  ( $\alpha = .10$ ), based on a binomial probability test. Thus, the analysis points to one causal path at Juncture 3 that is usually necessary to generate a whistle-blowing outcome—a “significant other” and a role model/partner—and another that is necessary more often than not to generate a whistle-blowing outcome—no accurate cost-benefit analysis and no fear:

**SO3\*RP3 + cbacc3\*fear3 → WB**

**Discussion.** The two configurations sufficient for a whistle-blowing outcome at Juncture 3 point to two equifinal paths and two prototypes of whistle-blowers: a Strategic Moral Guardian (CB3\*vc3\*ANGER3\*SO3\*RP3) and a Fed-Up Vigilante (cb3\*cbacc3\*vc3\*ANGER3\*fear3\*SO3\*RP3) (Goldberg, Lerner & Tetlock, 1999). I flesh out these prototypes in the General Discussion section below.

It is worth noting that both “organizational loyalty disrupters,” rather than either one alone, are necessary at Juncture 3 for a whistle-blowing outcome. Indeed, both whistle-blower prototypes contain the configuration  $SO3*RP3$ , strongly supporting the emergent hypotheses H11 and H9, respectively.

The fact that “organizational loyalty disrupters” are relevant only at Juncture 3 indicates that they are not powerful enough to predetermine a whistle-blowing decision at earlier decision points; rather, they give people the fortitude to make an external whistle-blowing disclosure only when internal channels have been exhausted. This is important because it means that management need not concern itself about the mere presence of “loyalty disrupters” within their organizations and should focus instead on better managing the internal reports of wrongdoing that they receive.

### **RESULTS: NO WHISTLE-BLOWING**

Set scores for the attribute “no whistle-blowing disclosure” (wb) were derived through logical negation using the formula  $wb_i = 1 - WB_i$ . In the context of set theory and logic, negation does not imply opposite. For illustration, imagine that the set of rich people is defined as individuals with a liquid net worth above \$1 million. The negation of “rich people” is “not rich people,” as individuals with a liquid net worth of \$750,000 are out of the set of “rich people” as we have defined it, but are clearly not the opposite, or “poor people.” “Poor people” represents a distinct set with its own definition.

Thus, the negation of “whistle-blowing disclosure,” “no whistle-blowing disclosure,” is not, strictly speaking, the same as “inactive observation.” However, I use it here as a proxy in a preliminary exploration of the hypotheses regarding inactive observation. Truth tables and analysis tables for no-whistle-blowing are available upon request.

**Truth table analysis.** No configurations at Juncture 1 or 2 reached the consistency threshold of 0.85 for a no-whistle-blowing outcome. Thus, no analysis is possible for these two decision points. This result is consistent with the findings for whistle-blowing, as no configurations were predictive of whistle-blowing at these earlier junctures.

Three causal paths emerged as necessary to generate a no-whistle-blowing outcome at Juncture 3: (1) strong value conflict and no fear (VC3\*fear3); (2) strong value conflict and an accurate cost-benefit analysis (VC3\*CBACC3); and (3) strong value conflict and a role model/partner (VC3\*RP3). None of the configurations passes the veristic test of significance, so no inference can be drawn about the necessity of these casual paths for a no-whistle-blowing outcome:

$$\mathbf{VC3*fear3 + VC3*CBACC3 + VC3*RP3 \rightarrow wb (?)}$$

**Discussion.** The lack of statistically significant results for no-whistle-blowing is likely due to the small number of inactive observation cases I collected ( $N = 13$ ). Two patterns

of results suggest that further investigations of inactive observation with larger data samples are in order.

First, strong value conflict appears in all three configurations necessary for a no-whistle-blowing outcome ( $N = 7$ ). This association between strong value conflict and inactive observation is consistent with H1 and points to one potential prototype of inactive observers: a Servant of Two Masters (Goldoni, 1753). I flesh out this prototype in the General Discussion section below.

Second, the absence of anger from any necessity configuration at Juncture 3 suggests that anger is indeed associated with whistle-blowing decisions, rather than with inactive observation decisions (H3). As the case studies in Chapter 5 will illustrate, Servants of Two Masters are not angry at Juncture 3 because they do not experience either management inaction or management retaliation following Juncture 2. Rather, management succeeds in keeping these individuals focused on their commitment to the organization, which perpetuates strong value conflict that ultimately keeps them silent.

## **GENERAL DISCUSSION**

The set-theoretic analysis points to two paths that can lead to a whistle-blowing outcome. The fact that path divergence occurs at Juncture 3 suggests that organizational responses to internal reports of wrongdoing are critical contributors to the decision to whistle-blow. There is no path-dependent course toward whistle-blowing or inactive observation that

begins at Juncture 1 or 2, nor is there an *a priori* profile of whistle-blowers that organizations could attempt to screen out during recruitment.

Of further interest is that anger features in both whistle-blowing paths, but the focus of the anger differs for each one. As discussed below, Strategic Moral Guardians retain their focus of halting the wrongful activities, while Fed-Up Vigilantes shift their focus to restitution for themselves. Thus, while anger is associated with whistle-blowing decisions in both cases, the goals, targets and methods of a whistle-blowing disclosure depend on the source of the anger.

Finally, both whistle-blowing paths feature weak value conflict that favors whistle-blowing, while the inactive observation path features strong value conflict. This pattern further supports the notion that organizations can make or break whistle-blowing outcomes: Those that maintain potential whistle-blowers' allegiance can avoid embarrassing (and costly) external disclosures, while those that alienate potential whistle-blowers—through inaction or retaliation—invite undesired public scrutiny and potential reputational damage.

I present the two whistle-blower prototypes and the one inactive-observation prototype in Figure 13. Chapter 5 contains case studies for each one.

**Figure 13: Prototypes of Whistle-Blowers and Inactive Observers**

**Whistle-Blower Prototype #1: Strategic Moral Guardian  
(CB3\*vc3\*ANGER3\*SO3\*RP3)**

Strategic Moral Guardians are motivated to advocate against wrongful activities by their strong extra-organizational allegiances (SO3) and anger at organizational inaction following their internal reports (ANGER3). These principled, stymied individuals focus on accountability and results as the goals of their disclosures. They believe that whistle-blowing is the right thing to do in light of the importance of the wrongful activities (vc3).

Strategic Moral Guardians engage in cost-benefit analyses (CB3) that search for the most effective way to halt the wrongful activities with the least personal or professional fallout. Role models and partners (RP3) assist in this effort. Strategic Moral Guardians are not characterized by a distinct lack of fear of retaliation (“fear3” is not part of their makeup), but their cost-benefit analyses indicate that they are concerned about the possibility of retaliation and take deliberate steps to minimize its likelihood or effects.

**Whistle-Blower Prototype #2: Fed-Up Vigilante  
(cb3\*cbacc3\*vc3\* ANGER3\*fear3\*SO3\*RP3)**

Fed-Up Vigilantes were initially motivated to advocate against wrongful activities by their strong extra-organizational principles (SO3), but this motivation is matched or superseded by their anger over the retaliation they faced following their internal reports (ANGER3). These principled, targeted individuals focus on revenge and catharsis as the goals of their disclosures. Fed-Up Vigilantes believe that whistle-blowing is the right thing to do in the pursuit of justice and restitution (vc3).

Fed-Up Vigilantes do not engage in cost-benefit analyses (cb3) and do fear retaliation (fear3), as they have already suffered retaliation for their internal reports and have nothing left to lose or to fear. Role models and partners (RP3) assist Fed-Up Vigilantes in evidence-collection and in identifying a whistle-blowing target that will further their case.

**Inactive Observer Prototype: Servant of Two Masters (VC3)**

Servants of Two Masters are struggling to uphold their commitments to two conflicting values (VC3), one that favors whistle-blowing and one that favors inactive observation (Goldoni, 1753). These individuals cite professional, religious or moral/ethical imperatives to protect victims or report wrongdoing on the one hand and, most often, obligations to protect and support their families on the other.

Servants of Two Masters generally choose inactive observation. But they feel post-decisional shame or regret, even as they maintain that they took the proper course of action at the time. This indicates that Servants of Two Masters’ inactive observation values only narrowly edge out their whistle-blowing values at Juncture 3.

## CHAPTER 5: QUALITATIVE CASE STUDIES

Scholars have taken opposing positions on the possibility of theorizing about the causes and predictors of whistle-blowing, and their methodologies reflect these positions. At one extreme is the assumption that theorizing about whistle-blowing is possible because all individuals follow the same general path toward a whistle-blowing decision (outlined in Chapter 2). Scholars in this camp (e.g., Miceli & Near, 1992; Keenan, 1995; Treviño & Victor, 1992) have employed large-*N* experiments and surveys to identify this common path and the variables that make a whistle-blowing decision more or less likely. Their ultimate goal is a predictive model of whistle-blowing.

At the other extreme is the assumption that theorizing about whistle-blowing is impossible because each whistle-blowing episode is idiosyncratic. Scholars in this camp (e.g., Glazer & Glazer, 1989) have conducted in-depth interviews with and written detailed case studies of whistle-blowers that portray the unique attributes of each whistle-blowing decision. They do not draw inferences from one case to another or attempt to develop a general theory of whistle-blowing. Their ultimate goal is ethnography.

My dissertation represents a middle ground between these two positions. It assumes that theorizing about whistle-blowing is possible because individuals likely follow common paths toward a whistle-blowing decision. However, it eschews a one-size-fits-all approach by maintaining that multiple decision paths exist and searching for them. As a result, it employs qualitative interviews to build a grounded theory of whistle-blowing

that identifies common attributes of whistle-blowing episodes along each path, as well as the factors that may cause an individual to shift from one path to another.

This chapter presents case studies of three prototypical potential whistle-blowers from among my 60 informants. The case studies illustrate the unique elements of the three whistle-blowing decision paths that I derived from my qualitative analysis (Chapter 3) and set-theoretic analysis (Chapter 4). Figure 14 summarizes the three paths, based on Yin’s (2003) guidelines for pattern-matching to analyze multiple-case-study data.

**Figure 14: Emergent Whistle-Blowing Decision Paths**

	<u>Strategic Moral Guardian</u>	<u>Fed-Up Vigilante</u>	<u>Servant of Two Masters</u>
<b>Essential Features</b>	<ul style="list-style-type: none"> <li>- Cost-benefit analysis</li> <li>- Weak value conflict favoring whistle-blowing</li> <li>- Anger</li> <li>- Significant other</li> <li>- Role model/partner</li> </ul>	<ul style="list-style-type: none"> <li>- No cost-benefit analysis</li> <li>- Weak value conflict favoring whistle-blowing</li> <li>- Anger</li> <li>- No fear</li> <li>- Significant other</li> <li>- Role model/partner</li> </ul>	<ul style="list-style-type: none"> <li>- Strong value conflict</li> </ul>
<b>Whistle-Blowers</b>	13	8	2
<b>Inactive Observers</b>	0	0	5

Note: Totals for Strategic Moral Guardian and Servant of Two Masters indicate cases containing all of the essential features of the given decision path. Totals for Fed-Up Vigilante indicate cases containing all or all but one of the essential features of the decision path.

## **Case Study #1: The Strategic Moral Guardian**

The Strategic Moral Guardian had been at his organization six years when he discovered that it was systematically misleading key stakeholders regarding a public health issue. As a result, affected parties were receiving inappropriate and unnecessary medical treatments, instead of proper health care.

The Guardian became aware of the wrongful activities through a partner who had worked temporarily in another division of the organization, where he had been exposed to evidence of the wrongful activities. The Guardian “was troubled” by the evidence. The activities triggered a memory of a previous occurrence, in which he was not involved, when management had misled stakeholders:

I had already reached a level of disillusionment with the [organization]... Not only did it destroy my view of [management], but it gave me an incredibly bad taste in my mouth about [the organization] itself and about just how cynical and narrowly self-serving leadership could be... And so, when [the current wrongful activities] came along, it resonated in me because here was a clear issue that required attention... [Key stakeholders] were on the track of being betrayed by the [organization], ... and I made a decision that that was not going to happen.

In addition to low value conflict regarding the wrongful nature of the activities and his already-damaged trust in the organization, the Guardian recalls feeling very angry about the wrongful activities:

I thought, ‘Those sons-of-b---hes said they were false alarms,’ and now I had in front of me eyewitness testimony from [victims], given in a very matter-of-fact, credible way, that clearly contradicted the official line...

And now I'm beginning to think, 'S--t, you know? Maybe it did happen. Maybe this is real.' So, that's what began my journey.

The Guardian decided to verify the accuracy of the partner's evidence. When he was satisfied that the evidence was correct and the wrongful activities were, in fact, occurring, the Guardian experienced "a sense of rage" that the organization had "betrayed" stakeholders. He was unwavering in his denunciation of the activities: "To me, it's very black-and-white, on-off, one-zero. It's either the right thing to do or it isn't. And, in my mind, there was never any doubt that [the activities were] the wrong thing to do."

Because of his tenure at the organization, the Guardian knew that he could "kiss [his] career goodbye" if he raised the issue of the wrongful activities in a threatening way with superiors, and he had worked long and hard to reach his professional position: "I understood the institution inside and out, and, growing up, being a [profession] is what I'd always wanted to do. It's what I was interested in, what fascinated me." So he decided to present his supervisor with overwhelming evidence of the wrongful activities and to position his internal disclosure as an attempt to protect the organization. He expected his supervisor to understand the urgency.

What I expected him to say was, 'How much time have you spent on this? Does it interfere with your regular duties?' Those were all questions that I knew I had good answers to. But did I expect him to take me seriously, given the body of information I put in front of him? You bet.

The Guardian cited a number of core values that were violated by the activities, primary among them honesty and loyalty:

The idea of integrity, of telling the truth, of being upfront about what happened—that clearly did not happen in this case... There is a social contract between [the organization] and [stakeholders]... [The activities] clearly show a lack of integrity, a lack of honesty, on behalf of people at the very top of the food chain.

He also cited role models from history who strengthened his resolve and inspired him to stay the course:

I dog-eared almost every other page [of a role model's book] because there was something in there that was a virtual exact parallel for what I had experienced and was experiencing. And as I read that book, I was probably more fanatical, quite frankly, because it was validation in the biggest possible way... Reading [the book] was a life-changing experience for me... It just sealed me even more and made concrete my belief that I was absolutely right to be doing what I was doing. So, I had very good role models, even if they weren't with me in the flesh.

While the Guardian did not suffer retaliation for making his internal disclosure, he did face management inaction. In fact, his partner discovered that the Guardian's supervisor had mishandled the evidence presented during the internal disclosure. This infuriated both the partner and the Guardian, and set them on a course toward an external whistleblowing disclosure.

[My partner] discovered a guy who, in a hallway conversation, said, 'Yeah, I had to debunk [your] reports.' [My partner] was livid and read him the Riot Act because he simply didn't have the background [to do so]. And when [my partner] told me, I just exploded because I had gone to my manager in good faith and said, ... 'Not meaning to blindside you, but I really think the [organization] could wind up getting screwed in the end because this will come out, it is going to be a problem, it's not going to go away, so please have somebody look at it.' I went to him in good faith, and he took it to over to one of his manager pals... instead of taking to the

people...that I'd asked him to, and they had blown it off. So, my next step was to really send a giant shock across the bow.

The Guardian felt justified in taking his advocacy outside the organization:

When [my supervisor] failed to do the right thing and I discovered it, it... just told me, 'I'm going to have to really do something now to let them know that I am in deadly earnest about this'... [I needed a] way of signaling to leadership, 'You better damn well take me seriously because I'm not going to let this one go.'

He disclosed the wrongful activities to the media and hoped that management would question him about it: "That's the confrontation that I wanted because that was the moment I was going to confront my boss with his own duplicity." When that did not work, he orchestrated another media disclosure that coincided with his voluntary departure from the organization. About four months elapsed from the time the Guardian discovered the activities until his external disclosure.

The Guardian remained focused on his original goal: assisting the victims of the wrongdoing. In fact, he could not imagine anything other than restitution for victims that would have dissuaded him from continuing his advocacy:

There is nothing that anyone could have said that would have made me cease and desist, unless they said, 'We're going to hold a press conference, we are going to renounce, we are going to reinvestigate this, you...are going to be an active part of this, so you will be satisfied that we are doing the right thing.' Then, I would have stopped...I was going to [continue] to see to it that fraud was exposed, so those [victims] would have the chance of getting some real justice.

The Guardian did not fear retaliation throughout the episode, but his understanding of the system led him to engage in a cost-benefit analysis to determine the most effective and self-protective way to make his disclosures: “I was very calculating. I thought five, six, seven ten steps ahead... We were only going to get one shot to get this right.”

The partner, on the other hand, did fear retaliation, so the pair took steps to protect him. The Guardian described the multiple ways in which the partner contributed to the effort, as well as their joint decision to shield him from retaliation, as follows:

[The partner] was my wingman and was there to help validate data... and be my moral support. He was directly involved in some of [the internal disclosures], and in some of those was just as confrontational, if not more than I was... But once I decided to go public,... I was careful to make sure that if anybody was going to be in the lean on this, it was going to be me... If they were going to focus on anybody as being a problem child, they were going to focus on me. I was more than ready, willing and able to give them a target. By having them focus on me, it would mean that they would pay a lot less attention to [the partner].

The Guardian attributed his fearlessness to his personal family situation and to his value system, which maintained his focus on the victims of the activities:

I really didn't give a damn what the consequences would be. Now, that was a cavalier attitude, but I could afford to take it because [I] didn't have kids... If you've got kids, if you have other kinds of responsibilities like that, that's an inhibiting factor... This comes down to core values... Worst they could do was try to fire me. But I got up every single day thinking about those [victims].

The Strategic Moral Guardian cited no value conflict about making his disclosures.

It was one of the moments in life where everything was crystal clear to me. There was no moral ambiguity; there was no question about whether I was doing the right thing or not. They were clearly in the wrong. They were doing the wrong thing. They were doing something utterly unrighteous, fundamentally evil. And when you get up in the morning and you feel like you're fighting evil, that's a charge.

In fact, he was energized by the experience and believes that he would follow the same path in the future:

For me, doing the right thing...is an obsession; it's a compulsion. I could not get up in the morning and look myself in the mirror and feel that was an honest man if I did anything less than what I did. I would do the same thing tomorrow if I had to do it.

### **Case Study #2: The Fed-Up Vigilante**

The Fed-Up Vigilante had been at his job for six months and had 15 years of professional experience when a new manager implemented new procedures that endangered public and employee safety. The Vigilante was not alone in his distress about the changes: "This wasn't an isolated instance where just I was being subjected...This is everybody. This is a common problem."

The Vigilante and his colleagues were resentful that managers with less subject expertise than they had were implementing dangerous policies:

[The manager] has never done my job, so he has no clue. It made us—it angered us because...this is a stress on my marriage, it's a stress on [my children]. We...do the work better than anybody else...Once [the manager] implemented these changes, I, along with everybody else, started to feel, 'It's starting to go south. It's starting to go downhill.'

They were scared and concerned for their well-being: “It was an alarming thing. It was disbelief, like, ‘I can’t believe this guy is implementing this. He [can’t be] serious... What is this guy’s agenda?’”

The Vigilante held a high-profile role within his professional association. The contact with coworkers that this role afforded meant that he was exposed to peers who agreed with his position regarding the wrongful activities and provided the social support to raise their concerns as a group with a regional manager. They were rebuffed.

Management’s response made the Vigilante regret joining the organization. He felt that he was not able to fulfill his professional mission, and his loyalty to the organization, though not to customers, was waning: “I felt like it was a big mistake taking this job... [Management] just wanted to put numbers out there saying that we were [fulfilling our professional mission], and it was all a scam. It was like a big show, and [customers] wouldn’t know any better.”

The Vigilante’s role gave him an understanding of the proper grievance channels within the organization. So he decided to make another internal advocacy attempt on his own, this time to the manager who had instituted the policies. He knew it would be an uphill battle, given the manager’s previous comments about his coworkers:

In his wisdom, he had called us ‘disgruntled amateurs.’ So, I basically said to him, ‘These are the issues and concerns of professionals, not disgruntled amateurs.’ It was a long list of complaints and safety concerns...It wasn’t confrontational, just a matter-of-fact letter.

The manager ignored him. He ignored the Vigilante's second attempt, as well. This made the Vigilante angry and determined to get results: "It was pretty much like a screw-you. Now, we're going to town."

The Vigilante had assumed that the manager would respond positively to him, and he had no backup plan in the event of a rebuff. He was "flabbergasted" at the silence that followed his attempts to contact the manager, and he felt compelled at that point to fight for justice. The Vigilante said he had no value conflict about his action choice, given the potential danger to his peers and the public:

My mentality was, we don't have a choice but to do this. Our job security, all that is secondary to doing the right thing...I couldn't give up. I couldn't look at myself in the mirror without standing up, knowing that this was going on and just saying, 'Oh, OK. Well, screw it. Hand me my paycheck.'

He cited a commitment to public safety as his motivation:

The main thing that bothered me about the changes was that we no longer had the authority to protect [customers]...These changes...affected our ability to do our job. It meant that the public was not safe anymore.

The Vigilante and his colleagues became partners in whistle-blowing, making multiple simultaneous external disclosures to government officials and the media. The partners leveraged one another's contacts and knowledge of proper whistle-blowing channels. To maximize their effect, they did not go together to each whistle-blowing target; instead, each partner approached a different target.

It wasn't really in concert that we did it. Like, if you were in Dallas, you've got your local Dallas reps and your Senators, and whomever you knew. Some people had connections...It was a lot of us going to our Congressmen. Everybody was at the point where we were so disgusted and frustrated that we needed to start hitting Congress.

The partners did not feel that they had safety in numbers: They made their disclosures anonymously. But the Vigilante did not fear or expect retaliation because "there was nothing wrong" with his actions, and he identified himself in his disclosures. When management suddenly suspended him and put him under investigation, he was "outraged." His goal expanded from merely stopping the wrongful activities to include exposing the retaliation that management had inflicted on him. The advocate became a warrior: "From that day forward, I was nothing but angry. I thought, 'If they want to fight, we're gonna fight.'"

Anger drove the Fed-Up Vigilante to embark on a whistle-blowing blitz, and he identifies the day he was suspended as "the point of no return. I had no choice but to keep doing what I was doing." Over the course of three weeks, he told the media, government officials and whistle-blower advocacy groups about the wrongful activities and the retaliation. "[The organization] gave me the best PR of anyone," he said. "I became the voice of all frustrated [people in my profession]." About two years had elapsed from the time that the wrongful activities had begun.

The Vigilante credits his partners with giving him fortitude and credibility. “Honestly, I might not have tried to change the system without them. I don’t know that I would have wanted to stand up without the group.”

Indeed, even the partners’ focus shifted away from stopping the initial wrongful activities toward embarrassing the organization for retaliating against the Vigilante. The partners began making whistle-blower disclosures about the retaliation, as well. These disclosures included anonymous tips to reporters, who ultimately publicized the story.

### **Case Study #3: The Servant of Two Masters**

The Servant of Two Masters had been fired from his previous job for making internal complaints about a coworker and was still in a probationary period at his current job when he observed gross negligence by colleagues that killed a third party. Although the event was “appalling, a fiasco,” the Servant decided not to report the incident to supervisors or an oversight agency, fearing that he would lose this job, as well, if he did.

Over time, however, and following the end of his probation, the Servant witnessed multiple similar incidents that led him to understand that the initial activities were not isolated events, but part of a pattern of dangerous behavior by staff. He felt guilty for remaining silent:

It began to affect my conscience that I had not spoken up earlier about the events...One night it really came to a head. I was awake; I couldn’t sleep. It was 2:30 in the morning. And I thought to myself, ‘This is ridiculous.

I'm losing sleep over something my superiors haven't dealt with... Maybe one of my superiors should be losing some sleep, too.'

The Servant tried to assuage his guilt by making internal reports to supervisors about minor infractions instead. The positive response from peers made him feel that he was somehow contributing to the betterment of the organization, after all:

[Colleagues] came to me and said, 'I really appreciate what you did... you're absolutely right... and I'm so glad that you said something about it.'  
[Another] said, 'I get so frustrated with that bullshit.'

This dynamic placed the Servant into a strong value conflict situation. On one hand, he felt that he should report the initial wrongful activities to an oversight agency in order to protect future potential victims and improve accountability at the organization. On the other hand, he believed that his internal reports were making incremental improvements:

I had never seen anything quite like this. What really bothered me was that an incidence report [was not filed about the event]... [An incidence report] is supposed to be on file with... the risk management department, and it's supposed to be looked at and learned from... Procedure really broke down [during the event]. How do we make it so it doesn't happen again? There was no authority at all in this situation. I mean, it was just beyond scale... But then, when there was another [event] with similar ineptitude—not quite as bad, just lots of mishaps—I reported all those.

The stress of the conflict affected the Servant's health: "I was so distressed, I called in sick and didn't go in. I was really feeling very stressed out at what had happened... My conscience was just eating away at me. I was experiencing increasing emotional distress. [A colleague] believed I had some post-traumatic stress disorder from watching [that person] die."

The Servant cited deontic motivations and his professional oaths as the source of the drive to report the wrongful activities, large and small:

I [had a] desire for justice and a desire for professional integrity...The sole reason I work in this field, and the sole reason I work in a [given organization], is that ethics and integrity prevail [there]...We have responsibilities with the work that we do, and we advocate for [our customers'] well-being...That's our job...I thought [there was] a real breach of ethics here.

He stressed that it was value conflict, rather than fear, that prevented him from reporting the wrongdoing. He had engaged in a cost-benefit analysis that made him comfortable that he could sustain any retaliation that may have resulted from whistle-blowing. Once the probationary period had ended, the Servant's concerns about the professional ramifications of being terminated receded, and he considered only the personal financial cost of potential retaliation: "I live in a small apartment [that I own] and don't have to pay rent...I didn't need much income. I didn't have other people to think about."

The Servant believes that conditions have improved at his organization, but he is not confident about his future there:

I think [it's] gotten better now...I'm enjoying myself, actually. But, if worse comes to worst, I'll just get another job. I have strong credentials. I'm in a profession where there is a lot of need. I could find something.

## CHAPTER 6: LABORATORY EXPERIMENT

As a further test of some of the relationships uncovered by the interviews (see Chapters 3 and 5) and tested via set-theoretic methods (see Chapter 4), I conducted a vignette-based laboratory experiment that measured the effects of value conflict and emotion, the “hot” predictors with which I began this project, on intention to whistle-blow.

Experiments differ from set-theoretic analyses in how they define and operationalize causation and variables (Ragin, 2000). Experiments are premised on the concept of independent causality and, hence, examine the average net effects of individual variables on a given outcome. Because the goal of experiments is to determine the relative importance of predictors on an outcome, variance on the outcome variable is of paramount importance.

As discussed in Chapter 4, set-theoretic analyses are premised on the concept of multiple, conjunctive causality and, hence, examine the effects of configurations of attributes (or causal conditions) on a given outcome. Because the goal of set-theoretic analyses is to identify the causal combinations shared by cases with the same outcome, variance on the outcome variable is not desired. In fact, cases are selected for study specifically because they display the same outcome.

These differences mean that combining experimental and set-theoretic methodologies is an excellent way to triangulate on the relationships between causes and outcomes.

Consistent results across methodologies—combined with the qualitative analysis of Chapters 3 and 5—would provide strong evidence regarding the effects of value conflict and emotion on whistle-blowing.

The vignette format I utilize here is vulnerable to some limitations. First, participants are asked to indicate their intentions to respond to hypothetical situations, rather than to recall their actual responses to past events or to respond in real-time to unfolding situations. However, Fishbein & Azjen (1975) argue that intentions are most accurate predictors of behavior. Second, vignettes require participants to imagine themselves in the situations described, rather than to experience the situations first-hand. However, given the difficulties inherent in creating whistle-blowing simulations that are simultaneously realistic and ethically responsible, scenarios and vignettes are the most commonly used methodology among whistle-blowing studies (e.g., Treviño & Victor, 1992; Masser & Brown, 1996; Barnett, Bass & Brown, 1996; Singer, Mitchell & Turner, 1998; McCutcheon, 2000; Chiu, 2003). (The second-most common is archive and survey studies.) The two mitigating factors outlined here made me more comfortable adopting the vignette format for my study of the whistle-blowing decision process.

## HYPOTHESES

The hypotheses tested in this experiment were the deductively derived ones explored in the interviews and a subset of those included in fs/QCA analysis (see Chapters 2 and 4). Since I did not include “organizational loyalty disrupters” in this experiment, I could not test the hypotheses that pertain to them here.

**H1:** Strong value conflict leads to inactive observation.

**H2:** Weak value conflict leads to behavior that is consistent with the dominant value (to blow the whistle or remain silent).

**H3:** Anger at observed wrongful activities leads to whistle-blowing.

**H4:** Fear of retaliation leads to inactive observation.

**H5:** Anger at observed wrongful activities strengthens the main effect of weak value conflict that favors whistle-blowing, increasing the likelihood of whistle-blowing.

**H6:** Fear of retaliation strengthens the main effect of weak value conflict that favors inactive observation, increasing the likelihood of inactive observation.

## METHOD

**Participants.** A sample of 66 working adults who were enrolled in an MBA program at a large U.S. university were recruited via email and in-class invitations to complete a web-based vignette study. Recruits were adults working full-time in middle- or upper-management positions who attended school on a part-time basis. Participation was 100% voluntary, and no incentives were offered for responses.

Forty-six of the targeted participants completed usable answer sheets (32 men, 14 women), for a response rate of 69.7%. The respondents ranged 29-55 years in age, with an average age of 38.2 years. About 65% were married, and about 35% had school-age children. Participants' average tenure in their current position was 4.5 years, their average tenure at their organization was 6.8 years, and 76% supervised others at work. Forty-six percent had degrees beyond the bachelor's level, including 17% with doctoral- or post-doctoral-level degrees. No effects were found for these demographic variables.

The participants' demographic profile was similar to that of the interview informants, except that the participants were all private-sector employees, while most of the interview informants were public-sector employees. However, Callahan & Dworkin (1994) argue that one can generalize between public- and private-sector employees because: (1) there is no reason to believe that the public-sector subpopulation cannot represent general working population, since other organizational research mixes public- and private-sector employees and finds no differences between them, and no studies have demonstrated that

the two environments have different effects on whistle-blowing; (2) the gap between the legal protections for public- and private-sector whistle-blowers is narrowing; and (3) the government agencies included in earlier whistle-blowing research ranged 1,000-20,000 employees in size and had a variety of missions and goals, so some government agencies may be more similar to private-sector organizations than to other government agencies.

**Design and predictors.** The study consisted of two vignettes (see Figure 15). Vignette 1 was a 2 (value conflict) x 3 (emotion) between-subjects design, with subjects self-selecting into the six conditions, as described below. Vignette 2 was a one-way between- and within-subjects design. The between-subjects factor was value conflict, and the within-subjects factor was emotion. All participants read Vignette 1 first.

**Figure 15: Experimental Vignettes**

**Vignette 1:** You work on an off-shore oil drilling ship. You witness your colleagues repeatedly dumping something into the water in the middle of the night. When you ask them what it is, they tell you that it is a highly toxic chemical. You decide to raise the issue with the shift supervisor. He explains that the proper disposal of the chemical is very expensive and that it is necessary to keep the activities secret in order to preserve corporate profitability and therefore everyone’s job.

**Vignette 2:** You are a physician who serves on the oversight committee at a private hospital. As part of your routine review of events, you discover a series of grossly negligent mistakes by two other physicians on staff. The cases have never been investigated, and the physicians have never been sanctioned. You raise the issue with the Chief of Staff. You are told that the hospital does not want to threaten the livelihoods of the physicians by pursuing the matter.

Value conflict was measured through an adapted version of the Rokeach Values Survey (1973). The original Rokeach Values Survey contains two lists of 18 items each. Items in the first list represent “terminal” values, or end states of existence that individuals may

seek to achieve, such as “world peace” and “equality.” Items in the second list represent “instrumental” values, or modes of conduct for which individuals may strive, such as being “independent” and “loyal.” Each item in both lists is accompanied by a short (two- to three-word) description. For example, “independent” is described as “self-reliant; self-sufficient.” Participants are asked to rank the 18 items on each list in their order of importance to them personally (in the order in which the values “may act as a guiding principle in YOUR life”), with 1 signifying the most important value and 18 signifying the least important value.

The present study asked participants to complete rankings for only the “instrumental” values list, and it adapted the items on that list to include only values deemed through extensive pilot testing (described below) to be relevant to whistle-blowing. Items discarded from the original list were replaced with others that the pilot testing indicated were relevant to whistle-blowing but missing from the original list. Figure 16 presents the “instrumental” values list used in this study, along with the instructions participants were given regarding this exercise. The adapted list contained 16 items, with a rank of 1 indicating the most strongly held value and 16 indicated the most weakly held value.

Pilot testing revealed that four values were associated with propensity to whistle-blow: courageous, determined, honest and independent. Five values were associated with inactive observation: ambitious, broad-minded, forgiving, loyal and obedient. The pilot testing consisted of questionnaires administered to 50 individuals waiting for service at the Department of Motor Vehicles. The individuals were presented with the 16 values listed in Figure 16 and asked to identify the ones they believed “would be important to” a

whistle-blower and a non-whistle-blower. Values that received at least 35 votes were deemed to be associated with propensity to whistle-blow or inactive observation.

### Figure 16: Adapted Values Survey

Following is a list of values in alphabetical order. Each value is accompanied by a short description and a blank space. Please rank each value in its order of its importance to YOU. Think of how much each value may act as a guiding principle in YOUR life.

To begin, select the value that is of most importance to you. Write the number 1 in the blank space next to that value. Next, choose the value that is second in importance to you and write the number 2 in the blank next to it. Work your way through the list until you have ranked all 16 values on the first list. The value that is of least importance to you should be rated 16.

Take your time and think carefully. Feel free to go back and change your order should you have second thoughts about any of your answers. When you have completed the ranking, the result should represent an accurate picture of how you really feel about what's important in your life.

<b>Ambitious</b> Hardworking and aspiring	_____	<b>Imaginative</b> Daring and creative	_____
<b>Broad-minded</b> Open-minded	_____	<b>Independent</b> Self-reliant; self-sufficient	_____
<b>Capable</b> Competent; effective	_____	<b>Intellectual</b> Intelligent and reflective	_____
<b>Courageous</b> Standing up for your beliefs	_____	<b>Logical</b> Consistent; rational	_____
<b>Determined</b> Seeing things through to the end	_____	<b>Loyal</b> Faithful to friends or the group	_____
<b>Forgiving</b> Willing to pardon others	_____	<b>Obedient</b> Dutiful; respectful	_____
<b>Helpful</b> Working for the welfare of others	_____	<b>Responsible</b> Dependable and reliable	_____
<b>Honest</b> Sincere and truthful	_____	<b>Self-controlled</b> Restrained; self-disciplined	_____

I calculated value conflict for each individual as follows: First, I counted the number of times that the individual rated the “whistle-blowing” values 1, 2 or 3; this count became the individual’s whistle-blowing score. Then, I counted the number of times that the individual rated the “inactive observation” values 1, 2 or 3; this count became the individual’s inactive observation score. Finally, I subtracted each individual’s inactive observation score from his or her whistle-blowing score. If the absolute value of this difference score was 0 or 1, I deemed the individual to have strong value conflict. If the absolute value of the difference score was 2 or 3, I deemed the individual to have weak value conflict. The direction of the weak value conflict depended on the valence of the difference score: Positive differences (i.e., +2 and +3) favored whistle-blowing, and negative differences (i.e., -2 and -3) favored inactive observation.

This operationalization is consistent with Tetlock (1986), which defines value conflict as conflict between values that are both important and approximately equally important. Selecting only values ranked 1, 2 or 3 ensured that the values under consideration were the most strongly held of the 16 options, while defining strong value conflict by difference scores of 0 or 1 only ensured that the values under consideration were equally or approximately equally strongly held.

Emotion was measured in Vignette 1 and manipulated in Vignette 2. In Vignette 1, participants were shown three photographs of the same person expressing three different emotions (see Figure 17). The faces were taken from Ekman’s (2004) MicroExpression

Training Tool)/Subtle Expression Training Tool to represent classic expressions of the emotions anger and fear, plus a neutral face. Participants selected the face that most closely represented “how you feel” after reading the vignette. Then, they indicated their responses on the behavioral dependent measures. In Vignette 2, the manipulation involved showing participants three photographs of a different person expressing the same three emotions as in Vignette 1 (see Figure 17). The sequence in which the emotions were presented was randomized to minimize order effects. In this case, participants were shown each emotion in turn and asked for their responses on the behavioral dependent measures if they “felt like this.” Both models were middle-aged white males to minimize response bias due to gender, race or age. Manipulation checks verified that participants correctly identified the emotions presented for both vignettes.

**Behavioral dependent measures.** After reading each vignette and receiving the emotion probe, participants indicated the likelihood that they would make internal and external whistle-blowing reports through seven-point scales: 1 represented “not at all likely,” and 7 represented “extremely likely.” Internal reports were defined as reports “up the company’s chain of command, to levels above your immediate supervisor,” and external reports were defined as “blow[ing] the whistle’...to an entity outside the company.” Each dependent variable was measured through a single item.

**Procedure.** Participants completed the study online. After indicating their consent to participate, they completed the adapted values survey (see Figure 16). Next, they read the two vignettes. Participants were instructed to imagine that they themselves had witnessed

the wrongful activities described in each vignette and to imagine how they would respond to such a situation. In both cases, the vignette indicated that participants had questioned the wrongful activities to their immediate supervisors, but were rebuffed (see Figure 15). Following each vignette, participants completed measures of their emotional response to the events (for Vignette 1) and the dependent measures (for both vignettes), as well as manipulation checks (see Figure 17).

**Figure 17: Vignette Study Materials**

**Emotion and Behavioral Dependent Measures for Vignette 1**

		
Anger	Fear	Neutral

**Q1:** Which face best describes how you feel in this situation?  
**Q2:** Please write 2-3 sentences in the space below to describe how you feel in this situation.  
**Q3:** How likely would you be to report these activities up the company's chain of command, to levels above your immediate supervisor? [1-7 scale]  
**Q4:** How likely would you be to "blow the whistle" on these activities to an entity outside the company? [1-7 scale]

## Emotion Manipulation and Behavioral Dependent Measures for Vignette 2

		
Anger	Fear	Neutral
<p><b>Q1:</b> If you felt like this, how likely would you be to report these activities up the hospital's chain of command, to levels above the Chief of Staff? [1-7 scale]</p> <p><b>Q2:</b> If you felt like this, how likely would you be to "blow the whistle" on these activities to an entity outside the hospital? [1-7 scale]</p>		

Note for both sets of photos: Emotion labels were not provided in the actual experiment. All scales had endpoints of 1 = Not at all likely, 7 = Extremely likely.

## RESULTS

**Values and value conflict.** Participants most highly valued honesty (mean rank = 4.61), a whistle-blowing value, and ambition (5.70), an inactive observation value, among the nine values of interest. They least valued forgiveness (11.57) and obedience (13.72), both inactive observation values. Figure 18 contains descriptive statistics for the values results.

Of the 46 participants, 12 expressed low value conflict favoring inactive observation, 20 expressed low value conflict favoring whistle-blowing, and 14 expressed high value conflict.

**Figure 18: Values: Descriptive Statistics**

<b>Values</b>	<b>Mean Rank</b>	<b>Modal Rank</b>	<b>Times Rated 1-3 (Most Important)</b>	<b>Times Rated 14-16 (Least Important)</b>
<b>Whistle-Blowing</b>				
Courageous	8.70	6*	4	9
Determined	8.52	8	9	5
Honest	4.61	1	24	0
Independent	7.26	3*	13	2
<b>Inactive Observation</b>				
Ambitious	5.70	1*	19	4
Broad-minded	6.48	6	11	2
Forgiving	11.57	16	2	17
Loyal	9.83	10	2	11
Obedient	13.72	16	1	32

\* Multiple modes exist. The smallest value is shown.

### **Vignette 1**

Twenty-two participants reported feeling anger, 13 reported feeling fear, and 11 reported feeling neutral in response to the first set of events. Participants indicated a likelihood of 6.07 out of 7.00 that they would make an internal whistle-blowing report and a likelihood of 4.76 out of 7.00 that they would make an external whistle-blowing report across the three conditions of Vignette 1. Thus, they were significantly more likely to engage in internal whistle-blowing than in external whistle-blowing,  $t(45) = 4.916, p = .000$ . Figure 19 provides descriptive statistics.

**Main effect of value conflict.** I conducted a univariate analysis of variance (ANOVA) for each dependent variable to test H1 and H2. There was no main effect of value conflict on internal ( $M_{lowIO} = 6.25, M_{high} = 6.14, M_{lowWB} = 5.90$ ),  $F(2,43) = 0.416, p = ns$ , or external ( $M_{lowIO} = 4.83, M_{high} = 4.79, M_{lowWB} = 4.70$ ),  $F(2,43) = 0.027, p = ns$ , whistle-blowing intentions. Pairwise comparisons revealed no significant differences either.

Strong value conflict did not predict inactive observation intentions, and weak value conflict did not predict intentions consistent with the dominant value. Thus, neither H1 nor H2 was supported for internal or external whistle-blowing.

**Main effect of emotion.** I conducted a univariate analysis of variance (ANOVA) for each dependent variable, with three levels of emotion (anger, fear, neutral), to test H3 and H4. There was no main effect of emotion on internal ( $M_{\text{anger}} = 6.14$ ,  $M_{\text{fear}} = 5.69$ ,  $M_{\text{neutral}} = 6.36$ ),  $F(2,43) = 1.201$ ,  $p = ns$ , or external ( $M_{\text{anger}} = 4.36$ ,  $M_{\text{fear}} = 4.85$ ,  $M_{\text{neutral}} = 5.56$ ),  $F(2,43) = 1.805$ ,  $p = ns$ , whistle-blowing intentions. Pairwise comparisons did not reveal any significant differences either. Anger did not predict internal or external whistle-blowing, and fear did not predict inactive observation. Thus, neither H3 nor H4 was supported for internal or external whistle-blowing.

**Interaction.** Given that the main effects of value conflict and emotion were not significant for either dependent variable, I did not conduct tests of their interaction.

**Figure 19: Vignette 1: Descriptive Statistics**

<b><u>Value Conflict</u></b>	<b>Likelihood of Internal Whistle-Blowing</b>		<b>Likelihood of External Whistle-Blowing</b>		<b><u>N</u></b>
	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	
	No Value Conflict (IO)	6.25	0.866	4.83	
High Value Conflict	6.14	1.027	4.79	1.578	14
No Value Conflict (WB)	5.90	1.294	4.70	1.625	20
Total	6.07	1.104	4.76	1.594	46

<b><u>Emotion</u></b>	<b>Likelihood of Internal Whistle-Blowing</b>		<b>Likelihood of External Whistle-Blowing</b>		<b><u>N</u></b>
	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	
	Anger	6.14	0.990	4.36	
Fear	5.69	1.377	4.85	1.068	13
Neutral	6.36	0.924	5.45	1.214	11
Total	6.07	1.104	4.76	1.594	46

**Vignette 2**

Participants indicated a likelihood of 4.48 out of 7.00 that they would make an internal whistle-blowing report and a likelihood of 3.89 out of 7.00 that they would make an external whistle-blowing report across the three conditions of Vignette 2. Thus, they were more likely to engage in internal whistle-blowing than in external whistle-blowing,  $t(45) = 4.916, p = .000$ , as in Vignette 1. Figure 20 provides descriptive statistics.

**Main effect of value conflict.** I calculated each participant’s mean internal and external whistle-blowing intention scores across the three conditions to obtain overall intentions to engage in internal and external whistle-blowing. Then, I conducted a univariate analysis of variance (ANOVA) for each dependent variable to test H1 and H2. None was found for internal ( $M_{lowIO} = 4.41, M_{high} = 4.51, M_{lowWB} = 4.56$ ),  $F(2,43) = 0.060, p = ns$ , or external ( $M_{lowIO} = 4.03, M_{high} = 3.67, M_{lowWB} = 3.89$ ),  $F(2,43) = 0.417, p = ns$ , whistle-

blowing intentions. Pairwise comparisons revealed no significant differences either. Thus, neither H1 nor H2 was supported for internal or external whistle-blowing.

**Main effect of emotion.** I conducted a repeated-measures ANOVA for each dependent variable, using emotion (anger, fear, neutral) as the within-subjects factor, to test H3 and H4. There was a main effect of emotion on internal whistle-blowing intentions, Wilks'  $\Lambda = .431$ ,  $F(2,43) = 28.41$ ,  $p = .000$ , multivariate  $\eta^2 = .57$ . Pairwise comparisons revealed that the main effect was driven by anger: Participants indicated that they would be significantly more likely to make an internal whistle-blowing report when they were angry ( $M_{anger} = 5.80$ ) than when they were fearful ( $M_{fear} = 3.87$ ) or felt neutral ( $M_{neutral} = 3.60$ ),  $t(44) = 6.74$  and  $t(44) = 6.67$ , respectively, both  $ps = .000$ . There was no difference between fearful and neutral participants,  $t(45) = 0.90$ ,  $p = ns$ . Thus, H3 was supported, but H4 was not supported, for internal whistle-blowing intentions.

The same pattern emerged for external whistle-blowing intentions. There was a main effect of emotion on external whistle-blowing intentions, Wilks'  $\Lambda = .404$ ,  $F(2,43) = 31.75$ ,  $p = .000$ , multivariate  $\eta^2 = .60$ . Pairwise comparisons revealed that the main effect was again driven by anger: Participants indicated that they would be significantly more likely to make an external whistle-blowing report when they were angry ( $M_{anger} = 5.13$ ) than when they were fearful ( $M_{fear} = 3.42$ ) or felt neutral ( $M_{neutral} = 2.98$ ),  $t(44) = 6.23$  and  $t(44) = 7.23$ , respectively, both  $ps = .000$ . There was no difference in external whistle-blowing intentions between fearful and neutral participants,  $t(45) = 1.43$ ,  $p = ns$ . Thus, H3 was supported, but H4 was not supported, for external whistle-blowing intentions.

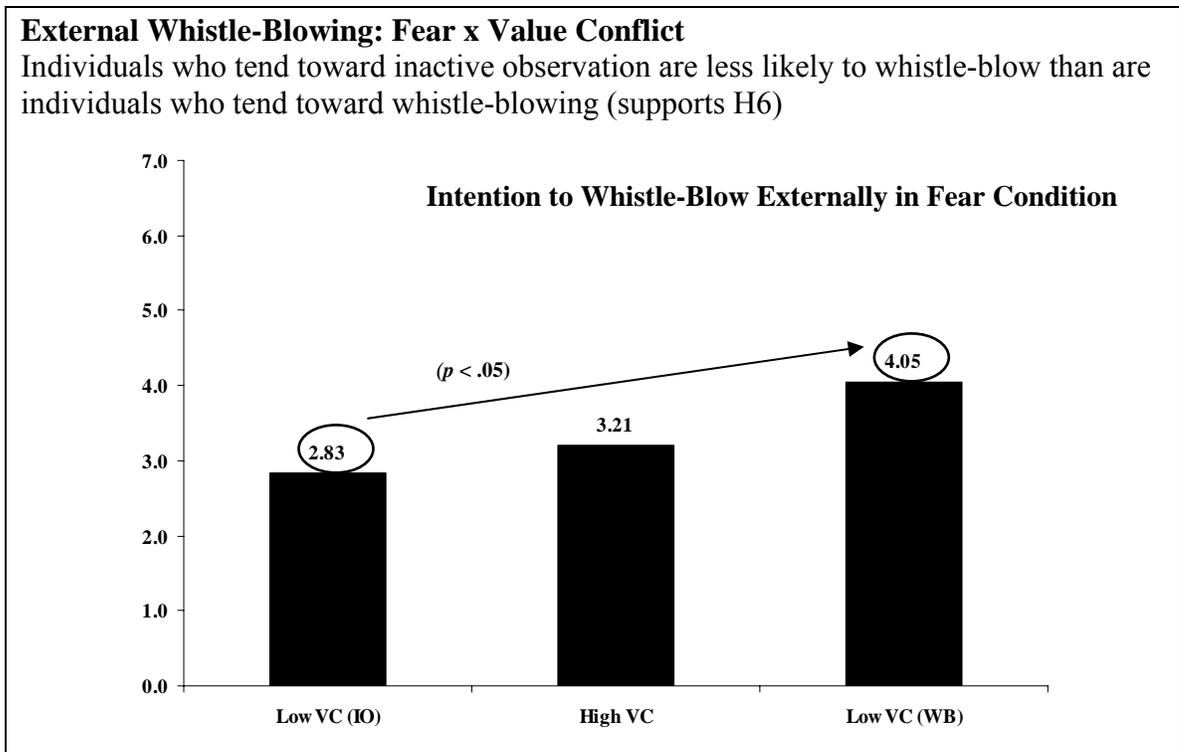
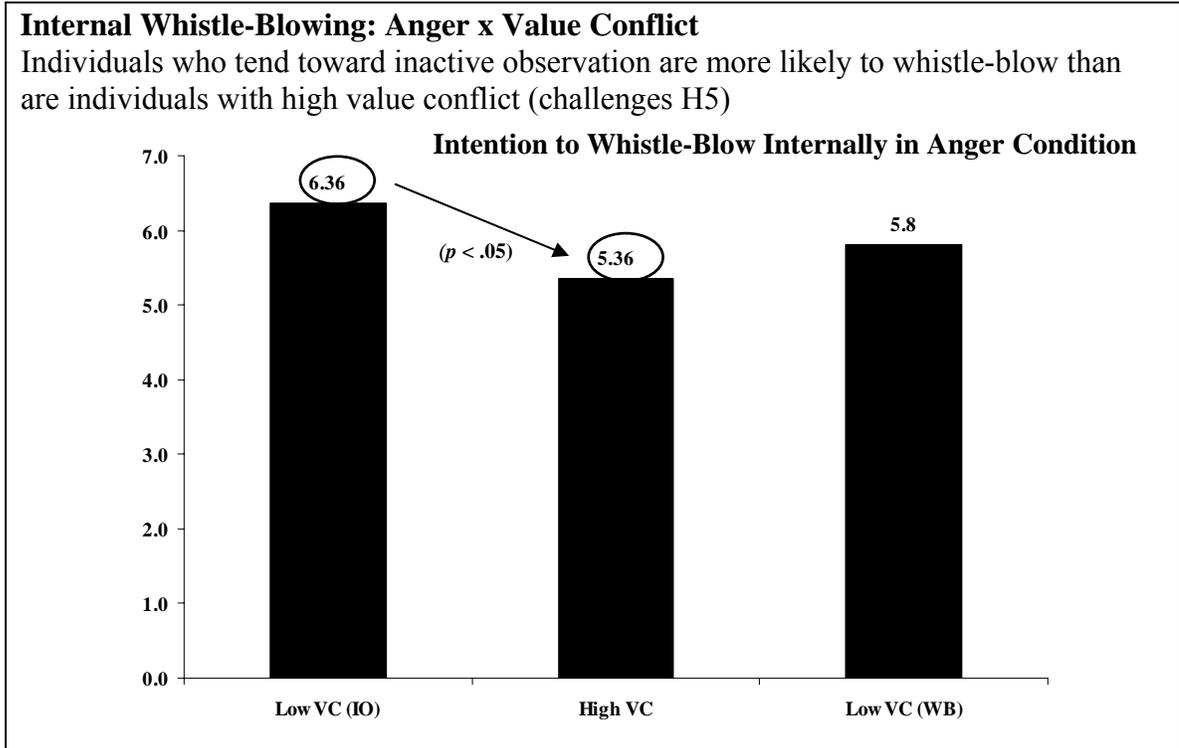
**Interaction.** I conducted a univariate analysis of variance (ANOVA) for each dependent variable to test H5 and H6. There was a significant interaction between anger and value conflict for internal whistle-blowing that challenges H5: Low-value-conflict individuals favoring inactive observation were more likely to engage in internal whistle-blowing in the anger condition than were high-value-conflict individuals ( $M_{lowIO} = 6.36$ ,  $M_{high} = 5.36$ ), (see Figure 21). There was a significant interaction between fear and value conflict for external whistle-blowing that supports H6: Low-value-conflict individuals favoring inactive observation were less likely to engage in external whistle-blowing in the fear condition than were low-value-conflict individuals favoring whistle-blowing ( $M_{lowIO} = 2.83$ ,  $M_{lowWB} = 4.05$ ),  $p = .05$  (see Figure 21).

**Figure 20: Vignette 2: Descriptive Statistics**

<b>Value Conflict</b>	<b>Likelihood of Internal Whistle-Blowing</b>		<b>Likelihood of External Whistle-Blowing</b>		<b>N</b>
	<b>Mean</b>	<b>SD</b>	<b>Mean</b>	<b>SD</b>	
No Value Conflict (IO)	4.41	1.215	4.03	1.059	12
High Value Conflict	4.51	1.379	3.67	1.247	14
No Value Conflict (WB)	4.56	1.008	3.89	1.131	20
Total	4.48	1.190	3.89	1.118	46

<b>Emotion</b>	<b>Likelihood of Internal Whistle-Blowing</b>		<b>Likelihood of External Whistle-Blowing</b>		<b>N</b>
	<b>Mean</b>	<b>SD</b>	<b>Mean</b>	<b>SD</b>	
Anger	5.80	1.217	5.13	1.179	46
Fear	3.87	1.700	3.42	1.685	46
Neutral	3.60	1.924	2.98	1.790	46
Total	6.07	1.104	4.76	1.594	46

**Figure 21: Vignette 2: Interactions of Value Conflict and Emotion**



## DISCUSSION

The experimental results are somewhat consistent with the interviews in terms of the main effect of emotion on whistle-blowing. Anger predicted whistle-blowing intentions in Vignette 2, while fear did not predict either whistle-blowing or inactive observation. It appears that fear is not strong enough to stifle whistle-blowing intentions, nor is it strong enough to be the deciding factor behind the decision to remain silent.

It is worth noting that significant results were obtained for Vignette 2, but not for Vignette 1. This suggests that participants are better at contrasting the effects of different emotions on themselves than they are at imagining the effects of an isolated emotion.

The results for value conflict were mixed, as they were in the interviews. No consistent relationship emerged here or in the interviews for value conflict and whistle-blowing decisions. The hypothesized interaction between fear and value conflict was supported, although the hypothesized interaction between anger and value conflict was challenged.

The mixed results may be due to the fact that values and value conflicts shift over time in response to experience, opportunities and alternatives, such that measuring them at one point in time and testing their effect at a later point in time may be a flawed strategy. On the other hand, the Rokeach Values Survey (1973) is meant to capture core values, which should not change over time. Clearly, further work is needed to improve the operationalization and measurement of values related to whistle-blowing.

Another important limitation of this study is that it does not track individuals as they proceed down a path of varied emotional states and value conflicts toward an ultimate whistle-blowing decision. Rather, it captures individuals at one point in time. Therefore, it is unable to test the effects of different sequences of emotions and value conflicts. Further experimental work on a dynamic model of whistle-blowing decisions is needed.

Nevertheless, the consistency between the interviews, the set-theoretic analysis and this experiment with respect to emotions provides a strong argument in favor of including these “hot” cognitions in future models of the whistle-blowing decision process. Indeed, individuals’ shifting whistle-blowing intentions following exposure to momentary and rapidly changing emotional states suggest that organizations should approach potential whistle-blowing episodes with care, as the decision to make an external disclosure may turn on a focal individual’s emotional response to organizational action (or inaction), all else held constant.

## CHAPTER 7: CONCLUSIONS AND FUTURE DIRECTIONS

My dissertation utilized a multimethod approach to understand the whistle-blowing decision process and discovered challenges to key elements of the classical model, as well as some elements that were missing from the classical model.

My research found that “hot” cognitions play an important role in decisions about whistle-blowing. Interestingly, and important for managers to understand, emotions were most influential on whistle-blowing decisions only after internal attempts to halt the activities had failed. In other words, organizational action can push an individual toward a whistle-blowing decision by triggering emotions in the potential whistle-blower that interfere with his or her initial intention of helping the organization and potential victims.

Rather than discouraging whistle-blowing, retaliation and ostracism provoke anger in potential whistle-blowers and shift their cost-benefit analyses in ways that actually make whistle-blowing appear to be a more appealing or less risky option. The following quote illustrates how retaliation provokes anger and converts a potential whistle-blower’s focus from helping to punishment:

I knew my career was destroyed that very second. And, let me tell you, they were a whisker away from being clocked right then and there. That guy came real close to getting plowed. I [was] livid. Livid is not a good explanation of the anger [I felt]...Now it’s fight time. Yeah, it’s time to fight. Dukes off, and we’re gonna have a slug fest...And [my motivation is] what was done to me; in other words, retaliation. They’ve drawn first blood, and now they’re gonna get bloody. I’m gonna draw some of their blood.

Management inaction maintains individuals' focus on helping victims and benefiting their organizations. Although inaction leads to external whistle-blowing just as retaliation does, the whistle-blowing channels chosen by "stymied" individuals are often extensions of internal chains of command, such as government agencies or law enforcement, rather than the media. This finding may be small consolation to managers who find themselves under investigation, but the distinction is important because it suggests that whistle-blowers are not disloyal or disaffected. Rather, they believe deeply in the stated goals of the organization and care deeply about its relationships to key stakeholders. They simply disagree strongly with the means used to achieve organizational objectives and are energized to improve perceived organizational shortfalls.

My qualitative fieldwork found that role models and partners facilitate and direct whistle-blowing decisions following management inaction or retaliation, while "significant others," like distal loyalty targets or short-term working relationships, lower potential whistle-blowers' inhibitions against embarrassing their organizations following punishment or a rebuff. These elements have not had a place in whistle-blowing models to date, but my interview data indicate that they play an important role in the whistle-blowing decision process.

My dissertation also enriches our understanding of the role of cost-benefit analyses. In contrast to the classical theory, my data indicate that cost-benefit analyses do not always occur, and that they may be inaccurate when they do occur. This inaccuracy contributes

to the retaliation and ineffectiveness internal whistle-blowers experience, as they did not accurately anticipate management's response (or lack of response) to their advocacy.

Perhaps most important for theory development, my dissertation has identified at least two paths to whistle-blowing behavior, as well as the juncture of path divergence (management's response following an internal report). This finding suggests that the singular path proposed by the classical model is insufficient for understanding the wide variety of whistle-blowing episodes that exist and explains the theory's inability to identify consistent predictors of whistle-blowing. Future work should examine other combinations of emotions and value conflicts to expose additional paths and junctures.

A likely candidate for study is the emotion of hope. Most whistle-blowers fully hoped and expected their supervisors to respond positively to their internal disclosures. Future work should examine whether more hopeful individuals became angrier than less hopeful individuals following management inaction, for example, and what effect the combination of hope and anger has on whistle-blowing decisions.

There is one important category of whistle-blowers not covered by my study: individuals who make whistle-blowing reports for self-preservation or self-enhancement reasons, rather than out of concern for principles or potential victims. I was told repeatedly by lawyers and whistle-blower advocates that many whistle-blower claims are frivolous, attempts to thwart termination proceedings or extract richer severance packages when employees are terminated for cause. These cases seem to be motivated by a combination

of anger and greed. Further, they do not depend on management response to internal whistle-blowing reports, as individuals either do not follow up on management inaction until their job security is threatened or they go directly to external authorities in order to qualify as a whistle-blower when they feel that their job security is threatened. Thus, these cases seem to follow different decision-making paths from those explored in my dissertation, with different combinations of emotions, different value conflicts and different cost-benefit analyses, and they deserve further study.

My dissertation identified only one decision path toward inactive observation. This is likely due to the small sample of inactive observers in my dataset. Future work should explore the predictors of inactive observation with larger samples and should look more closely at the role of fear on decisions to remain silent.

My study makes two important methodological contributions through its use of in-depth interviews and set-theoretic analyses of these interviews. My dissertation is evidence that set-theoretic methods are appropriate for the study of “micro” organizational behavior and other social psychological phenomena.

In conclusion, then, I have contributed new theory, new predictors and new methodologies to the study of whistle-blowing. I hope that these contributions will inspire scholars to re-open inquiries and to use creative methodologies and alternative techniques to understand this important phenomenon.

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