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BEHAVIOR IN GROUPS

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November 1967

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FIFTH ANNUAL REPORT  
Contract NONR 624 (14)

BEHAVIOR IN GROUPS  
Bernard M. Bass  
Principal Investigator

15 November 1967

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## I. INTRODUCTION

During 1966-7, research efforts were regrouped into three major areas: combining management training and research, examining the effect of EDP on management, and studying individual orientations affecting managerial attitudes and behavior. In one way or another, the Office of Naval Research has made a contribution to each of the efforts reported here, but additional support for these various research activities has also come from the Ford Foundation, the Federal Deposit Insurance Corporation, the International Dimensions Grant of the University of Pittsburgh and the University of Pittsburgh, itself.

During this period a total of 13 articles, briefs and technical reports were published by the staff of the Management Research Center and distributed. Five more have been accepted for publication. An MRC Brief series has been started.

## II. COMBINING MANAGEMENT TRAINING AND RESEARCH

### The Research Organizations

An International Research Group on Management (IRGOM) has been formed consisting of four active regional organizations; ERGOM, CINSELA, MITRA and NARGOM.

European Research Group on Management (ERGOM). A great deal of progress has been made since the formal organization of the European Research Group on Management (ERGOM) in May 1966. During the fall of 1966 and winter of

1967, members of ERGOM translated the initial 10 exercises\* used to combine training and research (1,3) into 10 languages. ERGOM advisory council meetings were held in Brussels in November, 1966 and in Geneva in April, 1967. The next will be held in Madrid in May, 1968.

Membership in ERGOM now includes approximately 100 behavioral scientists from every country in Western Europe. These members are represented on the steering committee by individuals from Scandinavia, the United Kingdom, Eire, Holland, Belgium, France, Spain, Italy and Israel.

Comite para Investigaciones sobre Ejecutivos Latinoamericanos (CINSELA).

In June, 1967, an organizational meeting was held in Mexico City for the purpose of creating CINSELA, a sister organization to ERGOM. Out of 32 Latin Americans who attended the meeting, approximately 16 have shown continued interest and are in contact with us. Area organizations of CINSELA have been or are being formed as follows:

- (1) CINSELA-CEV, representing Colombia, Ecuador and Venezuela has been established under the direction of Dr. Miguel Bernal and is a going operation.
- (2) Negotiations are underway to establish CINSELA-MEXICO in conjunction with the Centre de Productividad de Monterrey, A. C. in Monterrey.
- (3) Negotiations are in progress to establish CINSELA-BRAZIL in cooperation with the Brazilian School of Public Administration in Rio de Janeiro.

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\* Objectives, Attitudes, Compensation, Life Goals, Supervision, Fishbowl, Organization, Communication, Negotiations and Evaluation.

Management Institute for Training and Research in Asia (MITRA). Three workshops were run in November, 1967; one in Madurai for 13 trainers, another in Madras for 40 managers with 8 of the 13 trainers serving as interns, and a third with the staff of the International Labor Organization near Bombay for managers and trainers. An advisory council meeting is planned next which will include representatives from Indian industry and the major management institutes in India (Ahmedabad, Bombay, Delhi and Calcutta).

North American Research Group on Management (NARGOM). NARGOM held its first meeting in conjunction with the APA Convention, August 31, 1967, in Washington, D. C. Forty American and Canadian management researchers were in attendance. The advisory council for NARGOM will hold its first meeting December 26 - 29, 1967, at Seven Springs, Champion, Pennsylvania. Members of the advisory council include: Dr. Edgar Schein, Massachusetts Institute of Technology; Dr. Paul Baker, Standard Oil of New Jersey; Dr. Gilies Auclair, University of Montreal; V. Jon Bentz, Sears Roebuck & Company; Dr. Walter Mahler, Mahler & Associates and Dr. Herbert Meyer, General Electric Company.

### The Exercises

As of this writing, the initial 10 exercises are available in Danish, Dutch, English, French, German, Greek, Italian, Hebrew, Norwegian, Portuguese, Spanish and Swedish.

For ease of data processing and to facilitate data collection, a standardized non-carbon reproducing (NCR) format is used. For a given exercise each trainee uses a booklet of his own to read exercise instructions

and register his own decisions. As he writes a response in the booklet, a copy is automatically made via the NCR paper. These copies are submitted voluntarily to the trainer for transshipment to the central processing center and data bank in Pittsburgh.

Plans. In addition to modifying old exercises for research or training purposes, several new ones are now being tested covering risk-taking in national planning\*, managers' expectations about the future world of work\*\* and managers' self-appraisals.\*\*\*

Information Processing. Normative data is being distributed rapidly to trainers in the form shown in Figure 1 on Page 5.

Several briefs (9, 11, 12, 14) and longer descriptive reports (7) have been prepared and many more are in progress based on normative samples. As soon as the bank has been filled with adequate numbers of cases, more sophisticated analyses of data will be attempted. As of this writing, approximately 4,000 exercises have been distributed in ERGOM; 1,000 in CINSELA, 1,000 via MITRA and 2,000 via NARGOM. During this report period, in addition to those already mentioned, workshops to train trainers have been held in Geneva, Utrecht, Manchester, Aarhus and Dublin. Additional trainer workshops are planned for France, Germany, Belgium, Israel, Italy, Sweden, Colombia, Brazil, Mexico and India, as well as the United States, by early 1968.

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\* Exercise Kolomon

\*\* Exercise Future

\*\*\* Exercise Self-Appraisal

## FIGURE 1

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## TRANS-NATIONAL MANAGEMENT RESEARCH PROJECT

DATE OF ANALYSIS--25 AUGUST 1967

SUB-SAMPLE REPORT  
EXERCISE LIFE GOALS

DATA COLLECTED BY--MANAGEMENT RESEARCH CENTER

ON 10 MAR 67 AT GENEVA, SWITZERLAND

DURING THE ERGCM TRAINERS WORKSHOP

THERE WERE 25 PARTICIPANTS FORMED INTO 4 GROUPS

LIFE GOAL ITEMS	MEAN RANK ASCRIBED TO SELVES	MEAN RANK ASCRIBED TO OTHERS
LEADERSHIP	6.48	5.75
EXPERTNESS	3.52	3.34
PRESTIGE	8.08	6.51
SERVICE	5.52	5.30
WEALTH	9.80	9.64
INDEPENDENCE	3.92	5.09
AFFECTICN	4.28	5.42
SECURITY	7.32	6.71
SELF-REALIZATION	2.64	4.13
DUTY	8.16	7.11
PLEASURE	6.28	7.06

1.0 = MAXIMUM AND 11.0 = MINIMUM

### III. IMPACT OF EDP ON MANAGEMENT

Studies on the impact of computers on managerial behavior were expanded during 1966-67. These are being coordinated with previous work on management consulting patterns built around the Pittsburgh Administration Review (PAR), a survey questionnaire. Data collection via structured interview and written questionnaires has now been completed in three areas.

#### Metropolitan Bank Study

The case study of a large metropolitan bank (assets in excess of 3.5 billion) was essentially completed during 1967. Questionnaire responses from 354 out of 400 officers in the bank were collected and analyzed, and four articles were published and distributed summarizing the results (15, 16, 17, 18). In brief, age was the predominant determinant of the managers' attitudes towards the computer. Managers at all levels in the organization felt that the computer had increased their range of decision making, but younger managers felt it to a significantly greater extent than older managers. Those persons working closely with the computer were perceived by other managers in the bank as a new breed--one that gets special attention and at the same time sees things differently from others in the organization. Attitudes towards the impact of EDP on promotions were influenced by age and exposure to the computer: the younger one is and the greater his exposure to the computer, the more likely he is to feel that use of the computer is influencing promotion opportunities in a significant way. Overall results of the attitude survey indicate a need for a great deal more interaction and communication between the new breed (computer personnel) and other managers as well as some basic orientation and education programs for both.

### Pharmaceutical Study

Responses from 1076 managers in a large pharmaceutical company to a written questionnaire concerning the impact of computers in their organizations were collected and are now being analyzed. Following a comprehensive report of the results to top management, a series of comparisons will be made between these data and those from the banking industry.

### F.D.I.C. Study

The Federal Deposit Insurance Corporation provided the major support for a study of the impact of computers in small to medium-sized banks (those having 10 to 40 million in deposits). Field visits to 58 banks have been completed and 438 questionnaire responses have been received from managers in 57 of the 58 banks. These data are now being analyzed and reports are being prepared for the participating banks, as well as F.D.I.C. A monograph is being prepared describing the process of automation in banks and the impact on the organization.

### A Comparison of the Manager's Perceived Role in the Three Studies.

Two questionnaires were administered in each of the previously mentioned studies. One of the two in each case was an attitude survey designed specifically for the population being studied, but containing some overlapping items so that comparisons between the sample population on attitudes towards computers will be possible.

The second of the two questionnaires (PAR 3) was identical in all 3 samples. It asked the respondents to estimate the percentage of their time spent in 6 managerial functions and the percentage spent consulting

with eight sources of information. Following is a sample of these data.

Mean Reported Percentage of Time  
Spent in Six Managerial Functions  
by Three Samples of Managers

	Metropolitan Bank Managers N=354	Small to Medium Sized Bank Managers N=438	Pharmaceuticals Managers N= 1076
<u>Function</u>	<u>Mean</u>	<u>Mean</u>	<u>Mean</u>
Negotiating	24.19	22.50	31.91
Supervising	20.72	20.58	11.63
Planning	12.15	13.36	16.44
Investigating	12.79	15.40	16.28
Coordinating	13.13	12.66	10.89
Evaluating	13.15	11.42	9.94
Other	3.02	2.72	3.13

Compared to pharmaceutical managers, bank managers report spending almost double the amount of time in supervising others. The same is true of time spent in negotiating. Explanations for this and other differences are currently being sought in additional analyses.

Plans

In the EDP area, increased attention will be focused on the amount and kind of information needed by managers to make effective use of computers. Alternative techniques for developing the requisite EDP skills and knowledge in managers will be explored.

Concerning the consulting patterns of managers, interest will focus on different patterns across industries and between levels within an industry. We also hope to collect some criterion data which would permit us to relate consulting patterns to managerial effectiveness.

#### IV. INDIVIDUAL ORIENTATIONS TOWARD WORK, MANAGEMENT AND ORGANIZATION

##### Orientation and Social Behavior

A summary of work in this area was published (4). A symposium is planned to examine the significance of task-orientation on management effectiveness.

##### Attitudes Toward Organization Success

Comparisons of graduate business students and managers towards what makes for organizational success (7) yielded a 12-item scale (OSQ) which is being distributed in their native language by AIESEC to students in Belgium, Denmark, France, Germany, Italy, The Netherlands, Norway, Sweden, Switzerland, the United Kingdom and the U.S.A. when they apply for foreign industrial jobs. In addition to comparing attitudes across countries, analyses of OSQ attitudes before and after foreign work experience will be made. To what extent participative or political attitudes are promoted will be examined.

## V. PERSONNEL

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## DOCUMENT CONTROL DATA - R&amp;D

1. Originating Activity (Corporate Author) University of Pittsburgh Pittsburgh, Pennsylvania 15213		2a. Report Security Classification Unclassified	
		2b. Group Group Psychology Branch	
3. Report Title  BEHAVIOR IN GROUPS			
4. Descriptive Notes (Type of Report and Inclusive Dates)  ONR ANNUAL REPORT (#5)			
5. Author(s) (Last Name, First Name, Initial)  Bass, Bernard M.			
6. Report Date November 15, 1967		7a. Total No. of Pages 11	7b. No. of Refs. 19
8a. Contract or Grant No. Contract NONR 624(14)		9a. Originator's Report Number(s) Annual Report #5	
b. Project No.		9b. Other Report No(s). (Any other numbers that may be assigned this report)	
c.			
d.			
10. Availability/Limitation Notices  500 Copies			
11. Supplementary Notes		12. Sponsoring Military Activity Group Psychology Branch Office of Naval Research, Department of the Navy	
13. Abstract Progress is reported for three research areas. I. <u>Combining Management Training and Research</u> --four regional organizations in Europe (ERGOM), India (MITRA), North America (NARGOM) and Latin America (CINSELA) feed a data bank with management responses to standardized problems in organizational psychology to generate cross-cultural and cross-industrial comparisons of management behavior in small group exercises in budgeting, communicating, negotiating and evaluating. II. <u>Impact of EDP on Management</u> --Surveys of management attitudes toward EDP in a large metropolitan banking system, in a large pharmaceutical firm and in 50 small to medium-sized banks. III. <u>Industrial Orientations Toward Work, Management and Organization</u> --surveys of managers' and students' attitudes and personal factors associated with opinions about work and large organizations.			

Security Classification

14. Key Words	Link A		Link B		Link C	
	Role	Wt.	Role	Wt.	Role	Wt.
Management training						
Management research						
ERGOM						
CINSELA						
MITRA						
NARGOM						
Cross-cultural						
EDP and management						
banks						
management role						
task orientation						
organizational success questionnaire						

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