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**ABSTRACT**

Two studies examined the relationship between various indicators of communicative work dependency and response satisfaction. Work dependency is a structural variable that influences individual information processing needs, while response satisfaction is a relational variable pertaining to the communication climate of organizations. For Study One, conducted in the first few months of operation of a retail store, employees completed a scale developed by Jablin (1978). Study Two, carried out in a consumer goods warehouse, measured variables traditionally examined in the framework of the International Communication Association audit. The results of Study One established a link between satisfactory supervisory relationships and variables dealing with supervisor understanding and getting the information needed to perform one's job. In Study Two, overall communication satisfaction was strongly related to the need for information from specific others. The results of both studies emphasized the importance of horizontal communication relationships for response satisfaction, and taken together revealed the complex interrelationship between two variables which are embedded in the overarching theories of systems and human relations. (Tables of data are included.) (AEW)

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AN EXAMINATION OF THE RELATIONSHIP BETWEEN COMMUNICATIVE  
WORK DEPENDENCY AND RESPONSE SATISFACTION

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AN EXAMINATION OF THE RELATIONSHIP BETWEEN WORK DEPENDENCY  
AND RESPONSE SATISFACTION

ABSTRACT

The studies reported here examined the relationship between various indicators of communicative work dependency and response satisfaction. Study One was conducted on a retail store using a scale developed by Jablin and Study Two, conducted in a warehouse, included variables traditionally examined in the framework of the ICA Communication Audit. The results of Study One established a linkage between satisfactory supervisory relationships and variables dealing with supervisor understanding and getting the information needed to perform ones job. In Study Two overall communication satisfaction related strongly with the need for information from specific others. The results of both studies emphasized the importance of horizontal communication relationships for response satisfaction. The results of this research point to the complex interrelationships among these conceptual variables which are embedded in two different overarching theoretical perspectives.

## AN EXAMINATION OF THE RELATIONSHIP BETWEEN COMMUNICATIVE WORK DEPENDENCY AND RESPONSE SATISFACTION

This research focuses on the relationship between communicative work dependency and response satisfaction. Work dependency is a structural variable which influences individual information processing needs, while response satisfaction is a relational variable which is related to the communication climate of organizations. Since these variables are embedded in the overarching perspectives of systems and human relations respectively; this study represents an attempt to synthesize critical areas in such a way as to contribute to the growth of our understanding of organizational communication processes (Jablin, 1980; Redding, 1979; Reynolds & Johnson, 1982).

Response satisfaction reflects an interactant's subjective perceptions of a positive affective tone associated with an information source. This concept is similar to Thayer's (1969) notion of communication satisfaction which he defined as the personal satisfaction inherent in successfully communicating to someone or in successfully being communicated with. Thus response satisfaction refers to the quality of communication links and represents a more purely relational or climatic factor, although at a much more concrete level of analysis.

Work dependency refers to the degree to which individuals perceive they rely on others in the organization for the accomplishment of their assigned tasks. It is thus directly related to the systemic concerns of the organization and the basis for work dependency becomes access to needed task-related information. Atkin (1973) has suggested that individual information-seeking strategies

generally are based in part on the utility of the information for fulfilling specific needs. Thompson (1967) has asserted that work dependency determines communication channels in an organization to a greater degree than such factors as affiliation, influence, and status.

Naturally work dependency and response satisfaction may be closely tied since the more crucial the work related information provided, the more satisfied an individual should be with a particular source. However, unlike work dependency which focuses on the content of information transmitted, response satisfaction focuses on a receiver's perceptions of the manner in which a source delivers a message. Not only will individuals seek out work related information, they will also be concerned with the manner in which information is given to them. Thus they will tend to develop relationships with individuals who provide them with positive affective responses which promote their self-esteem (Roberts & O'Reilly, 1979), as well as developing relationships with individuals who provide needed work related information. Because of the central place of these variables in two major, overarching theoretical perspectives it behooves us to more precisely examine the complex interrelationships among them.

This research attempts such a comprehensive exploration of their interrelationships through the use of multiple methods and the examination of different organizations. Study One examined a retail store and used indicators drawn from the ICA Communication Audit network analysis instrument and a battery of questions originally developed to examine supervisor-subordinate relationships. Study Two was conducted in a warehouse and used indicators drawn exclusively from the comprehensive ICA Communication Audit. This approach allows

us to examine any contingent effects of different organizations and the use of different measurement strategies for many of the indicators of the latent independent variables enhanced the possibility of convergent validity resulting from any consistent results across the two tests.

## STUDY ONE

### METHOD

This study was conducted in the first several months of operation of a retail outlet of a large nationwide chain of discount merchandise stores located in a midwestern metropolitan area. The composition of the work force included line management, line workers, and operations. The average age of respondents was 30 years and they had an average of five years of work experience in retail stores. Most respondents (60%) had a high school education, although a number of them (20%) had at least some college education. The majority of respondents were female (63%). There was a response rate of 73 percent among the organizational members (N=138) who were regularly employed.

#### Operationalizations

The indicators in this study were drawn from two primary sources contained within the same general questionnaire used to conduct a comprehensive study of this organization: a network analysis instrument and a battery of dyadic communication questions. The data from this larger study have been used to examine a multiplicity of research questions including the nature of multivariate communication networks (Johnson, 1984) and the nature of communication gradients

(Johnson, in press). These reports contain more information on the organization and the methods used to gather the data.

Network Analysis Instrument. The network analysis instrument used here was derived from the format used in the International Communication Association audit (Goldhaber, Yates, Porter & Lesniak, 1978). The network analysis instrument used a structured approach which provided a roster of the entire population under study. In a modified version of this instrument respondents were asked to report on three variables for each link: work dependency (importance) (AVIMP), response satisfaction (AVSAT), and frequency.

The instructions for response satisfaction, which used a 1 to 9 scale, were read out loud to the respondents. The average score across all links was then used as an indicant of response satisfaction.

RESPONSE SATISFACTION asks you to think about how satisfied you feel about the conversation. You are being asked to evaluate how satisfied you feel with the way in which a person responds to you during a conversation. Does the person appear interested, helpful or responsive to your questions? These behaviors would suggest positive RESPONSE SATISFACTION (VERY SATISFIED), Does the person appear disinterested, not very helpful or unresponsive to your questions? These behaviors would suggest dissatisfaction with the response (VERY DISSATISFIED). Place an X in the box which most accurately reflects your feelings about how satisfied you were with the response.

The variable work dependency was operationalized as importance on the questionnaire, and its average score across all reported links was then used to calculate the (AVIMP) indicant of work dependency. The

instructions, which were also read out loud, follow:

We want you to rate on a scale from 1 to 9 how critical the information you receive is to the completion of your job. A '1' indicates the information you received has minimal importance to the completion of your job. A '5' indicates the information is somewhat important and a '9' indicates the information is critical in completing your job. Place the appropriate rating in the space provided under the column IMPORTANCE.

For each of the network analysis indicants respondents were directed to look at a worked example provided for them on the bottom of the questionnaire.

Dyadic Communication Battery. A separate instrument based on a battery of five point scale dyadic communication questions developed by Jablin (1978) was modified to include relationships with co-workers and associates as well as supervisors. Jablin (1978) reports that this scale is extremely reliable (Cronbach's Alpha = .96). Five of these questions were used as additional indicants of work dependency and five were used as additional indicants of response satisfaction (See Table 1 and 2 for a more complete description of these indicants).

## RESULTS

Table 5 reports the Pearson correlations related to Research Question 5. There was generally a remarkably high pattern of correlations between all of the response satisfaction and work dependency indicators contained in the battery of questions with eleven of the 24 correlations greater than .5.

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Table 2 reports the canonical correlation results for the work dependency and response satisfaction indicators. This type of analysis attempts to maximize the variance accounted for by various linear combinations of variates which systematically relate two different sets of variables. Analysis resulted in four significant canonical variates with the loading of the respective indicators on each reported in the table. The canonical variates are essentially equivalent to principal components, except that they account for the maximum relationship between two sets of variables, with each subsequent variate accounting for the remaining variance (McLaughlin, 1980). The eigenvalues represent the amount of variance accounted for in one canonical variate by the other set of variables and the canonical correlation is roughly equivalent to a Pearson's correlation between the respective sets. The results reported here indicated that there were four significant canonical variates, with the first set having a canonical correlation of .89.

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TABLE 2 ABOUT HERE

STLDY TWO

METHOD

Study One provided some tantalizing insights which led to a broadening of the original lines of inquiry in Study Two. Study Two looks at the specific research questions examined in Study One using different operationalizations of the variables. These operationalizations included more general summary indicators, as well as indicators which focus on specific relationships.

Study Two was conducted in a consumer goods warehouse, distribution center (N= 52) which was a part of a larger organization. The physical structure was segregated into office and warehouse spaces. The warehouse was divided by large and small bins, which were above eye level, with a large shipping area and conveyer belts to promote movement of goods. Due to the movement of materials, the presence of forklifts, and the general absence of acoustic dampening the warehouse could be noisy. The office was rather standard for this sort of arrangement and somewhat protected from the noise of the warehouse.

Sixty-one percent of the respondents reported that they had worked in their current position for less than five years, although on average they had worked for the warehouse for six to 10 years. Most workers were employed in the warehouse (n= 41). Twenty-four per cent of the workers held some sort of supervisory position. The bulk of the respondents (73%) were high school graduates and most respondents (54%) were under 40 years of age.

The questionnaires were administered in groups of eight to ten organizational members, from different work units, in a conference room during the course of one day. Research assistants provided some additional instructions and supervised questionnaire administration. Fifty-two of the fifty-seven possible organizational members

### Operationalizations

The indicators for communicative response satisfaction and work dependency are drawn from subscales of the ICA communication audit instrument (see Goldhaber & Rogers, 1979 for more detail and information on the reliability and validity of these scales). Four indicators which determine workers need for information from coworkers, from other individuals, from supervisors, and concerning job related problems will be used to study work dependency and four variables reflecting an individual's satisfaction with the quality of their relationships with coworkers, supervisors, middle management, and with their overall communication will be associated with response satisfaction.

Because of their greater precision and inherent advantage in discriminating between contingent organizational properties metric fractionation scales were used in this Study Two rather than ordinal scales. These scales provided respondents with a standard anchored at one end of the scale with an absolute zero point and at the other by some arbitrary value, in this case 100. These scales also had a middle stimulus of 50 representing an average value. These scales have a number of inherent advantages over more conventional scales including: they allow for considerable variance, they are capable of fine discriminations, and they do not build error into the measurement process (see Barnett, et al, 1982). Comprehensive research on a variety of organizations has shown that workers can use these scales, they use them reliably, and they result in greater discrimination

## RESULTS

Table 3 contains the Pearson correlations among the the respective indicators found in Study Two. Generally the relationships are weaker than those found in Study One, except for a slightly stronger relationship between AVIMP and the rest of the indicators. The most noteworthy finding here was the consistently low relationship between WDSUP and RSMID and the remaining indicators. In contrast to Study One, none of the correlations were above .38 and many more were negative.

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TABLE 3 ABOUT HERE

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Table 4 presents the results of the canonical correlation analysis. Only two canonical variates were substantial, with only one of these approaching significance. The first canonical correlation had a value of .82, with a significance level of .07.

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TABLE 4 ABOUT HERE

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## DISCUSSION

The results point to the rich interrelationships between the indicants of these variables. Especially in Study One, there was a remarkably high pattern of interrelationships among the response satisfaction and work dependency indicants. Of course, some of this might have been attributable to their common measurement, with indicants drawn from the same battery of questions, but even given this, there were substantial correlations. The strongest correlations were generally associated with the FREEIDEA and INFOPOS indicants, which reflected the general importance of climate factors for the free exchange of information in organizations. The correlation between SUPUND and communication with supervisor satisfying (SUPSAT) was remarkably high (.78), pointing to the importance of such characteristics as empathic understanding for building quality relationships between supervisors and subordinates.

The canonical analysis further demonstrated the close relationship between these two sets of variables with significant canonical correlations for the first four sets of variates. The first variate appeared to be primarily linked to satisfactory supervisory relationships and getting the information needed to perform one's job. The second variate was primarily related to understanding, and somewhat relatedly, to the free exchange of ideas. The third variate was primarily related to the sharing of information with co-workers and the quality of these relationships. Finally, and somewhat less importantly than the others, the fourth canonical variate, related primarily to the average variables associated with all links and the associate's understanding of job needs.

The relative importance of these variates conformed with what

management would assume was there relative importance, with variables related to control and coordination by management coming first and second respectively, followed by variates which could typify more classic human relations concerns and horizontal relationships.

The results for Study Two revealed a somewhat different pattern, reflecting the different nature of the indicators involved. First, the average indicators were relatively more important, having somewhat more substantial relationships, especially for AVIMP. Second, in general, there was lower relationship between these sets of indicators, which may reflect their being drawn from different indices of the audit. Third, two of the variables WDSUP and RSMID had a relatively low pattern of correlations. This result was somewhat puzzling given the relative importance of supervisory relationships in Study One. This finding might reflect the different technologies involved, with much more defined and specialized tasks being present in the warehouse which implies there was less of a need for direct supervision. Fourth, in this study, as in Study One, there was a very strong relationship between coworker response satisfaction and the work dependency indicators, which emphasizes the importance of horizontal coordination relationships in these organizations. Finally, the strongest relationships generally were associated with the summary indicators of WDJOB and RSOVER.

The small n of this study may have led to a lack of significance for the canonical correlations since their values were substantial. However, this general lack of significance must temper the substantive findings reported here. The first variate appears to primarily relate to the summary indicators of response satisfaction with the work dependency indicators related to specific relationships (e.g., WDCO).

Thus total communication satisfaction related strongly to needing information from specific others. The second variate is primarily associated with response satisfaction with the most immediate organizational relationships (coworkers and supervisors) and work dependency with these sources. Thus needing information from specific others was linked to the evaluation of the quality of these relationships. For the canonical correlations the summary work dependency indicators, AVIMP and WDJOB, and RSMID were relatively unimportant.

In sum, this study revealed the complex interrelationship between two variables embedded in the overarching theories of systems and human relations. In general, it appeared that supervisory and coordinating relationships were the most important variables in this process, which nicely reflect the traditional focus of management and communication studies. However, the results also indicated that coworker relationships, which are relatively understudied, are also important. The results also pointed to the impacts of different indicators of conceptual variables on results, and the potential contingent impact on the results of different organizations, issues which should be followed up on in future research.

TABLE 1  
Pearson Correlations for Study One

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Work Dependency Indicants	Response Satisfaction					
	AVSAT	ASSFRND	SUPSAT	FREEIDEA	FREEFEEL	INFOPOS
AVIMP	.22	.08	-.05	-.01	-.03	.17
FREEEX	.28	.52	.32	.48	.29	.42
COSHARE	.40	.50	.44	.44	.29	.55
ASSUND	.42	.38	.39	.67	.53	.52
SUPUND	.42	.27	.78	.45	.49	.63
NEEDJOB	.23	.37	.41	.56	.53	.62

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TABLE 2

## Canonical Correlation for Study One

	CANONICAL VARIATES			
	1	2	3	4
Coefficients for First Set				
AVSAT	.049	.151	.189	-1.141
ASSFRND	-.099	.312	.734	.538
SUPSAT	-.456	-.876	-.326	.265
FREEIDEA	-.148	1.022	-.691	-.346
FREEFEEL	-.229	-.010	-.545	.226
INFOPOS	-.353	-.339	.824	.260
Coefficients for Second Set				
AVIMP	.140	-.143	.665	-.555
FREEEX	-.172	.438	.281	.332
COSHARE	-.188	.108	.648	.254
ASSUND	-.097	.763	-.545	-1.054
SUPUND	-.547	-.999	-.295	-.187
NEEDJOB	-.344	-.049	.043	.791
Statistics				
Eigenvalue	.787	.497	.274	.150
Canonical Correlation	.887	.705	.523	.388
Significance ( $p < $ )	.001	.001	.002	.038

TABLE 3  
Pearson Correlations for Study Two

Work Dependency Indicants	Response Satisfaction Indicants				
	AVSAT	RSCO	RSSUP	RSMID	RSOVER
AVIMP	.31	.25	.12	-.12	-.09
WDSUB	-.20	.20	.30	.05	.02
WDCO	.21	.37	.31	-.07	-.27
WDOTH	.19	-.03	-.06	-.16	-.36
WDSUP	.09	.15	.08	.07	.02
WDJOB	.31	.38	.33	.19	.17

TABLE 4  
 Canonical Correlation for Study Two

Coefficients for First Set	Canonical Variates	
	1	2
AVSAT	.927	-.470
RSCO	-.045	.760
RSSUP	-.007	.763
RSMID	-.073	-.136
RSOVER	-.837	-.103
Coefficients for Second Set		
AVIMP	.334	.200
WDSUB	-.502	.694
WDCD	.653	.748
WDOTH	.695	-.442
WDSUP	-.710	-.085
WDJOB	.233	.288
Statistics		
Eigenvalue	2.047	.961
Canonical Correlation	.820	.700
Significance (<)	.072	.522

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