

MANAGEMENT COMMUNICATION STYLE, TOLERANCE FOR
DISAGREEMENT, AND INNOVATIVENESS AS PREDICTORS
OF EMPLOYEE SATISFACTION:
A COMPARISON OF SINGLE-FACTOR, TWO-FACTOR, AND
MULTIPLE-FACTOR APPROACHES

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The construct of Management Communication Style (MCS), presumed to be a product of the organization's leadership style and the supervisor's communication style, was advanced as a theoretical predictor of employee satisfaction. It was found that MCS could be consistently and reliably measured and that MCS was linked in a linear fashion to employee satisfaction. As MCS becomes more subordinate-centered and interactive, employee satisfaction is increased. Because of the causal pattern implied, it is argued that future research involving intervention to alter MCS and study effects on employee satisfaction is justified.

Supplementary findings indicated that employee satisfaction is also linked to the employee's perception of her/his supervisor's tolerance for disagreement and the innovativeness of both the organization and the employee.

Locke (1976) has estimated that over 3,300 studies on the subject of employee satisfaction have appeared in the literature. This volume of research certainly suggests that employee satisfaction is of considerable interest to a wide variety of scholars and implies such satisfaction is linked to "bottom line" concerns of organizations, such as productivity. While a clear one-to-one relationship between employee satisfaction and employee productivity does not appear to exist, it is generally acknowledged by both scholars and practitioners that some relationship does exist, particularly in service-related organizations where real productivity is very difficult to define, much less measure. Similarly, employee satisfaction has been linked to employee turnover rates, a costly concern of most organizations whether their primary output is constituted of products or services.

Of course, humanistic concerns have also influenced many to seek to understand the dynamics of employee satisfaction. Few would argue with the implied value premise that it is better for people to be happy than unhappy.

With this large volume of research in the area of employee satisfaction it might be assumed that a consensus would have formed concerning the nature of such satisfaction. Quite the reverse is the case. There have been nearly as many operationalizations of employee satisfaction as there have been studies of the phenomenon. Conceptual definitions have also varied sharply, although not to the extent that operationalizations have. Before we present the foundations of the present study, therefore, it is important that we examine the nature of employee satisfaction as viewed in previous research.

EARLIER STUDIES

The Nature of Employee Satisfaction

One of the more common conceptualizations of employee satisfaction, particularly in earlier research, has been a global, or one-factor, approach (e.g. Ewen, Smith, Hulin, & Locke, 1966; Graen, 1968; Hinrichs & Mischkind, 1967). This conceptualization envisions a global or gestalt reaction of the employee that falls on a continuum from very satisfied to very dissatisfied. While this conceptualization does not deny that an employee may like some things in the work environment while disliking others, it views the interface of these competing reactions to represent a general, single dimensional satisfaction response.

A second conceptualization of employee satisfaction was developed in direct response to the above one-factor approach. This conceptualization has been referred to as the "Two-Factor Theory of Job Satisfaction" (Herzberg, Mausner & Snyderman, 1959). This approach envisions two continua, one for satisfaction and one for dissatisfaction, rather than a single satisfaction-dissatisfaction continuum. It stresses that an employee potentially can be very satisfied and very dissatisfied at the same time in response to different elements in the employment environment. The "Motivator-Hygiene Theory" that evolved from this conceptualization suggests that some elements, called "motivator" conditions, impact the satisfaction continuum while other elements, called "hygiene" conditions, impact the dissatisfaction continuum. While it is recognized that there is some overlap in impact of the two types of conditions, motivators are seen as such things as achievement, recognition, and the work itself; while hygiene conditions are seen to be such things as interpersonal relations, company policies, and working conditions. For an extensive review and evaluation of this approach to employee satisfaction, see King (1970).

The final conceptualization of employee satisfaction has been the most commonly employed in recent years (e.g. Friedlander, 1965; Wolf, 1967; Smith, Kendall, & Hulin, 1969) and the approach chosen by recent communication researchers (Falcione, McCroskey, & Daly, 1977; Hurt & Teigen, 1977). This approach envisions employee satisfaction being composed of multiple dimensions, where each dimension represents a separate (although possibly intercorrelated) satisfaction-dissatisfaction continuum. The dimensions isolated by Smith et al. (1969) have received the most attention: supervision, work, pay, promotions, and co-workers.

In the present investigation we have opted not to choose among these varying conceptualizations. Rather we have attempted to operationalize employee satisfaction in various ways in keeping with each conceptualization. These operationalizations will be outlined later.

Predictors of Satisfaction

While many variables in the working environment have been found to impact employee satisfaction, most of these have not been specifically related to communication. Such non-communication-related elements as job enlargement (Argyris, 1964), job enrichment (Herzberg, 1966), and working conditions (Roethlisberger & Dick, 1939), employee self-esteem (Falcione et al., 1977), employee perceptions of supervisor credibility, homophily, and attractiveness (Falcione et al., 1977), and employee and organizational innovativeness (Hurt & Teigen, 1977) are clearly important. Thus, it should be stressed that although communication within an organization should be expected to be an important element impacting employee satisfaction, many other variables should also be expected to account for variability, and no single element should be expected to be "the cause" of employee satisfaction or dissatisfaction across situations.

Research that has examined elements in the working environment that specifically involve communication has indicated the importance of communication in determining employee satisfaction. For example, permitting employees to communicate in the decision-making process (Falcione, 1974) and providing feedback to an employee on her or his performance (Herzberg, 1966; Hackman & Lawler, 1971) have been found to increase satisfaction, while employees who are communication apprehensive (people who fear and avoid communication) have been found to be less satisfied (Falcione et al., 1977). Of particular significance to this study is the finding that employees who have positive perceptions of the communication of their supervisors are significantly more satisfied. Falcione et al. (1977) report substantial correlations between employee satisfaction and employees' perceptions of their supervisor's listening ability, the level of understandingness the supervisor shows, and the general quality of the supervisor's communication.

The research briefly summarized above suggests that basic communication patterns of both supervisors and employees impact employee satisfaction. The present investigation sought to expand our understanding of this relationship by examining the independent and interrelated impacts of management communication style and both employee and supervisor tolerance for disagreement on employee satisfaction. The specific elements studied are outlined below.

Management Communication Style

The primary potential predictor of employee satisfaction with which this investigation was concerned was Management Communication Style (MCS). Considerable interest in the notion of communicator style has been generated among researchers concerned with interpersonal communication and instructional communication as a result of the work of Norton and his colleagues (e.g.,

Norton, 1978). This body of research and theory suggests that individuals develop habitual patterns, or styles, of communicating with other people and varying styles have a major impact on the way people are perceived by others in their communication environment. Corollary research to that of Norton (1978) conducted within an organizational environment (e.g., Knutson & Lashbrook, 1976) has also been able to identify clear-cut communication styles of organization members (although referred to in these investigations as "social style") and attendant differential perceptions. Although theory does not explicitly suggest that such communication or social style patterns may vary across contexts, the research reported to date has focused on the individual within a given context (i.e. as a member of a dyad, as an employee in an organization, as a teacher in a classroom), rather than tracing the individual's communication style across contexts. Research and theory concerning role behavior (e.g., Goffman, 1959), of course, explicitly suggests that communication behavior patterns of individuals will vary across contexts.

The communication style of a supervisor within an organization, we believe, is a function of both the management style imposed on the supervisor by the organization (or chosen by the supervisor within the parameters permitted by the organization) and the communication style of the individual supervisor which that individual brings to the organizational context—hence our term MCS. We envision the supervisor's MCS to be relatively constant across time within a given organization, but it may change sharply if the individual moves into the context of another organization or her or his own supervisor is changed.

The basic premise upon which this investigation was based is that a supervisor's MCS directly impacts employees' perceptions of both the supervisor and the organization and as a consequence is one determinant of employee satisfaction. Presuming the correct-

ness of this premise, employee satisfaction could be directly varied by altering the management style of the organization or the selection of a supervisor with a differing communication style. This investigation was directed toward the crucial linkage in this theory, that between MCS and employee satisfaction. Should this link be established, subsequent research involving intervention to alter MCS in an attempt to alter employee satisfaction would be justified. The completion of both research phases would permit a full test of our theoretical model. This study centered on the first phase and the selection/development of measures which can be employed in both phases.

Central to the development of our MCS construct and its operationalization (to be discussed later) was the work of Tannenbaum and Schmidt (1958), the film *Styles of Leadership* (1962) based upon this earlier work, and the research of Sadler (1970). Tannenbaum and Schmidt (1958) postulate a continuum of leadership orientations within an organization from the extreme "boss centered" to the extreme "subordinate centered." As one moves from the first extreme to the latter, the use of authority by the manager decreases and the freedom for subordinates increases. Although the original conceptualization envisioned seven steps along the continuum, both the *Styles of Leadership* film (1962) and Sadler (1970) removed apparently very close or overlapping steps to form a four-step continuum with the labels: Tell, Sell, Consult, and Join. An examination of these approaches will make the assumed relationship between management style and communication style explicit.

Tells. The manager who employs this style habitually makes decisions (or receives them from above) and announces them to subordinates, with the expectation they will be carried out without challenge.

Communication: Primarily downward, unidirectional, and noninteractive. Questions

generally are accepted if they are concerned with clarification or how the job is to be done. Inquiries questioning the desirability of the decision are discouraged or even forbidden. Expressed concern for employees' satisfaction is rare.

Sells. The manager employing this style also makes the decisions (or receives them from above), but rather than simply announcing them to subordinates, the manager tries to persuade the subordinates of the desirability of the decisions.

Communication: Primarily, but not exclusively, downward; sometimes bi-directional, and generally interactive. Questions are usually actively encouraged and challenges often met openly with persuasive counter-arguments. Concern for employee satisfaction with decisions often is explicit.

Consults. The manager employing this style also makes the ultimate decisions, but not until the problem has been presented to the subordinates and their advice, information, and suggestions have been obtained. While the problem may emanate from above the manager, the decision does not.

Communication: Primarily upward, bi-directional, and interactive. No adversary relationship established, subordinates communicate with manager to help make best decision and explore advantages and disadvantages of various options based on both the needs of the employees and the organization. Employee well-being is a specific criterion for discussion.

Joins. The manager employing this style does not make the decision, rather the authority to make the decisions is delegated to the subordinates, either in cooperation with the manager or in her or his absence. The manager defines the problem and indicates the limits within which the decision must be made. Typically, majority opinion will determine the decision after open discussion.

Communication: Primarily horizontal, some bi-directional, highly interactive. Manager

and subordinates communicate as equals or near equals. Employee desires become a primary criterion for decision making and discussion.

While the above approaches may appear categorical, it should be stressed that they reflect points on a continuum and few managers would be likely to operate at all times at only one point. More likely would be a general tendency to operate at one point, but to have some variability around that point.

An important implication of the above management styles is the communication styles that are imposed by the management style chosen. Clearly, if all decisions are made above a manager, he or she can only choose a Tell or Sell style, which would restrict the communication styles available for use. However, if the manager is given a great deal of autonomy, suggesting a Consult or Join style above, he or she has great flexibility in selecting a MCS for interface with employees. Thus, as we noted previously, MCS is a function both of a communication style preference of a manager and the management style imposed on the manager from above.

Previous research by Sadler (1970) indicated that the subordinates he studied expressed a clear preference for the Consults and Sells styles and that employee satisfaction was greater under Consults, Joins, and Sells than under the Tells style. Notably, in the Sadler (1970) study, since he treated the four styles as categories rather than points on a continuum, a large number of subordinates were unable to classify the style under which they worked, and these were the *least* satisfied employees. This implies that consistency of MCS may be as important or even more important than where the MCS is on the continuum in determining employee satisfaction. The above results suggest two hypotheses that were tested in the present investigation:

- H₁ For employees who can consistently identify the MCS under which they work, employee satisfaction will in-

crease as a linear function of a more subordinate-centered MCS.

- H₂ Employees who can consistently identify the MCS under which they work will be more satisfied than employees who cannot consistently identify the MCS under which they work.

Also, the following research question was posed for this study:

- Q₁ Does either consistency of MCS or level of MCS account for more variance in employee satisfaction than the other?

Tolerance for Disagreement

The construct of Tolerance for Disagreement was recently formulated by Knutson, McCroskey, Knutson, and Hurt (1978). Based upon earlier work in the area of conflict resolution and management, this construct was advanced to explain why some individuals are prone to become involved in conflict situations while others are not. Using the definition of Disagreement as "a difference of opinion on substantive or procedural matters," and the definition of Conflict as "disagreement plus negative interpersonal affect," Knutson et al. (1978) speculated that the likelihood of conflict in a dyad or organization increases as a function of either low tolerance for disagreement among one or all participants, or a low degree of positive affect among two or more of the participants. From this perspective, conflict is viewed in a negative light (leading to dissatisfaction with the conflict-generating environment) but disagreement is viewed as positive unless either tolerance for disagreement is low or positive affect is low.

While the Knutson et al. (1978) formulation is at present more definitional and descriptive than theoretical, and little empirical work with the formulation has been reported, it provides a potentially important interface with our MCS conceptualization. Some Management Communication Styles obviously en-

courage more interaction and disagreement over substantive and procedural questions than do other styles. Thus, it is not unreasonable to suspect that a Tells MCS might be more functional for an individual with a low tolerance for disagreement while a Joins MCS might be more functional for an individual with a high tolerance for disagreement, whether the individual be a manager or a subordinate. Hence, the following research questions were posed for this investigation:

- Q₂ Is employee tolerance for disagreement (ETD) correlated with employee satisfaction?
- Q₃ Is the employees' perception of the manager's tolerance for disagreement (MTD) correlated with employee satisfaction?
- Q₄ Do either ETD or MTD increase the predictability of employee satisfaction when MCS is controlled?

The final question, of course, is concerned with whether ETD or MTD contribute unique explained variance in employee satisfaction as opposed to being redundant measurement. Employees may distort MTD on the basis of the MCS under which they work or distort their perception of MCS because of their ETD level. Question 4 seeks to partial out these possible biases.

Innovativeness

Two additional variables were introduced into this investigation because of the strong association with employee satisfaction that has been reported for both in a previous study (Hurt & Teigen, 1977). These were the self-reported innovativeness of the employees and the employee's perceptions of the innovativeness of the organizations in which they were working. Hurt and Teigen (1977) report significant correlations of the following magnitude between perceived innovativeness of the organization and employee satisfaction dimensions: supervision, .77; promotions, .62; co-workers, .58, and pay,

.16. They also report a significant correlation of .78 between employee satisfaction with their own work and their own innovativeness.

Since these correlations represent unusually high variance accounted for in employee satisfaction (much higher than in other studies we have surveyed, except those with clearly redundant measurement, e.g. perceptions of supervisor and supervisor satisfaction in Falcione et al., 1977), it was felt desirable to determine whether innovativeness was redundant with any of the primary variables under study or if unique variance could be accounted for by both innovativeness and our selected predictors.

The following research questions were posed:

- Q₅ Do employees' perceptions of an organization's innovativeness increase the predictability of employee satisfaction when MCS, ETD, and MTD are controlled?
- Q₆ Do employees' self-reports of innovativeness increase the predictability of employee satisfaction when MCS, ETD, and MTD are controlled?

Since it was thought likely that organizations that spawn more subordinate-centered MCS in their managers would be more likely to be perceived by employees as innovative, it was suspected the Hurt and Teigen (1977) results may simply be an indirect indicant of the relationship between MCS and employee satisfaction. In addition, it was considered possible that more innovative employees may gravitate to organizations that spawn more subordinate-centered MCS in their managers, and thus again the innovativeness findings may simply be an indirect indicant of the relationship between MCS and employee satisfaction.

METHOD

Measurement

The following instruments were employed to measure the variables included in this investigation:

Employee Satisfaction—Single-Factor Model.

Two instruments were constructed to measure employee satisfaction assuming a one-dimensional satisfaction response. The first was an indirect measure composed of three items. These items inquired as to how willing the employee would be to move to a similar position in another organization for which the salary was (1) the same, (2) somewhat higher, and (3) somewhat lower. Since the subjects were public school teachers, they were asked "How willing would you be to move to a new position in another school district . . ." under each of the salary conditions. A seven-point response option ranging from very unwilling to very willing was provided for each item. Face validity is suggested for this measure in that it was assumed that people who are most satisfied would be least likely to move and people least satisfied would be most likely to move. The obtained internal reliability of this instrument, based on the Nunnally method (1967), was .70.

The second instrument designed to measure employee satisfaction within a one-dimensional context was composed of two seven-point, bi-polar scales. Subjects were asked to indicate "How do you feel about your current position?" on the two scales. One scale ranged from satisfied to not satisfied, the other ranged from dissatisfied to not dissatisfied. The subjects completed the instrument twice, which permitted computation of test-retest reliability. The estimated reliability was .87. Since the score used for analyses was the sum of the two total scores obtained in the two administrations of the instrument, the estimated internal reliability for the score employed was .92.

Employee Satisfaction—Two-Factor Model.

The instrument developed to measure employee satisfaction within a two-dimensional context was an adaptation of the instrument described above to directly measure satisfaction. The "satisfaction" dimension was measured by the seven-point, bi-polar scale ranging from satisfied to not satisfied. The "dis-

satisfaction" dimension was measured by the seven-point, bi-polar scale ranging from dissatisfied to not dissatisfied. Since the instrument was administered twice, it was possible to compute test-retest reliabilities. Those obtained were .86 for satisfaction and .79 for dissatisfaction. Since the scores employed in the data analyses were the sums from the two administrations, the internal reliabilities for the two dimension scores were estimated to be .92 for satisfaction and .88 for dissatisfaction.

Employee Satisfaction — Multiple-Factor Model.

In order to measure employee satisfaction according to this model, the *Job Descriptive Index* (JDI) developed by Smith et al., (1969) was administered. The JDI includes five dimensions pertaining to work, pay, promotions, co-workers, and supervision. This instrument has been found to be reliable and to have factorial stability in previous studies (Smith et al., 1969; Falcione et al., 1977; Hurt & Teigen, 1977). In the present study factorial stability was maintained and, after dropping items with lower than a .50 item-total correlation with the appropriate dimension score, the following split-half (odd-even) reliabilities were obtained: supervision, .92; work, .80; pay, .86; promotions, .80; and co-workers, .85. A total of fourteen of the seventy-two items were deleted. Most of these had clear face-validity problems in the organizational context in which this study was conducted and had been found to have poor factor loadings in a previous study with a similar population (Falcione et al., 1977).

Management Communication Style. The MCS scale was developed for this study. It is a 19-point continuum, ranging from Tell (which is scored 10), through Sell (scored 16), through Consult (scored 22), to Join (scored 28). Five steps are present between each identified point on the continuum: Tell 11 12 13 14 15 Sell; Sell 17 18 19 20 21 Consult; and Consult 23 24 25 26 27 Join. Subjects are simply asked to circle the MCS

under which they are working. This instrument is believed to be an improvement over that employed by Sadler (1970). He forced his subjects to select one of the four identified points on the continuum or to be recorded as unable to determine the style. The present scale allows subjects to record positions on the continuum that represent a mixture of MCS and thus more realistically represents the underlying theoretical continuum.

In order for the scale to be usable, the subjects had to be instructed concerning its meaning. Since the subjects, although full-time employees of a wide variety of school districts in several states, were students in a graduate-level course on communication in educational organizations, this instruction was an integral part of the course. The Tannenbaum and Schmidt (1958) conceptualization with the Sadler (1970) modifications was thoroughly explained, exemplified, and discussed. Then the subjects were asked to complete the scale. They were asked to complete the scale again the following class period with no further discussion. The obtained test-retest reliability for the scale was .85. Since the sum of the scores from the two administrations of the measure was employed for most analyses, the internal reliability of the summed score was estimated to be .92.

Tolerance for Disagreement. The Tolerance for Disagreement scale developed by Knutson, et al., (1978) was employed to measure the employees' tolerance for disagreement (ETD). The items were reworded to represent perceived responses of another person in order to create a measure of perceived tolerance for disagreement of the manager (MTD). For example, the item "I enjoy arguing with other people" was changed to "He/she enjoys arguing with other people," and "I do not like to disagree with other people" was changed to "He/she does not like to disagree with other people." The obtained split-half (odd-even) reliability for the ETD scale was .90 and that for the MTD scale was also .90.

Innovativeness. The measure of the employee's innovativeness used in this study was the 20-item Innovativeness Scale (IS) developed by Hurt, Joseph, and Cook (1977). Previous reports have indicated high reliability and a strong case for the validity of this scale (Hurt et al., 1977). In the present study the internal reliability estimate (split-half, odd-even) was .93.

The measure of perceived innovativeness of the organization in which the subject was working used in this study was the Perceived Organizational Innovativeness Scale (PORGI) developed by Hurt and Teigen (1977). This 25-item instrument has been found to have excellent reliability and both construct and predictive validity (Hurt & Teigen, 1977). In the present study the internal reliability estimate (split-half, odd-even) was .97.

Data Collection

Subjects were 183 public school, elementary and secondary, teachers (130 female, 44 male, 9 did not record their sex) representing 39 school districts in Maryland, Ohio, Pennsylvania, Virginia, and West Virginia. Participation was a result of being enrolled in a graduate class (five different courses offered in five different areas, enrollment voluntary) entitled, "Communication in the Educational Organization." Subjects were asked to complete the JDI, Willingness to Move, ETD, MTD, IS, and PORGI scales during the first class period before any content had been discussed. The two-factor employee satisfaction scales were administered twice during the middle of the course. Instruction relating to MCS occurred at the end of the second third of the course, thus the MCS scale was administered on two successive class days at that time.

All subject responses were anonymous. To insure anonymity, subjects were assigned random code numbers known only to themselves. They recorded their code numbers on each scale which permitted merging the data for analyses.

Data Analyses

The first step in the data analyses was the examination of the measuring instruments for reliability and factorial stability. The obtained reliabilities were reported above. The dimensionality of the JDI was consistent with previous research. The tolerance for disagreement (ETD, MID) measures and the innovativeness measures (IS, PORGI) were single-factored.

The next step in the analysis of the data was directed toward testing the two research hypotheses. Each satisfaction variable was analyzed separately. Subjects were divided into two groups on the basis of the way they responded to the MCS scale on the two occasions. Those subjects who recorded the same MCS score on both administrations of the measure, or scored within two points higher or lower on the second administration, were classified as "consistent." Those who scored more than two points higher or lower on the second administration were classified as "inconsistent." Only twenty-three subjects fell into the latter category. Separate single-classification analyses of variance were performed on each satisfaction measure with level of consistency serving as the independent variable. This provided a series of tests of the second hypothesis. To test the first hypothesis, a series of univariate correlations were computed, with MCS scores (based on a total score from the two administrations of the measure) serving in each case as the predictor variable and the various measures of satisfaction serving successively as criterion variables. Separate correlations were computed using only the data from subjects classified as "consistent" above, and using all of the subjects regardless of consistency classification. Determining an answer to the first research question was possible by comparing the results of these three sets of analyses.

In an effort to provide answers to the second and third research questions, a series of univariate correlations were computed with tolerance for disagreement (ETD, MTD)

serving as the predictor variable and the various measures of satisfaction serving successively as criterion variables. To answer the fourth research question, a series of multiple regression analyses were conducted with the various measures of satisfaction serving successively as criterion variables. In each case the sequential analysis results were examined, with MCS entered as the first predictor, MTD the second, and ETD the third.

The final research questions, questions 5 and 6, were examined by a series of multiple regression analyses similar to those noted above, except that the relevant innovativeness score (IS, PORGI) was entered as the final predictor following MCS, MTD, and ETD.

The alpha level set for significance of all tests, including tests of sequentially ordered predictors in the multiple regression analyses, was .05. Several additional tests designed to investigate possible nonlinear relationships failed to indicate the presence of nonlinearity in any case. Consequently, these analyses will not be reported here.

RESULTS

The analyses of variance based upon the consistency classification with the various satisfaction dependent variables (the 5 JDI dimension scores, willingness to move, general one-dimensional satisfaction, and the two-dimensional dissatisfaction and satisfaction scores) all produced nonsignificant results. The F-ratio in every case was less than 1.0. In short, no relationship between consistency of MCS perception and any measure of satisfaction was found.

The results of the two series of correlations (consistent subjects, all subjects) between MCS and satisfaction were virtually identical. Thus, only the results involving all subjects will be considered here. These results are reported in Table 1. As noted in Table 1, MCS was significantly correlated with the supervision, work, and promotion dimensions of the multiple-factor satisfaction model, with both the satisfaction and dissatisfaction dimensions

TABLE 1
Univariate Correlations Between Predictor Variables and Employee Satisfaction

Satisfaction Criterion	Predictor Variable*				
	MCS	MTD	ETD	IS	PORGI
<u>Single-Factor</u>					
Willingness to Move	-.15**	-.17**	-.05	-.02	-.11
General Satisfaction	.32**	.29**	.01	.12	.15**
<u>Two-Factor</u>					
Satisfaction	.27**	.28**	.03	.16**	.13
Dissatisfaction	-.25**	-.16**	.03	-.04	-.12
<u>Multiple-Factor</u>					
Supervision	.46**	.35**	.01	.22**	.45**
Work	.28**	.25**	-.07	.31**	.09
Pay	.10	.15**	.05	-.14**	.31**
Promotions	.17**	-.02	-.02	-.11	.23**
Co-Workers	.10	.22**	-.16**	.05	.05

*MCS=Management Communication Style; MTD=Tolerance for Disagreement of Supervisor; ETD=Tolerance for Disagreement of Employee; IS=Innovativeness Scale; PORGI=Perceived Organizational Innovativeness.

**Statistically significant, $\alpha = .05$.

of the two-factor model, and the willingness to move and general satisfaction scores of the single-factor model. No significant relationships were found between MCS and the pay or co-worker dimensions of the multiple-factor model.

The results of the correlational analyses involving tolerance for disagreement (MTD, ETD) and employee satisfaction are also displayed in Table 1. Tolerance for Disagreement of the subjects' immediate supervisor was significantly related to all measures of employee satisfaction except the promotions dimension in the multiple-factor model. The results on the Tolerance For Disagreement of the employees (subjects) were almost the exact

reverse. The only significant relationship was between ETD and the co-worker dimension of the multiple-factor model.

The results of the multiple regression analyses, based upon the sequential sums of squares, are displayed in Table 2. The over all models were significant in every case ($p < .05$). The variance in satisfaction predicted by the total model and each individual predictor sequentially entered into the model are noted in Table 2. Examination of the results indicate generally that adding the scores representing the perceived tolerance for disagreement of the supervisor (MTD) into the predictive equation increased predictable variance in satisfaction, while entering employee tolerance for

TABLE 2
 Variance Attributable to Individual Predictors and Total Models for
 Multiple-Regression on Employee Satisfaction

Satisfaction Criterion	Predictor Variable					Total Models*
	MCS	MTD	ETD	IS	PORGI	
<u>Single-Factor</u>						
Willingness to Move	.02	.04	**	--	--	.07
General Satisfaction	.11	.06	--	--	--	.19
<u>Two-Factor</u>						
Satisfaction	.08	.06	--	--	--	.15
Dissatisfaction	.06	--	--	--	--	.09
<u>Multiple-Factor</u>						
Supervision	.21	.08	--	.04	.08	.40
Work	.08	.06	.02	.09	--	.25
Pay	--	.02	--	.02	.11	.16
Promotions	.03	--	--	--	.04	.08
Co-Workers	--	.05	.03	--	--	.09

*Including variance of all predictors. Total may not equal sum of individual predictors due to rounding error.

**Only variance attributable to statistically significant predictors is reported.

disagreement (ETD) generally did not. Entering innovativeness scores (IS, PORGI) into the equations relating to the single-factor and two-factor operationalizations of satisfaction failed to explain additional variance. However, entering innovativeness scores did increase explained variance in four of the five dimensions of the multiple-factor operationalization of satisfaction.

Tables 3 and 4 report subsidiary correlational analyses among predictor and criterion variables, respectively. A comparison of Tables 1 and 2, magnitude of correlation vs. variance accounted for, suggests some colinearity among predictors. This is further indicated

in Table 3 and will be considered in the following section. The correlations among criterion variables indicated in Table 4 suggest meaningful, but not always high, associations among the single-, two-, and multiple-factor approaches to employee satisfaction. This will also be considered in the following section.

DISCUSSION

The first hypothesis posed for this investigation predicted that for employees who can consistently identify the MCS under which they work, employee satisfaction will increase as a linear function of a more subordinate-centered MCS. This hypothesis received sup-

TABLE 3
Correlations Among Predictor Variables

	MCS	MTD	ETD	IS	PORGI
MCS	1.00	.20*	.03	.23*	.34*
MTD	.20*	1.00	.20*	.02	.16*
ETD	.03	.20*	1.00	.11	.07
IS	.23*	.02	.11	1.00	-.06
PORGI	.34*	.16*	.07	-.06	1.00

* Statistically significant, alpha = .05.

port within both operationalizations of the single-factor approach to satisfaction, both operationalizations of the two-factor approach, and three of the five operationalizations of the multiple-factor approach. Thus the primary test of our underlying theoretical model is supported, regardless of which particular approach to employee satisfaction one chooses to operationalize. As might be expected, Management Communication Style has its largest impact (in terms of variance accounted for, see Table 2) on employee satisfaction with supervision. The importance of this finding is reinforced by the fact that (as noted in Table 4) satisfaction with supervision was the only satisfaction operationalization that was found to be significantly correlated with every other operationalization. Supervision, then, appears to be central to employee satisfaction, and Management Communication Style appears to be a very significant predictor of satisfaction with supervision. A subordinate-centered MCS appears to lead to increased employee satisfaction.

Our second hypothesis received no support, subjects who consistently identified the MCS under which they worked did not differ in satisfaction from subjects who could not consistently identify the MCS under which they worked. This finding challenges the conclusions from the previous research reported by Sadler (1970). It will be recalled that Sadler

(1970) did not permit his subjects to identify the leadership style (analogous to our MCS) of their superiors on a continuum. Rather, they were forced to choose among five categories—tell, sell, consult, join or none of these. Thus, subjects working under a combined tell-sell MCS (as was reported by many of our subjects) would be forced to mark "none of these" on the Sadler (1970) instrument. It would appear, therefore, that the Sadler finding was an artifact of the instrument he employed.

Because of the findings related to our second hypothesis, the answer to our first research question is clear, level of MCS accounts for significantly more variance in employee satisfaction than consistency of MCS, since the latter accounted for no significant variance. This finding suggests that a supervisor can vary her or his MCS according to situational requirements without running a high risk of reducing employee satisfaction. Employees appear to be able to construct a gestalt perception of MCS under such variation, and this gestalt perception is meaningfully associated with their satisfaction. Of course, the more that gestalt approaches a highly interactive, employee-centered MCS, the more satisfaction we should expect.

The results of the correlational analyses involving tolerance for disagreement and employee satisfaction provide clear answers to our second and third research questions. Employee tolerance for disagreement was not meaningfully associated with most of the criterion variables. ETD was significantly related only to satisfaction with co-workers. The supervisor's perceived tolerance for disagreement, on the other hand, was significantly related to all but one of the satisfaction operationalizations. MTD was not significantly associated with satisfaction with promotions.

The results of the multiple regression analyses involving tolerance for disagreement also provide a clear answer to our fourth research question. When MCS was controlled, MTD increased the predictability of employee satis-

TABLE 4
Correlations Among Criterion Variables

	SP	W	PY	PR	C	WM	GS	S	D
Supervision (SP)	1.00	.35*	.20*	.24*	.16*	-.19*	.42*	.40*	-.31*
Work (W)	.35*	1.00	.04	-.05	.24*	-.24*	.39*	.40*	-.34*
Pay (PY)	.20*	.04	1.00	.18*	-.04	-.10	.04	.04	.00
Promotions (PR)	.24*	-.05	.18*	1.00	-.08	-.04	.18*	.20*	-.11
Co-Workers (C)	.16*	.24*	-.04	-.08	1.00	-.04	.05	.00	-.10
Willingness to Move (WM)	-.19*	-.24*	-.10	-.04	-.04	1.00	-.47*	-.43*	.40*
General Satisfaction (GS)	.42*	.39*	.04	.18*	.05	-.47*	1.00	.91*	-.89*
Satisfaction (S)	.40*	.40*	.04	.20*	.00	-.43*	.91*	1.00	-.62*
Dissatisfaction (D)	-.31*	-.34*	.00	-.11	-.10	.40*	-.89*	-.62*	1.00

* Statistically significant, alpha = .05.

faction on all criterion variables except dissatisfaction (in the two-factor model) and satisfaction with promotions. ETD increased predictability only for the work and co-workers dimensions of the multiple-factor model. Tolerance for disagreement, then, improved the predictability of employee satisfaction in every case, but in most instances MTD was the meaningful contributor rather than ETD. It is clear that the new construct of tolerance for disagreement deserves attention from future researchers concerned with communication in the organizational environment.

The results of the multiple regression analyses which added innovativeness scores into the predictive equations present a conflicting pattern of results pertaining to our fifth and sixth research questions. Neither IS nor PORGI increased the predictable variance for employee satisfaction under either the one-factor or two-factor models of satisfaction. However, under the multiple-factor model, employee innovativeness (IS) significantly increased the predictable variance on the supervision, work, and pay dimensions, with IS being the single best predictor on the work dimension. The innovativeness of the organization (PORGI) increased the predictable variance on the supervision, pay and promotions dimensions, with PORGI being the best single predictor on both the pay and promotions dimensions. No definitive answer to our research questions

seems possible at this point. Rather it seems necessary to conclude that innovativeness is associated with employee satisfaction, but that relationship must receive additional research focus before we can determine its exact nature.

An additional point must be made in this regard. Even though our measures of innovativeness were exactly the same as those employed in the Hurt and Teigen (1977) research, our JDI scales virtually identical, and the subjects were drawn from the same employee population, the correlations we obtained were, in some cases, drastically different. Table 5 displays both sets of correlations. Clearly, our replication provides results which differ meaningfully from the original study. Because of these sharp differences, it would seem unwise to draw any firm conclusions at this point concerning the relationship between innovativeness and employee satisfaction.

The supplementary analyses of our data (reported in Tables 3 and 4) provide information that deserves comment. MCS was found to be meaningfully associated with all of our other predictor variables except employee tolerance for disagreement. In particular, as MCS becomes more employee-centered, the organization is perceived to be more innovative and the supervisor is perceived to be more tolerant of disagreement. Both of these correlations seem intuitively appropriate and suggestive of a causal pattern. It is reasonable to argue

TABLE 5
Correlations Between Innovations and Employee Satisfaction—Two Studies

<u>Innovativeness</u> <u>Score</u>	<u>Satisfaction Dimension</u>				
	Supervision	Promotion	Work	Co-Workers	Pay
<u>PORGI</u>					
Hurt & Teigen	.77* (.59)**	.62* (.38)	.05	.58* (.34)	.16* (.02)
Present Study	.45* (.20)	.23* (.05)	.09	.05	.31* (.10)
<u>IS</u>					
Hurt & Teigen	.01	.02	.78* (.61)	.02	.01
Present Study	.22* (.05)	-.11	.31* (.10)	.05	-.14* (.02)

* $p < .05$

** Variance accounted for.

that MCS could cause such modifications in perceptions of both the organization and the supervisor. On the other hand, the significant relationship between MCS and employee innovativeness is more difficult to explain. Neither can logically be expected to cause the other. However, it is quite possible that innovative employees seek employment in organizations where employee-centered MCS is prevalent and/or that employee-centered employers seek to employ innovative individuals. In any event, it is clear that MCS, MTD, IS, and PORGI are not completely independent predictors of employee satisfaction. More likely, they all function in an interrelated system.

An examination of the correlations displayed in Table 4, as well as a comparison of our findings reported in Tables 1 and 2, indicate that our various operationalizations of employee satisfaction are not highly redundant (with the exception of the inflated relationship between one of our one-factor measures and our two-factor measures produced by using portions of subject responses to calculate two

scores). Which operationalization of satisfaction one would choose to employ could greatly impact the interpretation of our hypotheses and results. There is considerable need for a resolution of the conceptual confusion surrounding the employee satisfaction construct in the literature. Comparisons among studies using differing operationalizations is difficult enough, but when the studies differ on both the conceptualization and the operationalization, such comparison is futile. For the present, we strongly encourage other researchers to employ the approach we have chosen in this study—multiple conceptualization and operationalization. In this way it will be increasingly possible to integrate the findings of studies in order to build theory concerning communication in organizations.

CONCLUSIONS

Based upon the results of this study and the interpretations discussed above, several conclusions are warranted. First, it is clear that Management Communication Style can be con-

sistently and reliably measured, and that such a measure should be based on a continuum (as our MCS measure in this study) rather than on categorical points on that continuum. Second, it is clear that, regardless of the satisfaction operationalization chosen, MCS is directly and meaningfully linked to satisfaction. As MCS becomes more employee-centered and interactive, satisfaction increases. While this study merely demonstrates a correlation among these variables, a causal pattern is implied and research involving intervention to alter MCS is clearly indicated. Finally, the findings of this investigation suggest that the new construct of tolerance for disagreement may be very meaningful within the organizational context. Future research employing this construct should prove fruitful, particularly as it relates to the prevention of management of conflict between supervisors and subordinates.

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