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An Examination of Air Force Supervisor-Subordinate  
Communication Relationships and Outcome Variables:  
A Review of the Findings<sup>1</sup>

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Abstract

Over the last three years, the authors have examined a series of questions dealing with the communication relationships between supervisors and subordinates and some possible outcome variables in the military. The basic research question was to try to determine what types of supervisor communication lead to changes in performance, satisfaction and retention. In addition, the authors examined the effect of age and affiliation on the communication-outcome relationships. The paper will be a compilation of the findings over the last three years.

Introduction

There has been a great deal of interest recently in the relationships among communication, motivation, performance, and job satisfaction (Hawkins and Penley, 1978; Huseman, et al., 1978; Muchinsky, 1977b; Downs, 1977; Penley and Hawkins, 1979, 1980; O'Reilly and Roberts, 1977). The Air Force has also been interested in these relationships (Boyle and Krebs, 1979; TIG Briefs, 1977, 1979a, 1979b).

Although an increasing amount of research has been conducted in this area, few, if any, practical communication strategies have been developed. In order to develop practical implications for this direction in communication research, it is important to define what kinds of communication are important, for what types of people. This is exactly the type of contingency approach called for by Huseman, et al. (1980) and Alexander and Penley (1981).

This paper is a report on our findings after developing a set of perceived communication behavior variables that could be related to outcome variables in an organizational setting.

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<sup>1</sup>This is an edited version for the Proceedings. A more complete copy with references can be obtained from Major Peterson.

## Finding 1

Performance was found to be higher when the supervisor was more receptive to listening to the subordinate. Performance was also found to be higher when the supervisor provided more information on how the employee was doing on his job. Both of these findings are consistent with prior research and are conceptually consistent with theory.

The finding that information from memos is negatively related to performance is harder to explain. The low performance associated with high receipt of memos may reflect an overload problem. Based on post hoc interviews, it appears that the organization uses written information to correct behavior. This policy is consistent with the negative sign. A discriminant analysis between those persons involved in high and low memo usage failed to show any demographic or organizational variables to explain this difference.

The findings concerning propensity to remain are interesting, but the non-findings may be more important. Only managerial receptiveness and responsiveness were significantly related to propensity to remain. The greater the extent to which an employee receives communication from upper management and perhaps feels part of the bigger picture, the more likely he or she is to stay with the organization. The fact that supervisory communication variables are not related to a person's propensity to remain is most interesting. A great amount of emphasis has been placed in the military on the supervisor's communication role in retention. These results, however, may suggest that the supervisor's impact is minimal. Although performance and satisfaction can be influenced by the supervisor's communication patterns, the intention to stay in the organization is evidently influenced more by the individual's personal characteristics. These findings tend to suggest that the overall managerial patterns or climate are extremely important and deserve more organizational attention to guarantee less turnover.

The results also indicate that older employees are more likely to stay in the organization. This makes sense in terms of the individual reducing dissonant feelings toward the job as he stays longer. The fact that older people are more likely to remain is also explained in terms of the lower potential of mobility of older employees.

The findings on job satisfaction are also consistent with prior theory. Those employees with the highest satisfaction are older, receive more performance information and management information, and their supervisors are more receptive. This scale reflects an affective response and hence is related to supervisory behaviors that indicate a personal interest in the employee.

## Finding 2

The objective of the second analysis was to examine the relationship among five communication variables and the performance and job satisfaction as moderated by age difference between supervisors and subordinates. Age difference was computed to categorize the subordinate as a younger employee (more than five years younger), peer group employee ( $\pm$  five years of the superior's age), or older employee (more than five years older than superior).

Analysis of covariance was employed utilizing multiple regression techniques to control for the effects of ethnic difference and supervisor tenure.

Although a strong main effect exists among four of the five communication variables and job performance, these findings mask the results found when age difference is used as a moderator variable. In three of the cases, including the one insignificant main effect, age difference did not significantly contribute to the regression model. However, in two of the regressions, the moderation by age difference indicated that there was a significant relationship to performance only for older subordinates paired with a younger supervisor. The relatively flat slopes of the communication-performance relationship for the younger and peer group subordinates indicate that regardless of the supervisor's communication effort, performance will be essentially unaffected.

The steep slope, however, for the relationships between policy and personal communication with performance for older subordinates paired with a younger supervisor would indicate that there is very real potential for the manager to affect performance of this group by increasing his or her communicative efforts.

Turning to the relationship between these communication variables and employee satisfaction, the results are even more masked without using age difference as a moderator. There is a significant main effect for all five communication variables with job satisfaction. However, just as with the performance results, this masks the impact of difference in age. The relationship between satisfaction and the communication variables was extremely strong for younger subordinates. For younger subordinates, communication from an older supervisor directly and strongly impacted the employee's satisfaction. However, there was virtually no relationship between personal and career communication with satisfaction for the other two employee groups.

The same pattern of moderation also was found with task and policy communication. Although the relationship with satisfaction for peer and older subordinates was positive, it was significantly more positive for the younger subordinates paired with an older supervisor.

These results indicate that there is a differential impact of communication on outcome variables, depending on the age difference of the superior and subordinate. These results seem to indicate that communication most strongly affects satisfaction for employees who are younger than their superiors, but it tends not to impact their performance. The reverse is true of subordinates who are older than their superiors. In this case, communication efforts of younger supervisors impact their older subordinates' performance, but it has much less impact on satisfaction. Communication did not impact peer group subordinates to any significant degree.

### Finding 3

The third research question was to determine if affiliation (military or civilian) of the supervisor and subordinate has an effect on the relationship between communication and propensity to remain (PTR). In this research, supervisor-subordinate pairs of affiliation were computed (e.g., CIV-MIL, CIV-CIV, MIL-MIL, MIL-CIV). In the analysis, each supervisor-subordinate combination was treated as a categorical variable by using dummy variables. Propensity to remain was treated as the dependent variable.

Task Communication indicates that there is significantly greater propensity to remain for both of the civilian-supervised groups when compared to the military supervisor-military subordinate group. Similarly, the civilian-civilian employee category was found to have higher propensity to remain when compared with a military supervisor and civilian employee. The relationships of task communication to performance was strongly moderated by supervisor-subordinate pairings. There was a significant and positive relationship between more communication on the task and an employee's propensity to remain, when the supervisor was a military supervisor. There was virtually no relationship between task communication and PTR when the supervisor was a civilian employee.

Policy Communication indicates the same basic pattern of results as Task Communication. The slopes of the relationships between Policy Communication and PTR showed strong, positive association when there was a military supervisor. Again the pattern of employees having overall better Propensity to Remain when supervised by civilian supervisors was found, with even greater statistical differences.

While the other three communication variables (Personal, Career, Managerial) showed a main effect with Propensity to Remain, they did not show a significant moderating effect when the supervisor-subordinate pairings were added to the regression.

### Conclusion

The findings in this paper represent another step in showing the importance of the relationship between communication and other organizational variables. The findings point to the differences from one outcome variable to another in terms of the communication variables which are related to them.

In addition, the research shows the importance of examining simultaneously the source, message, and receiver characteristics in examining the relationship between communication variables and the Propensity to Remain variable. Finally, the findings indicate the influence that age difference plays on the relationship between communication and job satisfaction and job performance.

A further step in this line of research is to continue efforts to validate the communication indices which were developed as a part of this study. Efforts should also be made to determine whether communication variables are moderated by other demographic and organizational variables.