TRUST THAT BINDS: 
THE INFLUENCE OF COLLECTIVE FELT TRUST ON RESPONSIBILITY NORMS 
AND ORGANIZATIONAL OUTCOMES

by 
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ABSTRACT

Significant attention has been dedicated to understanding the determinants for and the consequences of trusting another. Yet, extant literature provides little insight into whether, and how, the extent to which individuals' attitudes and behavior are impacted by how much they believe they are trusted by others. Drawing predominantly on social exchange and social identity theories, I developed and empirically tested a model of how employees respond to the extent they perceive to be trusted by management. In this model, employees' collective felt trust was expected to affect engagement in productive and counter-productive behaviors through its effect on the responsibility norms that develop among employees.

A large retail organization with 88 operationally independent plants throughout Canada took part in this study. The data was collected from two sources: survey data from employees working in these plants, and archival records of the company. Survey data was collected at two points in time, a year apart. 3683 employees completed the survey in the first wave, and 4751 employees completed the survey in the second wave.

Overall, the results support the contention that employees' collective felt trust affects both responsibility norms and organizational outcomes. As expected, collective felt trust was positively related to productive behaviors (organizational performance and prosocial behavior). Some support was obtained to the prediction that collective felt trust hinders counter-productive behavior. Lower absenteeism rates were present in plants with higher
collective felt trust, however no relationship was found between employees' collective felt trust and shrinkage rates of the plants. Some support was found to the prediction that responsibility norms mediated the collective felt trust-organizational outcomes relationship. Responsibility norms mediated the relationship between collective felt trust and performance.
TABLE OF CONTENTS

ABSTRACT.................................................................................................................... ii

TABLE OF CONTENTS ............................................................................................... iii

TABLE OF TABLES ..................................................................................................... vi

TABLE OF FIGURES .................................................................................................... vii

RESEARCH QUESTIONS ............................................................................................. 1

CHAPTER 1: LITERATURE REVIEW ........................................................................... 5

  1.1 Interpersonal Trust ............................................................................................. 5

  1.1.1 Trust Between Management and Employees ................................................. 7

  1.2 Felt Responsibility ........................................................................................... 8

CHAPTER 2: MODEL AND HYPOTHESES ............................................................... 10

  2.1 Collective Felt Trust ......................................................................................... 11

  2.2 The Impact of Collective Felt Trust on Responsibility Norms ......................... 12

  2.3 Proximal Effect: Reciprocity ........................................................................... 14

  2.4 Distal Effects: Collective Selves ....................................................................... 15

  2.5 The Impact Of Responsibility Norms on Productive And Counter Productive Behavior ................................................................. 22

CHAPTER 3: METHOD ................................................................................................. 25

  3.1 Sample and Procedure ..................................................................................... 25

  3.2 Design ............................................................................................................... 26

  3.3 Measures .......................................................................................................... 27

  3.3.1 Independent Variable .................................................................................. 27

  3.3.2 Mediating Variables ..................................................................................... 28

  3.3.3 Dependent Variables .................................................................................... 30

  3.3.4 Control Variables ........................................................................................ 32

CHAPTER 4: RESULTS ................................................................................................. 35

  4.1 Justification of Aggregation ............................................................................. 35

  4.2 Test of Hypotheses ......................................................................................... 36

  4.3 Additional Analyses ....................................................................................... 45

  4.3.1 Examining the Causal Direction of Collective Felt trust-Outcomes Link ...... 45

  4.3.2 Examining Collective Efficacy and Collective Esteem as Mediating the Collective Felt Trust-Outcomes Link ......................................................... 48
TABLE OF TABLES

TABLE 1: Descriptive Statistics .................................................................................. 37

TABLE 2: Zero Order Correlations .............................................................................. 37

TABLE 3: Results of Hierarchical Regression Examining the Impact of Collective Felt Trust on Productive and Counter Productive Behaviors ......................................................... 38

TABLE 4: Results of Hierarchical Regression Examining The Impact of Collective Felt Trust on Group Characteristics .................................................................................. 39

TABLE 5: Results of Hierarchical Regression Examining The Mediating Effects of Collective Efficacy and Collective Esteem on the Collective Felt Trust - Responsibility Norms Relationship ......................................................... 41

TABLE 6: Results of Hierarchical Regression Examining The Impact of Responsibility Norms on Organizational Outcomes .................................................................................. 42

TABLE 7: Results of Hierarchical Regression Examining The Mediating Effects of Responsibility Norms on the Collective Felt Trust - Organizational Outcomes Relationships .................................................................................. 44

TABLE 8: Results of CLPAs ...................................................................................... 47

TABLE 9: Results of Hierarchical Regression Examining The Mediating Effects of Collective Efficacy and Collective Esteem on the Collective Felt Trust - Organizational Outcomes Relationship .................................................................................. 49
TABLE OF FIGURES

FIGURE 1: The Influence of Collective Felt Trust on Organizational Outcomes........10
Trust has long been acknowledged as a fundamental hallmark of organizational effectiveness (Argyris, 1962, Likert, 1967). Trust has been found to lead to a wealth of benefits, including lowering uncertainty (Luhman, 1979), reducing agency and transaction costs (Jones, 1995), facilitating cooperation (Deutsch, 1958), and enhancing information sharing (Zand, 1972). Not surprisingly, the accumulating evidence of its advantages has fueled a large and rapidly expanding body of literature that examines the nature of trust (Hosmer, 1995, Mayer, Davis & Schoorman, 1995, McAllister, 1995), its antecedents (Mayer et al, 1995), and its development (Lewicki & Bunker, 1996).

Organizational researchers have predominately adopted the perspective of the trusting party. Accordingly, research has dedicated significant attention to understanding the determinants for trusting another (e.g., Mayer et al, 1995), and examining the positive attitudes and behaviors toward this other, which are facilitated by trusting him/her (e.g., Dirks & Ferrin, 2002). Determinants of trusting typically include the trusting party’s propensity to trust as well his/her perception of the trustworthiness of the trusted party. Once an individual trusts another, it enables him/her to engage in certain ‘risk-taking’ behaviors toward that other, such as delegating tasks (Mayer et al, 1995), or sharing sensitive information (Zand, 1972).
Trust scholars, however, have remained for the most part silent about the psychological effects that trusting has on the trusted party (Kramer, 1996). To date, there has been virtually no theoretical explanation or empirical examination of the psychological and behavioral outcomes of being trusted. We therefore lack understanding of whether and how individuals are affected by the extent of trust they are awarded. Because, as social psychologists have long emphasized, behavior is strongly influenced by the nuances of context (Mischel, 1973), it is highly plausible that individuals respond to the situation of being trusted. In other words, it is plausible that trusted parties' willingness to fulfill the expectations embedded in the trust might be considerably influenced by the extent of trust granted. Individuals' trustworthiness then can depend as much on how they are treated as on their basic character (Bhide & Stevenson, 1990). Specifically, individuals who feel highly trusted may be more motivated to affirm the trust than individuals who feel that they are less so. Thus, trusting can become a self-fulfilling prophecy -- individuals will respond to being trusted by being trustworthy.

Examining whether and how individuals respond to being trusted does not only contribute to a more balanced and comprehensive understanding of trust dynamics, but also carries practical value. Because trusting carries the risk of betrayal or opportunism, individuals often opt to protect themselves by not trusting. However, the decision of whether to trust another should, ultimately, also consider how the other will respond to the extent of trust bestowed. If we overlook the possibility that by trusting we can positively influence the other’s willingness to act responsibly, we might end up not trusting enough, thus providing little motivation for the other to act responsively. By initiating a relationship with low trust, we may thus bypass
opportunities for a more efficient and mutually beneficial relationship (Wicks, Berman, & Jones, 1999).

The purpose of this dissertation is to start filling this void in our understanding of the trusted party by developing and testing a model that delineates the influence that being trusted has on the trusted party in hierarchical relationships. Specifically, I examine the extent to which employees respond to being trusted, as a group, by management. Surprisingly, although trust researchers have long acknowledged the importance of trust between management and employees, there has been virtually no previous research designed specifically to investigate employees’ responses to felt trust. This omission is surprising given the centrality of management trust in employees in current management philosophies and practices, such as empowerment and self-management teams, respectively.

The model developed in this dissertation draws heavily on social exchange and social identity theories. It suggests that employees’ shared perceptions that they are trusted by management is likely to prime their collective identities and foster the development of responsibility norms. These responsibility norms are expected to enhance organizational outcomes by affecting employees’ engagement in productive and counter-productive behaviors.

This dissertation consists of five chapters. In the first chapter, I provide a brief literature review of interpersonal trust and felt responsibility. The second chapter delineates the model developed in this dissertation and the hypotheses derived from it. Next, the research design is explained
and methodological issues are addressed. A chapter with the results follows. Finally, a
discussion of the main findings and their theoretical contribution, limitations of this study, and
implications for practitioners conclude this dissertation.
In this section, I briefly review two literatures: interpersonal trust and felt responsibility. These reviews are meant to delineate the foundations on which I draw when collective felt trust and responsibility norms are discussed in Chapter 2. These reviews also highlight the potential contribution entailed in examining these variables and how they are related.

1.1 Interpersonal Trust

A growing interest in trust has recently generated a large and rapidly expanding body of literature that sweeps across several disciplines, including sociology, psychology, economics, and organizational studies. While there is no single unanimously accepted definition of trust, a convergence around the central features that define trust seems to materialize amongst trust scholars. A recent review of cross-disciplinary research on trust suggests that there is an agreement across literatures that trust is 'the willingness to be vulnerable based upon positive expectations of the intentions or behavior of the other party' (Rousseau et al., 1998). Vulnerability, then, is a central feature of trust, which implies that trust encompasses an element of risk.

Vulnerability differentiates trust from close constructs, such as confidence and predictability. Whereas both trust and confidence refer to expectations that may lead to disappointment, trust differs from confidence because it requires recognizing and assuming the risk that is inherent in the situation (Luhmann, 1988). Similarly, although both prediction and trust are means of
uncertainty reduction (Lewis & Weigert, 1985), trust goes beyond predictability in the willingness to be vulnerable (Mayer et al., 1995).

Trust research has typically adopted the perspective of the trusting party (the trustor). Scholars tend to agree that both the actual characteristics of the trustor and the perceived trustworthiness of the party trusted (the trustee) will determine the extent to which the trustor will be likely to trust the trustee (e.g., Mayer et al., 1995). Specifically, the trustor's propensity to trust, and his/her assessment of the trustee's trustworthiness establish his/her level of trust. Once an individual trusts another, it enables him/her to engage in certain 'risk-taking' behaviors toward that other, such as delegate tasks (Mayer et al, 1995), or share sensitive information (Zand, 1972).

Trust research to date has provided very little attention to the effect that the bestowed trust, per se, has on the trustee. Research on surveillance, however, provides some evidence that people do react to the extent of trust they are bestowed. Results of experiments suggest that individuals become unmotivated and untrustworthy when surveillance is seen as reflecting controlling intentions (Enzle & Anderson, 1993). Along similar lines, in an experiment of a simulated work situation, Harrell and Hartnagel (1976) found that subordinates stole less from supervisors who trusted them than from those who did not. Together, this research suggests that individuals respond to the extent of trust they are bestowed. To date, however, we lack both empirical evidence about this response and an understanding of the psychological mechanisms that underlie it.
1.1.1 Trust Between Management And Employees

Two separate research streams have examined trust between management and employees. One stream of research has focused on the antecedents and outcomes of employees' *unidirectional* trust in management (see Dirks & Ferrin, 2002 for a meta-analysis). This stream has found, for example, that employees are more likely to trust management when perceptions of fairness, organizational support, and participative decision making are present. Employees who highly trusted management were more satisfied, committed, engaged more frequently in citizenship behaviors and achieved higher performance (Dirks & Ferrin, 2002).

Another stream of research has examined trust in the leader-subordinate *relationship*. This stream has primarily adopted the LMX theory framework, which proposes that leaders develop qualitatively different types of relationships with various employees (Dansereau, Graen, & Haga, 1975). Within this stream, mutual trust is considered an integral component of the leader-subordinate relationship. Extensive research has found that a high-quality relationships between supervisors and subordinates lead to favorable outcomes including employee satisfaction, commitment, citizenship behaviors and performance (e.g., Liden & Graen, 1980; Scandura & Graen, 1984).

Some researchers, however, suggest that trust in hierarchical relationships need not be mutual or balanced as assumed by LMX literature. It is possible for a leader to trust a subordinate and simultaneously the subordinate to not trust the leader (Brower, Schoorman, & Hoon Tan, 2000). Brower et al (2000) therefore maintain that the construct of leader's trust of a subordinate should be conceptually and empirically separated from the subordinate's trust in the leader. To
date, however, we lack both (1) empirical evidence whether employees' perception that they are trusted by management impacts their behavior, and (2) insight into the underlying psychological mechanisms that are involved. The model developed and tested in this dissertation aims at addressing these questions.

1.2 Felt Responsibility

Individuals' felt responsibility toward the organization is defined as their cognitive and affective acceptance of responsibility for organizational outcomes (Latham, 1998). Felt responsibility includes two dimensions: a voluntary acceptance of causation of organizational outcomes and a voluntary acceptance of obligations or duties in relation to those outcomes (Cummings & Anton, 1990; Latham, 1998).

It is noteworthy that felt responsibility is a distinct concept from responsibility. Whereas felt responsibility is a subjective perception, responsibility is the objective causal influence on an event (Anton & Cummings, 1990). Thus, the key difference between them is that while one is judged on responsibility, one acts on felt responsibility (Anton & Cummings, 1990). This distinction, then, highlights felt responsibility as an important motivator underlying behavior.

Felt responsibility is also different from normative commitment. Both normative commitment and felt responsibility describe a motivation to act in a certain manner based on a notion of acting according to certain values, however normative commitment is concerned with the internalization of organizational values whereas felt responsibility is based on the notion that
one should perform (or refrain from performing) certain actions because it is the right thing to do (Latham, 1998).

The literature suggests that employee felt responsibility influences significant employee behaviors such as personal initiative (Frese, Kring, & Zempel, 1996) and principled organizational dissent (Graham, 1986). Empirical findings show that employees high in felt responsibility toward the organization are more likely to seek to help through extra role behaviors (Pearce & Gregersen, 1991), and engage in ‘taking charge’ behaviors, such as suggesting modifications to inefficient procedures in the organization (Morrison & Phelps, 1999).

Given the socially desirable behavior associated with employee felt responsibility, management scholars have noted the importance of examining ways to foster this psychological state (Pearce & Gregersen, 1991). Cummings and Anton (1990) further suggested that management can manipulate employees’ sense of responsibility. To date, however, extant research on how management can directly affect it has been limited. The only antecedents of felt responsibility that have been examined are restricted to characteristics of work design, such as job dimensions (Hackman & Oldham, 1976) and task interdependence (Kiggunda 1983; Pearce & Gregersen, 1991). As explained in the next chapter, this dissertation explores whether managers can enhance responsibility among employees by affecting salient aspects of the relational context in which employees function. More specifically, I examine whether employees are more likely to develop higher standards of responsibility when working in an environment in which they feel highly trusted by management.
CHAPTER 2
MODEL AND HYPOTHESES

In this section, I develop a conceptual model of how employees' shared perceptions that they are trusted by management affects organizational outcomes. The model delineates: (1) how employees' perceptions that they are trusted by management fosters the development of responsibility norms, and (2) how these norms, in turn, affect behavioral outcomes. The influence of perceived managerial trust on the development of responsibility norms is explained through both proximal (direct) and distal (indirect) effects. The proximal effect is explicated within the framework of social exchange theory. The distal effects are understood through the influence that perceived managerial has on two aspects of individuals' collective self-concepts: their collective self-esteem and their perceived collective efficacy. The behavioral outcomes resulting from higher responsibility norms consist of higher engagement in productive behaviors and lower involvement in counter-productive behaviors. This model is depicted in Figure 1 below.

FIGURE 1
The Influence of Collective Felt Trust on Organizational Outcomes
2.1 Collective Felt Trust

When management repeatedly takes actions in an organization that communicate to the workforce that they are trustworthy, members of that organization will tend to share a common perception that they, as a group, are trusted by their leaders. I label this shared perception "collective felt trust". Collective felt trust is conceptualized to be on a continuum from low to high levels.

Because shared perceptions represent shared meaning derived from the organizational context, they form the basis for individual and collective responses (Naumann & Bennett, 2000). Accordingly, I expect collective felt trust to affect organizational members' behavior. Although the relationship between collective felt trust levels and productive behaviors has not been examined, research at the individual level of analysis suggests that the perception of being trusted will affect engagement in productive behaviors. Brower et al (2000) develop a relational leadership model that suggests that when subordinates recognize the leader's high trust in them, they will be more satisfied, committed and engage in more citizenship behaviors. This literature thus suggests that it is highly likely that in organizations in which employees, as a group, feel highly trusted by management, employees will engage in a greater extent of productive behaviors. In line with this rationale, the following hypothesis is derived:

*Hypothesis 1a: Employees' collective felt trust will be positively related to productive behaviors.*
A few authors have also alluded to the effect that being trusted, both individually or as a group, has on discouraging counter-productive behavior. In an experiment of a simulated work situation, Harrell and Hartnagel (1976) found that subordinates stole more from supervisors who distrusted them than from those who trusted them. Miller (1992) provides another intriguing example in discussing the basis of cooperation in Hewlett-Packard. He notes that management decided to eliminate time clocks and locks on equipment room doors as an expression of trust in employees and that, as a result, employees acted less opportunistically. Without having built a climate of trust, he suggests, employees "would find it tempting to engage in short-term maximizing behavior that was inimical to long term efficiency" (p.197). Collectively, these examples suggest that in organizations in which collective felt trust levels are high, employees are likely to engage less in counter-productive behavior. Thus, the following is proposed:

_Hypothesis 1b: Employees' collective felt trust will be negatively related to counter-productive behavior_

### 2.2 The Impact of Collective Felt Trust on Responsibility Norms

The effect of collective felt trust on group behavior can be understood through its influence on the development of certain group norms. Norms are defined as socially shared standards against which the appropriateness of behavior can be evaluated (Birenbaum & Sagarin, 1976). Norms are powerful motivators of behavior because adherence to norms allows one to gain approval and avoid rejection (Cialdini, Bator, & Guadagno, 1999). The literature distinguishes between two types of norms: descriptive norms and injunctive norms. Descriptive norms are derived from
observing what others do in a given situation. By watching others, people are informed of what is the ‘normal’ thing to do in a particular context. Injunctive norms, on the other hand, go beyond simply describing accepted behavior to prescribing it (as well as proscribing inappropriate behavior) (Cialdini et al., 1999). Injunctive norms are thus the moral rules of the group – they specify what should or should not be done. For example, one reason individuals may feel obligated to help others is the presence of a norm that prescribes socially responsible behavior (Berkowitz, 1964; Cialdini et al, 1999; Staub, 1972).

I posit that collective felt trust can foster the development of injunctive responsibility norms. Drawing from literature on felt responsibility (Latham, 1998; Pearce & Gregersen, 1991), I define responsibility norms as the importance that organizational members ascribe to accepting responsibility for organizational outcomes. Accepting responsibility includes both a subjective “after the fact accountability” and a “before the fact consciousness”, or sense of obligation (Cummings &Anton, 1990). Thus, when responsibility norms are high, organizational members will not only assume responsibility for past organizational outcomes, but will also engage in ongoing activities that advance organizational goals, or refrain from activities that hinder the pursuit of these goals. Alternatively, when responsibility norms are low, group members will not only be less likely to accept responsibility for past organizational outcomes, but will also be less likely to exert effort that promotes collective outcomes, and less likely to refrain from acts that are harmful to the organization.
2.3 Proximal Effects: Reciprocity

How does collective felt trust foster the development of responsibility norms? I hypothesize that this influence can be explained through both proximal (direct) and distal (indirect) effects. One proximal effect can be explicated within the framework of social exchange theory. Social exchange theory is concerned with the general processes and principals that govern the exchange of valued psychological, social and material commodities (McClintock, Kramer, & Keil, 1984). Like economic exchange, social exchange generates an expectation of some future return for contributions; however, unlike economic exchange, the exact nature of the exchange is unspecified (McClintock et al, 1984). A basic tenet of social exchange theory is that actors within a relationship are compelled to reciprocate commodities because they are motivated to maintain a balance between inputs and outputs and to stay out of debt in social transactions (McClintock et al, 1984). Thus, as suggested by Mauss (1967) in his study of exchange of gifts, commodities received can convey not only a sense of dignity, inclusion, status and so on, but also convey an obligation on the receiver. Gouldner (1960) further suggests that the norm of reciprocity makes two interrelated, minimal demands: (1) people should help those who have benefited them (2) people should not injure those who benefited them.

The social exchange framework has been widely used in the literature to examine leader-subordinate exchange relationships because their exchanges encompass not only material but also psychological and social commodities (e.g., Marcus & House, 1973; Whitener et al, 1998). For example, it was found that subordinates reciprocate compliments by the supervisor in the form of loyalty and compliance (Marcus & House, 1973). Applying this framework to the context here, collective felt trust can be viewed as a rewarding psychological commodity
provided to employees. As such, following the social exchange principles highlighted by Gouldner (1960), it should evoke employees’ sense of obligation to reciprocate and not hurt management who benefited them. In other words, employees will feel compelled to reciprocate and not to abuse the trust they were bestowed. To the extent that employees agree on the extent to which they are trusted, they will be likely to share their sense of obligation to reciprocate by developing standards of responsible behavior. This notion is consistent with Van Dyne, Graham and Dienech’s (1994) view of covenantal relationships, whereby employees are likely to reciprocate managerial trust in them in the form of responsible and constructive behavior. Building on the above argument, the following hypothesis can be derived:

*Hypothesis 2: Employees’ collective felt trust level will be positively related to responsibility norms*

### 2.4 Distal Effects: Collective Selves

The influence of collective felt trust on the development of responsibility norms can also be explained through distal (indirect) effects. Specifically, collective felt trust can affect the behavioral norms that employees develop by affecting their self-concepts. The self-concept refers to the “totality of self descriptions and self-evaluations subjectively available to an individual” (Hogg and Abrams, 1988:24). Tajfel (1982) argued that an individual’s self-concept is composed of two identities: a personal identity and a social identity (or identities). A personal identity is that part of the self that is derived from idiosyncratic attributes, such as personality and abilities. A social identity, on the other hand, involves defining oneself in terms of the groups to which one belongs. Thus, although part of individuals’ self-concepts is
uniquely their own (their personal identity), a part of their self-concepts (their social identity) is shared. I argue that employees' shared perception that they, as a group, are trusted will impact their social identity, or collective self concept. Specifically, I expect collective felt trust to affect their collective esteem and collective efficacy, which in turn, will influence the development of responsibility norms.

One fundamental aspect of employees' collective self-concepts is their collective self-esteem, defined as the positive value, or esteem, that individuals derive from their attachment to a specific group membership (Bartel, 2001; Long, Spears, & Manstead, 1994). Consistent with the view of the self as consisting of personal and social/collective dimensions, researchers differentiate between an individual's self-esteem and his/her collective self-esteem. Whereas self-esteem is based on a sense of competence, power or ability to cope with one's environment (Shamir, House, & Arthur, 1993), collective self-esteem refers to the positive value that an individual attaches to having a specific group membership (Bartel, 2001; Long, Spears, & Manstead, 1994).

It is noteworthy that this contemporary use of collective self-esteem in organizational studies (e.g. Bartel, 2001) differs from its initial conceptualization in social psychology. Luhtanen and Crocker (1991) introduced the collective self-esteem construct as a personal disposition, namely as a general, cross-group tendency to evaluate one's social identity positively. Organizational researchers, however, use this term to describe a psychological state towards a specific group or organization. Accordingly, collective self-esteem is not viewed as a personal disposition; rather,
it results from a dynamic process of appraisal that continually updates previous perceptions in accordance with new experiences (Rubin and Hewstone, 1998).¹

Social identity theory suggests that a central means by which individuals’ collective self-esteem is shaped is by the extent to which others evaluate the groups to which they belong (Tajfel (1982). Research on the group value model (Lind & Tyler, 1988; Tyler & Lind, 1992) is consistent with this view, suggesting that individuals’ experiences with group authorities provide a source of information about their self-worth. For example, being respected by one's superior has been found to strongly affect individuals’ sense of social identity (Tyler, 1999). As well, research suggests that a positive communication climate, in which employees perceive that they are respected and appreciated by management, enhances the extent to which individuals positively evaluate their organizational membership (Smidts, Pruyn, & van Riel, 2001). Along similar lines, I suggest that collective felt trust is likely to enhance employees’

¹ It is also worthwhile mentioning that collective self-esteem differs from organizational based self-esteem (OBSE). Pierce et al (1989) define OBSE as ‘the degree to which organizational members believe that they can satisfy their needs by participating in roles within the context of the organization’ (p.625). OBSE reflects the self-perceived value that individuals have of themselves as organization members; thus employees with high OBSE perceive themselves as important and effectual within their employing organizations. Thus, although both collective self-esteem and OBSE are anchored in an organizational frame of reference, OBSE focuses on an organizational member’s sense of personal adequacy within an organization, whereas collective self esteem addresses the positive value that an individual attaches to his/her specific group membership. Therefore, whereas it is possible that OBSE and collective self-esteem could be related (e.g. higher OBSE could enhance collective self-esteem) they are not the same construct.
positive appraisal of their group membership because it reflects management’s high regard for
the group. Thus, belonging to a group that is perceived to be highly trusted by its leaders will
enhance employees’ collective-self esteem. The higher the collective felt trust, the more
positively employees will feel about their organizational membership. Moreover, I posit that
exposure to the same trust environment will lead individuals in the same organization to share
their levels of collective self-esteem, resulting in an emergent, group-based collective esteem.

Hypothesis 3: Collective felt trust level will be positively related to collective esteem.

Research suggests that collective self-esteem lies at the heart of organizational identification
(Bartel, 2001). Organizational identification refers to the perception of ‘oneness’ with an
organization (Ashforth & Mael, 1989), or the degree to which a member defines himself or
herself by the same attributes that he or she believe that define the organization (Dutton,
Dukerich, & Harquail, 1994). Because the desire for self-enhancement is often a potent
motivator of identification, members who derive a high degree of esteem from their
organizational membership tend to exhibit high levels of identification (Ashford & Mael, 1989;
Dutton et al, 1994).

A review of the organizational identification literature reveals that some scholars suggest an
even closer link between collective self-esteem and organizational identification. Specifically,
‘affective identification’ has been defined as the degree to which an individual values having a
specific organizational identity (Harquail, 1998). This common definition of collective self-
esteem and affective identification suggests, then, that organizational identification and collective self-esteem are not only closely related but are, in fact, intertwined. Scholars introduced the term 'affective identification' in an attempt to theoretically distinguish between the cognitive and affective elements embedded in the identification process. The need for this differentiation surfaced with the recognition that previous work on organizational identification has predominately focused on the cognitive mechanisms of identification, failing to acknowledge that "when individuals think of themselves as organizational members they also feel like organizational members" (Harquail, 1998, p.224 italics in original). Affective identification thus acknowledges and captures the emotions implicated in the identification process. Such positive emotions typically include pride in affiliation, a sense of ownership, and enthusiasm about membership (Harquail, 1998; Kelman, 1958; O'Reilly & Chatman, 1986).

High collective self-esteem and strong identification affect group members' orientation toward collective pursuits. According to Brewer and Gardner (1996), at the collective level of identity, the basic social motivation of individuals is the collective welfare. Experimental research on individuals' choices in situations of social dilemmas has demonstrated the powerful effect of group identification on participants' willingness to restrict individual gain to preserve a collective good (e.g., Brewer & Kramer, 1986). In a similar vein, several studies conducted by Tyler and colleagues (Tyler, 1999) demonstrate that identification leads to the development of internal values, or obligations, toward the organization. These internal obligations are likely to be shared among employees because organizational identification brings about homogeneity in attitudes and behavior by aligning individual interests and behaviors with interest and behaviors that benefit the organization (Ashforth & Mael, 1989; Dutton et al, 1994). I therefore expect collective self-esteem to lead to the development of responsibility norms.
Hypothesis 4: Collective esteem will partially mediate the relationship between collective felt trust and responsibility norms.

High collective felt trust that reflects management confidence in the group’s ability can affect not only individuals’ collective self-esteem, but also their perceived collective efficacy. Collective efficacy refers to the group’s (or organization’s) collective belief of their group’s competency (Bandura, 1986). Collective efficacy thus differs from self-efficacy in that the referent of the efficacy perceptions is the group and not the individual.

Research suggests that leaders can affect collective efficacy in various ways. For example, external team leaders who allow teams to set their own performance and output goals, thus creating more autonomy experiences, increase collective efficacy (Manz & Sims, 1987). Transformational leaders, those who energize, inspire, and communicate high performance expectations also directly influence their followers’ collective efficacy (Guzzo, Yost, & Campbell, 1993). These findings are consistent with those found in research on interpersonal expectancy effects, also known as self-fulfilling prophecies. Specifically, studies by Eden and colleagues (see Eden, 1993 for a review) demonstrate that leaders’ high expectations from followers affect the latter self and collective efficacy. This well-established research, then, lends strong support to the contention that high collective felt trust is likely to affect collective efficacy. Stated as an hypothesis:

H5: Collective felt trust will be positively related to collective efficacy.
Collective efficacy, in turn, influences various collective attitudes and behaviors (Bandura, 1986). For example, groups with high efficacy have been found to set higher goals and be more committed to them than groups with low efficacy (Mulvey & Klein, 1998; Prussia & Kinicki, 1996). I suggest that collective efficacy will affect the extent to which members will develop and internalize responsibility norms. Research on felt responsibility in the context of helping behavior suggests that a prevailing generalized efficacy influences experiences of felt responsibility to help (Schwartz, 1976). Specifically, Schwartz’s (1975) norm activation model, which explains how humanitarian norms to help are primed, suggests that eliciting a sense of responsibility to help requires the belief that one is able to perform the relevant action. This contention was supported in several experiments designed to test this link between perceived ability and felt responsibility (Berkowitz & Connor, 1966; Kazdin & Bryan, 1971). Contemporary conceptualizations of felt responsibility (Cummings & Anton, 1990) concur that individuals’ sense of responsibility toward an event is affected by the extent to which they believe they have the required ability to affect the event. Based on this literature, I posit that it is likely that employees will be more willing to accept responsibility for organizational outcomes to the extent that their collective efficacy is high. Without a sense of capacity to achieve group goals, group members are less likely to be committed to these goals (Mulvey & Klein 1998; Prussia & Kinicki, 1996) or feel accountable for group outcomes. Thus, high responsibility norms will be likely to be developed in groups (organizations) with high collective efficacy. To conclude, the influence of collective felt trust level on responsibility norms will operate through its effect on collective efficacy. Stated as an hypothesis:

_Hypothesis 6: Collective-efficacy will partially mediate the relationship between collective felt trust level and responsibility norms._
2.5 The Impact of Responsibility Norms on Productive and Counter-Productive Behaviors

The internalization of responsibility norms provides an impetus for individuals' actions. When individuals perceive themselves responsible for organizational outcomes, they will attempt to act in ways that are congruent with their beliefs. Thus, in organizations with high responsibility norms, employees will be likely to engage in ongoing activities that advance organizational goals. I label such behaviors 'productive behaviors' and operationalized them as performance and 'prosocial' behaviors. Prosocial behaviors are those directed at an individual or group with whom an organizational member interacts while carrying out his or her organizational role, and which is performed with the intention of promoting the welfare of the individual or group toward which it is directed (Brief & Motowidlo, 1986). Examples of behaviors that are prosocial in nature include helpful behaviors directed at co-workers, supervisors, customers and the organization at large, such as suggesting improvements and representing the organization favorably to outsiders.

My prediction that the development and internalization of responsibility norms will lead to productive behavior is consistent with previous research on felt responsibility at the individual-level of analysis. Empirical findings suggest that employees high in felt responsibility toward the organization are more likely to seek to help through extra-role behaviors (Pearce & Gregersen, 1991), and engage in 'taking charge' behaviors, such as suggesting modifications to inefficient procedures (Morrison & Phelps, 1999). I therefore formulate the following two hypotheses:
Hypothesis 7a: There will be a positive relationship between responsibility norms and productive behavior.

Hypothesis 7b: Responsibility norms will mediate the relationship between collective felt trust level and productive behavior.

Responsibility norms can also affect the extent to which employees will engage in counter productive behavior. Scholars who have proposed typologies of deviance in the workplace (e.g., Hollinger & Clark, 1982, Robinson & Bennett, 1995) agree that organizationally directed deviance can be broken down into two categories: property deviance and production deviance. Property deviance refers to intentionally acquiring or damaging property or assets of the organization without authorization (Hollinger & Clark, 1982). Production deviance refers to behaviors that violate the formally prescribed norms delineating the minimal quality and quantity of work to be accomplished (Hollinger & Clark, 1982).

Group norms provide one of the most promising explanations for employee engagement in counter-productive, or deviant behavior (Murphy, 1993). Group norms were found to regulate behaviors such as theft (Horning, 1970), absenteeism (Johns and Nicholson, 1982) and anti-social behavior (Robinson & O’Leary-Kelly, 1998). To illustrate, it was found that if the norm among employees is to be absent one day a month, employees who are rarely or never absent might be pressured by the group to stay at home from time to time (Chadwick-Jones, et al, 1982). Group norms can, however, not only encourage deviant acts (e.g., Robinson & O’Leary-Kelly, 1998), but also proscribe them (e.g., Hollinger & Clark 1982). For example, Hollinger and Clark (1982) found that informal sanctions from fellow co-workers significantly deterred
employee theft. As explained by Murphy (1993), it is hard to escape the scrutiny of co-workers, especially when one’s behavior is counter to prevailing norms.

Based on the extensive literature that attests to the effect of norms on deviant behavior, I suggest that the presence of high responsibility norms can be a potent deterrent to counter-productive behavior. Organizations composed of employees with high responsibility norms will place high importance on acting responsibly, which includes refraining from acts that hinder the pursuit of organizational goals. Based on the above discussion, I derive the following hypotheses:

*Hypothesis 8a: There will be a negative relationship between responsibility norms and counter productive behavior.*

*Hypothesis 8b: Responsibility norms will mediate the relationship between collective felt trust and counter-productive behavior.*
CHAPTER 3

METHOD

3.1 Sample and Procedure

A large retail organization with 88 operationally independent plants throughout Canada took part in this study. The data was collected from two sources: survey data from employees working in these plants, and archival records of the company. The survey data was collected at two points in time, a year apart, as part of a larger opinion survey that is conducted by the organization, yearly, in all its plants. In the first wave (T1), 3683 employees completed the survey, an overall response rate of 69 percent. In the second wave (T2), 4751 employees completed the survey, an overall response rate of 67 percent. The surveys were administered during work hours; they were anonymous and respondents were assured of confidentiality. The archival records were obtained for each location for the quarter that followed the survey administration at T2.

Fifty eight percent of the plants were situated in urban regions, the rest in rural areas. Plant size ranged between 36 and 160 employees, with an average of 81 employees (T2). The percent of part time employees ranged dramatically from 12 to 63, with an average of 39 percent (T2). The average percentage of workforce that received commissions ranged from 40 to 71, with an overall average of 56 percent (T2). Employees’ average age per plant ranged between 22.9 and 31.5, with an overall average age of 26.4 (T2). Average tenure per plant ranged between 1.3 and 2.6 years, with an overall average tenure of 2 years (T2). Approximately 28 percent of the employees were females (T1).
3.2 Design

This study employs a within-organization, longitudinal design. The independent variables are measured at T1, the mediating variables are measured a year later at T2, and the dependent variables are reported for the quarter following the administration of the survey at T2. This longitudinal design provides some confidence about the direction of causality between the variables of interest.

The within-organizational design that is employed in this study provides some assurance that the plants are sufficiently identical to rule out alternative explanations for any observed variance in the dependent variables. All constructs are conceptualized at the plant level of analysis. The independent and mediating variables are all collective constructs, thereby individual-level perceptions are aggregated to represent the plant-level constructs. Aggregating individual-level perceptions has been recommended as the appropriate manner by which to measure collective phenomena that emerge through composition; that is, phenomena that are essentially the same as they emerge upward across levels (Kozlowski & Klein, 2000). Dependent variables are global variables -- archival records for each plant.

Common method bias is a common concern in survey research. Observed relationships between variables may be artificially inflated when the same instrument is used to measure them, especially when the measures are collected from the same participants at the same point in time (Campbell & Fiske, 1959). In this study, relationships between the independent (collective felt trust) and the dependent variables (productive and counter-productive behaviors), as well as relationships between the mediating variables (responsibility norms, collective efficacy and
collective esteem) and the dependent variables, were not subject to common method bias because the data was collected from different sources at different points in time.

Relationships among the mediating variables, however, could be artificially inflated because these variables were collected and aggregated from the same respondents at the same point in time. To reduce potential common method bias, I used a split sample design. I randomly divided the employees in each plant into two equal size groups, such that one group provided their perceptions of one mediating variable and the other group provided their perceptions of the other. In this manner, correlations computed between any two mediating variables were less subject to bias.

### 3.3 Measures

The independent, mediating, and part of the control variables were collected through employee surveys. The dependent variables and other control variables are archival data provided by the organization.

#### 3.3.1 Independent Variable

*Collective felt trust.* No published measure of felt trust was found in the literature. A three-item scale was developed for this study. Prima facie, because trust is defined as the willingness to accept vulnerability, it could follow that felt trust would be operationalized as one’s perception that the other party is willing to be vulnerable to one’s actions. However, in line with existing research that attests to the differing perspectives of trustors and trusted parties, I did not pursue this alternative. This literature found that in social interactions in which trust takes place, only
the trusting parties (but not the trusted parties) are aware of the vulnerability or risk that is involved (Maholtra, 2003). This suggests, then, that measuring felt trust by asking trusted parties to report the extent that the other party is willing to be vulnerable towards them may lack face validity. I therefore asked employees to directly indicate the extent to which they felt trusted by management. The direct use of the word ‘trust’ in items that measure trust is not uncommon in trust research (e.g., Brockner et al, 1997; Robinson 1996; Sapienza & Korsgaard, 1996). Employees were asked to indicate to what extent they agreed or disagreed with the following three items (using a 5 point Likert scale, 1=strongly agree, 5=strongly disagree): (1) “Management believes that associates at this location can be trusted”; (2) “Management at this location believes that associates are trustworthy; (3) “Management places trust in associates at this location.” Importantly, the referent of trust in these items is the group of employees in the location rather than the individual respondent because my intention was to tap shared perceptions of trust in the group. I then calculated the average, for each location, of all employees’ scores on these items and each plant was assigned that value as an indicator of the plant’s degree of collective felt trust. This measure was collected at both Time 1 and Time 2. The coefficient alpha for this scale was .97 at both points in time.

3.3.2 Mediating Variables

Responsibility norms. Items were adapted and adjusted from Hackman and Oldham’s (1975) experienced responsibility scale and two items were added to capture more directly the obligation dimension of responsibility. To provide a store-level measure of responsibility norms, employees’ scores were averaged within locations. Employees were asked to indicate

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2 All the hypotheses were tested with collective felt trust at T1, and responsibility norms, collective efficacy and collective esteem at T2. Collective felt trust and responsibility norms were obtained at two
the extent to which they agreed or disagreed (using a 5 point Likert scale, 1=strongly agree, 5=strongly disagree), with the following five statements: (1) We associates feel accountable for the performance of this store; (2) Associates feel a sense of responsibility to the success of this store; (3) Associates in this location care whether the work gets done right; (4) Associates feel a sense of responsibility for the work done in this location; (5) Associates in this store feel an obligation to act responsibly. The coefficient alpha for this scale was .91 at T1 and .95 at T2.

Collective Efficacy. Three items from Guzzo et al’s (1993) scale of group potency were adapted and adjusted to be meaningful in this organization. Employees were asked to indicate the extent to which they agree or disagree with the following items (using a 5 point Likert scale, 1=strongly agree, 5=strongly disagree): (1) “Associates in this store have confidence in themselves” (2) “Associates at this location can be very productive if they work hard” (3) “Associates at this store believe in their ability to achieve established targets”. Collective efficacy was measured by averaging, within locations, all members’ perceptions of collective efficacy. The coefficient alpha for this scale was .91 (at T2).

Collective esteem. To measure the extent to which employees’ positively evaluate their organizational membership, I used Chatman and O’Reilly’s (1986) scale of identification-based attachment to the organization. Employees were asked to indicate the extent to which they agree or disagree with each of the following three items (using a 5 point Likert scale, 1=strongly agree, 5=strongly disagree). (1) “I am proud to work for (company name)” (2) “I feel a sense of ownership in (organization name) and am not just an employee”. (3) “I would recommend (company name) to others as a good place to work”. Similar items were used in points in time in order to conduct the CLPAs that are described in the results chapter.
other scales of collective self-esteem and identification scales that incorporate affective aspects of identification (Shamir, Zakay & Breinin, 1998; Smidts et al., 2001). Kozlowski and Klein (2000) suggest that, if possible, researchers should employ measures using collective-level referents when measuring emergent constructs. Yet, they recognize that item content is critically important to the unit of reference, thus do not encourage a collective referent as a litmus test. Because an individual’s collective self-esteem is part of an individual’s self-concept, the appropriate referent cannot be collective in these items. However, because individuals’ share their collective self-esteem (i.e., individuals are proud of their membership in the same group), collective esteem can be measured by averaging, within locations, all members’ collective self-esteem. The coefficient alpha for this scale was .86 (at T2).

3.3.3 Dependent Variables

All dependent variables were provided by the organization. To test the hypotheses, I obtained archival data for the quarter that followed the survey administration at T2.

*Productive behaviors.* I used two measures of productive behavior: performance and prosocial behavior. *Performance* was measured as sales. However, because locations differ along several dimensions that affect their sales (e.g., size, mix of products, clientele), sales of a location may poorly represent its actual performance. Therefore, after consulting with the organization, I decided to use their adjusted sales measure, which is the figure that top management uses to compare the locations’ performance. This measure comprises the percent of actual sales in a given location divided by the target sales of the location. Because the target sales takes into account the particular features of each location, this adjusted sales measure better reflects the actual operating performance of a location.
Prosocial Behavior was operationalized as customer service, a measure of prosocial behavior previously used in research on salespeople (George, 1990). Customer service was collected by the organization from customers in each plant on a quarterly basis. Bonuses to managers are based on customer service ratings, however employees’ commissions are based solely on sales. The number of customers typically includes around 170-220 customers per location. Ten questions are included in the customer survey: whether the customer was greeted, the manner the customer was greeted, whether the customer was provided assistance, whether the customer’s needs were determined, whether the salesperson demonstrated knowledge about the product, neat appearance of the salesperson, friendly check out, efficiency in checkout, overall experience and overall customer service. Each question has a range of possible scores, and the weight of each question in the total customer service rating is not equal. The maximum possible score is 166 and minimum possible score is –60. Because customer service data was available to me only as a composite score (its breakdown was not available), I was not able to assess the reliability of this scale.

Counter-productive behavior. I used two measures of counter-productive behaviors: absenteeism and theft. To assess absenteeism, I used the percentage of sick leave hours as an indicator. Abuse of sick hours has been commonly conceptualized as a type of production deviance in deviance research (e.g. Murphy, 1993). The percentage of sick leave hours per location was calculated by the organization as total employee sick hours divided by total employee working hours. This measure included both certified and uncertified sick leave, but
did not include sick leave associated with an injury or illness that entitled employees to workers compensation.

To assess *theft*, a common measure of property deviance, I used the standard measure of shrinkage calculated and used by the organization to determine theft levels in the different plants. This measure is similar to that previously used by Greenberg (1990). Because shrinkage records for the quarter that followed the survey administration included only a small number of the plants, I instead used the shrinkage records of the preceding quarter (the quarter ending at the time of the survey administration at T2) because it was available for all plants.

### 3.3.4 Control Variables

The within-organizational design that is employed in this study provides some assurance that the plants are sufficiently identical to rule out alternative explanations for any observed variance in the dependent variables. Because all locations have the same selection practices, incentive structure, benefits, training, and control and surveillance mechanisms in place, this helps me to rule out the possibility that these common predictors account for differences in productive and counter productive behavior across plants.

In addition, I controlled for factors that are not controlled for within the within-organization design. The inclusion of these factors enables me to demonstrate with greater confidence the unique impact of collective felt trust on organizational outcomes.

*Plant size.* Plant size was measured as the number of employees working in each plant. This data was obtained from the organization at both Time 1 and Time 2. Research demonstrates that
size is associated with group characteristics, such as the group affective tone (e.g. Mason & Griffin, 2003), and organizational outcomes, such as theft rates (Dietz et al, 2003). This variable may therefore affect group norms and behavior.

_Urban/Rural_. Each plant was coded by the organization as urban or rural (1=urban, 0=rural). Research suggests that rural background has direct effects on of citizenship behavior (Smith, Organ, & Near, 1983). This variable may therefore be related to the responsibility norms developed in the different plants.

_Part time employees_. Respondents indicated whether they are fully or partly employed (1= part, 0=full). Research demonstrates that the part-time employees have more favorable attitudes toward the organization than full time employees (Eberhardt & Shani, 1984). Different percentages of part time employees across plants can therefore account for variance in group characteristics and behavior.

_Tenure_. Respondents were requested to indicate whether they have been working in the organization for (1) less than three month, (2) three months to a year, (3) 1-2 years and (4) more than two years. I then aggregated the responses and created two categories: less than a year, and more than a year (1=less, 0=more). Different percentages of new employees (less than a year) across plants may account for variance in group dynamics and organizational outcomes.
Commission. Respondents indicated whether they are paid with commissions (1=yes, 0=no). Because commissions impact motivation, they can be associated with behaviors such as sales and absenteeism. Different percentages of employees with commissions across plants can therefore account for variance in organizational outcomes.
CHAPTER 4
RESULTS

4.1 Justification of Aggregation

When individual data are aggregated to the unit-level, it is important to establish the extent to which unit members agree on their descriptions of the unit prior to aggregation (Rousseau, 1985). Thus, before aggregating all individual ratings to location-level measures, I evaluated whether the aggregation is justified using two recommended procedures: between-group analysis of variance (ANOVA) and James, Demaree, & Wolf (1993) inter-rater agreement index (rwc).

The results of the ANOVAs indicated that there were significant between-plant differences for all the aggregated measures: collective felt trust ($F_{87,3595} = 6.25; p<0.01$ at T1, and $F_{87,4663} = 6.58; p<0.01$ at T2), responsibility norms ($F_{87,3595} = 5.42; p<0.01$ at T1, and $F_{87,4663} = 5.74; p<0.01$ at T2); collective efficacy ($F_{87,4663} = 4.62; p<0.01$ at T2), and collective esteem ($F_{87,4663} = 5.96; p<0.01$ at T2).

The results of the rwc analyses indicate that in most stores employees exhibited a high level of agreement on all independent and mediating variables. Median values above .70 are desirable (Janz, Colquitt, & Noe, 1997). Values for the measure of perceived collective felt trust ranged from 0.56 to 0.93, with a median of 0.80 at T1, and from 0.33 to 0.95, with a median of 0.79 at T2. Values for the measure of responsibility norms ranged from 0.65 to 0.94, with a median of
0.86 at T1, and from 0.76 to 0.95, with a median of 0.89 at T2. For the measure of collective efficacy, values ranged from 0.77 to 0.94, with a median of 0.88 (at T2). Finally, values for the measure of collective esteem ranged from 0.58 to 0.92, with a median of 0.78 (at T2).

4.2 Test of Hypotheses

Table 1 reports the minimum and maximum values, means, and standard deviations of all variables. Table 2 reports the zero-order correlations of all variables. I performed several sets of hierarchical regression analyses to test the hypotheses. Hypothesis 1a and 1b predicted that collective felt trust would be positively related to productive behaviors and counter-productive, respectively. Table 3 presents the regressions results. In the first step, only the control variables were entered into the equation: location size, urban/rural dummy variable, percent of part time employees, percent of employees receiving commission, and percent of employees with tenure of less than a year. In the second step, trust was added to the equation. Collective felt trust significantly predicted both sales and customer service ($\beta=.194, p<.1; \beta=.341, p<.01$ respectively). Thus, hypothesis 1a was supported by the data. Collective felt trust also predicted absenteeism ($\beta=-.210, p<.1$), but not shrinkage rates. Thus, some support was provided to hypothesis 1b.
### TABLE 1
Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>s.d.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Size (T2)</td>
<td>36</td>
<td>160</td>
<td>80.55</td>
<td>24.87</td>
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<td>2. Urban</td>
<td>0</td>
<td>1</td>
<td>.58</td>
<td>.50</td>
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<td>3. Part Time (T2)</td>
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<td>.63</td>
<td>.39</td>
<td>.10</td>
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<td>4. Tenure (T2)</td>
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<td>.72</td>
<td>.44</td>
<td>.10</td>
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<td>5. Commission (T2)</td>
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<td>.56</td>
<td>.06</td>
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<tr>
<td>6. Trust (T1)</td>
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<td>10.29</td>
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</tr>
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<td>7. Responsibility Norms (T2)</td>
<td>8.55</td>
<td>14.89</td>
<td>11.36</td>
<td>1.17</td>
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<td>8. Collective Efficacy (T2)</td>
<td>5.02</td>
<td>7.70</td>
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<td>.52</td>
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<td>9. Collective Esteem (T2)</td>
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<td>9.11</td>
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<td>.06</td>
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<td>117.2</td>
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<td>12. Sick Leave (pct)</td>
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<td>13. Shrinkage (pct)</td>
<td>-0.10</td>
<td>1.36</td>
<td>0.52</td>
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### TABLE 2
Zero Order Correlations

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<th>5</th>
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<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2. Rural</td>
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<td></td>
<td></td>
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<td></td>
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</tr>
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<td>3. Part Time</td>
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<td>-.00</td>
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<td></td>
<td></td>
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<td>.24*</td>
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<td></td>
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<td>5. Commission</td>
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<td>-.37*</td>
<td>-.14</td>
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<td></td>
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</tr>
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<td>6. Trust</td>
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<td>-.16</td>
<td>-.05</td>
<td>.11</td>
<td>.11</td>
<td></td>
<td></td>
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<td>7. Responsibility</td>
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<td>-.15</td>
<td>-.02</td>
<td>-.03</td>
<td>.01</td>
<td>.49*</td>
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<td>-.04</td>
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<td>.39*</td>
<td>.60*</td>
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<td>-.09</td>
<td>-.10</td>
<td>.15</td>
<td>.39*</td>
<td>.58*</td>
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<td>10. Sales</td>
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<td>-.14</td>
<td>-.13</td>
<td>.12</td>
<td>-.24*</td>
<td>.19†</td>
<td>.26*</td>
<td>.15</td>
<td>.02</td>
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<td>11. Customer Service</td>
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<td>-.24*</td>
<td>-.12</td>
<td>.04</td>
<td>.02</td>
<td>.41*</td>
<td>.30*</td>
<td>.36*</td>
<td>.40*</td>
<td>-.04</td>
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<td>12. Sick Leave (pct)</td>
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<td>-.08</td>
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<td>.12</td>
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<td>-.14</td>
<td>-.01</td>
<td>-.00</td>
<td>.00</td>
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<td>13. Shrinkage (pct)</td>
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<td>-.09</td>
<td>.10</td>
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<td>-.23*</td>
<td>-.12</td>
<td>-.02</td>
<td>.14</td>
<td>.05</td>
<td>-.12</td>
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N= 88; *p<0.05; †p<.10
TABLE 3
Results Of Hierarchical Regression Examining
The Impact of Collective Felt Trust on Productive and Counter Productive Behaviors

<table>
<thead>
<tr>
<th>Variables</th>
<th>Sales Step 1</th>
<th>Sales Step 2</th>
<th>Customer Service Step 1</th>
<th>Customer Service Step 2</th>
<th>Sick Leave Step 1</th>
<th>Sick Leave Step 2</th>
<th>Shrinkage Step 1</th>
<th>Shrinkage Step 2</th>
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</thead>
<tbody>
<tr>
<td>Size</td>
<td>-.053</td>
<td>.002</td>
<td>-.305**</td>
<td>-.209\dagger</td>
<td>.173</td>
<td>.114</td>
<td>.069</td>
<td>.077</td>
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<td>-.011</td>
<td>-.096</td>
<td>-.086</td>
<td>-.181</td>
<td>-.188</td>
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<td>Part Time</td>
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<td>-.267*</td>
<td>-.033</td>
<td>-.031</td>
<td>-.284</td>
<td>-.285</td>
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<td>-.090</td>
<td>-.077</td>
<td>-.056</td>
<td>.126</td>
<td>.123</td>
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<td>Commission</td>
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<td>-.299*</td>
<td>.140</td>
<td>.071</td>
<td>-.027</td>
<td>-.015</td>
<td>-.075</td>
<td>-.081</td>
</tr>
<tr>
<td>Felt trust</td>
<td>.194\dagger</td>
<td>.341**</td>
<td>.210\dagger</td>
<td>.029</td>
<td>.026</td>
<td>.027</td>
<td>.026</td>
<td>.027</td>
</tr>
<tr>
<td>R²</td>
<td>.115</td>
<td>.148</td>
<td>.127</td>
<td>.229</td>
<td>.128</td>
<td>.167</td>
<td>.026</td>
<td>.027</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>.061</td>
<td>.085</td>
<td>.074</td>
<td>.172</td>
<td>.075</td>
<td>.105</td>
<td>-.034</td>
<td>-.046</td>
</tr>
<tr>
<td>Change in R²</td>
<td>.033</td>
<td>.102</td>
<td>.038</td>
<td>.000</td>
<td>.432</td>
<td>.366</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>2.136\dagger</td>
<td>2.350*</td>
<td>2.386*</td>
<td>4.006**</td>
<td>2.411*</td>
<td>2.700*</td>
<td>.432</td>
<td>.366</td>
</tr>
</tbody>
</table>

\dagger p< .10
\* p< .05
\** p< .01
\*** p< .001

Hypothesis 2, 3 and 5 predicted that collective felt trust at T1 would be positively related to responsibility norms, collective efficacy and collective esteem, respectively, at T2. Table 4 presents the results of the hierarchical regressions, which were conducted in the same manner as the prior hierarchical regressions. Trust at T1 significantly predicted responsibility norms at T2 (β=.505, p<.01). Thus, as predicted, employees' collective perception that they are trusted by management explained considerable variance in the responsibility norms they shared.
Hypotheses 3 predicted that trust at T1 would be positively related with collective efficacy at T2. The result of the hierarchical regression supports this hypothesis. Trust at T1 significantly predicted collective efficacy at T2 (β=.385, p<.01).

Trust at T1 also predicted collective esteem at T2 (β=.36, p<.01) as predicted in Hypothesis 5. Trust explained considerable unique variance in responsibility norms beyond that which was accounted by the control variables.

Hypotheses 4 and 6 each predicted that the relationship between trust at T1 and responsibility norms at T2 would be mediated by collective efficacy and collective esteem, respectively. To
test these hypotheses, I followed Baron and Kenny's (1986) recommendation for examining mediating effects in regressions. They argued that four conditions have to be met to demonstrate mediation. Firstly, the independent variable must be significantly related to the dependent variable. The results of the analyses above indicated that, indeed, the independent variable (collective felt trust) was significantly related to the dependent variable (responsibility norms).

Secondly, the independent variable must be significantly related to the proposed mediator. As the preceding analyses demonstrated, collective felt trust is significantly related to collective efficacy and collective esteem. Thus, each of the proposed mediators fulfills the second condition.

Thirdly, the proposed mediator must be significantly related to the dependent variable when controlling for the independent variable. To test this requirement for mediation, I conducted two hierarchical regressions; the results are presented in Table 5. In the first regression, I included the control variables and trust at T1 in the first step, and then added collective efficacy in the second step. Similarly, in the second regression, I included the control variables and trust at T1 in the first step, and then added collective esteem in the second step. Both coefficients were significant (for collective esteem $\beta = .506, p < .01$; for collective efficacy $\beta = .516, p < .01$) suggesting that this third condition is met.

Meeting the three conditions above suffices to establish partial mediation. To demonstrate complete mediation, a fourth condition needs to be satisfied -- that the effect of the independent
variable on the dependent variable is not significant when the mediator is added to the equation. The results in Table 5 indicate that, in each case, adding collective esteem and collective efficacy lowered the initially significant effect that trust had on responsibility norms, but the effect did not lose statistical significance. Together, these results indicate that collective efficacy and collective esteem each partially mediates the effect of trust on responsibility norms, as predicted in Hypothesis 4 and 6, respectively. In addition to following Baron and Kenny’s (1986) above criteria, I followed their recommendation to test the significance in the change in the beta coefficients. The results of these significance tests provided further support to the mediation effect — the decrease in the strength of the relationship between trust and responsibility norms (from .419 to .25 for collective efficacy, and to .19 in collective esteem) was significant.

**TABLE 5**

Results of Hierarchical Regression Examining The Mediating Effects of Collective Efficacy and Collective Esteem on the Collective Felt Trust -Responsibility Norms Relationship

<table>
<thead>
<tr>
<th>Variables</th>
<th>Step 1</th>
<th>Step 2a</th>
<th>Step 2b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>-.032</td>
<td>-.030</td>
<td>-.017</td>
</tr>
<tr>
<td>Rural</td>
<td>.092</td>
<td>.015</td>
<td>-.011</td>
</tr>
<tr>
<td>Part Time</td>
<td>.006</td>
<td>.061</td>
<td>.065</td>
</tr>
<tr>
<td>Tenure</td>
<td>.051</td>
<td>-.004</td>
<td>-.048</td>
</tr>
<tr>
<td>Commission</td>
<td>-.017</td>
<td>.005</td>
<td>-.030</td>
</tr>
<tr>
<td>Trust TI</td>
<td>.419***</td>
<td>.250*</td>
<td>.193†</td>
</tr>
<tr>
<td>Collective efficacy</td>
<td></td>
<td>.516***</td>
<td></td>
</tr>
<tr>
<td>Collective esteem</td>
<td></td>
<td>.506***</td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>.185</td>
<td>.415</td>
<td>.373</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>.125</td>
<td>.363</td>
<td>.319</td>
</tr>
<tr>
<td>Change in R²</td>
<td></td>
<td>.230</td>
<td>.189</td>
</tr>
<tr>
<td>F</td>
<td>3.064***</td>
<td>8.091***</td>
<td>6.813***</td>
</tr>
</tbody>
</table>

† p< .10
* p< .05
** p< .01
*** p< .001
Hypothesis 7a and 8a predicted that responsibility norms at T1 will be positively related to productive behaviors, and negatively related to counter productive behaviors, respectively. Table 6 presents the results of the hierarchical regressions that were conducted to test these hypotheses. The control variables were entered into the equation in the first step, and responsibility norms was added in the second step. Responsibility norms significantly predicted each of the outcomes: sales ($\beta = .278$, $p<.05$); customer service ($\beta = .263$, $p<.05$); sick leave rate ($\beta = -.218$, $p<.05$) and shrinkage rate ($\beta = -.246$, $p<.05$). Thus, as predicted, responsibility norms were positively related to productive behaviors and negatively related to counter-productive behaviors.

**TABLE 6**

Results of Hierarchical Regression Examining The Impact of Responsibility Norms on Organizational Outcomes

<table>
<thead>
<tr>
<th>Variables</th>
<th>Sales</th>
<th></th>
<th>Customer Service</th>
<th></th>
<th>Sick Leave</th>
<th></th>
<th>Shrinkage</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 1</td>
<td>Step 2</td>
<td>Step 1</td>
<td>Step 2</td>
<td>Step 1</td>
<td>Step 2</td>
<td>Step 1</td>
<td>Step 2</td>
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<tr>
<td>Size</td>
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<td>-.027</td>
<td>-.305*</td>
<td>-.280*</td>
<td>.173</td>
<td>.152</td>
<td>.069</td>
<td>.092</td>
</tr>
<tr>
<td>Rural</td>
<td>-.017</td>
<td>-.012</td>
<td>-.096</td>
<td>-.069</td>
<td>-.181</td>
<td>-.204*</td>
<td>-.014</td>
<td>.010</td>
</tr>
<tr>
<td>Part Time</td>
<td>-.268*</td>
<td>-.299*</td>
<td>-.033</td>
<td>-.062</td>
<td>-.284*</td>
<td>-.260*</td>
<td>-.136</td>
<td>-.162</td>
</tr>
<tr>
<td>Tenure</td>
<td>.164</td>
<td>.168</td>
<td>-.057</td>
<td>-.053</td>
<td>-.077</td>
<td>-.080</td>
<td>.126</td>
<td>.133</td>
</tr>
<tr>
<td>Commission</td>
<td>-.260*</td>
<td>-.289*</td>
<td>.140</td>
<td>.112</td>
<td>-.027</td>
<td>-.004</td>
<td>.075</td>
<td>-.097</td>
</tr>
<tr>
<td>Responsibility</td>
<td>.278**</td>
<td>.263**</td>
<td>-.218*</td>
<td>-.246*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>.119</td>
<td>.196</td>
<td>.127</td>
<td>.194</td>
<td>.128</td>
<td>.174</td>
<td>.026</td>
<td>.084</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>.115</td>
<td>.190</td>
<td>.074</td>
<td>.134</td>
<td>.075</td>
<td>.113</td>
<td>-.034</td>
<td>.016</td>
</tr>
<tr>
<td>Change in $R^2$</td>
<td>.075</td>
<td>.067</td>
<td>.046</td>
<td>.059</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$F$</td>
<td>2.136†</td>
<td>3.162**</td>
<td>2.386*</td>
<td>3.247**</td>
<td>2.411*</td>
<td>2.849**</td>
<td>.432</td>
<td>1.230</td>
</tr>
</tbody>
</table>

†  $p<.10$

*  $p<.05$

**  $p<.01$

*** $p<.001$
Hypotheses 7b and 8b each predicted that the relationship between collective felt trust at Time 1 and productive and counter productive behaviors at Time 2, respectively, would be mediated by responsibility norms. To test these hypotheses, I followed the criteria described earlier for testing mediation for each dependent variable, as well as conducted significance test of change in the beta coefficient of the independent variable. Table 7 presents the results of the hierarchical regression that help examine these hypotheses. The results support the prediction that responsibility norms mediate the relationship between collective felt trust at Time 1 and sales at Time 2. Collective felt trust is related to sales, collective felt trust is related to responsibility norms (as was indicated in Table 4), and responsibility norms are related to sales when trust is held constant. Examining the test of the significance in the change in the beta coefficients of trust (from .194 to .070) indicates that the decrease in the strength of the relationship between trust and sales was significant. Therefore, supporting Hypothesis 7b, responsibility norms were found to fully mediate the collective felt trust-productive behavior relationship.

The results, however, do not support the prediction that responsibility norms mediate the relationship between collective felt trust and customer service. Trust is related to customer service and trust is related to responsibility norms (as was indicated in Table 4), however responsibility norms are not related to sales when trust is held constant. The result of the test of the significance in the change in the beta coefficients also indicates a lack of mediation. Thus, together, the above results about sales and customer service provide some support to Hypothesis 7b that felt responsibility norms mediate between trust and productive behaviors.
TABLE 7
Results of Hierarchical Regression Examining
The Mediating Effects of Responsibility Norms on
The Relationship between Collective felt trust and Organizational Outcomes

<table>
<thead>
<tr>
<th>Variables</th>
<th>Sales</th>
<th>Customer Service</th>
<th>Sick Leave</th>
<th>Shrinkage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 1</td>
<td>Step 2</td>
<td>Step 1</td>
<td>Step 2</td>
</tr>
<tr>
<td>Size</td>
<td>.002</td>
<td>-.101</td>
<td>-209†</td>
<td>-216†</td>
</tr>
<tr>
<td>Rural</td>
<td>-.011</td>
<td>.010</td>
<td>-.086</td>
<td>-.073</td>
</tr>
<tr>
<td>Part Time</td>
<td>-.267*</td>
<td>-.295*</td>
<td>-.031</td>
<td>-.047</td>
</tr>
<tr>
<td>Tenure</td>
<td>.145</td>
<td>.161</td>
<td>-.090</td>
<td>-.081</td>
</tr>
<tr>
<td>Commission</td>
<td>-.299*</td>
<td>-.300*</td>
<td>.071</td>
<td>.071</td>
</tr>
<tr>
<td>Felt trust</td>
<td>.194†</td>
<td>.070</td>
<td>.341**</td>
<td>.271**</td>
</tr>
<tr>
<td>Responsibility</td>
<td>.246*</td>
<td>.139</td>
<td>-.159</td>
<td>-.304*</td>
</tr>
<tr>
<td>R²</td>
<td>.148</td>
<td>.193</td>
<td>.229</td>
<td>.243</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>.085</td>
<td>.123</td>
<td>.172</td>
<td>.177</td>
</tr>
<tr>
<td>Change in R²</td>
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<td>.014</td>
<td>.019</td>
<td>.068</td>
</tr>
<tr>
<td>F</td>
<td>2.350*</td>
<td>2.735**</td>
<td>4.006**</td>
<td>3.673**</td>
</tr>
</tbody>
</table>

* p< .10
† p< .05
** p< .01
*** p< .001

The results do not provide support to the prediction that responsibility norms mediate between trust at T1 and sick leave rates. Trust is related to sick leave and trust is related to responsibility norms (as was indicated in Table 4), however responsibility norms are not related to sick leave when trust is held constant. The results of the test of the significance in the change in the beta coefficient also indicates a lack of mediation.

The results also do not provide support to the prediction that responsibility norms mediate between trust at T1 and shrinkage. Although the second and third conditions are met (trust is related to responsibility norms and responsibility is related to shrinkage when trust is held constant), the first criterion (that trust would be related to shrinkage rates) is not met. Thus,
taking together the findings about sick leave and shrinkage rates, I found no support to Hypothesis 8b that responsibility norms mediate the relationship between trust and counter productive behaviors.

4.3 Additional Analyses

In addition to empirically testing the hypotheses developed in this thesis, I conducted several analyses to examine whether the data provides support to several alternative plausible predictions.

4.3.1 Examining the Causal Direction of Collective Felt Trust–Outcomes Link

The longitudinal nature of the data provides some support to the hypothesized direction of causality between collective felt trust and outcomes. An argument can be made, however, that the direction of causality is reversed, namely that favorable outcomes build management trust in employees. Specifically, an alternative to the direction of causality suggested in this dissertation is that employees are more likely to be trusted when they exhibit higher responsibility norms. In the same vein, employees’ behavior – their performance, customer service ratings, absenteeism rates – could affect management trust in them. To provide more definitive evidence to the direction of causality theorized in this study, I conducted several cross-lagged panel analyses (CLPAs). These examined the direction of causality between (1) collective trust and responsibility norms, and (2) collective trust and the three organizational outcomes that were found to be related to trust: performance, prosocial behavior, and absenteeism.
CLPA involves measuring the two relevant variables in two points in time, and inferring the source of a causal relationship based on the relative magnitude of the cross-lagged coefficients (Shingles, 1985). Researchers have suggested the use of different cross-lagged coefficients, including zero-order correlations, partial correlations, and regression coefficients (Cook & Campbell, 1979; Schneider, White & Paul, 1998; Shingles, 1985). Most researchers, however, have moved from zero-order correlations to partial correlations or regression coefficients. These alternatives control or remove the confounding influences of the diachronic correlations present in zero-order correlations (Schneider, White, & Paul, 1998).

I used regression coefficients in the four CLPA s that were conducted. Consistent with Kessler and Greenberg’s (1981) approach, to control for stability effects, the dependent variable at T1 is included in each regression as a control variable (in addition to the other control variables). Thus, for example, when examining the causal direction between collective trust and responsibility norms, in the first regression responsibility norms at T2 are regressed on trust at T1 and responsibility norms at T1. In the second regression, trust at T2 is regressed on responsibility norms at T1 and trust at T1. The regression coefficients of the predictor in each regression are then compared. The results of the CLPAs are presented in Table 8.
### TABLE 8
Results of CLPAs

<table>
<thead>
<tr>
<th></th>
<th>Trust - Responsibility</th>
<th>Trust - Sales</th>
<th>Trust - Absenteeism</th>
<th>Trust - Customer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Trust T2</td>
<td>Responsibility T2</td>
<td>Trust T2</td>
<td>Sales T2</td>
</tr>
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<td>-.033</td>
<td>-.031</td>
</tr>
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<td>.133</td>
<td>-.208(^\d)</td>
<td>-.054</td>
</tr>
<tr>
<td>Part Time</td>
<td>-.161</td>
<td>.079</td>
<td>-.154</td>
<td>-.219(^\d)</td>
</tr>
<tr>
<td>Tenure</td>
<td>.204(^\d)</td>
<td>.056</td>
<td>.198</td>
<td>-.142</td>
</tr>
<tr>
<td>Commission</td>
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<td>0.25(^\d)</td>
<td>-.100</td>
<td>-.276*</td>
</tr>
<tr>
<td>Trust T1</td>
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<td>.432***</td>
<td>.179(^\d)</td>
</tr>
<tr>
<td>Responsibility T1</td>
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<td>.25(^\d)</td>
<td>0.01</td>
<td>.265*</td>
</tr>
<tr>
<td>Sales T1</td>
<td></td>
<td></td>
<td>-0.090</td>
<td>.378***</td>
</tr>
<tr>
<td>Absenteeism T1</td>
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<td></td>
<td></td>
<td>.04</td>
</tr>
<tr>
<td>Customer service T1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R(^2)</td>
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<td>.281</td>
<td>.209</td>
<td>.144</td>
</tr>
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<td>F</td>
<td>4.305***</td>
<td>5.794***</td>
<td>4.3***</td>
<td>3.1**</td>
</tr>
</tbody>
</table>

\(^\d\) \(p<.10\)
\(^\star\) \(p<.05\)
\(^\star\star\) \(p<.01\)
\(^\star\star\star\) \(p<.001\)

The examination of the collective felt trust-responsibility norms relationship reveals that when controlling for responsibility norms at T1, trust at T1 affects responsibility norms at T2 (\(\beta = .354, p<0.05\)), whereas when controlling for collective felt trust at T1, responsibility norms at T1 do not affect trust at T2. This result suggests that direction of causality maintained in this paper is more likely than the reversed direction. In other words, collective felt trust leads to responsibility norms rather than the reverse.
The CLPA between collective felt trust and sales shows that when controlling for sales at T1, trust at T1 affect sales at T2 ($\beta = .179, p<.10$), whereas when controlling for trust at T1, sales at T1 do not affect trust levels at T2. Again, this result provides support to the hypothesized direction of causality -- collective felt trust leads to sales rather than the reverse.

The result of the CLPA of the trust- absenteeism relationship was not informative in discerning the direction of causality. When controlling for absenteeism rates at T1, collective felt trust at T1 does affect sick leave rates at T2, and when controlling for collective felt trust at T1, sick leave rates at T1 do not affect trust at T2.

Finally, the examination of the collective felt trust- customer service relationship shows that when controlling for customer service at T1, trust at T1 affect customer service at T2 ($\beta = .216, p<0.05$), whereas when controlling for trust at T1, customer service ratings at T1 do not affect trust levels at T2. The direction of causality suggested in this paper is therefore supported.

Overall, the results of the CLPAs are supportive of the direction of causality suggested in the paper -- collective felt trust affects responsibility norms and productive behaviors, rather than the reverse.

4.3.2 Mediating Effects of Collective Efficacy and Collective Esteem

The argument developed in this dissertation suggests that collective esteem and collective efficacy mediate the collective felt trust – responsibility norms relationship. Responsibility
norms, in turn, are expected to influence organizational outcomes. An argument can be made, however, that it is also possible that collective efficacy and collective esteem mediate the collective felt trust- organizational outcomes relationship.

To test this possibility, I performed several sets of hierarchical regression analyses. I followed the criteria described earlier for testing mediation for each dependent variable (sales, customer service and absenteeism), as well as conducted significance tests of change in the beta coefficient of the independent variable. Table 9 presents the results of the hierarchical regressions. The results suggest that collective efficacy and collective esteem each partially mediates the relationship between collective felt trust and customer service. No support was obtained for the contention that collective efficacy and collective esteem mediate the collective felt trust-sales relationship, or the collective felt trust-absenteeism relationship.

**TABLE 9**

Results of Hierarchical Regression Examining The Mediation Effects of Collective Efficacy and Collective Esteem on The Relationship between Collective felt trust and Organizational Outcomes

<table>
<thead>
<tr>
<th></th>
<th>Sales</th>
<th>Customer Service</th>
<th>Absenteeism</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>Step 2a</td>
<td>Step 2b</td>
</tr>
<tr>
<td>Size</td>
<td>.002</td>
<td>-.007</td>
<td>.002</td>
</tr>
<tr>
<td>Rural</td>
<td>-.011</td>
<td>-.007</td>
<td>-.15</td>
</tr>
<tr>
<td>Part Time</td>
<td>-.267*</td>
<td>-.279*</td>
<td>-.266</td>
</tr>
<tr>
<td>Tenure</td>
<td>.145</td>
<td>.151</td>
<td>.143</td>
</tr>
<tr>
<td>Commission</td>
<td>-.299*</td>
<td>-.309*</td>
<td>-.297*</td>
</tr>
<tr>
<td>Felt trust</td>
<td>.194†</td>
<td>.144</td>
<td>.198†</td>
</tr>
<tr>
<td>Efficacy</td>
<td>.132</td>
<td>.011</td>
<td>.257*</td>
</tr>
<tr>
<td>Esteem</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>.148</td>
<td>16.3</td>
<td>14.8</td>
</tr>
<tr>
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<td>.085</td>
<td>.090</td>
<td>.074</td>
</tr>
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<td>Change in R²</td>
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<tr>
<td>F</td>
<td>2.35*</td>
<td>2.22*</td>
<td>1.99†</td>
</tr>
</tbody>
</table>
CHAPTER 5
DISCUSSION

The study of interpersonal trust has focused primarily on the trusting party's perspective. Significant attention has been dedicated to understanding the determinants for and the consequences of trusting another. Yet, extant literature provides little insight into whether, and how, the extent to which individuals' attitudes and behavior are impacted by how much they believe they are trusted by others. In this dissertation, I sought to start filling this gap by focusing on the trusted party. Drawing predominantly on social exchange and social identity theories, I developed and empirically tested a model of how employees respond to the extent they perceive to be trusted by management. In this model, employees' collective felt trust was expected to affect engagement in productive and counter-productive behaviors through its effect on the responsibility norms that develop among employees.

5.1 General Overview

Overall, the results support the assertion that employees' collective felt trust affects both responsibility norms and organizational outcomes. As expected, collective felt trust was positively related to productive behaviors (organizational performance and prosocial behavior) and negatively related to counter-productive behavior (absenteeism). Some support was obtained to the prediction that responsibility norms mediated the collective felt trust-organizational outcomes relationship -- responsibility norms were found to fully mediate the relationship between collective felt trust and performance. Together, these
findings provide preliminary evidence that the examination of the trusted party merits consideration and further research attention.

5.1.1 Effects of Collective Felt Trust on Organizational Outcomes

As expected, collective felt trust was positively related to productive behavior. Plants in which employees felt more trusted by management exhibited both higher sales and higher customer service satisfaction. Some support was obtained to the prediction that collective felt trust hinders counter-productive behavior. Lower absenteeism rates were present in locations with higher collective felt trust, however no relationship was found between employees’ collective felt trust and shrinkage rates of the locations.

The different effect of collective felt trust on absenteeism and shrinkage rates may stem from the fact that shrinkage is a low base phenomenon. To the extent that shrinkage rates, unlike absenteeism rates, manifest the behavior of only a very small number of employees, it is plausible that those who engaged in theft did not share the trust perceptions of others. Alternatively, it is possible, that these employees did share their colleagues' trust perceptions, but idiosyncratic factors dominated their behavior. For example, personal factors in the form of economic pressure or different moral standards could account for their engagement in theft. Finally, the low variance in shrinkage rates across plants, in comparison to absenteeism rates, may also account for the weaker association between collective felt trust and shrinkage rates.
5.1.2 Effects of Collective Felt Trust on Responsibility Norms

As expected, I found that collective felt trust by management positively influenced responsibility norms among employees both directly and indirectly. Consistent with social exchange theory, collective felt trust directly affected responsibility norms. This finding is consistent with Van Dyne, Graham and Dienech’s (1994) notion of covenantal relationships, whereby employees are expected to reciprocate managerial trust in them in the form of responsible behavior.

Collective felt trust was found to foster responsibility norms indirectly by affecting employees’ collective identities. As expected, collective esteem and collective efficacy were each found to partially mediate the relationship between collective felt trust and responsibility norms. That collective felt trust affects collective identities is consistent with prior literature on the group value model (Lind & Tyler, 1988; Tyler & Lind, 1992), which suggests that individuals’ experiences with group authorities provide a source of information about their self-worth. This result is also consistent with literature that attests to the effects of transformational leaders on their followers’ collective identities (Kark, Shamir, & Chen, 2003). The above results, however, extend previous literature by (1) highlighting the specific role of felt trust in enhancing collective esteem and collective efficacy, and (2) identifying the effects of collective esteem and collective efficacy on responsibility levels in organizations.

Taken together, the direct and indirect effects of collective felt trust inform the literatures on trust and on experienced responsibility within organizations. First, the results provide empirical evidence that confirms the view that the experience of trust is multifaceted and affects
cognitive, emotional and normative elements (Barber, 1983; Jones & George, 1998) -- felt trust was found to influence collective esteem (affective element), collective efficacy (cognitive element) and responsibility norms (normative element).

Second, these findings extend our understanding of antecedents of experienced responsibility in organizations. Whereas research to date has focused on characteristics of work design as antecedents of felt responsibility (Kiggunda, 1983), the above findings suggest that the management-employee relational context, as perceived by employees, affects responsibility norms. It should be noted that this study's design implies that characteristics of work design are very similar across all locations in this study. Therefore, the contention that these previously identified antecedents accounted for the variability in responsibility norms across plants can be ruled out with some confidence.

Finally, it should be acknowledged that the relationship between collective felt trust and responsibility norms may due to a reversed direction of causality of that argued in this dissertation. Admittedly, groups of employees exhibiting responsible behavior could lead to managerial trust in them. The results of the cross-lagged analyses that were conducted, however, provide some confidence that in this case collective felt trust led to development of responsibility rather than the reversed. The findings here are, then, consistent with the contention that trusting can become a self-fulfilling prophecy -- individuals respond to being trusted by being trustworthy (or responsible).
5.1.3 The Effects of Responsibility Norms on Organizational Outcomes

Responsibility norms were found to affect all organizational outcomes (sales, customer service, absenteeism and shrinkages rates). This finding is particularly noteworthy given that these outcomes were not correlated with each other. Consistent with prior research that attests to the effect of experienced responsibility on productive behavior (e.g. Pearce & Gregersen, 1991), responsibility norms were found to be positively related to sales and customer service ratings. Also, consistent with extensive research that maintains that group norms regulate counter productive behaviors (e.g., Hollinger & Clark, 1982; Horning, 1970; Robinson & O’Leary-Kelly, 1998), responsibility norms were found to be negatively related to absenteeism and shrinkage rates.

The reported consequences of responsibility norms contribute to research on experienced responsibility in organizations. First, prior research on experienced responsibility has been studied only at the individual level of analysis, whereas the findings here demonstrate that experienced responsibility is conceptually meaningful also at the aggregate level of analysis -- employees’ sense of responsibility towards the organization can be shared among employees working in the same environment. Second, the preliminary evidence provided here on the significant influence of responsibility norms on both productive and counter productive behavior suggests that the study of how they can be fostered is likely to be a fruitful avenue for future research.

These results also inform the literature on workplace deviance. This literature has long emphasized the potent influence of group norms on promoting or deterring deviant behavior
(e.g., Robinson & O'Leary-Kelly, 1998). However, previous research has typically focused on specific norms, such as absenteeism norms (e.g., Johns, 1997) or theft norms (Horning, 1970), whereas this study suggests that responsibility norms can account for different types of deviance. Future studies are necessary to determine whether responsibility norms extend to other types of deviance.

5.1.4 Responsibility Norms as a Mediator of the Relationship Between Collective Felt Trust and Organizational Outcomes

I obtained some evidence to support the prediction that responsibility norms mediate the relationship between collective felt trust and productive behavior. Responsibility norms mediated the relationship between collective felt trust and sales, however they were not found to mediate the relationship between collective felt trust and customer service. I obtained no support to the prediction that responsibility norms mediated the relationship between collective felt trust and counter-productive behavior.

Several reasons could possibly explain the lack of consistent support for the mediating effect of responsibility norms between collective felt trust and organizational outcomes. First, the mediation may not be statistically significant due to low statistical power. Significant mediations are more likely to be found when the association between the independent and mediating variable is similar or weaker that that between the mediating variable and the dependent variable (Hoyle, Kenny, 1999). It may be that the stronger association between collective felt trust and responsibility norms than that between responsibility norms and outcomes affected the significance of the mediation. Because collective felt trust and
responsibility norms are collected through a common method (a survey), their relationship may be overestimated in comparison to the relationship between responsibility norms and organizational outcomes (the latter are archival records).

Second, it is possible that the presence of moderators that were not considered in the model influenced the mediation results. The process suggested here might be more likely to unfold in the presence of certain conditions. For example, employees' justice perceptions might affect employees' responses -- employees may be more likely to respond to collective felt trust by developing responsibility norms if they perceive that they are fairly compensated, and / or if they perceive that the procedural justice climate is positive. Identifying potential moderators of the relationships examined here would be an interesting avenue for future research.

Finally, whereas the model developed here suggests that responsibility norms is the main mechanism through which collective felt trust impacts all organizational outcomes, it may be that collective felt trust affects different organizational outcomes through different mechanisms. Although not initially hypothesized, I found that collective efficacy and collective esteem each partially mediated the collective felt trust-prosocial behavior relationship. The first finding is consistent with research that found that positive mood at work fosters prosocial organizational behaviors (George, 1991, 1989). Future research could investigate whether the effect of collective felt trust on counter productive behavior is mediated through other mechanisms.
5.1.5 Additional Implications

It is particularly noteworthy that employees' collective felt trust levels varied across the locations in this study, even though they were essentially identical in terms of all their formal practices and procedures, including control routines, reward systems and recruiting practices. This finding can, however, be explained by the fact that employees in each store location were subject to very different managers. Thus, this variability lends support to the claim that leaders act as 'climate engineers' who affect the development of shared perceptions by shaping the meaning employee attribute to organizational characteristics (Dansereau & Alutto, 1990). Given the evidence provided here on the important consequences of employees' trust perceptions, an exciting avenue for future research could be to identify managerial acts that facilitate their formation.

Limitations

This study was conducted in one organization to provide strong controls for alternative explanations of organizational outcomes (as explained in the method chapter). Additional research is therefore needed to determine the extent to which these findings are generalizable to other organizations. It is possible, for example, that the within organization design employed here controls for variables that affect the relationships that were reported.

A second limitation of this study is that my choice of length of time lag between the variables was driven by the nature of the data rather than by theory. Within existing literature, I found no guidance in terms of appropriate theoretical time lags. Nevertheless, a one year time lag seems consistent with longitudinal research that examined the effects of trust over. Robinson (1996),
for example, found effects of trust around the 18 month mark. Future attempts to replicate these studies could benefit from testing various time lags in exploring the effect of collective felt trust.

A third limitation of the data is its relatively small sample size. Sample size can constrain the type of analyses that can be conducted with the data. Because the sample size was smaller than the minimum recommended for structural equation modeling, the data was analyzed with regression analyses. Although it is always desirable to have a large sample size, here I was limited to the number of plants in the organization. As mentioned, however, this choice of within-organizational design was important because it provided some assurance that the plants are sufficiently identical to rule out alternative explanations for any observed variance in the dependent variables.

Finally, a note of caution with the respect to the interpretation of the findings is necessary. Although the longitudinal nature of the data and the CLPAs that were conducted provide some support for the effect of collective felt trust on outcomes, the data cannot provide conclusive evidence of the proposed causal direction. Future research that uses other analytic strategies such as time series and structural modeling could perhaps fully solve the issue of causal direction.

5.3 Managerial Implications

This study highlights the importance of maintaining employees’ perceptions that they are trusted by management. Whereas previous research has centered on the importance of gaining the trust of employees, this study found that the extent that employees feel trusted by
management is linked to critical organizational outcomes. Leaders who want a higher level of performance should therefore demonstrate their trust in their followers.

It should be noted, however, that nurturing employees' perceptions that they are trusted does not imply trusting blindly or foolishly, or eliminating formal monitoring that may in fact be functional and desired even by employees themselves (Niehoff & Moorman, 1993). The results here actually suggest that managers can create an environment in which employees feel trusted even when significant formal monitoring procedures are in place (as was the case in this organization). Of major importance for managers, then, is managing the meaning that employees attach to existing formal organizational characteristics and paying particular attention to the informal communication of trust in them.

5.4 Conclusion

I set out to examine whether and how employees respond to collective felt trust by management. I have found that collective felt trust has extensive influence on the responsibility norms developed in organizations, as well as on both productive and counterproductive behaviors. These findings highlight the importance of studying the trusted party, a party that has been overlooked in extant trust research. They also suggest that managers will be well advised to nurture employees' perceptions of trust in them because those can substantially affect organizational outcomes.
REFERENCES


Eberhardt, B. J., & Shani, A.B. 1984. The effects of full-time versus part-time employment status on attitudes toward specific organizational characteristics and overall job satisfaction; 

Eden, D. 1993. Interpersonal expectations in organizations. In Blanck, P. (Ed) Interpersonal 
154-178.

of Personality & Social Psychology, 64:257-266.


George, J. M. 1991. State or trait: Effects of positive mood on prosocial behaviors at work. 

George, J.M., & Bettenhausen, K. 1990. Understanding prosocial behavior, sales performance, 
and turnover: A group-level analysis in a service context. Journal of Applied Psychology, 
75:698-709.


L. Cummings (Eds.), Research in organizational Behavior, vol. 8: 1-52. Greenwich, CT: JAI 
Press.

Greenberg, J. 1990. Employee theft as a reaction to underpayment inequity: The hidden cost of 


Applied Psychology, 60:159-170.

(Eds), Identity in organizations: Building theory through conversations. Thousand Oaks, CA, 

Harrell, W.A., & Hartnagel, T.1976. The impact of machiavellianism and the trustfulness of the 
victim on laboratory theft. Sociometry, 39:157-165.


65


Opinion surveys are conducted at regular intervals to help [Company Name] identify factors which affect your job satisfaction. We would like you to answer the questions in this survey as you personally feel; not how you think others feel. Please remember there are no right or wrong answers, we just want your opinions. All answers will be kept confidential and individual questionnaire results will be combined with all others so that anonymity is preserved. Results will be tabulated by an outside company.

Please read carefully before you begin

The following information is needed for analysis of the survey results. Please darken only one box in each question that best describes your status.

1. My employment status is:
   1 □ Full time
   2 □ Part time

2. My length of service is:
   1 □ Less than 3 months
   2 □ 3 months to 1 year
   3 □ 1-2 years
   4 □ More than 2 years

3. The type of work I do is mainly:
   1 □ Sales associate (commission)
   2 □ Sales associate (non-commission)
   3 □ Store Associate (non-selling)
   4 □ Distribution Associate
   5 □ Service Depot Technician
   6 □ Service Depot Associate
   7 □ Other

**HOW TO RESPOND:** Read each statement carefully, and darken only one of the responses that best describe how you feel about the statement.

**EXAMPLE QUESTION:**
My favourite color is red.

```
1 2 3 4 5
□ ■ □ □ □
Strongly Agree Strongly Disagree
```
<table>
<thead>
<tr>
<th>ITEMS</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Management places trust in associates at this location.</td>
<td>□□□□□</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Management at this location believes that associates are trustworthy.</td>
<td>□□□□□</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Management believes that associates in this location can be trusted.</td>
<td>□□□□□</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Associates feel accountable for the performance of this store.</td>
<td>□□□□□</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Associates in this store feel an obligation to act responsibly.</td>
<td>□□□□□</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Associates feel a sense of responsibility for the work done in this location.</td>
<td>□□□□□</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Associates in this location care whether the work gets done right.</td>
<td>□□□□□</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Associates feel a sense of responsibility to the success of this location.</td>
<td>□□□□□</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Associates at this store believe in their ability to achieve established targets.</td>
<td>□□□□□</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Associates in this location have confidence in themselves.</td>
<td>□□□□□</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Associates at this location can be very productive if they work hard.</td>
<td>□□□□□</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. I feel a sense of ownership in [company name] and am not just an employee.</td>
<td>□□□□□</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. I am proud to work for [company name].</td>
<td>□□□□□</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. I would recommend [company name] to others as a good place to work.</td>
<td>□□□□□</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Once completed, please hand your completed questionnaire to the Associate collecting these forms. The questionnaires will be then placed in a pre-addressed envelope and sent to an outside firm where they will be processed.

Thank you for completing this survey. Your input will greatly assist us in promoting positive discussion and action on ideas and issues that affect our workplace.

---

3 The complete company survey included 51 items in T1, and 56 items in T2.

4 Collective felt trust items 1-3; Responsibility norms items 4-8; Collective efficacy items 9-11; Collective esteem items 12-14. Order of items was mixed in the actual questionnaire.

5 Survey items were identical at T1 and T2 except for responsibility norms, which included three out of the five items above at T1.