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Using Profit Sharing to Enhance Employee Attitudes: A Longitudinal Examination of the Effects on Trust and Commitment

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Abstract

The ability of profit sharing to increase organizational performance via positive changes in employee attitudes has yielded mixed results. Drawing on principal agent, expectancy and organizational justice theories, this paper assesses how perceptions of profit sharing (capacity for individual contribution and organizational reciprocity) alter organizational commitment and trust in management using longitudinal data provided by 141 engineering employees. Favorable perceptions of profit sharing served to increase organizational commitment while only organizational reciprocity predicted trust in management. The relationship between organizational reciprocity and commitment was partially mediated by trust in management. Implications for the design of profit sharing initiatives are noted.
Using Profit Sharing to Enhance Employee Attitudes: A Longitudinal Examination of the Effects on Trust and Commitment

Group-based incentive systems such as gainsharing, employee stock ownership plans (ESOPs), and profit sharing have been the subject of numerous studies (see Cooke, 1994; Kim, 1999; McKersie, 1986; and Hammer, 1988 for differences between gainsharing and profit sharing and Klein, 1987 and Klein & Hall, 1988 for differences between ESOPs and profit sharing). Profit sharing, simply put, occurs when a portion of organizational profits is distributed to employees as part of their compensation (Kruse, 1993). Research on profit sharing has generally entailed case study examinations (Bartol & Durham, 2000) or adopted a micro-economic perspective (e.g. Weitzman, 1995). The latter type of research has typically addressed the issue of whether profit sharing has any effect on such outcomes as profitability, productivity, absenteeism, and labor turnover, by using survey data to compare organizations with and without profit sharing (e.g., Blasi, Conte, & Kruse, 1996; Kruse, 1996). For a variety of reasons which will be described later, there is little consensus regarding the effectiveness of profit sharing. The ambiguity surrounding if, how, and when profit sharing is successful leaves human resource professionals uncertain as to whether to recommend the implementation of profit sharing in their firms. This paper strives to shed light on this important issue by expanding the set of outcomes profit sharing should influence to include more proximal results (e.g., more favorable employee attitudes, more supportive employee behaviors).

Co-existing with case-oriented and macro-economic profit sharing research is a much smaller body of inquiry which examines the effects of profit sharing on employee attitudes and behavior. As noted by Florkowski and Schuster (1992), this research credits profit sharing with improving a range of attitudes and behaviors. Ogden (1995) and Schwochau, Delaney, Jarley, and Fiorito (1997), for example, have demonstrated how
profit sharing facilitates employee support for policy changes. At the same time, the mechanisms by which profit-sharing affects hypothesized outcomes remain under-explored (Florkowski & Schuster, 1992; Ogden, 1995). Furthermore, the predominant research design employed in these empirical studies is cross-sectional, which limits causal inferences. Our focus complements this work by assessing the effects of profit sharing on trust in management and affective organizational commitment. Specifically, we address the following two questions. First, to what extent does profit sharing enhance employees’ trust in management and organizational commitment? Secondly, if profit sharing does enhance trust and commitment, what are the key mechanisms by which this effect occurs?

Literature Review and Hypotheses

There is a very large literature, both theoretical and empirical, on profit sharing (sometimes termed profit-related pay). Lawler, Mohrman and Ledford (1995) report that two-thirds of the U.S. Fortune 1000 firms have some sort of profit sharing plan and there is good evidence to suggest that firms that adopt profit sharing experience lower absenteeism and quit rates (Azfar & Danninger, 2001; Brown, Fakhfakh, & Sessions, 1999; Wilson & Peel, 1991). However, the evidence demonstrating the ability of profit sharing to have a positive impact on organizational performance is supportive, but not universal. In the UK, for example, Blanchflower and Oswald (1988) found no association between profit sharing and a measure of financial performance among a large sample of establishments, while Wadhwani and Wall (1990), based on an analysis of 219 manufacturing firms, concluded that profit sharing was "much ado about nothing.” On the other hand, Weitzman and Kruse (1990) and Schulz (1998) found that profit sharing increased productivity by an average of 7.4 percent and 9.1 percent respectively. Much of this literature presupposes that these schemes generate higher productivity or profits by inducing greater worker effort, providing incentives to invest in skill enhancements, or
increasing information flows between employees and managers (Kruse, 1992; Kruse, 1996). The success of profit sharing can also be explained as an application of principal-agent theory (Eisenhardt, 1988; 1989) since it is a performance-based form of compensation that serves to better align the interests of employees, managers, and shareholders. Nevertheless, there is general recognition that the processes by which profit sharing affects firm performance are not well understood (Bartol & Durham, 2000; Weitzman & Kruse 1990). More broadly, Moynihan, Gardner, and Wright (2002) note that strategic human resource management has been criticized for its lack of theoretical specification of the mediating processes through which human resource practices may influence organizational outcomes. The authors argue that organizational commitment may represent an important mediating mechanism in the relationship between HR practices (e.g., profit sharing) and organizational performance.

Florkowski and Schuster (1992) argue that the diversity of empirical results associated with profit sharing may reflect a failure to consider employee perceptions of profit sharing. Thus, it would seem that the identification of mediating variables could help explain why some profit sharing initiatives are successful while others are not. Using a cross-sectional survey of 160 employees, the authors’ study demonstrates a positive relationship between perceptions of profit sharing and organizational commitment. While the results of this single, cross-sectional study must necessarily be regarded as tentative, they suggest a fruitful line of inquiry. In this study we build upon the Florkowski and Schuster framework by examining the relationship between perceptions of profit sharing and employee attitudes using a longitudinal research design. Two complimentary perceptual bases of explanation are proposed: individual capacity for contribution and organizational reciprocity. The first draws on expectancy theory as a basis for explanation by suggesting that employees think rationally about the connections among effort,
performance and rewards and that the degree to which an organization supports these linkages will have a major bearing on subsequent employee attitudes. Profit sharing may serve as such a support mechanism. The second basis asserts that organizational reciprocity is derived from theories of organizational justice, specifically perceptions of procedural justice. The establishment of profit sharing systems implies the intent of returning to employees a portion of the fruits of their collective labor (i.e., an organizational-level manifestation of the norms of reciprocity). Employees perceiving high levels of such reciprocity attributable to profit sharing are likely to rate procedural organizational justice highly. Such assessments, in turn, are asserted to affect subsequent employee attitudes.

Capacity for Individual Contribution

An underlying assumption of profit sharing is that employees understand the pay system and perceive that their collective efforts will have a bearing on company profitability. Several studies have documented that understanding a pay system is strongly related to satisfaction with the pay system (Brown & Huber, 1992; Judge, 1994). To the extent that employees understand how a plan works (instrumentality perceptions) and can forecast how it might benefit them (expectancy perceptions), employee attitudes may be enhanced. If, on the other hand, too many factors beyond employees’ control are thought to affect company profitability (e.g., economic conditions, accounting procedures), the prospects for the plan to have desirable consequences are diminished. In addition, employees must perceive that the company will also engage in whatever actions are necessary to make the firm competitive and therefore profitable. Cable and Wilson (1989), for example, strongly emphasize the context within which profit sharing is introduced, which suggests that the effects of profit sharing might be highly sensitive to the precise circumstances where it is deployed. Similarly, Florkowski and Schuster (1992:
state, "most fundamental, participants must believe that they can significantly affect corporate financial performance". In short, how employees perceive the link between their effort and performance may influence how profit sharing affects employee attitudes.

The capacity for individual contribution is also likely to enhance employee attitudes because it facilitates perceptions of ‘psychologically experienced ownership’. Psychologically experienced ownership is a state of mind where employees feel a target of ownership (e.g., a job, product, employing organization) is “theirs” (Pierce, Kostova, & Dirks, 2001). Following a review of the employee ownership literature, Pierce, Rubenfeld, and Morgan (1991) concluded that ownership ties (e.g., profit sharing) might yield desirable attitudinal and behavioral effects through psychologically experienced ownership. More recently, Pierce et al. (2001) identified determinants of psychological ownership. A key determinant in their analysis is an innate human desire to experience causal efficacy in the work environment (which they term efficacy and effectance). Hence, the capacity to make an individual contribution to the organization is at the heart of efficacy and effectance. Consequently, the extent to which employees perceive that they can be instrumental in affecting the profitability of the organization, the more psychological ownership they will experience, and the greater degree to which their attitudes will be favorably enhanced.

**Perceptions of Organizational Reciprocity**

Profit sharing may also enhance employee attitudes through mechanisms related to organizational justice (Greenberg, 1996) and notions of “fair exchange”. We assert that profit sharing can facilitate perceptions of procedural justice (fairness) among all employee groups within an organization. Even in the face of free-rider problems, the institution of profit sharing implies an organization’s intent to share rewards broadly with employees, as opposed to distributing profits solely to managers or shareholders.
Moreover, procedural justice has been shown to affect employees’ trust in leadership and organizational commitment (McFarlin & Sweeney, 1992; Korsgaard, Schweiger, & Sapienza, 1995). Profit sharing may also be advantageous because of its symbolic value; that is, it may demonstrate to employees that management has their best interests at heart. Furthermore, Rousseau and Shperling (2000) argue that the dissemination of financial information to lower level employees can increase employees’ trust in management. It also suggests the presence of a corporate culture where employee contributions are valued, setting the stage for the evolution of norms of reciprocity.

This idea has been captured by perceived organizational support (POS) developed by Eisenberger and his colleagues (1986) to represent employees' beliefs about "the extent to which the organization values their contributions and cares about their well-being" (Eisenberger, Huntington, & Sowa, 1986: 501.) Adopting a social exchange framework, Eisenberger et al. (1986) argue that high levels of POS create feelings of obligation to reciprocate through more positive attitudes. As such, employees seek to a balance in their exchange relationships with organizations by having attitudes that are commensurate with the organization's orientation toward them. Relying on the norm of reciprocity (Gouldner, 1960), studies support a positive relationship between perceived organizational support and organizational commitment (Allen, Shore & Griffeth, 2000; Coyle-Shapiro & Kessler, 2000; Eisenberger et al., 1986; Meyer & Allen, 1997).

Shore and Shore (1995) note that the premise of research on antecedents of POS is that organizational actions are interpreted by an employee as information about the degree of employer commitment to them, as individuals. Therefore, POS is strengthened by favorable work experiences that employees believe reflect discretionary decisions made by the organization (Rhoades, Eisenberger, & Armeli, 2000). Specifically, opportunities for rewards have been found to be positively associated with POS (Eisenberger, Cummings,
Armelis & Lynch, 1997; Eisenberger, Rhoades & Cameron, 1999; Guzzo, Noonan & Elron, 1994). Shore and Shore (1995) identify two types of human resource practices that are positively related to POS: (a) discretionary practices that imply investment by the organization and (b) organizational recognition. An important aspect of perceived organizational support is the degree to which organizational actions are viewed as voluntary rather than the result of external constraints (Shore & Shore, 1995). Eisenberger et al. (1997) found that practices such as reward systems, fringe benefits and training opportunities have a stronger relationship with perceived organizational support when employees believed they represented discretionary actions by the organization. Therefore, the extent to which employees view profit sharing as organizational reciprocity, the more likely they will reciprocate the organization through positive attitudes.

Applebaum, Bailey, Berg and Kalleberg (2000) note that a major weakness of prior empirical work on high performance work systems (HPWSs) is its neglect of worker attitudes that may help our understanding of why HPWSs might be related to organizational performance. We focus on two attitudes: trust in management and organizational commitment that researchers have highlighted as important outcomes of human resource practices (Applebaum et al., 2000).

Trust in Management

Interpersonal trust is gaining prominence as organizational researchers uncover its beneficial impact on numerous outcomes. Trust has been found to be positively associated with organizational citizenship behavior (Podsakoff, MacKenzie & Bommer, 1996), employee productivity (Mishra & Morrissey, 1990) and co-operation (Axelrod, 1984; Deutsch, 1962). The conceptualization of trust is subject to disciplinary differences (Rousseau, Sitkin, Burt & Camerer, 1998) with psychologists viewing trust in terms of attributes of trustors and trustees. Some academics treat trust as a positive attitude held by
the trustor toward the trustee (Robinson, 1996; Whitener, Brodt, Korsgaard, & Werner, 1998). Others adopt more specific definitions to include “willingness to be vulnerable” (Mayer, Davis, & Schoorman, 1995), “willingness to rely on another” (Doney, Cannon, & Mullen, 1998) and “confident, positive expectations” (Lewicki, McAllister, & Bies, 1998). Mishra (1996: 265) presents four dimensions of trust as reflecting the content domain of the trust literature and defines trust as “one party’s willingness to be vulnerable to another party based on the belief that the latter party is (a) competent, (b) open, (c) concerned, and (d) reliable”.

In view of the importance of trust for intraorganizational relationships, attention has focused on the antecedents of trustworthy behavior. Whitener et al. (1998) argue that managers have considerable impact on building trust and furthermore, managerial actions and behaviors provide the foundation of trust. The authors present five categories of behavior that influence the degree to which employees perceive managers to be trustworthy among which is benevolence, defined as the demonstration of a concern for the welfare of others (Mayer et al., 1995) and consists of three managerial actions: showing consideration for employees’ needs, acting in ways that protect employee interests and not exploiting employees for the benefit of managers (Whitener et al., 1998). Applebaum et al. (2000) argue and provide empirical support for the impact of high performance work systems (HPWSs) on employee trust in management. Specifically, they argue that “incentives to enhance motivation should increase trust. This is especially true for incentives such as evidence of the organization’s commitment to the worker” (p. 175). This draws on the demonstration of concern for the employee as a managerial trust enhancing behavior. Profit sharing is included as one practice that reflects managerial benevolence, which in turn affects the degree to which employees trust their managers (Applebaum et al. 2000). Therefore, the degree to which employees perceive profit
sharing as reflecting managerial benevolence (albeit with the existence of tax incentives), their trust in management should be enhanced. We examine this with the following hypothesis:

H1: Employee perceptions of their capacity to contribute and organizational reciprocity will be positively associated with trust in management controlling for employees’ prior trust in management.

Organizational Commitment

Achieving high levels of organizational commitment among employees is frequently mentioned as an indicator of supportive human resource management practices and as a mechanism for enhancing organizational performance (Arthur, 1994; Guest, 1987). Affective commitment, for example, has consistently been found to be negatively associated with turnover intentions and actual turnover (Cropanzano, James, & Konovsky, 1993; Meyer, Allen, & Smith, 1993; Rhoades, Eisenberger, & Armeli, 2000; Somers, 1995). However, studies investigating the relationship between affective commitment and in-role performance have yielded mixed results, with meta-analytic findings supporting only a positive weak correlation between organizational commitment and in-role (i.e., individual level) performance (Meyer, 1997). Meyer (1997) suggests that a potential explanation for the weak link between organizational commitment and performance is that the measure of individual performance may not capture the unique behaviors that contribute to the performance of the overall unit. Two studies conducted at the organizational level support this assertion (i.e., a stronger positive relationship between the average commitment levels amongst employees and organizational performance). Benkhoff (1997) reports significant linkages between several measures of organizational commitment and branch bank performance (i.e., achieving higher sales targets, increased profits). Ostroff (1992) investigated the link between the commitment of teachers and
profit sharing and employee attitudes

school performance and found that commitment was significantly related to most indices
of performance in the predicted direction. Thus, there is growing recognition of the
importance of organizational commitment at both individual and organizational levels of
analysis.

Emerging empirical research suggests that organizations can influence their
employees’ commitment through the adoption of progressive human resource practices
such as profit sharing (Huselid, 1995; Poole & Jenkins, 1998; Wood & de Menzes, 1998,
Meyer, 1997). Some researchers view the relationship between human resource practices
and organizational commitment as a direct one. For example, Florkowski (1987) was
among the first to propose such a connection as he identified organizational commitment
as the most immediate determinant of organizational performance in his conceptual model
of the effectiveness of profit sharing plans. Similarly, there is empirical support for the
positive relationship between employee ownership schemes and organizational
commitment (Florkowski & Schuster, 1992; Klein, 1987; Klein & Hall, 1988; Wetzel &
Gallagher, 1990). Other researchers view trust as an important intermediary outcome in
the relationship between progressive human resource practices and organizational
commitment (Applebaum, 2000). The authors propose that HPWSs lead to greater trust in
management that in turn leads to higher organizational commitment. In other words,
enhanced trust as a result of HPWSs provides the explanatory mechanism underlying
higher organizational commitment. We examine both views by exploring whether trust in
management fully mediates the relationship between perceptions of profit sharing and
organizational commitment. If this relationship is supported, it suggests that trust in
management is an important explanation for the effects of perceptions of profit sharing on
organizational commitment. If not, it indicates that profit sharing may affect
organizational commitment directly and trust in management is not necessary for this
effect to occur.

H2: Employees’ trust in management will mediate the effects of perceptions of capacity to contribute and organizational reciprocity on organizational commitment controlling for employees’ prior commitment.

Method

Setting and Participants

Data for this study were obtained from a sample of employees in a UK multinational supplier of aerospace components to the aerospace industry. In the late 1980s, the plant introduced TQM, which attempted to inculcate the values of continuous improvement, customer satisfaction and teamwork through a flexible cellular manufacturing structure. Practices such as communications and team briefings, as well as the display of cell performance measures, served to reinforce the operation of cells as ‘mini-businesses’. Subsequently, an opportunity arose for a management buy-out that separated the site from its multinational owner. This paved the way for management to introduce a profit-related pay scheme, an opportunity that was not previously available.

The profit sharing scheme introduced by the organization had three central features: the organization required agreement from 80% of the employees; a specified fraction of employees’ wage had to be explicitly linked to the profit outcome in advance; and thirdly, that the actual profit-linked payments made to employees were subject to tax relief. At the time of this study, full income tax relief was available to the individual employee on the lower 20% of total pay or the absolute sum of £4000 per year. Profit-linked payments in excess of these amounts were taxed normally. The obvious benefit of the tax break to the employee was that, even from an unchanged level of gross pay, net pay would be increased. Against this was the prospect that the element of total pay that was linked to profits would turn out to be volatile. If profits fell, so too would the profit
Allocation to employees. Total net pay, therefore, became less certain. The organization did not automatically benefit in a direct way from the scheme.

Accordingly, management canvassed employees to assess their desire to join the scheme. This canvas was not done well. It was preceded by hasty communication about the scheme in which managers, themselves not fully understanding it, attempted to explain it to employees. Not surprisingly, the 80% participation rate was not attained. A more considered attempt was subsequently made to communicate the benefits of the scheme (i.e., profit sharing represented a possible supplement to their base pay), and employees were given time to digest the intricacies of how it would operate. Six months later, the scheme was re-launched with a participation rate of virtually 100% (two individuals opted out of the scheme). At the time of the second survey, the profit sharing scheme was midway through its second year of operation. Employees were therefore accustomed to its workings and had received interim payments and a final pay out of about 4% of their annual salaries seven months prior to completing the second survey.

Procedure

Prior to the commencement of this study, the first researcher met with management and trade union representatives separately to gain their support for the research. Employees were informed that their participation in the survey was voluntary and their responses would remain confidential. Employees completed the surveys during work away from their work area. Surveys were administered on two measurement occasions: ten months prior to and twenty months subsequent to the introduction of profit sharing. At the time of the first survey was conducted, none of the respondents was aware of the pending introduction of profit sharing. Therefore, the survey responses were not influenced by individuals’ knowledge of the forthcoming intervention.

At time 1, of the 246 employees asked to complete the survey, 206 did so, which
yielded a response rate of 84%. Of the 206 who completed the first survey, 141 completed the second survey two-and-a-half years later, yielding a response rate of 68%. The subsequent analysis is confined to those employees who completed the two surveys. At time 2, the participant group was 91% male, with a mean age of 41.9 years, a mean job tenure and tenure at the site of 6.9 years and 12.1 years respectively. The sample consisted of 44% manufacturers, 22% engineers, 13% administrative/clerical, 12% supervisors/managers, 3% research and 6% in a number of production related positions. Overall, the participant sample was representative of the population on the basis of job type, organizational tenure and age.

**Dependent Variables**

**Trust in management.** This six-item scale was taken from Cook and Wall (1980: 39) who defined trust in terms of "the extent to which one is willing to ascribe good intentions to and have confidence in the words and actions of other people. This scale captures the two components: faith in the trustworthy intentions of others, and confidence in the ability of others. The alpha coefficient for this scale was .89 and .86 at time 1 and time 2 respectively. A 7-point scale was used ranging from ‘strongly agree’ to ‘strongly disagree’.

**Organizational commitment.** Organizational commitment was measured at Time 1 and Time 2 using the six positively worded items from the nine-item scale developed by Cook and Wall (1980) for use in samples of blue-collar employees in the UK. The development of the scale draws upon the work of Buchanan (1974) and Porter, Steers, Mowday and Boullian (1974) whereby commitment is viewed as comprising three interrelated components: identification, involvement and loyalty. The authors report alpha coefficients of .87 .80 for two independent samples. Other investigators report alpha coefficients of .82 (Peccei & Guest 1993), .86 (Peccei & Rosenthal, 1997). In this study,
organizational commitment exhibited an internal consistency reliability of .81 at time 1 and .77 at time 2. A 7-point scale was used ranging from ‘strongly agree’ to ‘strongly disagree’.

**Independent Variables**

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**Capacity for individual contribution.** This five-item scale was developed specifically for this study to capture the extent to which an individual perceives that they can contribute to the profitability of the organization. Respondents used a 7-point Likert scale. The alpha coefficient of this scale is .73.

**Organizational reciprocity.** This three-item scale measures the extent to which respondents perceive profit sharing as reflecting an investment by the organization in its employees using a 7-point Likert scale. This scale has an alpha coefficient of .71.

**Analysis**

Hierarchical regression analysis was used to test the hypotheses using the Time 1 and Time 2 data. Prior research has demonstrated that attitudes and behaviors at work can be influenced by demographic characteristics (Mowday, Porter, & Steers, 1982). Therefore, we included three demographic variables (gender, age, and organizational tenure) to reduce the possibility of spurious relationships based on these types of personal characteristics. In all equations, we control for the dependent variable at time 1. To test hypothesis 1, we entered the demographic variables and trust in management at time 1 in step 1. In step 2, we entered the profit sharing factors: capacity for individual contribution and organizational reciprocity. By entering the profit sharing factors in a subsequent step, this allows us to examine the unique, if any, contribution made by the profit sharing factors to explaining variance in trust in management at Time 2.

To test hypothesis 2, we followed the procedures recommended by Baron and Kenny (1986) for testing mediation. First, the mediator (trust in management) is regressed
on the independent variables (capacity to contribute and organizational reciprocity); second, the dependent variable (organizational commitment) is regressed on the independent variables (capacity to contribute and organizational reciprocity) and; third, the dependent variable (organizational commitment) is regressed simultaneously on the independent (capacity to contribute and organizational reciprocity) and mediator (trust in management) variables. Mediation is present if the following conditions hold true: the independent variable affects the mediator in the first equation; the independent variable affects the dependent variable in the second equation and the mediator affects the dependent variable in the third equation. The effect of the independent variable on the dependent variable must be less in the third equation than in the second. Full mediation occurs if the dependent variable has no significant effect when the mediator is controlled and partial mediation occurs if the effect of the independent variable is smaller but significant when the mediator is controlled.

Results

Table 1 presents the means, standard deviations and intercorrelations of the scales. The standard deviations of the main study variables ranged from .85 to 1.30, suggesting that none of the variables are excessively restrictive in range. The results of paired sample t-tests indicate that trust in management ($T_1 = 3.61, T_2 = 4.25$) and organizational commitment ($T_1 = 4.96, T_2 = 5.46$) significantly increased ($p < .01$) between time 1 and time 2. The two dependent variables had a correlation of .62 suggesting that they were moderately related. Similar correlations have been found between organizational commitment and perceived organizational support (Rhoades et al., 2000) and Cook and Wall (1980) report a correlation of .58 between organizational commitment and trust. Consequently, we conducted a factor analysis to determine the factorial independence of the two constructs. The results (principal components with varimax rotation) are
presented in Table 2 and show a two-factor solution with eigenvalues greater than 1.0. All of the items loaded above .50 on the appropriate factor and demonstrated a difference of at least .20 between this loading and the next highest loading, thus supporting the independence of the two attitudes. We also factor analyzed the profit sharing items since they were designed explicitly for this study. A two-factor solution emerged (Table 3); the first factor reflected ‘capacity for individual contribution’ and the second reflected ‘organizational reciprocity’.

Hypothesis 1 predicted that there would be a positive relationship between perceptions of profit sharing and employees’ trust in management. The results presented in Table 4 (column 2) provide partial support for hypothesis 1. Controlling for prior trust and the demographic variables, perceptions of organizational reciprocity is positively associated with trust in management ($\beta=.41$, $p<.01$) but no significant effect was found for capacity for individual contribution. Overall, the inclusion of perceptions of profit sharing explains unique variance in trust in management ($\Delta F = 21.42$, $\Delta R^2 = .18$, $p<.01$).

As capacity for individual contribution is not significantly related to trust in management, condition 1 of mediation is not fulfilled so trust cannot mediate the effects of capacity to contribute on organizational commitment. However, an individual’s perception of their capacity to contribute is directly and significantly related to organizational commitment ($\beta=.18$, $p<.01$) after controlling for trust in management. Turning to the mediating role of trust in management, the results of hypothesis 1 fulfill condition 1 for organizational reciprocity. Table 4 (column 4) fulfills condition 2 in establishing a relationship between perceptions of organizational reciprocity and organizational commitment. The inclusion of perceptions of profit sharing explains additional variance in organizational commitment at time 2 ($\Delta F = 20.96$, $\Delta R^2 = .20$,
p<.01). When trust in management and organizational reciprocity are simultaneously included in the equation (Table 4, column 5), the results suggest that trust in management partially mediates the effect of organizational reciprocity on organizational commitment (the beta coefficient of organizational reciprocity reduces from .34, p<.01 to .15, p<.05 when trust is in the equation). Therefore, hypothesis 2 is partially supported in relation to the effect of organizational reciprocity but not to capacity to contribute.

Discussion

Our findings confirm and extend empirical research (Florkowski & Schuster, 1992) supporting the importance of employee perceptions of profit sharing in achieving desired attitudinal outcomes. Against the backdrop of a paucity of research on employee’s reactions to innovative pay plans (Dulebohn & Martocchio, 1998), our results confirm that plans that engender positive perceptions lead to higher levels of trust and organizational commitment.

Perhaps more importantly, this research sheds light on the underlying mechanisms through which profit sharing can affect employee attitudes. Our findings suggest that perceptions of profit sharing have a differential effect on our attitudinal outcomes. First, capacity to contribute is significantly related to organizational commitment but is unrelated to trust in management. Secondly, if employees view profit sharing as an act of reciprocity, their trust in management and organizational commitment will both be enhanced. Finally, trust in management is not a necessary precondition for perceptions of organizational reciprocity to enhance organizational commitment. In other words, a profit sharing perception grounded in organizational reciprocity is a powerful antecedent because it affects organizational commitment independently and/or through its ability to enhance trust (i.e., the impact of organizational reciprocity on organizational commitment is not simply an artifact of its ability to increase trust). Our findings parallel those of
Applebaum et al. (2000) in that human resource practices (in this case, profit sharing) can enhance employees’ trust in management and organizational commitment. However, our point of departure is that trust in management does not fully explain the effects of profit sharing on organizational commitment.

The results of this study help explain why profit sharing, a compensation-related human resource practice, generates favorable outcomes. Moreover, the study findings are consistent with several well-established management theories. Drawing on the tenets of principal-agent theory (Eisenhardt, 1988; 1989), profit sharing can be seen as a way to align the goals of management and employees. When employees perceive profit sharing favorably, commitment and trust increase, encouraging employees to exert maximum effort, share information and invest in firm-specific training that may not be valued outside of the firm. Turning to the specific components of profit sharing studied here, the results further explain why profit sharing can be beneficial by drawing on core ideas from expectancy theory (i.e., individual capacity for contribution) and organizational justice theory (i.e., organizational reciprocity). It is perhaps the joint use of these well-established models that accounts for the strength of the findings.

The results associated with capacity for contribution were not as strong in that a significant positive relationship was detected only for organizational commitment and not for trust in management. It may be that an individual’s belief that he/she has the capacity to contribute to the profitability of the organization is related to commitment and not trust because the attitudinal targets are different. Perceptions of ability to contribute to the bottom line of the organization and organizational commitment are more closely bound because they share a common referent, “the organization”. The organizational referent also embraces the entire employee membership and is based on a historical time span of some duration (i.e., the employee’s tenure). Trust in management refers to perceptions of
a narrower range of individuals (i.e., those identified as “management”) and who may be more transient in organizational membership than rank-and-file employees. The perception of an ability to contribute may also be more stable or enduring and thus linked more closely to organizational commitment, than an attitude like trust in management which may be more susceptible to change associated with day-to-day interactions with managerial personnel. Lastly, a third factor that might account for the different findings in trust and commitment is that employees may simply see their personal interests, as reflected in capacity for individual contribution to profitability, and the organization’s interests as more closely aligned than personal interests and management interests. Future research is needed to explore these possibilities, along with a broader consideration of other employee attitudes.

Implications

These findings have implications for practitioners charged with implementing profit sharing programs. Our findings suggest that when profit sharing is perceived as both an opportunity for individual input to the organization’s success and a reflection of the organization’s desire to treat employees fairly, higher levels of commitment follow. Structuring profit sharing systems to enhance perceptions of input (e.g., some portion of the profit sharing based on individual contribution to performance) and reciprocity (e.g., some portion based on years of service) would seem advantageous. Drawing on the expectancy basis of the capacity for individual contribution findings, practitioners should expect more positive attitudes among employees if they distribute profit sharing proceeds as often as possible, as opposed to placing such funds in a deferred retirement plan, since the deferred approach entails a greater time lag between effort and rewards. Similarly, explicitly “rolling out” profit sharing as a desire on the part of management to distribute rewards more fairly should heighten trust in management.
Moreover, employee perceptions of profit sharing may prove useful in understanding the extent to which a genuine change in employee attitudes is occurring. Stated differently, change initiatives ought to be introduced and implemented so as to maximize favorable employee perceptions of the initiative. For some time, academics have argued that employee participation in organizational change is fundamental to their acceptance of change. Jenkins and Lawler (1981), for example, argue that employees’ participation in the decision to implement a pay system change will enhance their commitment to the new system. Similarly, McClurg’s (2001) recent findings and recommendations for implementing team based pay underscore the importance of extensive and on-going communication in garnering support for group based reward systems. Kim’s (1999) empirical work, illustrating that gainsharing programs implemented through an employee majority vote are more likely to survive than those programs implemented without a vote, is especially relevant to this research. In our study, employee participation in the decision to implement profit sharing may not only have influenced the acceptance of the program but also how employees interpreted the underlying organizational motives. Consequently, an early assessment of employee reactions provides an opportunity to gauge whether desired perceptual changes are occurring and perhaps to discover unanticipated problems (e.g., an overall resistance to change, perceived lack of support from top management, or so-called free-rider problems where employees perceive that others may not contribute their fair share of effort under a group based reward system).

Limitations

As with the majority of studies, this study has its limitations. First, because this study was conducted in only one organization, replications in other organizations over longer time spans will be required before any firm conclusions can be drawn. Second, the
absence of a control group (nearly 100 per cent of employees voted to adopt the plan) makes it difficult to eliminate alternative explanations for the findings. Our respondents may have used different frames of reference to complete the surveys over the two-and-a-half year period. There were no other readily discernable, concurrent factors that might account for these results. Given that our results were consistent with prior research examining human resource practices on employee attitudes, and profit sharing was the most notable change during the period of investigation, our confidence in attributing these results to profit sharing is bolstered.

Another possible limitation is that all the variables were measured with self-report survey measures. Consequently, the observed relationships may have been artificially inflated as a result of respondents’ tendencies to respond in a consistent manner. However, more recent meta-analytic research on the percept-percept inflation issue indicates that while this problem continues to be commonly cited, the magnitude of the inflation of relationships may be over-estimated (Crampton & Wagner, 1994). In addition, the measures used to assess perceptions of profit sharing were expressly designed for this study and do not have established records of reliability and validity. Furthermore, this study did not include possible negative reactions to the profit sharing scheme. Nor, unfortunately, did the research setting allow us to assess whether profit sharing and/or enhanced employee attitudes resulted in higher level of performance as measured by objective means. Future research efforts should seek to include such measures. Finally, despite the demonstration of the positive effects of profit sharing shown here, profit sharing may have inherent limitations. The implementation of profit sharing and accompanying alterations in human resource management systems tend to increase labor costs, and there is some evidence that these increased costs can outweigh productivity and profitability gains (Kim, 1998).
Future research could pursue several avenues of investigation. Further research exploring potential antecedents of employee reactions to profit sharing plans may provide insight into the manageability of perceptions of organizational change. These types of antecedents may include specific features of the plan, contextual factors, and individual differences. For example, Dulebohn and Marticchio (1998) have shown, albeit in a cross-sectional research design, that understanding of a work group pay plan is linked to perceptions of fairness of the plan. Specifically they advocate managerial interventions to explain and verify employee understanding of group based pay plans. Our results support the importance of early assessment of employee perceptions of changes in compensation plans but clearly much more research is needed. Contextual features might include how information related to profit sharing is disseminated to employees. More frequent and detailed communication to employees about organizational performance might serve to strengthen individuals’ perceptions of their personal contribution, and in the case of low performance, lead to changes in work-related behavior. Individual differences relevant to managing organizational change might include personality traits such as openness to experience. Selection and retention of employees who seek and appreciate new experiences may facilitate adoption of change. Another research opportunity might be to study the role of self-efficacy. Based on the results of this study, we would hypothesize that individuals high in need for self-efficacy will embrace profit sharing when they perceive their capacity for contribution to be high, but will reject profit sharing when they perceive their capacity for contribution to be low.

Conclusions

Interest in profit sharing and other forms of group-based compensation continues to draw considerable attention from practitioners and deserves more consideration from academic scholars. Employees and managers persist in reporting enhanced satisfaction
with profit sharing compensation systems (Florkowski & Schuster, 1992) yet, empirical
evidence of the impact of profit sharing is relatively scarce and mixed. The underlying
causal mechanisms as to why profit sharing should enhance employee attitudes have not
been adequately specified (i.e., profit sharing research is seldom tied to theoretical models
seeking to explain why profit sharing should be beneficial). This study sought to address
these issues by relating profit sharing to established theories of human behavior (i.e.,
principal-agent, expectancy and organizational justice models) and by positioning profit
sharing in the context of attitude change. Stated differently, hypotheses derived from
established theoretical models and previous empirical work guided the research, thereby
contributing to both explanation and prediction. In addition, this study sought to
strengthen the causal inferences regarding the effects of profit sharing by assessing its
effects on attitude change longitudinally. Pretest attitude data (i.e., trust in management
and organizational commitment at Time 1) have rarely been incorporated in compensation
studies (Dulebohn & Martichio, 1998). This approach, coupled, with the results obtained
here, revealed a great deal about the interplay among profit sharing, how it is perceived,
and subsequent impact on employee attitudes. We are hopeful that these results will
stimulate others to engage in further research to discover additional circumstances under
which profit sharing systems can be advantageous.
References


Profit sharing and employee attitudes


### Table 1
**Descriptive Statistics and Correlations**

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>S.D</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gender $T_1$</td>
<td></td>
<td>0.09</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Age $T_1$</td>
<td>39.32</td>
<td>(9.84)</td>
<td>-.17</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Organizational Tenure $T_1$</td>
<td>9.05</td>
<td>(6.40)</td>
<td>.03</td>
<td>.33</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Trust in Management $T_1$</td>
<td>3.61</td>
<td>(1.30)</td>
<td>.19</td>
<td>.20</td>
<td>.10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Organizational Commitment $T_1$</td>
<td>4.96</td>
<td>(0.99)</td>
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<td>.19</td>
<td>.11</td>
<td>.65</td>
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<td></td>
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<td>6. Trust in management $T_2$</td>
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<td>(1.01)</td>
<td>.12</td>
<td>.08</td>
<td>-.04</td>
<td>.50</td>
<td>.35</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>7. Organizational commitment $T_2$</td>
<td>5.46</td>
<td>(0.85)</td>
<td>.17</td>
<td>.07</td>
<td>.00</td>
<td>.29</td>
<td>.39</td>
<td>.62</td>
<td></td>
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<td>8. Capacity for Individual Contribution $T_2$</td>
<td>3.89</td>
<td>(1.05)</td>
<td>.13</td>
<td>-.08</td>
<td>.04</td>
<td>.17</td>
<td>.20</td>
<td>.27</td>
<td>.36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Organizational Reciprocity $T_2$</td>
<td>3.61</td>
<td>(1.27)</td>
<td>.16</td>
<td>.06</td>
<td>-.07</td>
<td>.28</td>
<td>.51</td>
<td>.54</td>
<td>.46</td>
<td>.25</td>
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</tr>
</tbody>
</table>

Correlations > .28 are statistically significant at p < .01. Correlations > .16 are statistically significant at p < .05.
Table 2
Results of Factor Analysis of Dependent Variable Items (Trust in Management and Organizational Commitment)

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management is sincere in its attempts to meet the workers’ point of view</td>
<td>.79</td>
<td>.31</td>
</tr>
<tr>
<td>Management at work seems to do an efficient job</td>
<td>.75</td>
<td>.21</td>
</tr>
<tr>
<td>Management can be trusted to make sensible decisions for the firm’s future</td>
<td>.75</td>
<td>.24</td>
</tr>
<tr>
<td>Management would be quite prepared to gain advantage by deceiving the workers ‡</td>
<td>.70</td>
<td>.18</td>
</tr>
<tr>
<td>I feel confident that __ will always try to treat me fairly</td>
<td>.70</td>
<td>.31</td>
</tr>
<tr>
<td>Our __ has a poor future unless it can attract better managers ‡</td>
<td>.64</td>
<td>.14</td>
</tr>
<tr>
<td>Even if __ were not doing too well financially, I would be reluctant to change to another employer</td>
<td>.13</td>
<td>.79</td>
</tr>
<tr>
<td>The offer of a bit more money with another employer would not seriously make me think of changing my job</td>
<td>.12</td>
<td>.77</td>
</tr>
<tr>
<td>In my work, I like to feel I am making some effort, not just for myself but for __ as well</td>
<td>.33</td>
<td>.73</td>
</tr>
<tr>
<td>I feel myself to be part of __</td>
<td>.40</td>
<td>.73</td>
</tr>
<tr>
<td>To know that my own work had made a contribution to the good of __ would please me</td>
<td>.25</td>
<td>.70</td>
</tr>
<tr>
<td>I am quite proud to tell people I work for __</td>
<td>.34</td>
<td>.64</td>
</tr>
<tr>
<td>Eigenvalue</td>
<td>5.90</td>
<td>1.37</td>
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<tr>
<td>Percentage of variance explained</td>
<td>49.2</td>
<td>11.4</td>
</tr>
</tbody>
</table>

‡ reversed scored __ name of organization
Table 3
Results of Factor Analysis of Profit Sharing Items

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>The problem with profit sharing is that we never know how much we are going to make out of it</td>
<td>.72</td>
<td>-.21</td>
</tr>
<tr>
<td>Profits are a bad basis for pay because they are affected by factors outside the control of the workforce</td>
<td>.68</td>
<td>-.26</td>
</tr>
<tr>
<td>Profit sharing is really too complicated to be an effective incentive</td>
<td>.68</td>
<td>-.39</td>
</tr>
<tr>
<td>It is hard to see how my work alone can affect ___’s profits</td>
<td>.62</td>
<td>.11</td>
</tr>
<tr>
<td>Under profit sharing, there is no point in me making more effort if other people do not do the same</td>
<td>.61</td>
<td>.03</td>
</tr>
<tr>
<td>Profit sharing shows that management is looking after employee interests</td>
<td>-.12</td>
<td>.86</td>
</tr>
<tr>
<td>Profit sharing is a way of ___ saying “thank you” for all my hard work</td>
<td>.03</td>
<td>.78</td>
</tr>
<tr>
<td>Profit sharing does not fairly reward employees for their contribution to the profits of ___ a</td>
<td>-.17</td>
<td>.69</td>
</tr>
</tbody>
</table>

Eigenvalue | 2.91 | 1.46 |
Percentage of variance explained | 36.4 | 18.3 |

*a reversed scored
Table 4
Results of Hierarchical Regression Analysis Predicting Trust in Management and Organizational Commitment

<table>
<thead>
<tr>
<th>Variable</th>
<th>Trust in Management T₂</th>
<th>Organizational Commitment T₂</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Step 1</td>
<td>Step 2</td>
</tr>
<tr>
<td>Step 1 - Controls</td>
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<td></td>
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<tr>
<td>Gender T₁</td>
<td>.03</td>
<td>-.02</td>
</tr>
<tr>
<td>Age T₁</td>
<td>.01</td>
<td>.00</td>
</tr>
<tr>
<td>Organizational Tenure T₁</td>
<td>-.10</td>
<td>-.06</td>
</tr>
<tr>
<td>Dependent variable T₁</td>
<td>.51**</td>
<td>.37**</td>
</tr>
<tr>
<td>Step 2 – Profit Sharing</td>
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<tr>
<td>Capacity for Individual</td>
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<tr>
<td>Contribution T₂</td>
<td>---</td>
<td>.10</td>
</tr>
<tr>
<td>Organizational reciprocity T₂</td>
<td></td>
<td>.41**</td>
</tr>
<tr>
<td>Step 3</td>
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<td></td>
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<tr>
<td>Trust in Management T₂</td>
<td></td>
<td></td>
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<td></td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>F</td>
<td>12.02**</td>
<td>17.56**</td>
</tr>
<tr>
<td>Change in F</td>
<td>12.02**</td>
<td>21.42**</td>
</tr>
<tr>
<td>Change in R²</td>
<td>.26</td>
<td>.18</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>.24</td>
<td>.42</td>
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</tbody>
</table>

* p < .05
** p < .01