RESEARCH ORGANIZATIONS AND RESEARCH WORKERS

1. Social Structure of Laboratory Organizations


This paper deals with the problem of how a group of professional scientists and engineers met the conflicting demands of bureaucratic procedures, professional standards, and personal values.

Kennedy, John L. and G. H. Putt. "Administration of research in a research corporation." Administrative Science Quarterly (Graduate School of Business and Public Administration, Cornell University, Ithaca), December, 1956. pp. 326-339. $2.00.

Organizational problems of the new research corporation from the point of view of an administrator and of a researcher are discussed. A tool for improving communication between them is described, and its use in planning a large-scale research program is outlined.


This study of a military medical research organization is concerned with relating the different positions in the organization in a manner most effective for meeting the needs of the organization, as well as the needs of the persons in the various positions. The role of the administrator is analyzed with respect to type of conflict situation and in relation to organizational effectiveness.


A comparative analysis of the merits and consequences of functional organization versus project organization in the research laboratory.

*Compiled by Simon Marcson, Research Associate.
** Items from this list should be ordered directly from the publisher. Addresses are given in connection with each reference.

Study of social characteristics of research groups in twenty laboratories. Paper does not go into either methodological or substantive detail, but does report such findings as social characteristics of high- and low-productive groups, relations of both groups to management, and relations of supervisors to subordinates in both research groups.


Report on an applied research group in a university laboratory. The communication system within the project was studied through interviews and interaction counts. This, as well as data on the organization, is used to develop an analytical statement on the value system of the project group.


Study reports on a Naval research and development laboratory which made use of questionnaire data provided by laboratory personnel. Statistical analysis is used to identify seven major status groups and their relative prestige. The relations of background factors, behavior and attitudes, and esteem to status were analyzed. The inter-relation of types of esteem was then investigated to test hypotheses.

2. **Attitudes of Research Workers**


Study of relative weight which scientists give to monetary as over against professional considerations among a group who had voluntarily left their government jobs in 1948. Four out of five listed the opportunity to do interesting and important work under conditions of freedom and responsibility as requirements of a good job.


The data suggest that scientists are willing to sacrifice economic advantages for such professional requirements as choice of work under conditions of freedom and the opportunity to establish a professional reputation.
3. Personnel Selection and Talent Identification


Reports on study carried out for Manpower Branch of the Office of Naval Research in which actual work incidents critical to performance success or failure are reported by 500 scientists in 20 research laboratories. The critical behaviors were classified under such headings as formulating problems and hypotheses, planning and designing the investigation, interpreting research results, etc. This provided a standardized means for evaluating performance as over against reliance on statements of past performance.


Reports on a study of types of personnel administration procedures used and the problems encountered in industrial laboratories. Study covered the areas of selection, induction, merit rating, promotion, and training.


Collection of papers and discussions given at conference sponsored by the National Science Foundation on such topics as social and technological determinants of creativity, measures of scientific performance, problems of identifying creative scientific talent at various academic levels, demographic, cultural, and personality attributes of scientists, etc.

4. Utilization of Research Workers


A statement of a model of the types of information necessary for the members of a research team to effectively solve problems.


A study of the utilization of professional technical employees, such as engineers and scientists, in industry. Paper reports that these employees do not find the expected satisfactions in their work in industry. The technical experts, and other professional employees in industry tend to be chronically frustrated and dissatisfied.

This is a review and synthesis of the recent literature on methods of improving the utilization of civilian engineering personnel. It analyses the suggestions made as to their effective utilization.


Study of a governmental organization for medical research with 300 employees. The determination of the effects of the social environment on individual performance is reported in this paper. Results indicate that scientists tend to perform more acceptably when they are closely associated with colleagues having a variety of values, experiences, and disciplines and when supervisors provide frequent stimulation combined with autonomy of action.


Based on two-year study of the utilization and motivation of engineers and scientists in ten companies, this report deals with the reasons for satisfaction and dissatisfaction with salaries and intangible rewards.


Paper reports on the problems of communication between research and development and other groups. The concept of "cultural differences" between groups is made use of as a means of identifying some of the potential barriers to effective communication.


Study of scientific productivity in which the author measures the variations that exist between different research workers. He also explains differences and shows that in the relationship of salary to productivity, rewards do not keep pace with increasing production. This may account for the difficulty of efficient operation in many governmental laboratories with their relatively low pay ceilings.