

# Managerial Modes of Influence and Counterproductivity in Organizations: A Longitudinal Business-Unit-Level Investigation

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The authors studied the effect of 3 modes of managerial influence (managerial oversight, ethical leadership, and abusive supervision) on counterproductivity, which was conceptualized as a unit-level outcome that reflects the existence of a variety of intentional and unintentional harmful employee behaviors in the unit. Counterproductivity was represented by an objective measure of food loss in a longitudinal study of 265 restaurants. After prior food loss and alternative explanations (e.g., turnover, training, neighborhood income) were controlled for, results indicated that managerial oversight and abusive supervision significantly influenced counterproductivity in the following periods, whereas ethical leadership did not. Counterproductivity was also found to be negatively related to both restaurant profitability and customer satisfaction in the same period and to mediate indirect relationships between managerial influences and distal unit outcomes.

**Keywords:** abusive supervision, ethical leadership, managerial oversight, counterproductivity

Counterproductive employee behavior has staggering consequences for organizations. For example, employee theft and fraud, the fastest growing type of crime in North America, impacts virtually all kinds of organizations, costing the average business 1%–2% of its annual sales (Coffin, 2003). Although harder to pin down, the costs of other harmful employee behaviors (e.g., waste of resources, property damage) are undoubtedly also in the billions of dollars annually (Robinson & Greenberg, 1998). Clearly, understanding the causes of these tangible losses has significant implications for organizations' financial well-being. However, empirically based knowledge about the influences on these undesirable outcomes remains at an early stage. Therefore, in this study, we seek to contribute to this knowledge base by focusing on how managers can affect such outcomes, via three modes of influence—monitoring behavior (managerial oversight), positive behavior (ethical leadership), and negative behavior (abusive supervision).

We conducted our investigation using longitudinal data at the business unit level in a sample of casual dining restaurants. This context, like other nonprofessional service sector industries, provides a particularly suitable research venue because employee behaviors (e.g., carelessness, neglect, outright theft) that lead to tangible organizational losses have been shown to be widespread in these contexts (Boye & Slora, 1993; Harris & Ogbonna, 2002; Hollinger, Slora, & Terris, 1992) and because operational success (e.g., customer satisfaction, financial performance) depends heavily on the diligent efforts of nonmanagerial workers (Bertagnoli, 2005; J. R. Brown & Dev, 2000). The restaurant context is also ripe for organizational research because it has been studied relatively infrequently, despite being one of the fastest growing industries in North America (Lind, 2004).

## Counterproductive Work Behavior (CWB) and Counterproductivity

CWBs encompass an array of negative employee actions that violate the legitimate interests of an organization (Sackett & DeVore, 2001; Martinko, Gundlach, & Douglas, 2002). CWB research has typically focused on a specific type of counterproductive behavior, such as employee theft (e.g., Greenberg, 2002), but recent theorizing has begun to cluster related negative employee behaviors together. For example, employee deviance includes a variety of harmful behaviors directed toward fellow employees (e.g., spreading rumors, aggression) and the organization (e.g., theft, reduced work quantity; Robinson & Bennett, 1995). *Antisocial behavior* (Giacalone & Greenberg, 1997), *organizational misbehavior* (Vardi & Weitz, 2004), and *general counterproductive behavior* (Marcus & Schuler, 2004) are also terms used to describe related sets of negative employee acts. Bennett and Robinson

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(2003) and Marcus and Schuler (2004) recommended the broader approach because it allows researchers to develop more general theory about the common influences on these related behaviors, addresses problems with the low base rate of any particular type of negative behavior, and is likely to better match the general types of attitudes that are associated with such behavior (Fishbein & Ajzen, 1975). In addition, situational antecedents are thought to often affect a number of related CWBs simultaneously (Sackett & DeVore, 2001).

In this study, we build on Sackett and DeVore's (2001) recent distinction between CWBs, which refer to specific behaviors, and counterproductivity, which refers to tangible outcomes of undesirable employee behaviors. We focus specifically on unit-level counterproductivity, which we define as a measurable, aggregate organizational outcome that reflects the existence within a unit of a variety of intentional and unintentional harmful behaviors, such as carelessness, neglect, theft, or sabotage. As a unit-level outcome, counterproductivity is not easily linked to the CWBs of specific individuals. For example, inventory loss cannot readily be traced to responsible employees. Nonetheless, counterproductivity outcomes are thought to be important to financial success, so organizations frequently track measures such as inventory shrinkage or number of injuries within a business unit, and managers are encouraged to reduce them. Furthermore, unlike most definitions of CWB (O'Leary-Kelly, Duffy, & Griffin, 2000; Vardi & Wiener, 1996; Vardi & Weitz, 2004), our definition of counterproductivity embeds no assumption that all of the negative employee behaviors that it reflects are intentional. For example, the number of worker injuries in a year, a potential measure of counterproductivity, reflects a variety of employee behaviors that are both intentional (e.g., willful violation of safety procedures) and unintentional (e.g., carelessness). Similarly, employees contribute to inventory loss when they steal and when they unintentionally damage unsold merchandise.

### Influences on Counterproductivity

Similar to the literature on CWB, we conceptualize the likely influences on counterproductivity within a broad theoretical framework of person and situation factors (Marcus & Schuler, 2004; Martinko et al., 2002; Sackett & DeVore, 2001; Treviño, 1986). Traditional person approaches suggest that characteristics and deficiencies of individuals (e.g., demographic characteristics, personality) predispose some individuals to engage in harmful behaviors more than other individuals (Colbert, Mount, Harter, Witt, & Barrick, 2004; Greenberg, 2002; Hollinger & Clark, 1983; Robinson & Greenberg, 1998; Treviño, 1986; Vardi & Wiener, 1996; Vardi & Weitz, 2004). For example, relying on cognitive moral development theory (Kohlberg, 1969), Greenberg (2002) proposed and found that individuals' moral reasoning stage influenced employee theft. Hollinger and Clark (1983) also found that young employees with little job tenure were more likely to engage in deviant behaviors, such as theft. Whereas the CWBs of younger employees may decrease naturally as the employees mature and become more receptive to managerial influence (Hollinger et al., 1992), lower job tenure may reflect factors such as less training and lower organizational commitment (Tucker, 1989) or "career stake" (Huiras, Uggen, & McMorris, 2000), which make employees more likely to engage in CWBs whatever their age.

Although individual characteristics have proven to be useful predictors of CWBs (see Sackett & DeVore, 2001, for a review), such factors are not particularly malleable and are only somewhat susceptible to organizational intervention (e.g., employee selection or surveillance procedures). Thus, researchers have become more interested in the influence of organizational context (Bennett & Robinson, 2003; Greenberg, 1990, 2002; Robinson & Greenberg, 1998; Robinson & O'Leary-Kelly, 1998). For example, employees are thought to react to unfair treatment at work (Ambrose, Seabright, & Schminke, 2002), poor working conditions, or other work pressures with feelings of outrage or despair, both of which are thought to motivate employees' harmful behavior (Robinson & Bennett, 1997). Furthermore, work group norms have been found to influence employee deviance (Robinson & O'Leary-Kelly, 1998).

### Managerial Modes of Influence on Counterproductivity

Among the proposed contextual influences on CWB and its associated outcomes, conceptual models often include a general description of the potential impact of leaders or managers (e.g., Martinko et al., 2002; Vardi & Weitz, 2004). However, beyond the important link established between unfair treatment and CWBs such as theft and retaliation (e.g., Greenberg, 1990; Skarlicki & Folger, 1997), little research has examined other explicit influences of leadership (M. Brown & Treviño, 2006; Dineen, Lewicki, & Tomlinson, 2006). Therefore, in this study we focus on how managers might influence counterproductivity at the business unit level in three different ways. The first—managerial oversight—represents the perspective that counterproductivity can be reduced via the mere presence of management personnel. The next two—ethical leadership and abusive supervision—represent specific, overt managerial actions that are hypothesized to decrease and increase counterproductivity, respectively.

#### *Managerial Oversight*

A common explanation for CWBs such as theft is that they occur more frequently where opportunity is greatest (Gilman, 1982; Hollinger & Clark, 1983; Miethe & McCorkle, 1998; Niehoff & Paul, 2000). In short, employees steal "because they can" (Tomlinson & Greenberg, 2005, p. 212). For example, Hollinger and Clark (1983) noted that employees who work unsupervised are more likely to steal. In addition, Vardi and Weitz (2001) found that job autonomy was positively related to employees' perceptions of their own and others' misbehavior. Similarly, imperfect monitoring has been found to influence employee propensity to withhold effort (George, 1992; see Kidwell & Bennett, 1993, for a review). Underlying these propensities to take more or give less is employees' rational, instrumental calculation about the likelihood of being observed, caught, and punished (Dunn & Schweitzer, 2005; Hollinger, 1989; Robinson & O'Leary-Kelly, 1998; Sackett & DeVore, 2001; Vardi & Wiener, 1996). This perspective suggests that managers should be able to reduce undesirable employee behaviors and their associated costs simply by reducing opportunity via increased oversight or control. As Litzky, Eddleston, and Kidder (2006) noted, such reasoning is consistent with agency theory and its premise that employees have different interests than

the organization and are motivated to pursue their own interests in the absence of strong monitoring.

We define managerial oversight as the number of managers available to supervise a particular number of employees. This notion is the converse of the classic idea of span of control, the “measure of supervisory manpower” (Ouchi & Dowling, 1974, p. 357) at the unit level or the total number of subordinates over whom a single supervisor has authority or responsibility (Urwick, 1956). Managerial oversight is the most direct way for managers to guide and influence employees’ daily work behavior (Dunn & Schweitzer, 2005). In restaurants, for example, wait staff have direct contact with customers, and restaurants experience peak times when workers are extremely busy. Thus, the opportunity for harmful behavior is great unless managers can supervise employees fairly closely (Astor, 1972; Hegarty & Sims, 1979). Therefore, we expect that more managerial oversight will be useful in reducing counterproductivity.

*Hypothesis 1:* Managerial oversight is negatively associated with counterproductivity.

### *Ethical Leadership*

Expectations about getting caught and being held accountable are not the only reasons employees behave more or less in accordance with organizational interests. Even when employees are unlikely to be personally identified for contributing to unit-level counterproductivity, they may be motivated to refrain from harmful behaviors by the normative standards of their work environment (Kidwell & Bennett, 1993; Knoke, 1990; Robinson & Bennett, 1995). We propose that unit-level leaders can be a source of such normative standards through their ethical leadership. M. Brown, Treviño, and Harrison (2005) defined ethical leadership as “the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement, and decision-making” (p. 120). Ethical leadership is thought to influence behavior in followers primarily via social learning processes (Bandura, 1986). First, as attractive and legitimate role models, ethical leaders garner followers’ attention because they engage in caring and fair behaviors that indicate their altruistic motivation. Thus, employees should identify with ethical leaders and wish to emulate their normatively appropriate behavior. Second, ethical leaders draw employees’ attention to ethical standards and, through their use of rewards for ethical conduct and discipline for unethical conduct, create outcome expectancies regarding appropriate and inappropriate behavior. Employees thus learn vicariously what outcomes are likely to result from inappropriate conduct and adjust their behavior accordingly (Chonko, Wotruba, & Loe, 2002).

M. Brown et al. (2005) found that perceptions of supervisors’ ethical leadership were associated with followers’ willingness to report problems to management, a prosocial behavior. We propose in this article that ethical leadership should reduce the harmful employee behaviors that contribute to counterproductivity because ethical leaders create normative standards with which employees are motivated to comply. Such motivation is based on employee identification with and desire to emulate the ethical leader as well as feelings of accountability to that leader.

*Hypothesis 2:* Ethical leadership is negatively associated with counterproductivity.

### *Abusive Supervision*

Whereas we proposed above that managerial oversight and ethical leadership should decrease counterproductivity, we propose here that abusive supervision will increase counterproductivity. *Abusive supervision* is defined as a “subordinate’s perceptions of the extent to which supervisors engage in the sustained display of hostile verbal and nonverbal behaviors, excluding physical contact” (Tepper, 2000, p. 178). Examples of abusive supervision include rudeness, intimidation, public criticism, and inconsiderate actions (Bies & Tripp, 1998). Abusive supervision can result in feelings of shame and humiliation (Gilligan, 1996; Morrison, 1996) as well as resentment and antagonism (Ashforth, 1997; Tepper, 2000).

Theoretical treatments have suggested that subordinates wish to reciprocate abusive treatment with similarly hostile behavior (Andersson & Pearson, 1999). However, given the power differential between supervisors and subordinates, employees are unlikely to respond with overt behavior toward the abuser (Lord, 1998; Tepper, Duffy, & Shaw, 2001). Instead, they are likely to look for safer and more surreptitious ways to get even with specific managers or the organization as a whole. For example, Zellars, Tepper, and Duffy (2002) found that abused employees responded to abusive supervision with a reduction in discretionary organizational citizenship behavior. We propose that employees may also harm the organization by stealing, wasting organizational resources, and engaging in other acts that are likely to go undetected.

We theorize that two related psychological mechanisms can help to explain the relationship between abusive supervision and counterproductivity. First, abusive supervision can be considered a source of interactional injustice (Bies & Tripp, 1998) that produces anger, moral outrage, and a desire to retaliate or resist the leader’s influence attempts (Bies & Moag, 1986; Griffin, O’Leary-Kelly, & Collins, 1998; Richman, Flaherty, Rospenda, & Christensen, 1992). Unjust treatment and interpersonal injustice, in particular, have been associated with CWBs in several studies (Ambrose et al., 2002; Giacalone & Greenberg, 1997). In a restaurant setting, covert resistance may involve eating food surreptitiously or giving it away to friends and other customers. Alternatively, employees may attempt to retaliate by engaging in outright theft or sabotage (Greenberg, 1990; Greenberg & Scott, 1996; Skarlicki & Folger, 1997). Second, abusive supervision may also be considered a source of psychological distress, particularly if the abused employee feels threatened (Lazarus & Folkman, 1984; Tepper, 2001). When employees feel unsupported by their managers, they report being more depressed and anxious (Kahn & Byosiore, 1992). Interactional injustice has also been related to nervousness and impaired ability to concentrate (Elovainio, Kivimäki, & Helkama, 2001). These symptoms of distress following abuse by a supervisor are likely to be associated with carelessness and mistakes. All of this should result in food loss for the organizational unit.

In sum, abusive supervision is likely to be associated with both intentional (e.g., disregard of rules, theft) and unintentional (e.g., carelessness) behaviors that contribute to undesirable organizational outcomes. Thus, we predict that when employees perceive

that their managers are abusive, counterproductivity should increase.

*Hypothesis 3:* Abusive supervision is positively associated with counterproductivity.

### Counterproductivity and Business Unit Performance

Counterproductivity is thought to be important because of its assumed relationship with business unit financial performance (Sackett & DeVore, 2001). For example, observers in the restaurant industry have linked food loss to financial failures, suggesting that such losses can reduce restaurant gross profits by 10% (Bertagnoli, 2005). However, little research has actually demonstrated such a relationship. Kacmar, Andrews, Van Rooy, Steilberg, and Cerrone (2006) reported that food waste did not predict restaurant profits at Burger King, despite finding a significant bivariate relationship ( $r = -.24, p < .001$ ). However, they predicted annual profits using food loss from an entire preceding year. We believe that food loss should affect profitability most strongly in the same period in which it occurs. Therefore, we propose that counterproductivity will be negatively associated with unit-level profitability.

*Hypothesis 4A:* Counterproductivity is negatively associated with financial performance.

Counterproductivity should also be related to customer satisfaction, because the employee behaviors contributing to counterproductivity likely influence how customers feel about their experience. First, errors made in the delivery of the organization's product or service may taint customers' perceptions of the quality of the goods received. For example, the delivery of a cold or incorrect food order because of employee carelessness leads to both food waste and a dissatisfied customer (White, 2005). The counterproductivity resulting from errors in food orders, preparation, and service has also been found to be positively associated with customer wait times (Kacmar et al., 2006), which is consistent with Dunlop and Lee's (2004) finding of a negative association between perceptions of workplace deviance and efficiency (drive-through service time) in a fast food restaurant chain. Furthermore, when employees are angry or frustrated because of perceived abuse by managers, such negative emotions are likely to spill over into interactions with customers. Thus, we expect that counterproductivity will be negatively associated with customer satisfaction because the employee attitudes and behaviors causing counterproductivity to increase should simultaneously decrease customer satisfaction.

*Hypothesis 4B:* Counterproductivity is negatively associated with customer satisfaction.

Our focus in this research is on demonstrating leadership influences on counterproductivity (Hypotheses 1–3) and counterproductivity's relations with profitability (Hypothesis 4A) and customer satisfaction (Hypothesis 4B), but it is possible that these leadership influences also indirectly affect these two latter outcomes via the mediation of counterproductivity. Several decades of research suggest that managers have a relatively small direct impact on their organization's overall performance once industry and other environmental effects are considered (Bertrand &

Schoar, 2003; Lieberman & O'Connor, 1972). One explanation for this limited impact is that leaders likely influence distal performance-related outcomes through more proximal processes, such as their impact on employees' attitudes and behaviors and the more proximal outcomes produced by employees. This is consistent with the underlying premise of the popular employee–customer–profit chain model in the service retail sector—namely, that leaders impact the bottom line via their treatment of employees and employees' subsequent behaviors (Rucci, Kirn, & Quinn, 1998). Thus, to the extent that leaders can reduce counterproductivity through their ability to monitor employee behaviors (e.g., managerial oversight), model appropriate behaviors for employees (e.g., ethical leadership), and avoid hostile actions (e.g., abusive supervision), they should indirectly impact both financial performance and customer satisfaction.

*Hypothesis 5:* Counterproductivity mediates the relationships between managerial modes of influence and unit-level outcomes: (a) financial performance and (b) customer satisfaction.

## Method

### Context and Data

We collected data from 265 "Food-Co" restaurants, a pseudonym for a restaurant chain with locations throughout the United States. Food-Co competes in the casual dining portion of the restaurant industry, offering full-service-quality food in a fast food format; customers have the option of dining in or ordering food at a drive-through window. Each restaurant has 30–100 full- and part-time crew members (e.g., cooks, hosts, wait staff; sample  $M = 49.22, SD = 13.49$ ), 3–6 shift managers, and 1 general manager (GM). The GM controls internal restaurant operations, ranging from setting work hours and job responsibilities to managing discipline and promotions. To have access to all employees and observe store operations, GMs work long hours (on average, 60–80 per week) and vary their work schedule to cross all days and shifts. In fact, data we collected confirmed the prominence of the GM for most employees: 47.5% of crew members reported working with their GM "almost every shift I work," and another 32.5% reported working with their GM "at least once a week."

The data collection strategy incorporated both objective data based on internal company records and perceptual data from surveys. The survey data for the study come from crew members<sup>1</sup> who reported on their perceptions of the restaurant's GM. To administer the surveys, the GM held meetings with all crew members over a period of 1 week. The GM described the purpose of the survey and the process that was put in place to ensure confidentiality. Employees were told that under no circumstances would any individual-level responses be available to the shift managers, the GM, or higher level managers of the company. The GM also explained that all crew members would be compensated

<sup>1</sup> The terms *crew members* and *employees*—both of which refer to all nonmanagerial restaurant employees—are used interchangeably throughout. The terms *management* and *managers* are used to refer to the combination of shift supervisors and the GM as the overall management team of the restaurant.



for the time taken to fill out the survey. After giving the instructions, the GM left the room while crew members completed the survey. The surveys were then collected by an elected crew member, who sealed them in an envelope and mailed them directly to a survey administration firm for compilation. To further reduce concerns about social desirability bias, crew members were told that they could fill out the survey without recording their employee identification number. The average within-store response rate for crew members was 83%, with 92% of the stores having response rates of 60% or higher.

The collection of data within this context presented significant research challenges. For example, we worked with senior Food-Co management for over 1 year to develop a survey that accommodated their requirements that the survey be as short as possible and have items adapted to a sixth-grade reading level to ensure that nearly all crew members could participate. Additionally, for the objective measures, we limited the data collection period to a 4-month window (2 months each before and after the survey administration), because the turnover rate within the restaurant industry is high enough (between 100%–200% annually; Leidner, 1993; White, 2005) that it is likely that a majority of the same employees would not be present for a longer time frame. These challenges may explain why relatively little management research has been conducted on low-wage service sector workers (Stamper & Van Dyne, 2001, is a notable recent exception), despite the fact that 7 of the 10 occupations with the greatest projected job growth in the current decade are within this sector (including over 1,000,000 new jobs in food preparation and service alone; Lind, 2004).

### *Dependent Variable Measures*

**Counterproductivity.** Counterproductivity was operationalized through company-provided measures of food loss that compare actual food costs with expected costs for each restaurant. Theoretically, food loss reflects harmful employee behaviors on both production (e.g., wasting of resources, intentionally reduced effort) and property (stealing, giving away resources) fronts (Robinson & Bennett, 1995). Food loss was measured for each month of the year via register receipts, records of orders placed with the central distribution centers, and prices from suppliers. We calculated food loss by subtracting expected costs from actual food costs, dividing that figure by total sales, and multiplying the result by 100. Taking sales level into account controlled for the size of each restaurant. Thus, positive values signify instances in which actual costs exceeded projected costs for the amount of food sold and thus represent food waste, theft, or carelessness in preparation. Because food loss is considered a variable that GMs can strongly influence, performance on this dimension is incorporated into their quarterly evaluations. We averaged the food loss measure for 2 months following the survey data collection to increase reliability but still have most of the same employees who filled out the survey present to affect this variable.

**Operating profit.** Similar to counterproductivity, the operating profit measure was obtained from company records. We calculated operating profit by taking revenues (sales and other miscellaneous income) minus costs (cost of sales, discounts, labor, and other controllable costs) as a percentage of total sales, multiplied by 100.

Again, measuring operating profit as a percentage of sales controlled for restaurant size.

**Customer satisfaction.** We also obtained customer satisfaction scores from company records. Each restaurant solicits a random selection of customers (about 50 per month) to provide scores (to an independent vendor) for (a) overall satisfaction, (b) the intent to revisit the same store, and (c) the intent to recommend that store to others. We computed the average of these three items within each period to arrive at an overall customer satisfaction score. The reliability was .87.

### *Independent Variable Measures*

**Abusive supervision.** We used three items to measure the perceived abusive supervision of the restaurant's GM. These items were adapted from Tepper's (2000) scale. As noted above, we selected a subset of the original scale because of constraints on the length of the questionnaire. We chose items that were most relevant to this industry and had the highest factor loadings on the original scale. We used a 5-point frequency scale ranging from *never* (1) to *always* (5). Sample items include "[The GM] tells me my thoughts or feelings are stupid" and "expresses anger at me when he or she is mad for another reason." The reliability of the abusive supervision measure was .86.

**Ethical leadership.** We assessed crew members' perceptions of the GM's ethical leadership by adapting six items from the ethical leadership scale developed by M. Brown et al. (2005). Again, we selected items that were most relevant to this setting and also had high factor loadings on the original scale. We used a 5-point frequency scale ranging from *never* (1) to *always* (5). Sample items from the scale include "[The GM] disciplines employees who break ethics rules" and "sets an example of how to do things the right way in terms of ethics." The reliability of this scale was .89.

**Managerial oversight.** We operationalized managerial oversight by calculating the ratio of shift managers to employees at each store. We obtained these data from company records at the time of the survey. This ratio resulted in values for which smaller numbers indicate lower levels of managerial oversight. This interpretation of the measure of managerial oversight corresponds with a commonly used conceptualization of span of control (Ouchi & Dowling, 1974).

### *Control Variables*

**Prior food loss, prior operating profit, and prior customer satisfaction.** In all models, we controlled for the level of the focal dependent variable in the 2 months prior to the survey administration to account for existing store-level differences. These prior period measures were calculated the same way as described in the *Dependent Variable Measures* section.

**Pay fairness.** The literature on deviance and theft has shown that individuals may engage in counterproductive behaviors and acts against the organization when they feel unfairly paid (Greenberg, 1990; Greenberg & Scott, 1996; Robinson & Greenberg, 1998). We therefore measured pay fairness using a two-item scale consisting of "I am paid fairly for the work I do" and "Pay increases are handled fairly" ( $\alpha = .79$ ).

**Demographics.** The demographic variables we included as controls were employee age, tenure, and work hours and median

household income within a 1-mi radius of the restaurant. These variables reflect factors commonly cited by researchers as being related to counterproductive behaviors (Hollinger & Clark, 1983; Levine & Jackson, 2002; Vardi & Wiener, 1996). For instance, employees who have been hired recently are more likely to engage in counterproductive behavior than those who have been employed for longer periods of time (Murphy, 1993; Niehoff & Paul, 2000). Furthermore, we controlled separately for the tenure of production employees (e.g., cooks) and service employees (i.e., wait staff and hosts) because each may contribute differentially to food loss: Service employees can place incorrect orders or give away free meals; production employees may make cooking errors or use too much food per order. Similarly, we controlled for the average employee age because previous research has found that those who are younger tend to engage in more counterproductive behaviors than their older counterparts (Hollinger et al., 1992; Lary, 1988). We also controlled for the average number (per store) of biweekly work hours per employee; restaurants with a smaller number on this variable employ more part-time employees, who may not work frequently enough to develop strong, highly reliable routines or to be influenced by managers (e.g., ethical modeling). Fewer average hours per employee may also indicate the presence of fewer workers who see their current job as part of a career trajectory, a factor shown to be related to workplace deviance (Huiras et al., 2000). Last, we used median household income (in \$1,000s) in the area surrounding the restaurant to represent the modal economic background of store employees. We included this control because those who come from lower economic backgrounds may be more likely to engage in counterproductive behaviors (Hollinger & Clark, 1983). The company tracked this information on the basis of each store's ZIP code and address.

**Training.** Because food loss may be caused by employees who simply lack appropriate training in how to efficiently and appropriately use company resources, we controlled for training by including the percentage of all crew members who had been employed over 30 days who had been certified by nonstore management personnel as passing the company's training program on at least one of the stations in the restaurant. The company tracks this metric for use in evaluating store GMs.

**Turnover.** Because food waste may also be caused by the need to integrate many new employees "while the train is moving," we controlled for crew member turnover during the 2-month period concurrent with the dependent variables. Likewise, food waste may be associated with the integration of new managers, who are themselves just learning how to competently perform their new roles (including oversight of subordinates; Kacmar et al., 2006). We therefore also controlled for restaurant management turnover for the same period. We calculated each turnover measure by taking the number of terminations within a period divided by the average active number of employees of that type (crew member or managers), multiplied by 100. For instance, a store that had 50 crew members at the beginning of the period, eight terminations during the period, and 52 crew members at the end (because of extra hiring and transfers into the store) would have an employee turnover for the period of 15.69% (8/51).

**New store opening.** We controlled for all stores open less than 1 year prior to the survey administration. Managers at newer stores may lack sufficient data on customer demand and therefore be less able to place appropriate food supply orders or staff appropriately.

Furthermore, employees within newer stores may not be as familiar with operating procedures, routines for managing peak demand, and so on.

### Data Aggregation

The survey data were aggregated to the store level. For the two manager variables (abusive supervision and ethical leadership) and pay fairness, we computed a within-store correlation ( $r_{wg}$ ) to assess the amount of agreement across employees (James, Demaree, & Wolf, 1984). These mean within-store correlations ranged from .85 to .90, indicating good agreement. We also computed intraclass correlation—ICC(1) and ICC(2)—statistics to assess the degree of within-restaurant clustering. Whereas ICC(1) values should be statistically different from zero (Bliese, 2000), Glick (1985) suggested that ICC(2) values over .60 are desirable. The ICC(1) values in this study were .04 for abusive supervision, .08 for ethical leadership, and .06 for pay fairness; each of these values was significantly different from zero at  $p < .001$ . The ICC(2) values for abusive supervision, ethical leadership, and pay fairness were .68, .82, and .75, respectively, all above the proposed cutoff. In total, these statistics support the aggregation of these three variables to the store level.

### Results

Summary statistics are presented in Table 1. We analyzed the data using hierarchical regression, first entering the control variables and then proceeding to test the hypotheses. In Table 2, we present the results predicting food loss. In Model 1, we entered prior food loss, which was positively related to food loss in the subsequent periods (see Table 2). In Model 2, we entered the remaining control variables, which accounted for an additional 11% of the variance in food loss,  $F(10, 253) = 3.59, p < .001$ . Both the median household income of the neighborhood surrounding the store,  $t(253) = -3.23, p < .001$ , and employee training,  $t(253) = -2.97, p < .01$ , were negatively related to food loss.

In Model 3, we entered the managerial modes of influence variables to test Hypotheses 1–3. The addition of the three managerial variables accounted for a significant increase in the explanatory power of the model ( $\Delta R^2 = .09$ ),  $F(3, 250) = 10.33, p < .001$ . Abusive supervision was positively related to food loss,  $t(250) = 2.60, p < .01$ , in support of Hypothesis 1. However, ethical leadership was not significantly related to food loss,  $t(250) = 1.75$ . Thus, we did not find support for Hypothesis 2. Finally, the results show that managerial oversight was negatively related to food loss,  $t(250) = -4.73, p < .001$ , supporting Hypothesis 3.

In Table 3, we present our analysis of operating profit. We first entered prior operating profit as a control variable in Model 1. As expected, prior operating profit positively influenced subsequent operating profit,  $t(263) = 26.33, p < .001$ , and explained a major portion of the variance ( $R^2 = .73$ ),  $F(1, 263) = 693.41, p < .001$ . In Model 2, we added the rest of the control variables. Prior operating profit was again positively related to current operating profit,  $t(253) = 24.75, p < .001$ , as were both median household income,  $t(253) = 3.48, p < .001$ , and employee training,  $t(253) = 2.02, p < .05$  ( $R^2 = .75$ ),  $F(11, 253) = 69.91, p < .001$ . In Model 3, we entered the three leadership variables. None was signifi-

Table 1  
Summary Statistics and Intercorrelations

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Prior food loss	58.49	99.64	—																		
2. Prior operating profit	29.28	5.80	-.46**	—																	
3. Prior customer satisfaction	58.25	5.80	-.19**	.20**	—																
4. Employee age	26.24	2.71	-.05	.15*	-.03	—															
5. Employee work hours	43.99	5.79	-.08	.21**	-.09	.49**	—														
6. Production																					
7. Service employee tenure	0.73	0.42	-.02	.21**	.07	.60**	.33**	—													
8. Median household income (\$1,000s)	0.56	0.32	-.14*	.26**	.14*	.37**	.20**	.45**	—												
9. Pay fairness	49.58	15.86	-.08	.11	.03	-.16**	-.17**	-.14*	-.08	—											
10. Employee training	2.77	0.37	.02	-.09	.09	-.23**	-.17**	-.11	-.16**	-.12*	—										
11. Employee turnover	96.15	5.93	-.09	.09	.15*	.09	.05	.19**	.12*	-.04	.09	—									
12. Management turnover	14.29	6.02	.09	-.09	-.11	-.09	-.11*	-.20**	-.19*	-.06	-.01	-.24**	—								
13. Store open less than 1 year	2.24	6.88	.09	-.01	.00	-.04	.01	.01	.00	.08	-.02	-.06	-.06	.05	.02	—					
14. Managerial oversight	0.06	0.02	.23**	-.15*	-.01	-.03	.04	-.09	-.17**	.00	.05	.08	.04	.01	-.02	.01	—				
15. Abusive supervision	1.44	0.24	-.04	.01	-.07	.13*	.08	.05	.07	.03	-.22**	-.09	.04	-.03	-.08	-.11	.06	—			
16. Ethical leadership	3.93	0.33	-.04	-.05	.09	-.19**	-.15**	-.08	-.14*	-.07	.55**	.09	-.03	.02	.10	.06	-.51**	—			
17. Food loss	67.28	71.24	.34**	-.29**	-.17**	.11	-.04	.08	-.03	-.10	-.06	-.19**	.03	.07	.01	-.22**	.20**	-.09	—		
18. Operating profit	27.97	5.75	-.41**	.85**	.15*	.08	.16**	.15*	.25**	.20**	-.13*	.15*	-.10	.02	-.09	-.14*	-.01	-.04	-.36**	—	
19. Customer satisfaction	59.19	7.44	-.23**	.22**	.56**	-.01	.01	.05	.20**	-.01	.05	.13*	-.19**	-.04	.01	.02	.04	-.01	-.28**	.17**	—

Note. N = 265.

\*  $p < .05$ . \*\*  $p < .01$ .

Table 2  
Results of Hierarchical Regression Analysis Predicting Counterproductivity

Variable and statistic	Model 1		Model 2		Model 3	
	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>
Control variable						
Prior food loss	0.21***	0.18***	0.23***	0.04	0.04	0.04
Employee age		3.24	3.33		1.94	1.84
Employee work hours		-1.40	-0.96		0.79	0.75
Production employee tenure		19.02	13.69		12.02	11.45
Service employee tenure		-6.50	-13.86		13.73	13.16
Median household income (\$1,000s)		-0.84***	-0.76**		0.26	0.25
Pay fairness		-19.44	-22.57		10.99	12.26
Employee training		-2.12**	-1.86**		0.71	0.68
Employee turnover		0.14	0.07		0.70	0.67
Management turnover		0.90	0.87		0.53	0.50
Store open less than 1 year		3.34	-2.63		22.17	21.12
Leadership variable						
Abusive supervision			51.17**			19.72
Ethical leadership			27.05			15.49
Managerial oversight			-753.88***			159.21
<i>R</i> <sup>2</sup>	.10***		.21***		.30***	
Adjusted <i>R</i> <sup>2</sup>	.09		.18		.26	
$\Delta R^2$			.11***		.09***	
<i>df</i> (regression, residual)	1,263		11,253		14,250	

\*\*  $p < .01$ . \*\*\*  $p < .001$ .

cantly related to operating profit: abusive supervision,  $t(250) = 0.87$ ; ethical leadership,  $t(250) = 1.34$ ; managerial intensity,  $t(250) = -0.54$  ( $\Delta R^2 = .00$ ),  $F(1, 250) = 0.74$ , *ns*. In Model 4, we entered food loss into the model, which produced a significant increase in the variance explained by the model ( $\Delta R^2 = .01$ ),  $F(1,$

249) = 7.74,  $p < .01$ . In support of Hypothesis 4A, food loss was significantly and negatively related to operating profit,  $t(249) = -2.78$ ,  $p < .01$ .

We began testing for the mediating role of food loss by following the steps outlined in Baron and Kenny (1986). In Step 1, the

Table 3  
Results of Hierarchical Regression Analysis Predicting Operating Profit

Variable and statistic	Model 1		Model 2		Model 3		Model 4	
	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>
Control variable								
Prior operating profit	0.85***	0.03	0.83***	0.03	0.82***	0.03	0.79***	0.04
Employee age			-0.06	0.09	-0.06	0.09	-0.04	0.09
Employee work hours			0.00	0.04	0.00	0.04	-0.01	0.04
Production employee tenure			-0.69	0.56	-0.71	0.56	-0.50	0.56
Service employee tenure			0.94	0.65	0.93	0.65	0.85	0.65
Median household income (\$1,000s)			0.04***	0.01	0.04***	0.01	0.04**	0.01
Pay fairness			-0.88	0.51	-1.22*	0.60	-1.40*	0.60
Employee training			6.69*	3.31	6.40	3.36	4.68	3.37
Employee turnover			0.00	0.03	0.00	0.03	0.00	0.03
Management turnover			0.01	0.02	0.01	0.03	0.02	0.02
Store open less than 1 year			-1.20	1.03	-1.33	1.04	-1.41	1.02
Independent variable								
Abusive supervision					0.84	0.97	1.21	0.96
Ethical leadership					1.02	0.76	1.20	0.75
Managerial oversight					-4.17	7.69	-9.50	7.82
Mediator variable								
Food loss							-0.01***	0.00
<i>R</i> <sup>2</sup>	.73***		.75***		.75***		.76***	
Adjusted <i>R</i> <sup>2</sup>	.72		.74		.74		.75	
$\Delta R^2$			.02**		.00		.01**	
<i>df</i> (regression, residual)	1,263		11,253		14,250		15,249	

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .



independent variables must be positively related to the mediating variable. Model 3 in Table 2 provides support for this first step for abusive supervision and managerial oversight. In Step 2, the independent variables should be positively associated with the dependent variable. The analyses shown in Model 3 of Table 3 indicated that none of the three leadership variables had a significant direct effect on unit-level operating profit. Absent these main effects, food loss cannot be established as a mediator per the traditional mediation tests set forth by Baron and Kenny (1986). However, recent research has suggested that more distal mediation can be established without significant main effects of the independent variables, provided the independent variables are significantly associated with the mediator (shown in Table 2, Model 3) and the mediator is significantly related to the dependent variable (shown in Table 3, Model 4; MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002; Shrout & Bolger, 2002). One approach to establishing mediation in such situations is the Sobel (1982) test, which we used to test whether food loss might be mediating an indirect relationship between the leadership influences and operating profit. Because ethical leadership did not directly affect the more proximate counterproductivity outcome (i.e., food loss), we did not conduct a Sobel test for it. However, the Sobel tests for both abusive supervision ( $Z = 2.59, p < .01$ ) and managerial oversight ( $Z = 4.74, p < .001$ ) were significant. Thus, although the results do not meet the more conservative requirements of the Baron and Kenny (1986) test for mediation, there is partial support for Hypothesis 5a in that the leadership variables indirectly affected operating profit through food loss, indicating a form of distal mediation (Shrout & Bolger, 2002).

In Table 4, we present our analysis of customer satisfaction. Prior levels of customer satisfaction positively influenced subsequent customer satisfaction,  $t(263) = 11.18, p < .001$  (see Model 1). This variable accounted for a significant portion of the variance ( $R^2 = .32$ ),  $F(1, 263) = 124.99, p < .001$ . In Model 2, we entered the rest of the control variables, which did not produce a significant increase in the variance explained ( $\Delta R^2 = .04$ ),  $F(10, 253) = 1.38$ . Service employee tenure was positively associated with customer satisfaction,  $t(253) = 2.10, p < .05$ , and employee turnover was significantly negatively related,  $t(253) = -1.99, p < .05$ . As shown in Model 3, none of the leadership variables was significant: abusive supervision,  $t(250) = 1.01$ ; ethical leadership,  $t(250) = -0.71$ ; managerial intensity,  $t(250) = 1.09$  ( $\Delta R^2 = .01$ ),  $F(1, 250) = 1.30, ns$ . Finally, in Model 4 of Table 4, the addition of food loss accounted for a significant increase in the variance explained ( $\Delta R^2 = .03$ ),  $F(1, 249) = 11.60, p < .001$ . In support of Hypothesis 4B, food loss was negatively associated with customer satisfaction,  $t(249) = -3.41, p < .001$ .

To test the mediating role of food loss, we followed the same procedure as for operating profit. Although two of the leadership variables were shown to influence the mediator (Table 2, Model 3) and the mediator was shown to influence the dependent variable (Table 4, Model 4), we did not find direct effects of the independent variables on the dependent variable (Table 4, Model 3). Thus, food loss does not pass the conventional mediation tests (Baron & Kenny, 1986). However, the Sobel tests for both abusive supervision ( $Z = 2.57, p < .01$ ) and managerial oversight ( $Z = 4.62, p < .001$ ) were again significant, indicating, in partial support of Hypothesis 5b, that these leadership variables indirectly affected customer satisfaction through food loss.

## Discussion

The results of this research support the contention that unit-level management can and does influence counterproductivity. Our findings indicate that counterproductivity is higher when there are fewer managers providing direct oversight and when managers behave in ways perceived as abusive by subordinates. In total, the three modes of managerial influence we studied accounted for a 9% increase in the explained variance in counterproductivity beyond a relatively broad set of control variables related to alternative explanations. In addition, our finding that food loss was significantly associated with restaurant profitability and customer satisfaction demonstrates the importance of this and future studies of counterproductivity and its causes.

This study reminds us of the potential value of sheer managerial oversight or control. Although span of control and related notions have been mostly abandoned in research in favor of more overtly positive (e.g., transformational) or negative (e.g., abusive) aspects of leadership, this study suggests that objective, neutral measures of leadership influence remain valuable tools for explaining what happens in hierarchical work settings. Although it was not significant in the regression analysis, the correlation matrix shows that increased oversight was associated with reduced profitability. This makes sense because increased managerial oversight, although useful for reducing unwanted subordinate behaviors and their associated tangible outcomes, represents a significant business cost. Therefore, management has to take care to find an optimum level of managerial oversight—enough to minimize counterproductivity without excessively increasing labor costs.

Furthermore, our findings point to the negative effects of abusive managerial behavior. That is, we have shown that GMs' abusive supervision (as perceived by subordinates) was associated with increased business-unit-level counterproductivity in the form of food loss. Whereas abusive supervision has been linked to negative employee attitudes and reduced citizenship behaviors (at the individual level; e.g., Tepper, Duffy, Hoobler, & Ensley, 2004; Zellars et al., 2002), we believe that this study is the first to demonstrate a link between abusive managerial behavior and an objective unit-level outcome. This is an important practical finding because it demonstrates that being perceived as abusive by subordinates can "come back to bite" managers who are held accountable for unit-level counterproductivity and overall profitability. We speculate that the losses stemming from abusive supervision will be particularly great where it is hardest to link retaliatory acts to specific individuals.

Like Dineen et al. (2006), who found that high-integrity supervisory guidance did not influence organizationally directed deviance among retail bank employees, ethical leadership did not influence counterproductivity in our study. In the relatively low-pay and low-skill work setting we studied, where workers likely lack strong commitment and feel dispensable (Leidner, 1993), basic working conditions and decent treatment may be more important to employee attitudes and behaviors than a manager's ethical leadership (George, 1992). Finally, in the restaurant environment, the ethical issues employees face (e.g., whether to take or give away food) are quite straightforward. Ethical leadership may become more important in work environments where employees face more ambiguous ethical issues. Future research across organizational contexts should investigate whether the type of work

Table 4  
*Results of Hierarchical Regression Analysis Predicting Customer Satisfaction*

Variable and statistic	Model 1		Model 2		Model 3		Model 4	
	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>
Control variable								
Prior customer satisfaction	0.58***	0.05	0.55***	0.05	0.55***	0.05	0.52***	0.05
Employee age			−0.12	0.19	−0.15	0.19	−0.09	0.19
Employee work hours			0.04	0.08	0.03	0.08	−0.01	0.08
Production employee tenure			−1.23	1.20	−1.12	1.20	−0.68	1.18
Service employee tenure			2.89*	1.38	3.01*	1.39	2.69*	1.37
Median household income (\$1,000s)			−0.02	0.03	−0.02	0.03	−0.04	0.03
Pay fairness			0.34	1.10	1.18	1.29	0.77	1.27
Employee training			2.26	7.15	1.79	7.22	−2.20	7.17
Employee turnover			−0.14*	0.07	−0.14*	0.07	−0.14*	0.07
Management turnover			−0.05	0.05	−0.05	0.05	−0.02	0.05
Store open less than 1 year			−2.41	2.22	−2.08	2.23	−2.09	2.18
Independent variable								
Abusive supervision					2.09	2.06	2.91	2.03
Ethical leadership					−1.15	1.62	−0.77	1.59
Managerial oversight					17.80	16.26	6.65	16.26
Mediator variable								
Food loss							−0.21***	0.01
<i>R</i> <sup>2</sup>	.32***		.36***		.37***		.40***	
Adjusted <i>R</i> <sup>2</sup>	.32		.33		.33		.36	
$\Delta R^2$			.04		.01		.03***	
<i>df</i> (regression, residual)	1,263		11,253		14,250		15,249	

\*  $p < .05$ . \*\*\*  $p < .001$ .

and workers, the outcome studied, or both affect the type of managerial influence that is most important.

Our findings that abusive supervision influenced counterproductivity, whereas ethical leadership did not, are also highly consistent with a wide array of research demonstrating the generic psychological pattern that “bad is stronger than good” (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001, p. 323). In an extensive review, Baumeister et al. (2001) noted that negative information gets more attention, is processed more thoroughly, is retained longer, and has stronger and more lasting effects than positive information. Research on social support has documented that aversive interactions have a more powerful impact on relationship and stress outcomes than supportive interactions (e.g., Okun, Melichar, & Hill, 1990). In addition, in a study explicitly related to ethical behavior, Risky and Birnbaum (1974) concluded that judgments of people are more powerfully influenced by morally bad deeds and, once formed, cannot be easily overcome by good deeds: “The overall goodness of a person is determined mostly by his worst bad deed, with good deeds having lesser influence” (p. 172). All of this research combines to paint a picture of the vast power of abusive supervision to influence employee impressions and reactions relative to ethical leadership. Employees are more likely to attend to, process, and react to negative leader behavior than positive leader behavior.

We also found that two control variables—median neighborhood household income and level of employee training—were negatively related to counterproductivity. However, pay fairness was not a significant predictor of food loss, perhaps because perceived pay unfairness was so pervasive across our sample ( $M = 2.77$ ,  $SD = 0.37$ , on a 5-point scale). We also did not find either

management or employee turnover to be a significant predictor, despite Kacmar et al.’s (2006) recent reporting that employee turnover was related to subsequent food waste at Burger King. This difference may reflect differences in the measurement of food loss and waste across the companies and/or the different time lags used.

Finally, although we found some evidence for an indirect relationship between the managerial modes of influence we studied and profitability or customer satisfaction, we did not find evidence of the direct effects between these variables, which would be expected in traditional mediation analyses. Although romantic notions of leadership may suggest such relationships (Meindl, Ehrlich, & Dukerich, 1985), our findings are more consistent with arguments and evidence that individual leader characteristics or attributes are unlikely to be significant direct predictors of distal performance outcomes under most conditions (e.g., Waldman, Ramirez, House, & Puranam, 2001) but instead influence these outcomes indirectly via more proximate decisions and outcomes (Carpenter, Geletkanycz, & Sanders, 2004). We note, though, that our findings speak only to the impact of the three modes of managerial influence studied. Other types of managerial influence may impact restaurant outcomes directly. The correlations shown in Table 1 suggest that managerial actions that increase crew member tenure, especially that of servers, and efforts that improve a restaurant’s global service climate (Schneider, White, & Paul, 1998) may be more predictive of customer satisfaction and, in turn, overall operating profit. Managerial efforts that enhance servers’ friendliness and authenticity during customer interactions may be particularly valuable (Grandey, Fisk, Mattila, Jansen, & Sideman, 2005). In any case, our findings suggest that both researchers and

practitioners should take care to set expectations and rewards for leaders in accordance with those outcomes that leaders have a demonstrated ability to control.

### *Strengths, Limitations, and Future Directions*

Several features of this research support its unique contribution. First, we believe that the distinction between CWB and counterproductivity, and our focus on the latter, represents an important advance. One advantage of focusing on counterproductivity is that organizations likely care primarily about those employee behaviors with tangible outcomes. Our research demonstrates that at least one tangible outcome (food loss) of harmful employee behaviors is, in fact, associated with other unit-level outcomes that are clearly significant to organizations. We believe our shift to the unit level of analysis is particularly valuable because negative outcomes that matter to organizations often cannot be attributed to specific individuals. For example, although individuals steal, measures of outcomes such as inventory shrinkage are usually available only for entire organizational units. Also, where carelessness and neglect are widespread, organizational errors and loss may be as much the product of multiple, interdependent individuals and acts as the work of isolated individuals.

A second strength of this study is our simultaneous focus on three modes of managerial influence, a strategy that may prove instructive for future research. Only by accumulating more theoretically driven empirical research can we develop a more complete model of the conditions under which specific modes of managerial influence are likely to be most powerful. A third strength is our use of both objective and subjective data from multiple sources to examine the causes of a specific manifestation of harmful employee behaviors across a large number of business units ( $N = 265$ ). Our objective measure of food loss and its relationship with restaurant profitability allowed us to demonstrate very real financial consequences of counterproductivity. Despite calls for increased use of such objective outcome measures (Bennett & Robinson, 2003), access to them is difficult to obtain, and therefore few studies use them. We were also able to combine other objective measures, such as median neighborhood income, employee age and turnover, employee training, and managerial oversight, as predictors, along with perceptual measures of leadership from employees. Finally, the design of this longitudinal field study allowed us to address causality, because all independent variables were collected prior to the assessment of food loss. Moreover, our ability to control for prior levels of food loss, profitability, customer satisfaction, and numerous other alternative explanations reduces the possibility that our findings are spurious.

One limitation of our work is the difficulty of knowing exactly what type of employee behaviors and other factors produce food loss, this study's operationalization of counterproductivity. For example, we cannot pinpoint the percentages of total food loss attributable to employee waste or neglect versus intentional theft. Furthermore, most counterproductivity measures available in business organizations (e.g., inventory shrinkage, injuries) are likely to be caused in part by nonemployee factors, such as equipment breakdowns or supplier problems. Even if one considered only employee factors, counterproductivity would not always equate to the sum of all CWBs, because some behaviors do not lead to tangible outcomes (e.g., not all safety violations result in injuries;

Sackett & DeVore, 2001). Future research might attempt to validate the relationship between CWBs and counterproductivity by exploring how collective employee perceptions about CWBs in a unit correspond to objective measures.

A second limitation and need for future research stems from the fact that we did not directly measure the various psychological mechanisms we proposed as underlying explanations for the managerial influences on counterproductivity. For example, we did not directly measure interactional injustice perceptions. Finally, we focused on the influences of the GM's ethical and abusive behaviors because only this leader has direct responsibility for the store and regularly interacts with all store employees. However, we recognize that the behavior of lower level managers (e.g., shift managers' abusive supervision) may also influence counterproductivity. Future studies should attempt to assess the relative influence on counterproductivity of multiple levels of leadership.

### *Implications for Practice*

For managers, the bad news from our findings is that abusive supervision not only results in dissatisfied employees with less favorable attitudes (Ashforth, 1997; Keashly & Jagatic, 2000), lower self-efficacy (Baron, 1988), lower citizenship behavior (Zellars et al., 2002) and higher levels of psychological distress (Baron, 1990; Tepper, 2000) but also contributes to counterproductivity—a source of major material damage to their organization that negatively impacts profitability and customer satisfaction. Furthermore, positive leadership behavior in the form of ethical leadership may not be powerful enough to reduce counterproductivity, at least in this setting. However, the results of this study suggest some cause for optimism. Senior management can take actions to minimize abusive supervisory behaviors throughout the organization, can make strategic choices to optimize the amount of managerial oversight, and can make sure that all employees are well trained in procedures and expectations. Thus, at least to some extent, managers can intervene to reduce counterproductivity and thereby increase their likelihood of achieving financial success.

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