Management Communication and Employee Performance:

The Contribution of Perceived Organizational Support

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Abstract

This study used a cross-lagged panel design to examine the temporal relationship between management communication and perceived organizational support (POS), and its consequences for performance. We assessed management communication and POS 2 times, separated by a 3-year interval, in a social services organization (N=236). Our findings suggest that management communication was positively associated with a temporal change in POS. Additionally, we found that POS fully mediates the relationship between management communication and both in-role and extra-role performance. The present study advances our theoretical knowledge concerning how management communication affects performance, with implications for practice. Specifically, it reveals that management communication affects performance mainly because it signals that the organization cares about the well-being and values the contributions of its employees.

Keywords: Management communication, POS, performance, cross-lagged panel design, structural equation modeling
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Managers and researchers have long agreed that communication processes are a major factor in organizational success (Roberts & O’Reilly, 1974; Snyder & Morris, 1984). Employees who have open lines of communication with managers are more likely to build effective work relationships with those managers, to increase their organizational identification and enhance their performance, and contribute to organizational productivity (Gray & Laidlaw, 2004; Muchinsky, 1977; Tsai, Chuang & Hsieh, 2009). Employees who report positive and open communication with managers are also better able to cope with major organizational changes, such as layoffs and mergers (Gopinath & Becker, 2000; Schwiger & DeNisi, 1991), report higher organizational identification (Bartels, Pruyn, De Jong & Joustra, 2007, Smidts, Pruyn & van Riel, 2001), and deal more effectively with job stressors (Stephens & Long, 2000; Tepper, Moss, Lockhart & Carr, 2007). As a consequence, many ways to improve communication within organizations have been proposed (Atwater & Waldman, 2008; Downs & Adrian, 2004).

There is strong evidence that different aspects of effective management communication, such as high frequency, openness and accuracy, performance feedback, and adequacy of information about organizational policies and procedures are positively related to employees’ performance (Kacmar, Witt, Zivnuska & Gully, 2003; O’Reilly, 1977; O’Reilly & Roberts, 1977; Roberts & O’Reilly, 1979; Snyder & Morris, 1984). However, little knowledge exists about the processes underlying these factors, particularly concerning communication by managers to lower level employees. One such process may involve perceived organizational support (POS: Eisenberger, Huntington, Hutchison, & Sowa, 1986; Eisenberger & Stinglhamber, 2011; Rhoades & Eisenberger, 2002; Shore & Shore, 1995), which refers to employees’ perception concerning the extent to which the organization values their contributions and cares about their well-being.
Allen (1992, 1995) found a strong relationship between management communication and POS. We build on Allen’s findings by addressing two important issues concerning the relationships of management communication with POS and performance.

First, we address the question concerning the direction of the relationship between management communication and POS, something that no empirical study has looked at so far. While research has usually proposed management communication as an antecedent of POS (Allen, 1992, 1995), it is also possible POS influences employees’ perceptions of management communication or that the relationship may be bidirectional. Therefore, we examine the directionality of the relationship between management communication and POS and the resulting influence on performance by using a cross-lagged panel design.

Second, we consider the question of whether POS is one of the mechanisms through which management communication affects performance. Specifically, is management communication important for performance solely due to the exchange of work-related information, or because it additionally indicates a positive valuation of employees’ contribution and concern with their well-being? Organizational support theory (Eisenberger & Stinglhamber 2011; Rhoades & Eisenberger 2002; Shore & Shore, 1995) supposes that employees develop global beliefs concerning their positive valuation in order to satisfy socioemotional needs and to determine the organization's readiness to recognize and reward increased work effort and to provide aid when need.

Based on the norm of reciprocity (Gouldner, 1960), these benefits should lead employees to respond to POS with greater in-role and extra-role behavior, as has been found (Rhoades & Eisenberger, 2002). The norm of reciprocity entails the obligation to reciprocate the benefits received from another along with the expectation that favorable actions toward others will be rewarded (Korsgaard, Meglino, Lester & Jeong, 2010). It affects prosocial behavior, as
individuals search for indicators of expected future returns (Gouldner, 1960). That is, when individuals receive benefits in the form of open communication from management and POS, they feel obligated to respond accordingly, namely through the increase of their task performance and voluntary actions to benefit the organization. Thus, we also examine the possible mediating role of POS in the relationship between management communication and performance.

**Temporal Relationship Between Communication and POS**

The effective implementation of organizational strategies and human resources policies depends on open two-way communication between management and employees (Goggin, Bowman, Lester & O’Toole, 1990; Tourish, 2005). Upward communication allows employees to point to the internal contradictions and problems that beset their organizations (Tourish, Craif & Amernic, 2010). It influences personnel and operational decisions, as well as adjustments in policies and strategy (Glauser, 1984). Downward communication serves to provide employees with directives, policy statements and performance feedback (Katz & Kahn, 1966). Further, management communication can increase POS by allowing managers to describe general goals and strategies, and to provide needed information on a timely basis that helps employees carry out their jobs (Allen, 1992). Such communication can lessen employees’ anxiety and uncertainty regarding organizational change (Eisenberger & Stinglhamber, 2011), while stimulating the emergence of innovative ideas and blocking the development of groupthink (Janis, 1983). Without an open two-way communication line between management and employees, senior managers may become out of touch with their employees, underestimate (or miss) emerging problems, and develop strategies that are misaligned with the perceptions of their employees (Tourish, 2005).
Effective communication with management should be particularly effective in increasing POS because high level managers formulate policies and goals and therefore are considered by lower level employees as strongly representative of the organization (Eisenberger & Stinglhamber, 2011). Open communication with management may signal that the organization cares about the well-being and values the contribution of its employees, thus increasing POS.

Several aspects of management's communication, such as quality of information received from management, positive job-related feedback, and conversations about support, as well as employees’ satisfaction with communication have been found to be positively related to POS (Allen, 1992, 1995). However, no studies to date have examined the directionality of the relationship between communication with management and POS, independently of the level of management. Although organizational support theory suggests that management communication leads to POS, high POS may lead employees to perceive that managers engage in more positive communications. Employees view managers as agents of the organization (Eisenberger et al., 1986; Levinson, 1965), and therefore may interpret the openness of their communication as indicative of the organization’s support. However, the opposite direction of influence is also possible. That is, POS might lead to more positive perceptions of management communication. The rationale for this reverse relationship can be found in confirmation bias literature.

Confirmation bias is generally described as a situation in which individuals reinforce their existing attitudes by selectively collecting new evidence, by interpreting evidence in a biased way or by selectively recalling information from memory (Oswald & Grosjean, 2004). Compelling evidence concerning individuals’ efforts to seek information that confirms their prior beliefs has been previously found (Lord, Lepper & Ross, 1979; Ross & Anderson, 1982; Wason, 1968). Therefore, employees with high POS might be biased toward interpreting communication opportunities with management more favorably.
Studies that have examined the relationship between POS and management communication have considered the constructs simultaneously, leaving unclear the directionality of the relationship. Thus, we used a cross-lagged panel design to examine whether, management communication leads to POS, whether POS leads to the perception of greater management communication, or whether it is bidirectional. In order to test which of these temporal effects actually occurs in practice, we propose the following competing hypotheses.

*Hypothesis 1a:* Communication with management is positively related to temporal change in POS.

*Hypothesis 1b:* POS is positively related to temporal change in communication with management.

**Consequences for Employee Performance**

POS may provide an important link between management communication and performance, as evidenced by the social exchange approach. Social exchange theory (Blau, 1964) refers to “voluntary actions of individuals that are motivated by the returns they are expected to bring and typically do in fact bring from others” (p.91). This perspective maintains that, based on the norm of reciprocity, employees strive to repay with increased effort and dedication to their organizations the reception of tangible and socioemotional rewards (Blau, 1964; Eisenberger et al., 1986; Eisenberger & Stinglhamber, 2011). Moreover, and in line with this reasoning, Allen (1992) found that POS mediated the relationship between management communication and employee affective commitment to the organization.

Employees with high POS have been found to have a greater felt obligation to aid the organization reach its objectives, stronger affective commitment to the organization, and increased expectancy of reward for high performance, and all of these outcomes have consistently been found to be associated with increased in-role and extra-role performance.
The meta-analysis performed by Rhoades and Eisenberger (2002) showed a moderate relationship of POS with in-role performance and extra-role performance directed toward the organization. Such relationship is stronger with extra-role performance, due to the more voluntary nature of many extra-role activities, which allow for more opportunities for employees to demonstrate their desire to reciprocate (Eisenberger & Stinglhamber, 2011).

Recently, preliminary empirical evidence on the direction of causality between POS and performance has been gathered (Chen, Eisenberger, Johnson, Sucharski & Aselage, 2009), providing evidence that POS leads to extra-role performance. Taken together, these results suggest that POS is a key social exchange mechanism, as employees try to reciprocate the positive valuation received from the organization (Eisenberger et al., 1986). Therefore, POS should mediate the relationship between management communication and both the performance of standard job activities (in-role performance) and of actions favorable to the organization that go beyond assigned responsibilities (extra-role performance).

_Hypothesis 2_: POS mediates the positive relationship between management communication and in-role performance.

_Hypothesis 3_: POS mediates the positive relationship between management communication and extra-role performance.

**Method**

**Sample and Procedure**

We administered the questionnaires to subordinates and supervisors of a social services organization located in the mid-Atlantic region of the U.S. Following the procedure most commonly used on POS cross-lagged research (e.g., Chen, Eisenberger, Johnson, Sucharski & Aselage, 2009; Rhoades, Eisenberger & Armeli, 2001), we used a three year time lag. The
surveys were completed during their regular scheduled working hours first in 2005 (Time 1) and then again in 2008 (Time 2). Cross-lagged panel designs can be used to determine temporal relations among measures, and requires that variables are measured simultaneously at two or more points in time. While it has several advantages, its main benefit is its suitability to test causality among a set of constructs, by examining cross-effects (each variable with the other at a different point in time) while controlling for autocorrelations (each variable with itself at two points in time) (Kenny, 1979).

The initial sample was composed by 575 employees and their respective supervisors’ evaluations of performance. Forty-one percent of the initial sample returned questionnaires at Time 2, of which six had to be removed for incompletion. The final sample was comprised of 236 employees. This final sample of employees was comprised mostly by full-time workers (93%) and sixty-nine percent of the sample were female. At Time 1, the mean age for the final sample was 43.9 years (SD = 10.4), organizational tenure was on average 6.6 years (SD = 5.6) and educational attainment was as follows: 38.7% high school diploma, 16.9% post-high school or associate degrees, 23.5% BA, 18.3% master’s degree, and 2.6% MD or doctorate degree.

Measures

Control variables. We controlled for organizational tenure at Time 1, since it is usually related to POS (Rhoades & Eisenberger, 2002).

POS. We assessed POS with 8 high-loading items from the Survey of Perceived Organizational Support (positive items 1, 9, 21 and 27; and negative items 3, 6, 17 and 23; Eisenberger et al., 1986), with factor loadings ranging from .71 to .84. The scale reliability (coefficient α) was .88 and .89 at Time 1 and Time 2, respectively.

Management communication. We developed a 4-item scale to assess employees’ perception of communication flow with management. Communication flow is considered a
central aspect of organizational communication (Goldhaber, 1983), which helps employees’
sense-making process through which they make organizational life meaningful (Lundberg &
Brownell, 1993). The scale included items assessing both upward and downward communication
between employees and management. The items are: *Upper management is open and honest in communicating reasons for changes in policy and personnel, Upper management acts on employees’ ideas and suggestions, Upper management tells employees in advance about changes that will affect them and There is an easy way for me to communicate my ideas and suggestions to upper management*. The scale reliability (coefficient α) was .80 at both Time 1 and Time 2.

**In-role performance.** Supervisors evaluated their subordinates’ in-role performance using five items from Williams and Anderson’s (1991) scale. Sample items are: *This employee meets formal performance requirements of the job and This employee adequately completes assigned duties*. The scale reliability (coefficient α) was .90 and .92 at Time 1 and Time 2, respectively.

**Extra-role performance.** Supervisors evaluated their subordinates’ extra-role performance using four items from Lynch, Eisenberger and Armeli (1999) and one item developed for this study. Sample items are: *This employee continues to look for new ways to improve the effectiveness of his/her work and This employee encourages coworkers to try new and more effective ways of doing their job*. The scale reliability (coefficient α) was .90 and .91 at Time 1 and Time 2, respectively.

For all but the control variables, respondents rated their agreement with each statement using a 7-point Likert-type scale (1- *strongly disagree*, 7- *strongly agree*).

**Results**

Means, standard deviations, reliabilities, and the intercorrelations among variables at Times 1 and 2 are shown in Table 1. Management communication at Time 1 was significantly
related to POS at Time 2 ($r = .49; p<.01$), and POS at Time 1 was also related to management communication at Time 2 ($r = .44; p<.01$). However, POS at Time 2 was related to in-role ($r = .13; p<.05$) and extra-role performance ($r = .16; p<.05$), while management communication at Time 2 did not present a significant relationship with either in-role ($r = .04; p>.05$) or extra-role performance ($r = .06; p>.05$).

We conducted confirmatory factor analyses using AMOS 18 to examine the distinctiveness of the four constructs in our measurement model: POS, management communication, in-role and extra-role performance. We compared the fit of four nested models for Time 1 using chi-square difference tests (Bentler & Bonett, 1980; James, Mulaik, & Brett, 1982). The four-factor model treated all factors as distinct. In order to test the distinctiveness of the variables collected from the same source, we created a three-factor model in which subordinate’s POS and management communication were combined into a single factor, and a two-factor model in which subordinate’s POS and management communication were combined into a single factor, and supervisors’ assessment of in-role and extra-role performance were also combined into a single factor. Finally, we created a one-factor model that aggregated all variables into one single factor. As shown in Table 2, the four-factor model presented a better fit for all indexes, CFI, TLI and RMSEA, and for the chi-square difference tests ($\chi^2 (203) = 364.87, p < .01$; CFI= .95; TLI= .94; RMSEA= .06). All the individual items loaded acceptably on their predicted factors, with standardized loadings ranging from .50 to .79 for POS, .61 to .79 for communication with management, .47 to .91 for in-role performance, and .76 to .82 for extra-role performance. Consequently, we treated the four constructs separately in the tests of our hypotheses.

To test the temporal relationship between management communication and POS, we estimated a cross-lagged panel model using structural equation modeling (see Figure 1). We used
a partial disaggregation technique (Bagozzi & Edwards, 1998) which consists of combining items into composites, for POS, in-role and extra-role performance. This approach of combining two or more items into one single indicator is particularly useful when the sample size is small (N=236) when compared to the total number of parameters to be estimated (k = 44). Its main advantages are that it reduces the number of parameters to be estimated and it tends to decrease measurement error (Bagozzi & Edwards, 1998). For each variable (both at Time 1 and Time 2) we followed the item-to-construct balance procedure outlined by Little, Cunningham, Shahar and Widaman (2002). This method’s goal is to derive parcels that are equally balanced in terms of their intercept and slope. Specifically, we averaged the highest loading item with the lowest loading item, followed progressively by the items with the next highest and lowest loadings, and so on, reducing the number of indicators of POS to 4, and in-role and extra-role performance to 3 each. Management communication remained with the initial 4 indicators (k = 22). The parcels’ internal reliability was similar to that of the individual survey items (for the parcels, POS Time 1 $\alpha = .88$; POS Time 2 $\alpha = .88$; IRB Time 1 $\alpha = .80$; IRB Time 2 $\alpha = .85$; ERB Time 1 $\alpha = .88$; ERB Time 2 $\alpha = .89$).

Since we used the same items to measure our constructs in Time 1 and Time 2, we allowed for autocorrelated error variances by freeing error covariances of identical terms administered at both Time 1 and Time 2 (Finkel, 1995). Additionally, we also allowed for the error variance between management communication and POS (Time 2) and of in-role and extra-role performance to covary. In our model, we also controlled for the temporal change in the performance variables, by including paths from in-role performance at Time 1 to in-role at performance Time 2, and from extra-role performance at Time 1 to extra-role performance at Time 2. The inclusion of organizational tenure and performance variables (Time 1) in our model allowed us to account for spuriousness in the management communication -POS relationship.
For ease of presentation, Figure 1 depicts only the predicted paths in our hypotheses\(^1\), and not the effects of our control variables, organizational tenure and both in-role and extra-role performance (Time 1)\(^2\). Organizational tenure presented a significant relationship with POS at Time 2 (\(\beta = .12; p < .05\)), but not with management communication (\(\beta = .11; p > .05\)) or in-role (\(\beta = .06; p > .05\)) and extra-role performance (\(\beta = .08; p > .05\)). Consistent with hypothesis 1a, management communication was significantly related to temporal change in POS (\(\beta = .29; p < .05\)). In contrast, POS was not significantly related to temporal change in communication with management (\(\beta = .01; p > .05\)). That is, management communication at Time 1 significantly predicted POS in Time 2, while POS was not a predictor of management communication.

Finally, POS at Time 2 was significantly related to both in-role (\(\beta = .42; p < .05\)) and extra-role performance (\(\beta = .45; p < .05\)). To test the indirect effect of management communication on both in-role and extra-role performance through POS (Hypotheses 2 and 3), we followed the \(z\)-prime procedure outlined by MacKinnon, Lockwood, Hoffman, West, and Sheets (2002). In line with our hypotheses, these mediation effects were significant both for in-role (\(z' = 1.38, p < .05\); critical \(z\)-prime value for statistical significance = .97) and extra-role performance (\(z' = 1.43, p < .05\); critical value = .97). The overall model showed acceptable fit (\(\chi^2 (338) = 498.77, p < .01\); CFI=.96; TLI=.96; RMSEA=.05).

**Discussion**

The present study drew attention to the relationship between management communication, POS, and performance using a cross-lagged effects model. Using structural equation modeling, we tested competing hypotheses concerning the relationship between management communication and POS. We found that management communication at Time 1 was a significant predictor of POS at Time 2, but that POS at Time 1 was unrelated to management communication at Time 2. Additionally, we found that POS fully mediated the
effect of management communication at Time 1 on performance at Time 2, while controlling for organizational tenure and previous levels of performance. These are important findings for the management communication and POS literatures for several reasons.

First, the present findings provide key evidence for the temporal relationship between management communication and POS. As previously mentioned, the present study is the first attempt that we know of at understanding the causal link between management communication and POS. The methodology used in the present study (cross lagged panel design), together with the inclusion of third variables that are potential sources of spuriousness (Time 1 organizational tenure and performance), contributed to strengthen our causality inference, by testing all three necessary criteria (Kenny, 1979): correlation, time precedence and nonspuriousness. While previous studies already attempted to address this relationship (Allen, 1992, 1995), the nature of the management communication - POS link remained unclear. Consistent with organizational support theory (Eisenberger & Stinglhamber 2011; Rhoades & Eisenberger 2002; Shore & Shore, 1995), our study found that management communication is an important antecedent of POS (Lynch et al., 1999), and not the other way around. Employees use the cues provided by managers through communication to infer about their relationship with the organization.

Second, these results suggest that open communication between management and employees is an effective way to increase employee’s performance – both their standard job and extra-role activities – mainly because it signals that the organization cares about the well-being and values the contributions of its employees. In line with the norm of reciprocity (Gouldner, 1960), when managers communicate openly with employees, creating upward and downward lines of communication, employees strengthen their POS, and consequently increase their effort to reciprocate through behaviors that help the organization. Moreover, our study supports the view that management communication conveys more than just information directly related to the
organization’s mission and specific tasks to be performed. Open communication is an important means for the creation and maintenance of meaning within the organization (Lundberg & Brownell, 1993), through which employees make sense of the organization’s intentions toward them.

These findings provide interesting directions for future research. It would be interesting to examine possible moderators of the management communication-POS relationship. For example, does the use of different communication channels (e.g., face to face conversations, video conference, formal letters, newsletters, memos, emails) shape the positive effect of management communication on POS? These channels involve distinct levels of media richness and proximity between actors, and are particularly relevant in complex communication situations, such as work settings. Media richness theory (Daft & Lengel, 1984; Daft, Lengel & Trevino, 1987) has provided some useful insights, as richer media are more effective in communicating affect as well as complex material. For example, individuals using leaner media are less likely to trust others and more likely to engage in defection and deception (Rockmann & Northcraft, 2008), but they also feel more justified in doing so (Naquin, Kurtzberg & Belkin, 2010). The relationship between management communication and POS may vary depending on the richness of the channel used, such that this relationship is expected to be stronger when richer means of communication are used. Additionally, individuals have different preferences as to the channel of communication. As receivers, tend to prefer channels that increase that proximity (Daft & Lengel, 1986), as they provide additional cues (e.g., non-verbal) concerning the intentions of the other party. On the other hand, individuals, as senders, strategically prefer channels with fewer social cues when threats to their self-presentation arise (O’Sullivan, 2000), and other parties are aware of that choice. These differences should receive further attention.
This research also has implications for practice. It brings open communication as an important HR policy to managers’ attention. Just like other HR practices, such as pay, promotions, job security, autonomy and training (Shore & Shore, 1995), open communication demonstrates the recognition of employee efforts to help the organization, thus contributing to POS, with consequences for performance. Moreover, communication with management may also affect employees’ expectations concerning future exchanges and potential benefits. When there is open communication with management, POS increases, and employees feel obliged to reciprocate such positive treatment. In contrast, a breach in open communication may lessen POS with negative consequences to organizational functioning. Employees with low POS may reduce their prosocial behaviors (e.g., task or discretionary behaviors) or engage in more disruptive behaviors (e.g., counter-productive work behaviors). Communication between management and employees should therefore be a key part of organizations’ strategic planning, and managers should receive training in order to maximize the potential of open communication in their organization.

While this study benefitted from using a fully cross-lagged panel design, it is not without limitations. First, the use of self-report data on both occasions might have inflated the strength of the relationships between variables due to common method variance, although the use of this type of design minimizes its impact (Podsakoff, Mackenzie, Lee & Podsakoff, 2003). The use of data collected from both employees and supervisors also minimizes common method variance concerns. Second, we tested the causal path across one time lag of three years. While this is the most commonly used time lag in POS research (Chen et al., 2009; Rhoades et al., 2001), the selection of a specific time interval might have contributed for the lack of statistical significance between POS in Time 1 and management communication in Time 2 (Finkel, 1995). To fully understand the nature of these relationships, and completely rule out our competing hypotheses
(i.e., that the management communication – POS relationship is bidirectional), they should be tested across multiple waves, using other time lags. Despite these limitations, the present study provides key empirical evidence for the relevance of management communication for POS, and consequently for performance.
References


*Psychological Methods, 7*, 83-104.


Footnotes

1 In order to test whether there was a full mediation effect of POS on the relationship between management communication and performance, we compared our full mediation model with a partial mediation model which included paths from management communication (Time 1) to both in-role and extra-role performance (Time 2). The chi-square difference test ($\chi^2_{\text{diff}} (2) = .82, p > .05$) was not significant, suggesting that the partial mediation model does not present a better fit than the hypothesized full mediation model. As a consequence, all the analyses refer to the full mediation model.

2 We also compared our hypothesized model with two other models: a model that included path from in-role performance at Time 1 to POS at Time 2; and a second model, which included a path from extra-role performance at Time 1 to POS at Time 2. These models did not present any improvement in model fit ($\chi^2 (337) = 498.76, p < .01$; CFI= .96; TLI= .96; RMSEA= .05 and $\chi^2 (337) = 498.69, p < .01$; CFI= .96; TLI= .96; RMSEA= .05). In line with the findings of Chen et al. (2009), we did not find a significant relationship between performance at Time 1 and POS at Time 2, for both in-role and extra-role performance ($\beta=-.00; p>.05$ and $\beta=-.01; p>.05$, respectively).