

This research compares formal and informal organizational communication structures, specifically focusing on salience, channel factors, and channel usage. The major hypotheses of this research were partially supported with data collected from a large, technically oriented governmental agency (n = 380).

Differences Between Formal and Informal Communication Channels

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This research focuses on a central problem in organizational communication structures, the relationship between formal and informal structures (Hartman & Johnson, 1990). An organization's communication structure consists of formal and informal elements, as well as other ingredients, and is not reducible to either (March & Simon, 1958). However, to most organizational researchers this fundamental distinction captures two different worlds within the organization, worlds that have different premises and outlooks and most importantly, different fundamental assumptions about the nature of interaction (Allen, 1977; Dow, 1988).

LITERATURE REVIEW

Very few research studies have attempted to compare these approaches directly, to assess how they may differ along critical dimensions. A recent attempt to systematically compare formal and informal groupings and their impact on the levels of role ambiguity found more similarities than differences and suggested a complex set of contingencies in which one or the other would have the most impact on organizational variables (Hartman & Johnson, 1990).

A formal structure identifies individuals who are the official sources of information and the information that is their special concern. This has been the traditional view of managers and professional business communicators. Since relationships are determined by one's role, structure is viewed by managers as a static entity which conforms to a top down configuration (Monge & Eisenberg, 1987). This perspective, which has been termed the configurational view, emphasizes the authoritative coordination of work in the service of stated organizational objectives

(Dow, 1988). Recent reviews suggest that formal approaches focus on the configurations resulting from formal authority relationships represented in the organizational hierarchy (Dow, 1988; Jablin, 1987), from differentiation of labor into specialized tasks (Dow, 1988; Jablin, 1987), and from formal mechanisms for coordination of work (Dow, 1988). These characteristics, along with the notion of goal or purpose, have been seen by Schein (1965) as representing the very essence of an organization.

On the other hand, informal approaches recognize that a variety of needs, including social ones, underlie communication in organizations and that, as a result, the actual communication relationships in an organization may be less rational than formal systems (Johnson, 1993). Informal structures function to facilitate communication, maintain cohesiveness in the organization as a whole, and maintain a sense of personal integrity or autonomy (Smelser, 1963). The coactivational perspective recognizes that communication relationships are not solely based on the positions individuals occupy within formal organizations. Informal groups often arise out of a combination of human needs and formal factors (Schein, 1965). For example, increasingly business communicators have focused on the role of informal communication in generating innovations within organizations (Johnson, 1990).

Scholars in the two camps have completed many research projects, but have rarely attempted to examine the relationships between the two perspectives, especially in terms of specific organizational factors such as salience, channel factors, and channel usage.

Salience

Three means of characterizing salience, personal, effect, and cultural, will be used in this research to compare the relative importance of formal and informal channels.

Personal Salience

"Information is valued to the degree it is salient. Salience to an individual means the perceived applicability of information to a problem that he or she faces" (Evans & Clarke, 1983, p. 239). Individuals use particular channels for a variety of motives, including some intensely personal ones, such as securing information related to advancement and merit increases. Using a channel to seek feedback about performance can be seen as an instrumental response on the part of employees who desire to earn positive evaluations (Ashford & Cummings, 1985). Individuals who are skilled at seeking feedback are more likely to be successful (Ashford & Cummings, 1985). High performers within research and development laboratories have been found to be much more likely to communicate widely within their organizations, using a variety of informal sources (Allen, 1977). Accordingly,

H1a: Employees will perceive informal channels as more effective than formal channels for advancing their personal agendas.

Effect Salience

An individual's beliefs about the outcomes of channel usage are also important. Individuals ask themselves: Can I do something? A belief that there is no procedure available for confronting their problems would impede channel usage. Somewhat relatedly, if an individual believes there are costs (for example, loss of self-esteem) associated with a particular channel, this will reduce his or her level of channel usage (Baliga & Jaeger, 1984; Miller & Jablin, 1991; Reinsch & Beswick, 1990). Because of the capacity of information channels to be shaped to fit individual needs and circumstances we expect to find that,

H1b: Employees will evaluate the effect salience of informal channels more highly than formal channels.

Cultural Salience

In some cases cultural norms may identify which information is salient and should be gathered in decision making situations (Feldman & March, 1981). Strong cultures can also severely restrict the content and the communication partners available to individuals. But, because of the sophistication of shared understandings, strong cultures can increase the effectiveness of communication by clearly delineating roles, relationships, and contexts within which individuals use channels. Thus, a strong, monolithic organizational culture would likely enhance perceptions of the effectiveness of formal channels of communication.

H1c: Formal channels will be perceived as more culturally salient in achieving organizational goals than will informal ones.

Channel Factors

The channel factors are drawn from a model of Media Exposure and Appraisal (MEA) that has been tested on a variety of information carriers and in a variety of international settings (Johnson & Meischke, 1993). These factors focus on the characteristics and utility of channels.

Characteristics

Characteristics, such as editorial tone and communication potential, relate primarily to message content attributes. Editorial tone reflects an individual's perception of the credibility and intentions of a source. If individuals perceive that a source has motives other than the mere provision of information, then this will weigh heavily in their exposure decisions. Scholars have argued that source credibility and trustworthiness affect anticipatory socialization (Jablin, 1987) and the upward flow of information in organizations (Glauser, 1984).

Communication potential, the other dimension examined in prior research, refers to an individual's perception of the manner in which information is presented. This dimension relates to issues of style and comprehension. For example, is an article in a company newsletter visually stimulating and well written? Comprehension has been found to be a critical factor in determining the selection of technical reading material of engineers (Allen, 1977).

Because of the mixed-motives often attributed to formal communication (Eisenberg, 1984) and the greater understandability of informal channels,

H1d: Employees will evaluate informal channels more highly than formal ones for channel characteristics of comprehension and credibility.

Utility

Is the information contained in the channel relevant, topical, and important for the individual's purposes? Atkin (1973) has argued that mass media exposure will result from a combination of receiver needs and message attributes. Utility is a central concern in determining formal structures that filter the upward flow of information in organizations, since reducing information overload requires choices about which information should be provided to decision makers (Glauser, 1984). Because of the greater flexibility inherent in the choice of informal channels, which can be tailored more to fit individual needs,

H1e: Employees will evaluate informal channels as more useful than formal channels.

Channel Use

Employees use channels in several different ways within formal and informal structures. For example, Lenz (1984) has identified three different dimensions of information seeking: method, scope, and depth. Method relates to the channel selected—in this current research, formal and informal channels. The two major variables examined here related to technical communication are scope, in terms of the number of different people from whom information is sought, and depth, in terms of the number of different messages involved. Diversity in the number of people contacted and the depth of each contact have both been found to be very important to successful performance within research and development laboratories (Allen, 1977). Here we will argue that the level of individual initiative differs for formal and informal channels, with much more freedom of action for the individual within informal channels. Accordingly,

H2: In comparison to formal channels, employees will report that they receive fewer informal-channel messages from

fewer people and send more informal-channel messages to a larger number of people.

The primary research question this study addresses concerns the different perceptions of various organizational factors and how those relate to formal and informal communication channels. As we have seen formal and informal channels have inherently different capabilities, they also have different historical patterns of development and usage, which should result in individuals evaluating them differently.

METHODS

This research was conducted in a large midwestern state governmental agency that is charged with providing engineering and technical services. This study was part of a much larger project designed to comprehensively assess current communication practices, to make recommendations, and to implement change strategies designed to improve both internal and external communication within this agency.

Before developing the questionnaires thirty employees, selected from various levels and functional divisions within the organization, were interviewed at length (30 minutes to three hours duration) by the coauthors. After these interviews and a review of appropriate agency documents (for example, mission statement, standard operating procedures) questionnaires were pretested on agency employees.

Copies of the final version of the questionnaire were distributed to bureau executives who then distributed them to their administrators and supervisors. In turn, administrators and supervisors distributed questionnaires to employees along with plain, brown envelopes in which the questionnaires were to be returned. The surveys included a cover letter from the Interim Director of the agency stressing the importance of the survey and the confidentiality of the responses. The employees returned the sealed envelopes to their supervisors who then returned them to the researchers.

Sample

The respondents ($n = 380$) were characterized as follows: the median report of education was college graduate, with 18 percent reporting at least some post graduate education. Thirty-three percent reported they were engineers; 32 percent, other technical specialties; and 15 percent, administrative. Eighty-seven percent of the respondents were Caucasians, 6 percent were African-Americans, and 7 percent reported other or did not report. Eighty percent of the respondents were male. There was a 26 percent refusal rate among the 513 individuals drawn for the total sample.

Scales

All psychometric scales were based on eleven point bipolar type items embedded in a larger questionnaire. Questions for each of the scales

were developed based on items derived from the academic literature; from the initial exploratory, qualitative interviews; and from formal agency documents. The actual question wordings for the final individual items are contained in Table 1.

Table 1
Scale Items, Factor Loadings, and Reliabilities
for Formal and Informal Channels

Scale Items	Factor Loadings	
	Formal	Informal
Personal Salience (alpha = .78, .80)		
When I communicate with this channel I get recognition which can help me in getting promoted.	.80	.82
When I communicate with this channel I get recognition which can help me in getting a merit increase.	.80	.82
Effect Salience (alpha = .91, .88)		
It is pointless to communicate using this channel since no one listens.	.87	.83
Nothing ever happens when I communicate by means of this channel.	.92	.91
I don't get information helpful to me in performing my job if I use this channel.	.86	.79
Cultural Salience (alpha = .91, .82)		
Using this channel I can help _____ in performing its missions.	.89	.91
By using this channel I can help _____ better serve the public.	.92	.91
By using this channel I can help _____ inform the public.	.80	
By using this channel I can help people in other units do their jobs.	.77	.54
By using this channel I can develop teams of people to tackle specific problems within _____.	.73	
Characteristics (alpha = .86, .85)		
Accurate (10)-Inaccurate (0)	.80	.72
Well-intentioned (10), questionable intentions (0)	.67	.68
Very understandable (10), very difficult to understand (0)	.82	.84
Material clearly presented (10), not clearly presented (0)	.82	.83
Utility (alpha = .85, .84)		
Personally significant (10), not personally significant (0)	.69	.65
Very useful (10), not at all useful (0)	.86	.84
Very easy to get information from (10), very difficult to get information (0)	.89	.83
Extremely valuable source of information (10), not valuable at all (0)	.65	.69

Note. Effect salience items were reverse coded. Items that show no value in the "informal" column were omitted because of parallelism problems.

The measurement model was analyzed by means of the confirmatory factor analysis subroutine of the PACKAGE computer program (Hunter & Lim, 1987). Confirmatory factor analysis is a superior technique when the a priori specification of items expected to cluster together is possible (Fink & Monge, 1985; Hunter & Gerbing, 1982). We assessed unidimensionality with the three criteria proposed by Hunter (Hunter, 1980; Hunter & Gerbing, 1982), homogeneity of item content (face validity), internal consistency (for example, Spearman product rule), and parallelism (for example, "flat" correlation matrix). In addition, the scree test was also used to determine the unidimensionality of factor structures (Van de Geer, 1971). Tests of unidimensionality are essential to scale development since alpha provides an unbiased estimate of reliability only if scale items are unidimensional (Hunter, 1980; Hunter & Gerbing, 1982). Only psychometric scales that met these criteria were included in the final tests. Naturally, during the process of scale development, items that did not meet the psychometric criteria were dropped from the respective scales.

Respondents were given the following instructions to help them in distinguishing between formal and informal communication for each scale item:

Informal communication usually does not follow the organizational chart and tends to be more personal. For example, work-related discussions with co-workers, calling friends in another work unit on how to handle a work problem, etc.

Formal communication is considered to be "official" such as oral communication up and down the organizational chart and written communication contained in formal memoranda and departmental directives.

Table 1 presents actual question wordings and the results for the psychometric scales for salience. The personal scale (2 items, alpha = .78 for formal and .80 for informal), the effect scale (3 items, alpha = .91 for formal and .88 for informal), and cultural scale (5 items, alpha = .91 for formal and 3 items, alpha = .82 for informal) were used as indicators of salience. The cultural scale items were drawn from the agency's Mission Statement which had been recently developed. Both the process of development and the dissemination of the Mission Statement have made values very central to the lives of organizational members, a conclusion that is buttressed by the findings of the exploratory interviews. Scores for this scale were adjusted to reflect the differing number of items available for each channel.

Channel factors (see Table 1) were represented by two scales: characteristics (4 items, alpha = .86, .85) and utility (4 items, alpha = .85, .84) (Johnson & Meischke 1993).

Channel usage was operationalized by items reflecting the number of people from whom technical information was initiated and received and the number of messages sought and received.

RESULTS

T-tests were used to determine if there were significant differences for each of the separate organizational factors between channels (See Table 2). H1a was not supported ($p > .05$), with very low means and an exceptionally high Pearson correlation ($r = .84$) between personal salience for the two channels. H1c, cultural salience, and H1d, channel characteristics, had significant differences, although not in the direction predicted by the hypotheses. H2, which dealt with messages initiated and received and the numbers of people involved was only supported for the number of messages initiated. H1b, effect salience, and H1e, utility, were supported as originally predicted.

Table 2
T-Tests for the Hypotheses
for Formal and Informal Channels

Hypothesis	Means		t-value	df	Pearson <i>r</i>
	Formal	Informal			
H1a, Personal Salience	4.96	4.87	0.57	327	.84
H1b, Effect Salience	19.84	21.65	-4.64*	371	.57
H1c, Cultural Salience	19.12	21.43	-5.49*	332	.46
H1d, Characteristics	29.63	28.47	3.02*	368	.39
H1e, Utility	25.39	28.29	-6.06*	358	.29
H2, Messages Initiated	9.90	12.09	-3.03*	349	.47
Messages Received	10.27	12.06	-2.32*	359	.43
People Initiated	6.94	7.10	-0.43	347	.68
People Received	6.26	6.87	-1.57	355	.55

Note. Results supported hypotheses concerning Effect Salience (H1b), Utility (H1e), and Messages Initiated (H2). Results were statistically significant but contrary to prediction for hypotheses concerning Cultural Salience (H1c), Characteristics (H1d), and Messages Received (H2).

* $p < .05$

DISCUSSION

Earlier we adopted a contingency perspective, suggesting various organizational factors for which informal or formal channels might be more highly evaluated. However, the overall pattern of results, except

for channel characteristics, suggests that informal channels in this organization were more highly evaluated in general. This is clearly seen in the support for H1b, effect salience; H1e, utility; and the partial support for H2 in terms of messages initiated. Because business communicators have traditionally concentrated on formal channels, this suggests renewed efforts might be in order to tap the communication potential of informal channels.

H1c posited that formal channels would be used more than informal ones for cultural objectives. Interestingly, exactly the opposite was found. Our personal interviews indicated a very high level of support for the cultural objectives of this organization, which was also found in other studies in this research stream. These other studies have suggested that culture constitutes another medium, or channel, in which people in this organization interact (Johnson, Donohue, Atkin, & Johnson, 1993). This result suggests that in this organization, where there is some degree of consonance concerning the organization's culture, informal channels are better at communicating the overall mission of the organization.

Blau (1954) has identified two integrative processes that occur in organizations: one's expertise, usually reflected in formal structure, and establishing extensive informal relations, or emergent processes. Within the formal structure, communication behaviors are somewhat dictated by the role and functions one performs; however, certain roles, such as the technical ones we focus on here, provide the opportunity for individuals to communicate informally (Dow, 1988). Katz and Kahn (1978) differentiate between roles and norms, viewing norms as expectations for individuals within a particular role. Specifically, a role dictates what is expected in terms of task performance. However, the social rules for performing particular role behaviors may alter individual expectations for that role behavior. These informal standards can differ from the formally prescribed role behaviors. Thus role theory parallels formal and informal structural theories. While communication researchers have generally given primacy to the impacts of emergent, informal communication in these processes, this research suggests that for most organizational factors the channels are evaluated equally or informal channels are perceived more highly.

Unexpectedly, for H1d, informal channels were less highly evaluated for characteristics, which primarily reflects the editorial tone dimension of this channel. While Davis's studies of the grapevine suggest that informal channels can be highly credible, more popular perceptions suggest that the grapevine is inaccurate (Johnson, 1993). This also may relate to the lack of support for the people element of Hypothesis 2, with a relatively limited number of authoritative individuals generally accessible. Thus, the lack of support for this element of the hypothesis may be artificially constrained by the number and nature of available sources of information in this organization.

H1a, which argued that informal channels would be perceived as better for securing personally salient information, was not supported. This could reflect the relatively stable, bureaucratic nature of this organization, whose members have relatively long tenure, and who apparently perceive little likelihood that communication is linked to personal outcomes. Promotions, especially, were relatively scarce, with clear ceilings for the opportunities for the advancement of technical professionals.

In sum, while the pattern of findings in this study were partially supportive of our original arguments, they also suggest that there is still much to be done to unravel the mystery of the relative importance of informal and formal channels. As in other work (Hartman & Johnson, 1990), our findings reveal rich and complex interrelationships between these two channels. Part of the solution to this problem might lie in more sophisticated typologies of the media within which people interact in organizations (Johnson et al., 1993). Another element of the solution is an even more sophisticated understanding of the conditions which might create differences between the channels. Thus, this research study raises as many questions as it answers and is but one step on the way to unraveling the relationship between formal and informal communication in organizations.

NOTES

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