

Singapore Management University

Institutional Knowledge at Singapore Management University

Research Collection Lee Kong Chian School Of
Business

Lee Kong Chian School of Business

5-2000

The Trusted General Manager and Unit Performance: Empirical Evidence of a Competitive Advantage

James H. Davis
University of Notre Dame

F. David Schoorman
Purdue University

Roger C. Mayer
Baylor University

Hwee Hoon TAN
Singapore Management University, hhtan@smu.edu.sg

Follow this and additional works at: https://ink.library.smu.edu.sg/lkcsb_research



Part of the [Leadership Studies Commons](#), and the [Organizational Behavior and Theory Commons](#)

Citation

Davis, James H.; Schoorman, F. David; Mayer, Roger C.; and TAN, Hwee Hoon. The Trusted General Manager and Unit Performance: Empirical Evidence of a Competitive Advantage. (2000). *Strategic Management Journal*. 21, (5), 563-576. Research Collection Lee Kong Chian School Of Business. Available at: https://ink.library.smu.edu.sg/lkcsb_research/2508

This Journal Article is brought to you for free and open access by the Lee Kong Chian School of Business at Institutional Knowledge at Singapore Management University. It has been accepted for inclusion in Research Collection Lee Kong Chian School Of Business by an authorized administrator of Institutional Knowledge at Singapore Management University. For more information, please email cherylds@smu.edu.sg.

THE TRUSTED GENERAL MANAGER AND BUSINESS UNIT PERFORMANCE: EMPIRICAL EVIDENCE OF A COMPETITIVE ADVANTAGE

JAMES H. DAVIS^{1*}, F. DAVID SCHOORMAN², ROGER C. MAYER³ and HWEE HOON TAN⁴

¹College of Business Administration, University of Notre Dame, Notre Dame, Indiana, U.S.A.

²Krannert Graduate School of Management, Purdue University, West Lafayette, Indiana, U.S.A.

³Hankamer School of Business, Baylor University, Waco, Texas, U.S.A.

⁴Faculty of Business Administration, National University of Singapore, Singapore

Employee trust for the general manager is proposed as an internal organizational characteristic that provides a competitive advantage for the firm. This paper empirically examines the relationship between trust for a business unit's general manager and organizational performance. Trust was found to be significantly related to sales, profits and employee turnover in the restaurant industry. Managers who were either more or less trusted differed significantly in perceptions of their ability, benevolence and integrity. Copyright © 2000 John Wiley & Sons, Ltd.

The notion of a firm gaining a competitive advantage that can be sustained over the long run has come under recent attack (D'Aveni, 1994). Increasing competition has created dynamic environments in which strategies designed to ensure competitive advantages are quickly eroded by imitation, counter-attacks, and weakening entry barriers. This suggests that markets are moving more towards perfect competition, and therefore a *sustainable* competitive advantage cannot be achieved. Taken to the extreme, this line of reasoning would reduce strategic management to imitating competitor initiatives and implementing tactical adjustments designed for short-term advantage. Although competitive environments may never

reach this point, the search for sustainable competitive advantage appears to be shifting somewhat from traditional market strategies to a consideration of internal organizational factors. Unlike market strategies, internal organizational attributes may both lead to a performance advantage and be sustainable (Barney, 1986; Pfeffer, 1995; Gordon and DiTomaso, 1992). For an internal characteristic to provide a sustained competitive advantage, it must be valuable (affect economic consequences), rare, and imperfectly imitable (Barney, 1986; Hitt, Ireland and Hoskisson, 1995).

A number of internal firm characteristics have been considered to produce a sustainable advantage. For example, culture has been proposed as a characteristic which fulfills Barney's (1986) criteria (e.g., Peters and Waterman, 1982). Although culture as a form of competitive advantage makes intuitive sense, problems with its conceptual clarity and its subsequent measurement have rendered attempts to empirically exam-

Key words: trust, performance, restaurant industry, sales, profit, turnover, leadership

*Correspondence to: James H. Davis, College of Business Administration, University of Notre Dame, Notre Dame, IN 46556-0399, U.S.A.

ine its relationship with performance tenuous (Capon et al., 1991; Smith and Vecchio, 1993).

Another internal firm characteristic which has been advocated in recent years for its ability to produce an advantage is total quality management (TQM) (Barclay, 1993; Dean, 1994; Grossi, 1994; Wood, 1993). TQM proponents argue that techniques such as competitive benchmarking, statistical process control, process redesign, and flow-charting create a sustainable advantage. Although Powell, (1995) argues that most TQM characteristics do not lead to an advantage, he does support the view that some internal organizational characteristics which have imperfectly imitable features *can* produce an advantage. Thus, while there is growing concern in some quarters about the sustainability of market-based approaches to competitive advantage, internal characteristics appear to merit further investigation.

Trust has long been thought to be important to organizational success (e.g., Argyris, 1964; Scott, 1980; Gambetta, 1988; Bennis and Goldsmith, 1994; Zand, 1972). Trust reduces the need for formal contracts, reduces or eliminates opportunistic behaviors and reduces the need for hierarchical controls (Zaheer and Venkatraman, 1995). Trust appears to fulfill Barney's three criteria for a competitive advantage; trust adds value by reducing transaction costs (Milgrom and Roberts, 1992; Williamson, 1975), trust between employees and management is rare (Farnham, 1989), and trust between two individuals can be thought of as unique to that relationship and therefore cannot be copied.

A number of studies have argued that firms that have trusting relationships between top management and employees are thought to have advantages over firms that do not (e.g., Hosmer, 1995; Bromily and Cummings, 1992). Lawler, (1992) argued that one of the means to a sustainable competitive advantage for organizations is through cultural change from a control-oriented to an involvement-oriented management culture based upon mutual trust. Argyris, (1964) argued that the degree of trust and respect between management and employees has a direct bearing on the performance of the organization, illustrating mechanisms by which firm performance can be affected. In a climate of low trust, employees vent frustration and aggression by attempting to break management rules and 'get away with it,' or by setting inappropriate goals which are not

conducive to firm performance. Alternately, where trust for the leader is high, "employees may be more willing to see the legitimate needs of the organization" (Argyris, 1964: 31). Mayer, Davis and Schoorman (1995) argued that trust leads to risk taking behaviors such as delegation and empowerment on the part of leaders, and organizational citizenship behavior and enhanced individual performance on the part of subordinates.

WHAT IS TRUST?

Researchers have referred to trust in a variety of ways (Hosmer, 1995; Smith, Carroll and Ashford, 1995). Perhaps the key construct underlying much of the theoretical analysis of trust is risk. Kee and Knox, (1970) argued that all trusting relationships have meaningful incentives at stake and that the trusting party must understand the risks involved in the relationship. A willingness to take risks may be one of the few attributes of all trusting situations (Johnson-George and Swap, 1982). In their editorial commentary in a recent special issue on trust, Rousseau et al. (1998) note that the most widely cited definition of trust is that of Mayer et al. (1995), who characterized trust as a willingness to be vulnerable. When individuals take risks in relationships with others they become vulnerable to the party to whom they extend their trust. With vulnerability comes risk. Gambetta (1988), Boss (1978) and Zand (1972) argued that making oneself vulnerable to another implies that something of importance may be lost. The definition of trust employed in this research is the willingness of a party (trustor) to be vulnerable to the actions of another party (trustee) based on the expectation that trustee will perform an action important to the trustor, regardless of the trustor's ability to monitor or control the trustee (Mayer et al., 1995). This definition implies that the parties in a trusting relationship are identifiable and that trustors make rational decisions with respect to what they are willing to risk and where they will be vulnerable in a given relationship.

TRUST AND FIRM PERFORMANCE

Numerous measures of corporate performance can be found in the strategy literature that are as

diverse as accounting ratios, stock market measures, and market share. While each has merit within the correct context, what is important is that the measure taps into a factor that is important to the short- or long-term viability of the organization. For example, while market share is a legitimate performance measure for the automotive industry in which there are relatively few producers, it may be of little value to agricultural producers where each farm has a negligible market share. Thus, it is important to select indicators of performance that fit the industry.

This view is consistent with the literature on indicators of organizational effectiveness (e.g., Van de Ven and Ferry, 1980). Goodman and Pennings (1977) argue that organizational effectiveness is a multidimensional construct, and that the specific dimensions are unique to the nature of the business and the goals of the organization. This perspective implies that there are no universalistic indicators and that the measures of effectiveness and the antecedents of these measures require a 'fine grained analysis' of the industry and organization in question (Goodman, Atkin and Schoorman, 1983). The research described in this paper is conducted in the restaurant industry and, therefore, we will focus on measures of firm performance that are particularly relevant to this industry.

Financial performance

The most widely used indicators of firm performance are measures of the financial success of the organization. Financial success, for most profit-oriented firms, can be assessed both in terms of "top-line" (e.g., sales) as well as "bottom-line" (e.g., profitability) measures. In a restaurant where there is a higher level of trust in the general manager (GM), we expect the employees to be more highly committed to the success of the restaurant (and the general manager) and work in more effective ways to increase the volume of sales. Trust has been shown to influence such behaviors as communication (Mellinger, 1956), problem-solving (Zand, 1972), and adaptivity (Kegan, 1971). Such effective behaviors as these are likely to increase the restaurant's sales volume.

Hypothesis 1: Restaurants whose GMs are more trusted by their employees will have

higher sales than restaurants whose GMs are less trusted by their employees.

The "bottom-line" or profitability of an organization is as important a financial indicator in the restaurant industry as in any other industry. This reflects the efficiency of the organization and reflects the manager's ability to increase sales while keeping the variable costs down. In the restaurant industry, food costs are a significant part of the variable expenses. One major factor in the variation in food costs relative to sales is waste, which is controlled to a great extent by the employees at the lowest level of the organization. Thus, in a restaurant, the hourly employees can have a significant impact on the profitability of the organization. In a restaurant where there is a higher level of trust for the GM, we expect the employees to be motivated to keep variable costs down while increasing the sales volume.

Hypothesis 2: Restaurants whose GMs are more trusted by their employees will have higher net profits than restaurants whose GMs are less trusted by their employees.

Turnover

While financial indicators play an important part in the evaluation of firm performance in any industry, other industry-specific measures of effectiveness may reflect the success of the organization (Hosmer, 1995). In the restaurant industry the turnover rate among employees can be an important indicator of organizational success. High levels of turnover are common in this industry, due in part to the low wages and the unpredictable work hours. Costs associated with higher levels of turnover include recruiting and screening, training, and the loss of continuity in customer relationships (Cascio, 1991). A firm which is able to reduce voluntary employee turnover can reduce its costs, increase its level of service, and in turn increase its bottom line. Thus, in the restaurant industry, turnover rates may be an important indicator of organizational performance. We propose that trust for management has a direct bearing upon employee turnover. For example, where a manager is more trusted, employees are more likely to believe that their contributions to the organization, both direct and indirect, will be recog-

nized and rewarded in some way. Conversely, if a manager is not trusted, employees are likely to devalue the inducements/contributions ratio which ties them to continued membership in the organization (March and Simon, 1958; Mayer and Schoorman, 1992). This suggests the following hypothesis:

Hypothesis 3: Restaurants whose GMs are more trusted by their employees will have lower employee turnover rates than restaurants whose GMs are less trusted by their employees.

Given the proposed conceptualization of trust and its hypothesized relationship with performance, we now turn to factors that influence a trustor's willingness to assume risk and vulnerability in a relationship.

ANTECEDENTS OF TRUST FOR THE GENERAL MANAGER

A number of studies have attempted to describe factors which lead to one individual's willingness to be at risk or vulnerable to another. Previous research suggested as few as one factor (e.g., Strickland, 1958) and as many as ten (e.g., Butler, 1991). Mayer et al. (1995) argued that three factors, ability, benevolence, and integrity, appear most frequently in the literature and explain a major portion of perceptions of trustworthiness. Ability, benevolence and integrity provide unique perceptual perspectives from which to consider the manager's trustworthiness. This framework has been adopted by a number of researchers investigating the antecedents of trust (e.g., Bauer and Green, 1996; Brockner et al., 1997; Robinson, 1996).

Ability

A number of studies have argued that to trust another party, a trustor must perceive that the trustee has the ability or competence to accomplish the focal task (e.g., Sitkin and Pablo, 1992; Butler, 1991; Cook and Wall, 1980; Mishra, 1996). Ability has been defined as that group of skills and attributes which enables a party to have influence within some specific situation. The situation is specific due to the fact that a given manager may be highly skilled and

trusted in one domain but have little aptitude in another.

For a manager to be trusted, employees must perceive that he/she has the skills and aptitude to make a difference for them. If a manager is perceived as able to get something done about a particular problem, he or she is likely to be more trusted than a manager who is perceived as impotent in the situation. Restaurant employees who perceive that their managers have high ability believe that their managers have the knowledge and skills to influence their work lives in a positive way. While a GM gains power in the corporation and increases the amount of managerial discretion he/she is allowed by the corporation through operating a profitable restaurant, it is *not* the GM's ability to increase the bottom line per se which affects the employees' trust. Rather, it is the increased discretion and access to resources which enhances the GM's ability to have an influence on the employees' work lives. In other words, employees are less concerned with the facility's bottom line than they are with the issue of "what can you do for me?" If the employees perceive that their manager has the skills and the power to get things done which affect them, they will judge their GM to be higher in ability. This suggests the following hypothesis:

Hypothesis 4: There will be a positive relationship between the perception of GM ability and the level of trust for the GM.

Benevolence

The trust literature describes benevolence as the extent to which the trustor perceives that the trustee intends to do good to the trustor in the relationship (e.g., Larzelere and Huston, 1980; Mayer et al., 1995; Solomon, 1960; Strickland, 1958; Whitener et al., 1998). Benevolence represents a positive personal orientation of the trustee to the trustor. If employees believe their GM will go out of his/her way on their behalf they are more likely to trust the GM, since they perceive that the GM has their best interests at heart. Jones, James, and Bruni, (1975) suggested that trust in a leader is influenced in part by the extent to which the leader's behavior is relevant to the individual's needs and desires. Korsgaard, Schweiger and Sapienza, (1995) found that lead-

ers who show consideration towards followers had higher follower trust than those that did not. Restaurant employees perceive that their GM is concerned about their needs and desires at work when the GM is flexible in scheduling work hours and considering their opinions when making a decision. This suggests the following hypothesis:

Hypothesis 5: There will be a positive relationship between the perception of GM benevolence and the level of trust for the GM.

Integrity

An employee's perception of the GM's integrity involves the employee's belief that the GM adheres to a set of principles that the employee finds acceptable. Such factors as consistency, a reputation for honesty, and fairness all contribute to the employee's perception of GM integrity. Many authors have hypothesized that constructs similar to integrity are associated with trust (e.g., Lieberman, 1981; Sitkin and Roth, 1993; Butler, 1991). Employees in restaurants are more likely to trust their GM if they believe that the GM has integrity. Even if an employee does not like a particular managerial decision, the employee may still trust the GM if the employee believes that the GM is just, honest and fair. This suggests the following hypothesis:

Hypothesis 6: There will be a positive relationship between the perception of GM integrity and the level of trust for the GM.

In summary, this research predicts that trust, defined as employee *willingness to be vulnerable* to the actions of the GM, affects the performance of the organization in both financial and non-financial effectiveness measures. We further propose that the level of trust a GM is able to garner from his/her employees is contingent upon the employee's perceptions of the GM's ability, benevolence and integrity.

STUDY 1

The relationship between trust and organizational effectiveness was studied in a corporation consisting of a chain of nine restaurants. For several reasons, this restaurant chain provided a good

context in which to study the effects of trust. Each restaurant operates as an independent profit center for the parent corporation. Although all of the restaurants operate under the same basic rules, the GM at each facility has considerable latitude in dealing with the restaurant's employees. Thus, each GM had substantial capacity to either build or diminish trust through his/her interactions with employees. Further, turnover in the industry is quite high, and reducing it is recognized by the corporation to be an important factor in long-term success. This study's use of semi-autonomous organizations within the same corporation provided both statistical control and sufficient GM impact, making meaningful interorganizational comparisons of trust and performance levels possible.

The impact of employee attitudes in the restaurant industry has a more immediate effect upon organizational performance than in many other industries. Most communities provide numerous dining alternatives, making rivalry for customers intense. Employee attitudes can affect customer satisfaction very quickly and thus, have an immediate effect upon firm performance since customers can easily switch to competitors. The same might not be said for other service industries such as hospitals in which customers may have few, if any, alternatives and switching costs are greater or may be prohibited by insurance carriers. Thus, the restaurant industry provides an ideal environment to test the effects of trust on organizational performance.

In order to assess the extent to which each restaurant's employees trusted their GM, the employees of the nine restaurants completed a survey measuring the attitudinal variables including trust for the GM, and ability, benevolence and integrity of the GM. The measures developed by Schoorman, Mayer and Davis (1996) and adapted by Mayer and Davis (1999) were used in this study. Each employee was given time away from his/her normal duties to complete the brief questionnaire. A member of the research team was on site in each restaurant to administer the surveys and to answer questions. Respondents were promised confidentiality by the researcher in order to minimize bias. Responses to the five-point, Likert-type agree/disagree formatted items were averaged for each employee to form scores for each of the antecedents of trust and trust itself. The employees' scores in each restaurant were averaged to form restaurant composites.

These composites reflect the extent to which the restaurant's workforce trusts its GM (GM Trust), and its assessment of the GM's ability, benevolence and integrity.

Profits, sales, and turnover are three factors which are widely accepted in the restaurant industry as critical to long-term viability. In order to test the hypothesized relationship between trust and performance, unit financial and turnover data for the quarter following the survey were obtained from the corporate office. Two measures of financial performance were used in this analysis: total sales (SALES) for each restaurant and net profit (PROFIT). The two were selected because they are most clearly indicative of financial performance in this context, and are used by the corporation in assessing individual restaurant and GM performance. PROFIT is a measure of operating profitability calculated by subtracting total operating expenses (direct and indirect) from gross revenue. It reflects the efficiency of the restaurant and the manager's ability to increase sales while controlling variable costs. The corporation supplied turnover data, consisting of the percentage of employees who left each restaurant during the quarter.

Two control measures were employed in statistical comparisons of restaurant performance. It is feasible that differences in organizational financial performance can be attributed to environmental characteristics rather than internal factors such as trust. The performance of firms in the restaurant industry can be attributed to the size and income of the target market. Therefore, the number of households and the median income of residents in the county of each restaurant were used as control variables. In addition to these measures of the environment of the restaurant, a structural variable, physical size of the restaurant, was used as a control measure in the analyses of SALES as a dependent variable. Although each of the restaurants in the chain was similar in size, small differences could account for variance in sales. Size was measured as the square footage of the restaurant.

RESULTS

A total of 371 employees completed the trust survey. This comprised 61.8% of the total popu-

lation of the chain's employees. The average Trust score for employees in the corporation was 3.27 on a five-point scale (s.d. = 0.71).

In order to conduct the analyses of the relationship between Trust and SALES, PROFIT and turnover (Hypotheses 1-3), it was necessary to aggregate the measure of Trust to the restaurant level. In order to support this aggregation we conducted a one-way analysis of variance on the individual reports of Trust by restaurant. This procedure allowed us to test whether the between-group variance was greater than the within-group variance for the measure of Trust (Goodman, Ravlin, and Schminke, 1987; Yammarino, 1990; Yammarino and Markham, 1992). The analysis of variance yielded a significant F-ratio ($F = 4.139$, $p < 0.001$) indicating that there was greater agreement within restaurant than between restaurants, and justifying the aggregation of this variable to the restaurant level. The intraclass correlation of 0.11 likewise suggested low association between restaurants (Hays, 1988). These results allowed restaurant performance to be examined in relation to the aggregated measure of GM trust. The average GM trust by restaurant is presented in Table 1.

Is trust for the GM related to performance?

Two statistical approaches were taken to examining the relationship between GM trust and performance. The first consisted of tests of mean differences between restaurants with high trust and those with low trust. The second approach utilized multiple regression analyses that included

Table 1. Mean GM trust, rank and changes by study

Rest. #	STUDY 1		STUDY 2		CHANGES	
	GM Trust	Trust Rank	GM Trust	Trust Rank	Trust Change	GM Change
1	3.13	6	3.21	5	+0.08	Yes
2	2.90	9	3.17	6	+0.27	Yes
3	3.04	7	3.32	4	+0.28	Yes
4	3.50	3	3.56	1	+0.06	No
5	3.56	2	3.34	3	-0.22	No
6	3.03	8	2.88	9	-0.15	No
7	3.58	1	3.15	7	-0.43	Yes
8	3.40	4	3.47	2	+0.07	No
9	3.17	5	2.96	8	-0.21	Yes

control variables. Each approach had advantages and limitations as noted below.

Tests of hypotheses at restaurant level

For each of the hypothesis tests of the relationship between GM trust and restaurant performance, the analyses were conducted at the restaurant level. The aggregated measure of trust for the GM was related to measures of SALES and PROFIT. Given the small sample size at this level of aggregation ($n=9$), we split the sample at the median score for GM trust. This yielded a subgroup of restaurants in which the GM was trusted and a subgroup in which there was lower trust. A natural break in restaurant trust scores occurred at the median trust level, between the fourth and fifth restaurants rank ordered by trust score (see Table 1). Therefore, the top four (restaurant #'s 7, 5, 4 and 8) and the bottom five (#'s 9, 1, 3, 6 and 2) restaurants were grouped and designated high trust and low trust groups respectively. We then compared the measures of financial performance in the High Trust and Low Trust restaurants using a directional (one-tailed) t-statistic. Results of these hypothesis tests are presented in Table 2.

The first hypothesis examined the relationship between GM trust and restaurant sales. It was hypothesized that restaurants with higher trust would have significantly higher sales than those with lower trust. The t-test comparing the average of the high trust group with low trust group on SALES was significant ($t=3.46$; $p < 0.01$). This indicates that restaurants with higher trust had

higher SALES, which supports Hypothesis 1. A similar analysis was used to test Hypothesis 2, which compares the net profits of high trust restaurants with low trust restaurants. The difference in PROFIT was statistically significant in the hypothesized direction ($t=2.76$; $p < 0.05$). Restaurants with high GM trust had higher net profits than those with low GM trust, supporting Hypothesis 2.

The third hypothesis examined the effects of GM trust on employee turnover. The difference in turnover between restaurants with high GM trust and those with low GM trust was marginally significant ($t=-1.63$; $p < 0.10$). This result provides some support for Hypothesis 3, that more trusted GMs will have lower turnover. It is likely that the effect of GM trust on turnover has a longer time lag than that for financial measures, and we will explore this possibility later in the paper.

Regression analyses with control variables

A second approach to testing these hypotheses utilized multiple regression analyses where each of the dependent variables was regressed on GM trust, with the addition of number of households and median income as control variables (see Table 3). For the regression model with SALES as the dependent variable, the size of the restaurant (measured in square feet) was entered as an additional control variable. This allowed us to control for the size of the restaurant as well as to directly examine the effect of size on sales. Although these regression analyses provide the advantage of a more sophisticated analysis of the effects of trust on the dependent variable, they must be interpreted with caution in that the ratio of observations to variables violates most prescriptions of what is appropriate. This violation will tend to inflate the observed variance accounted for by the models.

In the regression model testing Hypothesis 1, GM trust was a significant predictor of SALES ($t=2.83$, $p < 0.05$) while controlling for households, median income and size. It is interesting to note that the size variable was also significant ($t=2.25$, $p < 0.05$) indicating that size does play a role in the total sales of the restaurant. In the test of Hypothesis 2, GM trust was statistically significant in predicting PROFIT ($t=2.42$, $p < 0.05$). The control variables did not account

Table 2. Tests of mean differences between high- and low-trust restaurants

STUDY 1	High Trust	Low Trust	t-value
SALES	607250.0	395600.0	3.46**
PROFIT	23.8	15.6	2.76*
Turnover	21.8	30.0	-1.63 ⁺
STUDY 2			
SALES	615125.0	483375.0	2.22*
PROFIT	48.2	22.4	2.79*
Turnover	39.7	30.3	1.43

** $p < 0.01$

* $p < 0.05$

⁺ $p < 0.10$

Table 3. Regression analyses of relationships between GM trust and performance – Study 1

Dependent Var	Independent Var	B	β	t
SALES	GM Trust	307274.1	108459.3	2.83*
	Restaurant Size	33.7	15.0	2.25 ⁺
	Households	1183.7	1282.4	0.92
	Median Income	-17402.6	14732.3	-1.18
	Constant	-348169.7	566821.0	-0.61
	Multiple R	0.93		
R square	0.87			
Adj. R square	0.74			
F =	6.63*			
PROFIT	GM Trust	15.44	6.38	2.42 ⁺
	Households	0.11	0.07	1.56
	Median Income	0.75	0.89	0.85
	Constant	-59.78	34.23	-1.75
	Multiple R	0.81		
	R square	0.65		
Adj. R square	0.45			
F =	3.14			
TURNOVER	GM Trust	-14.99	12.20	-1.23
	Households	0.09	0.14	0.62
	Median Income	0.99	1.69	0.58
	Constant	41.55	65.39	0.64
	Multiple R	0.53		
	R square	0.28		
Adj. R square	-0.15			
F =	0.65			

* $p < 0.05$ ⁺ $p < 0.10$

for significant variance in PROFIT. As with the means tests, both hypotheses related to financial performance were supported. The regression analysis examining turnover showed no significant relationship between GM trust and turnover. Thus Hypothesis 3 was not supported by the regression analysis. This is in contrast to the findings in the means tests which showed a marginally significant relationship ($p < 0.10$) in a directional test.

The weaker findings regarding turnover, and our own observations of the time frame related to decisions by employees to voluntarily terminate employment, suggested that we should examine the relationship between GM trust and turnover over a longer period than one quarter. We, therefore collected data over an additional quarter and re-examined the relationship between GM trust and turnover. In the same test of the mean differences presented above, with data from two quarters following the measurement of trust, GM trust

was significantly related to employee turnover ($t = -2.29$, $p < 0.05$). A similar analysis for the measures of financial performance, also yielded significant relationships for both SALES ($t = 3.14$, $p < 0.05$) and PROFIT ($t = 2.44$, $p < 0.05$) although the change in magnitude of the relationship was not as great as that for turnover. These data suggest that the effects of GM trust on financial performance may be more immediate and more robust than the effect on employee turnover.

The data presented above indicate that restaurants with the higher levels of GM trust were also those which attained the higher levels of sales and profitability, and lower levels of turnover. These results, taken together, present a consistent pattern of support for the view that GM trust is an important predictor of financial performance and employee turnover in the restaurant industry.

Can managers change levels of trust?

The preceding results provide evidence for a relationship between the trust a GM garners from his/her workforce and the restaurant's performance across a variety of measures. If the restaurants of more trusted GMs perform higher, it is important to consider what the GM can do to enhance his/her employees' level of trust. In the following analysis, we examine whether employee perceptions of GM ability, benevolence and integrity are associated with trust. We hypothesize that a GM can influence trust by influencing the perceptions of these three factors.

Confirmatory factor analysis using LISREL 7 was performed to test whether the items measuring factors of trustworthiness can be differentiated from one another. Results of that analysis are presented in Table 4. Examination of the fit indices reveals that the three-factor model fit the data well. The comparative-fit index (Bentler, 1990) was 0.98 for the proposed model, which indicates an acceptable fit. The single-factor model, representing that the items all reflect a global variable, did not fit the data nearly as well based on any of the fit measures (e.g., CFI = 0.84). A Chi-Square difference test confirmed that the proposed three-factor model provided a significantly better fit ($p < 0.001$) than the one-factor model.

Tests of Hypotheses at individual level

Previously, each of the three performance variables provided a single, restaurant-level number which was compared to the aggregate GM trust for each restaurant. Aggregation of data to the restaurant level was not necessary for tests examining employee perceptions of the antecedents of

GM trustworthiness. Thus, the following tests are conducted at the individual level of analysis. Table 5 presents means, standard deviations, correlations for trust and the hypothesized antecedents and reliability coefficients. The correlation of GM trust with GM ability was 0.56 ($p < 0.001$), with GM benevolence was 0.60 ($p < 0.001$) and with GM integrity was 0.66 ($p < 0.001$). Each of these relationships is statistically significant, thus supporting Hypotheses 4, 5 and 6. These results suggest that general managers can improve their employees' trust by improving their employees' perceptions of their ability, benevolence and integrity.

The data in Table 5 also indicate that the inter-correlations among the antecedent variables are large and raise the question of the combined predictive power of these variables. In order to examine this question a multiple regression analysis was conducted with GM ability, GM benevolence and GM integrity as predictors of GM trust (Table 6). The multiple regression analysis indicates that the three variables account for 46 percent of the variance in GM trust. The multiple R is 0.68, which is statistically significant ($F = 103.95$, $p < 0.001$). GM benevolence and GM integrity are statistically significant as individual predictors while GM ability is not. The failure of GM ability to reach statistical significance is possibly due to the high levels of multicollinearity discussed earlier.

It should be noted that the theory on which this research is based conceptualizes trust, ability, benevolence and integrity as perceptual variables, and therefore requires that they be measured through self-reports (Mayer et al., 1995). While efforts were made to ensure that relationships among variables were attributable to sources other than common method variance, common source bias may be a limitation of this analysis and the results should be interpreted cautiously.

Table 4. LISREL confirmatory factor analysis of antecedents of trust

Model*	df	χ^2	GFI	AGFI	RMSR	CFI	NFI
Null Model	36	2540.63	-	-	-	-	-
One Factor	27	424.94	0.78	0.63	0.17	0.84	0.83
Three Factor	24	80.04	0.95	0.91	0.08	0.98	0.97

GFI = Goodness of Fit Index
 AGFI = Adjusted Goodness of Fit Index
 $CFI = \{(\chi^2_{\text{null-dfnull}} - (\chi^2_{\text{theoretical-dftheoretical}})) / (\chi^2_{\text{null-dfnull}})\}$

STUDY 2

One remaining question that has not been clearly answered is the direction of causality between GM trust and organizational performance. Although we have presumed that this is the logical theoretical direction, the evidence in this study is far from definitive. An argument could be made, for example, that high organizational performance

Table 5. Means, standard deviations, intercorrelations and reliability coefficients for trust and antecedent variables

	Mean	S.D.	1	2	3	Reliability Coefficient
1. GM Trust	3.27	0.71				0.617
2. GM Ability	4.05	0.71	0.561***			0.907
3. GM Benevolence	3.67	0.87	0.595***	0.682***		0.922
4. GM Integrity	3.76	0.77	0.655***	0.753***	0.736***	0.866

*p < 0.05
 **p < 0.01
 ***p < 0.001

Table 6. Regression coefficients for effects of predictors of trust

Dep. Var.	Ind. Var.	B	B*	t
GM Trust	Constant	0.792		4.99***
	Benevolence	0.182	0.224	3.79***
	Ability	0.082	0.083	1.34 ⁺
	Integrity	0.394	0.427	6.40***

⁺p < 0.10
 *p < 0.05
 **p < 0.01
 ***p < 0.001

builds workforce trust in the organization's leader. Although the dependent variables in this study were collected in the quarter following the measurement of GM trust, the stability that is likely in both variables makes it possible that prior performance affected the level of trust in the next time period. In fact, this feedback loop between performance and trust is anticipated in the model of trust proposed by Mayer et al. (1995).

In order to further investigate the causal direction between GM trust and performance as well as to verify the relationships observed between these variables we returned to the same organization three years later to attempt to replicate the findings with respect to GM trust and performance. For Study 2, data collection was limited to the measurement of GM trust and the three performance variables described earlier. This allowed us to re-test Hypotheses 1–3. The data collection procedure and the instruments used were the same as those described for Study 1. As with the earlier study, the performance measures SALES, PROFIT and turnover were collected at the end of the following quarter.

RESULTS

A total of 381 employees completed the survey in Study 2. This represented 47.1% of the total number of employees on the restaurant chain's payroll as of the time of data collection. As with the first survey, data collection occurred on site, across all shifts. Over 90% of the employees working on the day of data collection completed the survey. The average GM trust score across the 9 restaurants was 3.22 on a five-point scale. The measure of GM trust was aggregated to the restaurant level in order to test the hypotheses regarding restaurant performance. A one-way analysis of variance examining whether the between-group variance was greater than the within-group variance (Goodman et al., 1987; Yammarino, 1990; Yammarino and Markham, 1992) supported this aggregation ($F = 3.79$, $p < 0.001$). The average GM trust score by restaurant, and the resulting trust ranks are presented in Table 1.

Changes in high- and low-trust restaurants

One interesting aspect of replicating the original study in the same sample of restaurants is that it allowed us to examine the changes that had occurred in the level of trust for the GM and the extent to which membership in the high- and low-trust groups changed over the three years. Of particular interest was the fact that five of the restaurants had changed GMs during this time, while four of the restaurants had the same GM. Table 1 presents the GM trust scores for both studies as well as the amount and direction of change that was observed in GM trust in each restaurant. It is interesting to note that the largest changes in GM trust occurred in the restaurants

that changed GMs. In fact, the three largest changes in GM trust (and 4 of the 5 largest changes) were in restaurants that changed GMs. A comparison of the change scores between restaurants that changed and those that did not change GMs showed a statistically significant difference ($t = 1.90, p < 0.05$).

In the restaurants that changed GMs, the changes in GM trust were not all in one direction. In three restaurants GM trust increased, while in the other two they decreased. This result is consistent with our observation that GMs changed for a variety of reasons, ranging from a promotion to a corporate job, to being fired by the organization. The evidence that a change in the GM is linked to the largest changes in trust suggests that trust is based more on the relationship with the person who is the GM, and less with the performance of the restaurant.

Will the trust-performance relationship replicate?

As with Study 1, the hypotheses were tested by comparing the mean differences in SALES, PROFIT and turnover between the high-trust and low-trust restaurants. Measures of performance were not available for one of the restaurants (#3) in the sample because the restaurant was closed shortly after the data collection. The remaining eight restaurants were divided evenly into high-trust (#'s 1, 4, 5 and 8) and low-trust (#'s 2, 6, 7 and 9) groups based on the study 2 GM trust data.

There are statistically significant mean differences on SALES ($t = 2.22, p < 0.05$) and PROFIT ($t = 2.79, p < 0.05$), supporting Hypotheses 1 and 2 (see Table 2). There is no significant mean difference in turnover, and Hypothesis 3 is not supported.

Regression analyses were also conducted following the strategy used for Study 1 including the number of households and median income as control variables, with size as an additional control variable for SALES. These data are presented in Table 7. In the analysis of SALES, GM trust is a significant predictor ($t = 4.19, p < 0.05$) with none of the control variables accounting for significant variance. For PROFIT, GM trust is a significant predictor ($t = 4.49, p < 0.05$). In this equation median income was marginally significant ($t = 2.20, p < 0.10$) but number of house-

holds was not significant. Thus Hypotheses 1 and 2 were supported in the regression analyses as well. In the model for turnover, neither GM trust nor any of the control variables accounted for significant variance in the dependent variable. Hypothesis 3 was not supported.

The results of the hypothesis tests in Study 2 are consistent with those of Study 1. GM trust is a significant predictor of financial performance for both SALES and PROFIT in both studies. The results for turnover were mixed. Although there was evidence for the relationship in Study 1 this was not observed in Study 2.

DISCUSSION

This research represents one of the few attempts to empirically examine the relationship between trust for a given GM and organizational performance and effectiveness. Does trust produce a competitive advantage? If so, can it be sustained? This study found a significant positive relationship between trust and restaurant performance. Thus, a GM who can garner higher trust from the firm's workforce gains a competitive advantage over rival firms. If the results obtained in the current research can be replicated in other, diverse settings, then the question of sustainability becomes pertinent.

If trust is a significant determinant of firm performance as suggested in this research, then knowing the factors that lead to trust is critical. As hypothesized, the relationships found between trust for a GM and employee perceptions of the GM's ability, benevolence and integrity were found to be significant. This supports the assertion that trust is affected by these three characteristics (Mayer et al., 1995). These results suggest that ability, benevolence and integrity provide a solid foundation for understanding how to build trust. These are specific, perceptual variables on which a manager could focus attention and thereby improve trust. A manager can increase his/her perceived trustworthiness via behaviors and tactics which improve the workforce's perceptions of the three trustworthiness factors. Likewise, if a firm chooses to build a strategic advantage based upon trust, this theoretical foundation appears to merit consideration as a heuristic for modeling management training programs in trust-building.

Table 7. Regression analyses of relationships between GM trust and performance – study 2

Dependent Variable	Independent Variable	B	β	t
SALES	GM Trust	420446.4	100414.80	4.19*
	Restaurant Size	2.5	12.7	0.20
	Household	1744.6	871.4	2.00
	Median Income	19357.1	11783.8	1.64
	Constant	-1490649.9	594210.7	-2.51 ⁺
	Multiple R	0.95		
R square	0.91			
Adj. R square	0.78			
F =	7.16*			
PROFIT	GM Trust	84.91	18.89	4.49*
	Household	0.14	0.16	0.88
	Median Income	4.87	2.22	2.20 ⁺
	Constant	-385.72	109.79	-3.51*
	Multiple R	0.92		
	R square	0.85		
Adj. R square	0.74			
F =	7.79*			
Turnover	GM Trust	35.69	18.02	1.98
	Household	-0.18	0.15	-1.18
	Median Income	1.58	2.11	0.75
	Constant	-112.47	104.72	-1.07
	Multiple R	0.74		
	R square	0.54		
Adj. R square	0.20			
F =	1.60			

*p < 0.05

⁺p < 0.10

While the results of this study support the hypothesized relationship between trust and performance in the restaurant industry, further analysis is necessary to examine its generalizability to other contexts. The measures of performance (net profits, sales and turnover) were selected because of their importance to this industry. Other performance measures, particularly market measures, must be examined to determine whether the hypothesized relationships hold. Likewise, the factors which have been shown to promote employee trust for general managers in the restaurant context must be examined further.

Finally, a note of caution with respect to the interpretation of findings is appropriate. The theoretical model of trust proposed in this paper suggests that GM trust is a *causal* antecedent of organizational performance. However, it is important to note that although the results reported in this paper provide clear evidence of a relationship between trust and performance, the

data cannot provide conclusive evidence of the proposed causal direction. Although the analysis of GM changes between Study 1 and Study 2 does suggest that trust is more closely related to the relationship with the GM than to previous levels of restaurant performance, and supports the view that trust is antecedent to performance, this evidence is not sufficient to rule out alternate explanations. Thus, future research that replicates these findings and is able to use other research and analytic strategies such as time-series and structural modeling is necessary to fully resolve the issue of causal direction.

REFERENCES

- Argyris, C. (1964). *Integrating the Individual and the Organization*, John Wiley, New York.
- Barclay, C. A. (1993). 'Quality strategy and TQM policy: Empirical evidence', *Management International Review*, **33**, pp. 87–98.

- Barney, J. B. (1986). 'Organizational culture: Can it be a source of sustained competitive advantage?', *Academy of Management Review*, **11**, pp. 656-665.
- Bauer, T. N. and S. G. Green (1996). 'Development of leader-member exchange: A longitudinal test', *Academy of Management Journal*, **39**, pp. 1538-1567.
- Bennis, W. and J. Goldsmith (1994). *Learning to Lead*. Addison-Wesley, New York.
- Bentler, P. M. (1990). 'Comparative fit indexes in structural models', *Psychological Bulletin*, **107**, pp. 238-246.
- Boss, R. W. (1978). 'Trust and managerial problem solving revisited', *Group and Organization Studies*, **3**, pp. 331-342.
- Brockner, J., P. A. Siegel, J. P. Daly, T. Tyler, and C. Martin (1997). "When trust matters: The moderating effect of outcome favorability", *Administrative Science Quarterly*, **42**(3), pp. 558-583.
- Bromily, P. and L. L. Cummings (1992). 'Transaction costs in organizations with trust', Working Paper No. 28, Strategic Management Research Center, University of Minnesota.
- Butler, J. K. (1991). 'Toward understanding and measuring conditions of trust: Evolution of a conditions of trust inventory', *Journal of Management*, **17**, pp. 643-663.
- Capon, N., J. U. Farley, J. M. Hulbert, and D. Lei (1991). 'In search of excellence ten years later: Strategy and organisation do matter', *Management Decision*, **29**, pp. 12-21.
- Cascio, W. F. (1991). *Costing Human Resources: The Financial Impact of Behavior in Organizations*. PWS-Kent, Boston, MA.
- Cook, J. and T. Wall (1980). 'New work attitude measures of trust, organizational commitment and personal need nonfulfillment', *Journal of Occupational Psychology*, **53**, pp. 39-52.
- D'Aveni, R. (1994). *Hypercompetition: Managing the Dynamics of Strategic Maneuvering*. Free Press, New York.
- Dean, J. W. (1994). 'Management theory and total quality: Improving research and practice through theory development', *Academy of Management Review*, **19**, pp. 392-418.
- Farnham, A. (4 December 1989). 'The trust gap', *Fortune*, pp. 56-78.
- Gambetta, D. G. (1988). 'Can we trust trust?' In D. G. Gambetta (ed.), *Trust*. Basil Blackwell, New York, pp. 213-237.
- Goodman, P. S., R. A. Atkin and F. D. Schoorman (1983). 'On the demise of organizational effectiveness studies'. In K. Cameron and D. Whetten (eds.), *Organizational Effectiveness: A Comparison of Multiple Models*. Academic Press, Orlando, FL, pp. 163-183.
- Goodman, P. S. and J. M. Pennings (1977). 'Perspectives and issues: An introduction', In P. S. Goodman and J. M. Pennings (eds.), *New Perspectives on Organizational Effectiveness*. Jossey-Bass, San Francisco, CA, pp. 1-12.
- Goodman, P. S., E. C. Ravlin and M. Schminke (1987). 'Understanding groups in organizations'. In B. M. Staw and L. L. Cummings (eds.), *Research in Organizational Behavior*. JAI Press, Greenwich, CT, **9**, pp. 121-173.
- Gordon, G. G. and N. DiTomaso (1992). 'Predicting corporate performance from organizational culture', *Journal of Management Studies*, **29**, pp. 783-798.
- Grossi, G. (1994). 'Shortcuts to paradise', *The Internal Auditor*, **51**, pp. 50-53.
- Hays, W. L. (1988). *Statistics*. Holt, Rinehart and Winston, Chicago, IL.
- Hitt, M. A., D. R. Ireland and R. E. Hoskisson (1995). *Strategic Management Competitiveness and Globalization*. West Publishing, St. Paul, MN.
- Hosmer, L. T. (1995). 'Trust: The connecting link between organizational theory and philosophical ethics', *Academy of Management Review*, **20**, pp. 379-403.
- Johnson-George, C. and W. Swap (1982). 'Measurement of specific interpersonal trust: Construction and validation of a scale to assess trust in a specific other', *Journal of Personality and Social Psychology*, **43**, pp. 1306-1317.
- Jones, A. P., L. R. James and J. R. Bruni (1975). 'Perceived leadership behavior and employee confidence in the leader as moderated by job involvement', *Journal of Applied Psychology*, **60**, pp. 146-149.
- Kee, H. W. and R. E. Knox (1970). 'Conceptual and methodological considerations in the study of trust', *Journal of Conflict Resolution*, **14**, pp. 357-366.
- Kegan, D. L. (1971). 'Organizational development: Description, issues and some research results', *Academy of Management Journal*, **14**, pp. 453-464.
- Korsgaard, M. A., D. M. Schweiger and H. J. Sapienza (1995). 'Building commitment, attachment, and trust in strategic decision-making teams: The role of procedural justice', *Academy of Management Journal*, **38**, pp. 60-84.
- Larzelere, R. and T. Huston (1980). 'The dyadic trust scale: Toward understanding interpersonal trust in close relationships', *Journal of Marriage and the Family*, **42**, pp. 595-604.
- Lawler, E. (1992). *The Ultimate Advantage: Creating the High-Involvement Organization*. Jossey-Bass, San Francisco, CA.
- Lieberman, J. K. (1981). *The Litigious Society*. Basic Books, New York.
- March, J. G. and H. A. Simon (1958). *Organizations*. Wiley, New York.
- Mayer, R. C. and J. H. Davis (1999). 'The effect of the performance appraisal system on trust for management: A field quasi-experiment', *Journal of Applied Psychology*, **84**, pp. 123-136.
- Mayer, R. C., J. H. Davis, and F. D. Schoorman (1995). 'An integrative model of organizational trust', *Academy of Management Review*, **20**, pp. 709-734.
- Mayer, R. C., and F. D. Schoorman (1992). 'Predicting participation and production outcomes through a two-dimensional model of organizational commitment', *Academy of Management Journal*, **35**, pp. 671-684.

- Mellinger, C. D. (1956). 'Interpersonal trust as a factor in communication', *Journal of Abnormal Social Psychology*, **52**, pp. 302–309.
- Milgrom, P., and J. Roberts (1992). *Economics, Organization and Management*. Prentice-Hall, Englewood Cliffs, NJ.
- Mishra, A. K. (1996). 'Organizational responses to crisis: The centrality of trust'. In R. M. Kramer and T. Tyler (eds.), *Trust in Organizations: Frontiers of Theory and Research*. Sage, Thousand Oaks, CA, pp. 261–287.
- Peters, T. J., and R. H. Waterman (1982). *In Search of Excellence*. Harper & Row, New York.
- Pfeffer, J. (1995). 'Producing sustainable competitive advantage through the effective management of people', *Academy of Management Executive*, **9**, pp. 55–69.
- Robinson, S. L. (1996). 'Trust and breach of the psychological contract', *Administrative Science Quarterly*, **41**(4), pp. 574–599.
- Powell, T. C. (1995). 'Total quality management as competitive advantage: A review and empirical study', *Strategic Management Journal*, **16**(1), pp. 15–37.
- Rousseau, D. M., S. Sitkin, R. S. Burt, and C. Camerer (1998). 'Not so different after all: A cross-discipline view of trust', *Academy of Management Review*, **23**, pp. 393–404.
- Schoorman, F. D., R. C. Mayer and J. H. Davis (1996). 'Empowerment in veterinary clinics: The role of trust in delegation'. Paper presented at the 11th Annual Meeting of the Society for Industrial and Organizational Psychology, San Diego, CA.
- Scott, D. (1980). 'The causal relationship between trust and the assessed value of management by objectives', *Journal of Management*, **6**, pp. 157–175.
- Sitkin, S. B. and A. L. Pablo (1992). 'Reconceptualizing the determinants of risk behavior', *Academy of Management Review*, **17**, pp. 9–38.
- Sitkin, S. B. and N. L. Roth (1993). 'Explaining the limited effectiveness of legalistic "remedies" for trust/distrust', *Organization Science*, **4**, pp. 367–392.
- Smith, K. G., S. J. Carroll and S. J. Ashford (1995). 'Intra- and interorganizational cooperation: Toward a research agenda', *Academy of Management Journal*, **38**, pp. 7–23.
- Smith, C. G. and R. P. Vecchio (1993). 'Organizational culture and strategic management: Issues in the management of strategic change', *Journal of Managerial Issues*, **5**, pp. 53–70.
- Solomon, L. (1960). 'The influence of some types of power relationships and game strategies upon the development of interpersonal trust', *Journal of Abnormal and Social Psychology*, **61**, pp. 223–230.
- Strickland, L. H. (1958). 'Surveillance and trust', *Journal of Personality*, **26**, pp. 200–215.
- Van de Ven, A. H. and D. L. Ferry (1980). *Measuring and Assessing Organizations*. Wiley, New York.
- Whitener, E. M., S. E. Brodt, M. A. Korsgaard, and J. M. Werner (1998). 'Managers as initiators of trust: An exchange relationship framework for understanding managerial trustworthy behavior', *Academy of Management Review*, **23**, pp. 513–530.
- Williamson, O. E. (1975). *Markets and Hierarchies: Analysis and Antitrust Implications*. Free Press, New York.
- Wood, L. V. (1993). 'Implementing total quality in R & D', *Research Technology Management*, **36**, pp. 39–41.
- Yammarino, F. J. (1990). 'Individual- and group-directed leader behavior descriptions', *Educational and Psychological Measurement*, **50**, pp. 739–759.
- Yammarino, F. J. and S. E. Markham (1992). 'On the application of within and between analysis: Are absence and affect really group-based phenomena?', *Journal of Applied Psychology*, **77**, pp. 168–176.
- Zand, D. E. (1972). 'Trust and managerial problem solving', *Administrative Science Quarterly*, **17**, pp. 229–239.
- Zaheer, A. and N. Venkatraman (1995). 'Relational governance as an interorganizational strategy: An empirical test of the role of trust in economic exchange', *Strategic Management Journal*, **16**(5), pp. 373–392.