To provide a clearer understanding of the relationship between various communication and communication related abilities and individuals' work performance, a four-year investigation was conducted to examine the relationships among four measures of social cognitive and communication abilities, and the relationships of these measures to job level and upward mobility in a large East Coast insurance company. The four social cognitive measures included cognitive differentiation, self-monitoring, perspective taking, and persuasive ability. The data revealed significant relationships among all combinations of the communication-related abilities. Each was significantly related to job level, and three of the four were significantly related to upward mobility. Stepwise multiple regression analyses revealed that, of the four communication-related abilities, cognitive differentiation accounted for the most variance in predicting job level and upward mobility. The findings suggest that communication abilities are important to the success of individuals in organizations. Six pages of references are appended. (Author/HOD)
COMMUNICATION RELATED ABILITIES AND UPWARD MOBILITY: A LONGITUDINAL INVESTIGATION

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COMMUNICATION RELATED ABILITIES AND UPWARD MOBILITY: A LONGITUDINAL INVESTIGATION

ABSTRACT

This paper reports the results from a four-year investigation of the relationships among four measures of social cognitive and communication abilities---cognitive differentiation, self-monitoring, perspective-taking, and persuasive ability---and the relationships of these measures to job level and upward mobility in a large east coast insurance company. The data revealed significant relationships among all combinations of the communication-related abilities. Each was significantly related to job level, and three of the four were significantly related to upward mobility. Stepwise multiple regression analyses revealed that, of the four communication-related abilities, cognitive differentiation accounted for the most variance in predicting job level and upward mobility. The findings suggest that communication abilities are important to the success of individuals in organizations. Persons with more developed abilities tended to be found at higher levels in the organizational hierarchy and tended to be promoted more often than persons with less developed abilities.
There is little disagreement about the importance of communication in work situations. Good communication is considered a key characteristic of organizational effectiveness (Roberts, O'Reilly, Bretton & Porter, 1974), a significant predictor of job and communication satisfaction (Goldhaber, Yates, Porter, and Lesniak, 1978), an indicator of effective management (Mintzberg, 1973; Boyatzis, 1982), the link that integrates work units and organizational levels (Likert, 1967), and the vehicle through which organizational images are created and good public relations maintained. Indeed, without communication there would be no organization.

Despite the longstanding claim that competent or good communication contributes to individual and organizational effectiveness (Likert, 1967; Argyris, 1962), there is little consensus about what constitutes "good" or competent communication. The traditional approach in the organizational communication area has been to equate "good" communication with satisfying communication, and relevant investigations have focused on factors or variables thought to influence perceptions of communication satisfaction, e.g. honesty, trustworthiness, openness, etc. (Goldhaber, et. al., 1978; Jablin, 1979). More recent studies offer criteria by which good or competent communication can be assessed (for a review, see B. Sypner, 1984) and management studies have begun to target the dimensions of communication behavior which separate effective and ineffective managers (Boyatzis, 1982).
Implicit in all this work is the assumption that individual differences in communication behavior make a difference at the individual and ultimately the organizational level. However, the kinds of differences are not altogether clear. Moreover, the kinds of important communication skills are even less clear. In beginning to unravel and further understand this tangle of related work, it is reasonable to begin at the individual level, since the activities at the micro level make macro level functioning possible.

The present study is an effort in this direction. More specifically this study seeks to provide a clearer understanding of the relationship between various communication and communication related abilities and individuals' work performance. The questions guiding this research are focused on the individual employee and the difference, if any, communication skills make, especially in regard to upward mobility.

To examine this issue, we chose not to ignore the voluminous data on managerial effectiveness. Because of a traditional focus on managers, there are a good many studies which offer some insight into the relationship between individual communication behavior and individual performance in the organization.

Communication Competence and Managerial Effectiveness

Beginning with Dale Carnegie's popular writings in the 1920's, there have been numerous studies linking communication skills to managerial effectiveness. From Barnard's (1938) early writings and Likert's (1961) seminal work on managerial effectiveness to
Boyatzis's (1982) more recent empirical work on competent management, there have been continual attempts to link communication relevant characteristics to effective supervision (Funk, 1956; Simons, 1961; Zima, 1968; Richetto, 1969; among others). In summarizing this research, Redding (1972) suggested that better supervisors are more "communication-minded". That is, they are empathic listeners, they tend to ask or persuade rather than tell or demand, and they are sensitive to others' feelings and ego-defensive needs.

A decade later, Kotter (1982) and Boyatzis (1982) continue to maintain that communication skills are prerequisites to managerial competence. Kotter argued that the "best" managers are able to skillfully and aggressively build a network of relationships which is instrumental in helping them implement their plans. Boyatzis (1982) reiterated these claims and suggested that related factors such as social development, interpersonal skills, and effective public speaking were important in differentiating between poor, average, and superior managers. Boyatzis (1982) provided sound empirical evidence to support the claim that the ability to communicate effectively is a requirement for competent managerial performance.

In this same vein, McCall and Lombard (1983) pointed out that communication abilities were key factors separating successful and "derailed" executives—the those who were expected to be successful, but reached a plateau, were fired, or were forced to retire early. The most often cited reason for derailment was insensitivity to others. Other reasons included the lack of persuasive skills, arrogance, and failure to change or adapt. These researchers concluded that the ability to understand others' perspectives was the most glaring difference between successful and derailed executives.
On examination, these findings regarding the relationship between communication and managerial success begin to look a lot like a list of criterion measures by which communication competence can be assessed, e.g., empathy, perspective-taking, persuasive abilities, adaptability, listening, etc. Despite the relative confusion about communication competence and ways to measure it (Bostrom, 1984), there appears to be a great deal of conceptual agreement. Consistently, research findings reveal that empathy or other-orientedness, interaction management and behavioral flexibility are central characteristics of a competent communicator (B. Sypher, 1984).

What is increasingly clear is the lack of any general framework undergirding this type of research (i.e., communication competence in general and the communication competence of managers more specifically). Most investigations, especially those in management, have been exploratory in nature, amassing a large number of variables and testing the predictive ability of each. To make a coherent contribution, this research must be guided by more theoretically-grounded approaches to communication. There is little chance of integrating findings without such development.

In this vein, we chose to couch our approach in a general social cognitive orientation. Constructivist work in particular informs this investigation, and for the most part, this piece of research is an extension of earlier work seeking to understand the role of communication related abilities in predicting individual success in work settings.
In a constructivist view, communication is simultaneously a social and psychological phenomenon—social in that it is an activity that must be coordinated between two or more people, and psychological in that communicators rely on a variety of cognitive schemes to interpret the actions of others and choose appropriate actions of their own (B. O'Keefe and Delia, in press). This view demands that the constituent aspects of communication competence include relevant social and psychological processes.

Delia and Clark (1975) have described the competent communicator as one who "utilizes knowledge of a shared code (language and rules) to express meanings in a form calculated to control another's interpretations so as to control the other's beliefs or actions toward some particular issue, event or policy" (p.2). More recently, Clark and Delia (1979) discussed communicative competence as the development of "complex and abstract modes of conceptualization which permit the differentiation and integration of understandings of particular situations and persons and, hence, the adaptation of messages to specific circumstances and listeners" (p.189). Thus, the constructivist view of communication emphasizes social construal processes and the development of a differentiated strategic repertoire. In general, constructivists argue that as communicators develop the capacity to more effectively conceptualize the subjective perspectives and psychological characteristics of their listeners, they should be better able to produce listener-adapted messages, one requirement for competent communication.

Research in the constructivist tradition has sought to identify the constituent characteristics involved in the development of communication competence. A major focus has been on individuals'
interpersonal cognitive differentiation and its relationship to other communicative abilities. Based on Kelly's (1955) theory of personal constructs, constructivism posits that interpersonal constructs form the basis of communicative choices, since constructs are the dimensions along which communication relevant listener characteristics are judged (B. O'Keefe and Delia, 1979).

Research has clearly shown that communicators' interpersonal construct system development is significantly related to other communicative abilities. For example, highly differentiated individuals, as indentified by Crockett's (1965) RCQ measure, generated a greater number of persuasive arguments (B. O'Keefe & Delia, 1979; H. Sypher, Witt & B. Sypher, in press), were better perspective takers (Hale and Delia, 1974), were less reliant on simplifying schemas for understanding social relations (Delia and Crockett, 1973), were less likely to get cognitively overloaded (Mower, White, 1977) and were more effective communicators (Hale, 1980).

In organizational studies, highly differentiated individuals were located in higher levels in the organization, judged themselves to be more effective communicators, and were judged by peers to be more persuasive than their less differentiated peers (B. Sypher, 1981; B. Sypher and H. Sypher, 1984; B. Sypher et al., 1984). Additionally, highly differentiated leaders were judged to be more effective performers by their supervisors, and they were found to use more person-centered communication, particularly in regulative situations (Husband, 1982).
A study by Goodman (1968) investigated the relationship of cognitive differentiation to job level. However, rather than focusing on interpersonal cognitive differentiation, Goodman looked at individuals' perceptions of salary structure, promotional structure, financial structure, authority structure, and major organizational problems. Goodman's measure attempts to determine how much knowledge an individual possesses regarding these organizational issues and how refined that knowledge is. Although the relationship found was not particularly strong, most persons at higher levels of the organization were highly differentiated whereas some people at lower levels were highly differentiated and some were not.

Most recently B. Sypher (1984) reported significant positive correlations between cognitive differentiation and job success, but she concluded that these early findings raised more questions than they answered. For one, these findings were derived from data gathered at one point in time, and thus questions about how differentiation and job level were related could not be answered. In contrast the study reported here utilized a three wave procedure to determine if differentiation and other communication relevant abilities were related to job level over time and more specifically to upward mobility in the organizational hierarchy.

Despite the large amount of evidence substantiating the cognitive differentiation and communication link, there is some concern over the RCQ measure itself. The most serious claim is that the RCQ may be measuring simple loquacity as opposed to any cognitive representation of the individual (Powers, Jordan, and Street, 1981). However there appears to be clear evidence to disbelieve the notion that
cognitive differentiation, as measured by the RCQ, is merely a measure of loquacity or verbal abilities (Burleson, Applegate and Neuwirth, 1981) or even intelligence (H. Sypher and Applegate, 1982). Independent investigations provided sound empirical evidence that differentiation is a separate and distinct construct underlying various communication abilities. Regardless of recent reinterpretations of the RCQ (B. O'Keefe and Delia, 1982), it is apparent that cognitive differentiation is related to the impressions we make about others and the resultant strategies we employ to communicate.

In addition to a concern with cognitive differentiation, constructivist research has focused on social perspective-taking and persuasive abilities. Perspective-taking involves cognitive processes used in detecting and interpreting behavioral cues and verbal messages in order to understand the perspectives of others. Burleson (1982) suggests that perspective-taking ability is crucial to such diverse communicative activities as effectively adapting the form and content of a message to an audience, managing the topic of a conversation, selecting the proper titles, honorifics and forms of address, and maintaining conversational coherence. Previous studies have shown perspective-taking ability to be positively related to construct system differentiation and abstractness (Burleson, 1982), organizational level, self-monitoring ability, and self-reports of perspective-taking ability (B. Sypher, 1984).

Persuasive ability, or the ability to construct persuasive messages, also has been linked consistently to construct system development (Apolegate and Delia, 1980; Clark and Delia, 1977; Delia,
Burleson and Kline, 1979; Delia and Clark, 1977; B. O'Keefe and Delia, 1979). This body of research has sought to substantiate the constructivist claim that interpersonal construct system development is the basis for persuasive communication performance (B. O'Keefe and Delia, 1979). However, Seibold, Cantrill, and Meyers (in press), in their review of current persuasion literature, note that most research has focused on the variables which influence strategic message choices and persuasive ability. Absent are studies linking ability and message choices to outcomes.

A final dimension of communication considered in this study was self-monitoring. Even though this dimension is not considered a part of the constructivist orientation, it is considered a social cognitive ability related to communication and interpersonal competence, and it has evidenced a significant positive relationship to the other communication relevant abilities in this study (B. Syoner et al, 1983). Several researchers, including Atnay and Darley (1981) have viewed self-monitoring, along with perspective-taking, as crucial components of competent communication.

Self-monitoring, a construct proposed by Snyder (1974; 1979), involves attending and responding to situationally relevant interpersonal cues and using them to guide one's self-presentation. Self-monitoring ability has been linked to a number of other communication related skills. For example, high self-monitors have been shown to be more accurate in recalling information about others (Berscheid, Graziana, Monson, and Dermer, 1976), to pay closer attention in inferring another's intentions (Jones and Baumeister, 1976), and to be more persuasive (Dabbs, Evans, Hopper and Purvis,
when compared to low self-monitors. Additionally, high self-monitors perceived themselves to be more effective communicators (B. Sypher and H. Sypher, 1983) and were perceived by others as more humorous (Turner, 1980). Finally, self-monitoring was included in this study because it has been found to be positively related to job level and to construct differentiation (B. Sypher, et al., 1983) and to selected career choices and career success (Snyder and Campbell, 1982).

The communication and communication related abilities discussed—cognitive differentiation, perspective-taking, persuasive ability and self-monitoring—have each been related to each other in various combinations as well as to other relevant communication skills. Additionally, B. Sypher (1984) has presented evidence of a positive relationship between cognitive differentiation, perspective-taking, self-monitoring and job level. However, these four abilities have yet to be investigated simultaneously or together in relation to job level, one measure of individual success in an organization.

The present study attempts to rectify this situation, as well as examine the relationship of these abilities to another more probable indicator of individual success in organizations, upward mobility. In this study, upward mobility is operationalized as the average number of job levels advanced per year in the organization. This added dimension of success should give a more complete picture of advancement in the organization than just examining differences between individuals at high and low job levels. More importantly, the longitudinal approach taken in this study increases our confidence in the findings. Unlike earlier work that found evidence
bearing on the communication and job success relationship at one point in time, this investigation tracked employees over a four year period. This longitudinal design is based on Pettigrew's (1979) and others' notion that extended investigations allow for more in depth questioning and provide a clearer picture of the phenomena studied. As a result of our longitudinal design, we were able to ask questions about the predictive ability of communicative abilities over time.

Research Questions

Q1: What is the relationship between cognitive differentiation, perspective-taking, self-monitoring, and persuasive ability?

Q2: What is the relationship of these social cognitive and communication abilities to job level?

Q3: What is the relationship of these social cognitive and communication abilities to upward mobility in the organization?

METHOD

The Organization Studied

The data in this investigation was collected at the headquarters of a large east coast insurance company over a four year period. Initial data were collected on site in 1980 and again in 1982. The 1984 data were collected via a mail survey in 1984. During this time, the company merged with a large conglomerate. The merger
changed the system of job level ratings and likely played a role in the reduction of the pool of participants in the study.

This organization was particularly suited to this research design for two reasons. First the organization is very communication minded. Many work projects are completed through group efforts, work spaces are open to encourage interaction, and a variety of social activities are organized on-site, e.g. card games, exercise classes, jogging clubs, bowling teams, company-sponsored picnics and ballgames, etc.

Second, this organization's hierarchy is very clearly evidenced through the level designations of individual members. Thus a change in levels is the main kind of advancement and one of the most concrete referents of status or success. As Rosenbaum (1979) noted, "If status is conceived as the prestige accorded to people on the basis of their occupational position, then level categories provide a fine-grained delineation of the most important status distinctions within organizations" (p. 224).

Income, occupational status and other measures of attainment will be quite insensitive to career mobility, he added.

Participants

Seventy-three employees constituted the initial 1980 sample, representing a cross section of departments and levels. Eleven participants were added in 1982, and six in 1984 for a total of 90 participants. Of the original 73 participants, 25 were no longer with the company in 1984; additionally three of the eleven added in 1982 were no longer employed in 1984. To further illustrate the
perils of longitudinal data collection, some of the measures discussed below were not able to be taken on the 1982 and 1984 groups. Sample sizes for each measure are reported below.

**Measures**

**Cognitive differentiation.** A modified version of Crockett's (1965) Role Category Questionnaire (RCQ) was used. The RCQ is a free response instrument, based on Kelly's (1955) theory of personal constructs, which requires subjects to describe a liked and a disliked peer. In keeping with the purposes of this study, participants were asked to describe a liked and a disliked co-worker. Substantial evidence exists for the validity of the RCQ (D. O'Keefe and H. Sypher, 1981), which is scored according to coding procedures outlined by Crockett, Press, Delia, and Kenny (1974). Each description is scored for the number of distinct constructs used. Crockett (1965) reported a test-retest reliability of .95 for the RCQ. Inter-rater reliability for this project was .97. RCQ scores were available for 80 participants.

**Self-monitoring.** Snyder's (1979) Self-Monitoring Scale, a 20-item, true-false checklist assessing self-monitoring behaviors, was used. Snyder reported internal reliabilities ranging from .60 to .70. Self-monitoring scores were available for 80 participants.

**Perspective-taking.** This ability was measured by a modified version of the Social Perspectives Task developed by Hale and Delia (1976) and Pelias (1979). In this task, study participants were given information about a hypothetical confrontation between a supervisor and subordinate and were asked to answer specific questions regarding the perspectives of each person in the hypothetical situation. Responses were scored using Pelias' (1979)
procedure; each response was given a score ranging from zero to four depending on how well the participant could maintain the requested perspective-taking level and provide complex and integrated descriptions of others' perspectives. Interrater reliability in this study was .90. Perspective-taking scores were available for 70 participants.

**Persuasive ability.** A task developed by B. O'Keefe and Delia (1979) in which subjects are presented with a hypothetical situation and asked to write a persuasive letter was used. Scores on this task reflect the total number of arguments or appeals generated by subjects. Interrater reliability on this measure was .97. Persuasive ability scores were available for 69 participants.

**Job level 1980.** The organization in this study has a system in which each job is assigned a rating reflecting its level in the organizational hierarchy. In 1980, when this study was begun, the system ranged from one to 30. Participants in the 1980 phase of the study were asked to place themselves in one of five categories: 1-5, 6-10, 11-15, 16-20, and 21 or above. Participants who were added to the study in later years were asked their 1980 job level and thus were added to this sample, for a total n of 77.

**Job level 1982.** The 1982 job level data were collected on-site as part of a larger investigation. During these meetings, employees were asked to report their exact job level so more precise movements in level could be detected. We have 1982 job level data for 56 of the study participants. This number reflects the addition of some new and the attrition of some former participants.
Job level 1984. This measure was taken in 1984 via a mailed questionnaire. Subjects were simply asked to report their 1984 job level. The job level rating system used in 1980 had been changed as a result of the corporate merger. The new system of ratings ranged from 36 to 59. A conversion chart was obtained from the company (since some participants reported their level using the old system and some used the new system) so that job levels could be standardized. Each level rating in the old system was directly convertible to a level rating in the new system. This measure was obtained from 58 participants.

Upward Mobility.

This measure also was obtained through the 1984 mail survey. Study participants were asked to report the year they joined the organization and their initial job level. An upward mobility score was obtained by dividing the number of levels each participant had advanced by the number of years each had been employed by the organization. Calculating the score in this manner reflected the rate of movement up the organizational hierarchy. Thus, if two persons advanced the same number of levels, the one who had done so in the fewest number of years would get the higher score. A negative score was obtained for one participant. However, since she indicated that she had left the organization for several years and was hired back at a lower level, a decision was made not to include her score. Upward mobility scores were obtained for 55 participants.

RESULTS

The results of this study are organized around the research questions outlined earlier. Correlational analysis revealed several strong relationships.
Table 1 shows the correlation matrix for the four social cognitive and communicative abilities. With the exception of self-monitoring and perspective-taking ability, all measures have significant positive relationships. The strongest correlations are between cognitive differentiation and perspective-taking \( (r = .58) \) and differentiation and persuasive ability \( (r = .56) \). Snyder's (1974) self-monitoring scale had the weakest relationships with the other study variables.

All four variables had significant positive relationships to job level across the four years involved in the study (see Table 2.). When the years are combined (new subjects and attrition account for the differences in sample sizes), construct differentiation was most strongly correlated to job level \( (r = .55) \), followed by perspective-taking ability \( (r = .51) \), persuasive ability \( (r = .50) \) and self-monitoring \( (r = .44) \).

In order to better understand the relationship of these variables, stepwise multiple regression was used to predict job level (a .05 entry level was specified). Interpersonal cognitive differentiation was the strongest predictor and accounted for 32\% of the variance in job level. Self-monitoring entered second and raised the \( r^2 \) to .41 while perspective-taking entered third \( (r^2 = .47) \). Persuasive ability raised the total \( r^2 \) to .49 but did not meet the .05 entry criterion. Interpretation of beta weights was problematic because of multicollinearity.

Upward mobility in the organization correlated significantly with interpersonal cognitive differentiation \( (r = .63) \), with persuasive ability \( (r = .56) \) and with perspective-taking ability.
(r = .60). Upward mobility was not correlated significantly with self-monitoring (r = .20). Stepwise multiple regression (with .05 entry level) indicated only one significant predictor of upward mobility . . . cognitive differentiation. This variable accounted for 48% of the variance in upward mobility. However, when the significance level for entry was raised (for exploratory purposes) to the program default (.15), perspective-taking proved to be a significant predictor. Fifty-three percent of the variance was explained by this two variable model. Persuasive ability and self monitoring did not add significant variance even when the entry criterion was relaxed.

DISCUSSION

The results of this investigation point to several conclusions. First, interpersonal construct differentiation, self-monitoring, persuasive ability, and perspective taking appear to be, for the most part, positively related. This finding is consistent with recent constructivist research which suggests that interpersonal cognitive differentiation is an ability underlying social perspective-taking as well as persuasive ability. Recent research has supported these relationships; the present study can be viewed as an extension of these findings. More importantly, these later findings were derived from a real work situation where employees were asked to perform communication tasks similar to those they perform in their daily routines.
Additionally, Snyder (1979) has argued that high self-monitors are sensitive to how they and others present themselves in interpersonal situations. As Athay and Darley (1981, p. 302) point out, the high self-monitor appears to be "an individual who has grasped the central social fact that achieving one's purpose requires accurate perceptions of the signals sent by others, as well as well-developed signaling capacities of one's own, and has therefore developed the skills necessary to do both these tasks." This research suggests that high self-monitoring individuals can use their insights to bolster their interactional skills. If high self monitors are in fact more other directed (Snyder, 1979), it seems they would also be better perspective-takers. However, we failed to find a significant relationship between self-monitoring and perspective-taking.

One explanation for this finding may involve the nature of the self-monitoring instrument. As a self-report, true-false questionnaire, it may be somewhat suspect as a means of measuring a communicative ability. The fact that construct differentiation, perspective-taking and persuasive ability all related more strongly to each other than any of these related to self-monitoring is theoretically consistent and may support the argument that free response demonstrations of communication ability are more appropriate for research on communication abilities than are self-reports (Delia, B. O'Keefe, and D. O'Keefe, 1982).

A second conclusion suggested by this study is that communication abilities are strong predictors of individual success in organizations. The present study examined four related
but distinct communication abilities and found three of the four to be significant predictors of job level.

Third, and perhaps most important, it appears that persons with more developed social cognitive abilities are promoted more often than persons with less developed abilities. Earlier claims about the importance of communication abilities were borne out in this study. Construct differentiation, perspective-taking, and persuasive ability were found to be positively related to upward mobility in this organization. And from our findings, we can argue that social cognitive abilities are significant predictors of employees' promotion to higher management levels.

A final conclusion is especially important to constructivist work: of the four communication related abilities investigated, cognitive differentiation appears to be the strongest predictor of both job level and upward mobility. Constructivists argue that cognitive differentiation is the foundation for other communication abilities, and this argument is supported in our findings.

This study suggests that communication abilities are linked to outcomes of importance for many organizational members—namely moving up the "organizational ladder". We believe that an important focus of organizational communication research should be to identify aspects of communication behavior that impact on the quality of organizational members' lives. Clearly, identifying communication abilities that help or hinder individuals in achieving their personal and work goals is an important part of such a focus.
### TABLE 1

**INTERCORRELATIONS FOR SOCIAL COGNITIVE AND COMMUNICATION ABILITIES**

<table>
<thead>
<tr>
<th></th>
<th>(1) COGNITIVE DIFFERENTIATION</th>
<th>(2) PERSPECTIVE-TAKING</th>
<th>(3) SELF-MONITORING</th>
<th>(4) PERSUASIVE ABILITY</th>
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<td>(1) COGNITIVE DIFFERENTIATION</td>
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<td>(2) PERSPECTIVE-TAKING</td>
<td>.58*</td>
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</tr>
<tr>
<td>(3) SELF-MONITORING</td>
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<td>.18</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>(4) PERSUASIVE ABILITY</td>
<td>.56*</td>
<td>.44*</td>
<td>.32*</td>
<td>1.0</td>
</tr>
</tbody>
</table>

*P < .01

Coefficients are Pearson product-moment correlations.

### TABLE 2

**CORRELATION MATRIX FOR COMMUNICATION ABILITIES, JOB LEVEL, AND UPWARD MOBILITY**

<table>
<thead>
<tr>
<th></th>
<th>JOB LEVEL</th>
<th>Upward Mobility</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1980</td>
<td>1982</td>
</tr>
<tr>
<td>(1) COGNITIVE DIFFERENTIATION</td>
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<td>.68**</td>
</tr>
<tr>
<td>(2) PERSPECTIVE-TAKING</td>
<td>.68**</td>
<td>.64**</td>
</tr>
<tr>
<td>(3) SELF-MONITORING</td>
<td>.33*</td>
<td>.35*</td>
</tr>
<tr>
<td>(4) PERSUASIVE ABILITY</td>
<td>.65**</td>
<td>.57**</td>
</tr>
</tbody>
</table>

n=77 n=56 n=58 n=55

*P < .05

**P < .01

Significance levels associated with various correlations vary due to unequal samples.
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