

LEADERSHIP PRACTICES IN RELATION TO  
PRODUCTIVITY AND MORALE

Robert L. Kahn and Daniel Katz

Institute for Social Research  
University of Michigan

December, 1952

## INTRODUCTION

In applying the principles discovered in laboratory studies to life situations there is always the problem of the generality and meaningfulness of the findings. Can the more complex social situation be interpreted adequately in terms of the results of laboratory experiments? Will the use of the generalization from the group experiment be effective in the life situation, where the game is being played for higher stakes, i.e., where people are playing for keeps? The direct study of natural groups and organizations may not necessarily challenge the validity of laboratory research but it can demonstrate its importance or its triviality.

In a program of research on human relations in group organization the Survey Research Center of the University of Michigan has attempted a direct attack upon the conditions and causes of worker productivity and worker morale through field studies, surveys and field experiments. In this program the initial research was not planned around tight mathematical models of the hypothetico-deductive variety but was more empirically oriented, seeking to discover and explore those variables which assumed significant proportions in the industrial situations studied. Nevertheless, the contributions of the Lewinian school, the self-realization notions of Dewey and Rogers, and the realistic analyses of institutional structure by Allport and Mayo and Roethlisberger had a good deal to do with the directions of the research.

Field studies of this sort have the great advantage over laboratory situations of dealing directly with social realities and thus meeting the problem of applicability and generalization to social phenomena, provided that they can deal with variables at some level of generality. They suffer, however, in comparison to laboratory experiments with respect to control in the identification and manipulation of variables. In the Human Relations Program, therefore, methodological emphasis was placed upon the checks and controls in the field studies undertaken. Unquantified anthropological observation was replaced by standardized interviews with carefully defined samples of respondents. Impressionistic accounts of attitude and morale, as in the Hawthorne studies, were replaced with measures of workers' psychological responses. Effects of supervisory practices were not judged on the basis of what management assumed the results to be. Independently derived measures were employed in testing relationships between factors. For example, supervisory behavior was measured independently of its effects upon productivity and morale of workers. Interestingly enough, this is the first time such measurements have ever been taken in an effort to get at the functional relationships in an ongoing organization. Moreover, where productivity was taken as the dependent variable, supervisory practice as the independent variable, and morale as

the intervening variable, the groups which were compared were equated on all the technological factors which could affect productivity.

Studies in this program of research have now been conducted in a variety of industrial situations, and in civilian and military agencies. These include the home office of an insurance company, maintenance-of-way section gangs on a railroad, an electric utility, an automotive manufacturer, a tractor company, an appliance manufacturer, and two agencies of the federal government. Some of the major research findings emerging from these projects are summarized in the following pages.

#### (1) Differentiation of Supervisory Role

The supervisor with the better productive record plays a more differentiated role than the supervisor with the poor productive record; that is, he does not perform the same functions as the rank and file worker, but assumes more of the functions traditionally associated with leadership. Foremen of railroad section gangs, for example, were found to differ with respect to the amount of time they spent in planning the work and performing special skilled tasks. (Table 1.) In general, the foremen with the better production records devoted more time to these aspects of their work, according to their own report, and they were perceived by their men as possessing superior planning ability. (Table 2.) Similarly, in a company manufacturing heavy agricultural and road-building equipment, both the foremen and the men of high producing sections evaluated the quality of planning as superior to that of most other groups. (Table 3)

Another indication of the ability of the high-producing supervisor to differentiate his own function from that of the men is the amount of time which he gives to the work of actual supervision, as contrasted to the time allocated to activities which are not uniquely those of the supervisor. In the studies of clerical workers, railroad workers, and workers in heavy industry, the supervisors with the better production records gave a larger proportion of their time to supervisory functions, especially to the inter-personal aspects of their job. The supervisors of the lower producing sections were more likely to spend their time in tasks which the men themselves were performing, or in the paper-work aspects of their jobs. (Table 4)

The reverse side of this picture was also revealed in the railroad study, in which statements made by the section hands in low-producing sections indicated a tendency for an informal leader to arise in these sections. For example, in the low sections there was more frequently some one member of the group who "spoke up for the men when they wanted something." Apparently the informal organization in the low groups compensated in some respects for the abdication or mis-directed leadership of the foremen, but not without some losses in total effectiveness. (Table 5)

The recognition by the supervisor of the importance of giving more time to his leadership role was also reflected in the morale findings. In the tractor company, for example, the men supervised by foremen who reported spending more than half their time in actual supervision not only had higher production records, but were more satisfied with the company than the men whose supervisors gave their time primarily to other aspects of the job.

Moreover, in the same company the men with the highest morale as measured in terms of satisfaction with job, supervisor, and company were those who perceived their supervisors as performing a number of broad, supportive functions. Almost all employees, of high or low morale, reported that their supervisors enforced the rules and kept production up, but the high morale employees also reported that their supervisors performed such other functions as on-the-job training, recommending people for promotion and transfer, and communicating relevant information about the work and the company.

The differentiated role of the supervisor apparently affects the productivity of the group in two ways. The attention given to planning has a direct effect upon output in the coordination and organization of the tasks of the group. This is a type of skill of an engineering or institutional sort, in that the technical know-how of the supervisor is brought to bear upon the ordering of the work of the group on a long range basis. The second way in which the supervisor affects productivity is more indirect. He can increase or decrease the motivation of his employees to produce. These two abilities are not necessarily correlated in the same supervisors. But our evidence indicates that either the engineering skill or the human relations skill can increase the performance of the group. The relative importance of these two factors is determined in good part by the degree of freedom in the situation for the given skill to be effectively manifested. If the company is so tightly organized and so centrally controlled that the tasks of even the smallest work groups are prescribed, then the first-level supervisor with extremely high planning ability will not affect the productive process.

Table 1

Relation of What Foreman Reports  
Doing on the Job to Section Productivity

(Section Gangs on a Railroad)

	Supervisory Duties		Non-Supervisory Duties		Number of duties mentioned*	N
	Planning; skilled tasks	Providing materials to men; watching men	Same things men do	Keeping up track		
Foremen of High- Producing Sections	42	41	8	7	98	36
	83		15			
Foremen of Low- Producing Sections	25	42	15	14	96	36
	67		29			

\*The responses total more than 72 because many foremen gave more than one answer.

Table 2

Relation of Men's Perception of Foreman's  
Planning Ability to Section Productivity

(Section Gangs on a Railroad)

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Question: "How good is the foreman at figuring work out ahead of time?"

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	Very good	Pretty good	So-so and not very good	Not ascertained	Total	N
Men in High- Producing Sections	38%	48%	2%	12%	100%	156
Men in Low- Producing Sections	27%	54%	10%	9%	100%	142

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Table 3

Relation of Foreman's Perception  
of Planning to Section Productivity

(Work Groups in a Tractor Factory)

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Foreman question: "How does your section compare with other sections on . . . The way the work is planned for the group?"

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Section Productivity	Better than most	Same as most	Not as good as most	Not ascertained	Total	N
97-101%	19%	75%	2%	4%	100%	52
91-96%	34	64	1	1	100	71
86-90%	18	77	3	2	100	89
80-85%	28	67	3	2	100	69
50-79%	9	85	6	0	100	35

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Table 4

Relation of Time Spent in Supervision  
to Section Productivity

(Sections in an insurance company; section gangs on a railroad;  
work groups in a tractor factory)

Questions:

- Insurance Company - "What proportion of your time is given to supervisory matters? What proportion to other duties?"
- Railroad - "How much of your time do you usually spend in supervising and how much in straight production work?"
- Tractor Factory - "How much of your time do you usually spend in supervising the men, and how much in other things like planning the work, making out reports, and dealing with people outside your section?"

Section Productivity	50% or more of time spent in supervising	Less than 50% of time spent in supervising	Not ascertained, or can't separate functions	Total	N
Insurance Company					
High	75%	17%	8%	100%	12
Low	33	59	8	100	12
Railroad					
High	55	31	14	100	36
Low	25	61	14	100	36
Tractor Factory					
97-101%	69	31	0	100	52
91-96%	59	41	0	100	71
86-90%	48	52	0	100	89
80-85%	41	59	0	100	69
50-79%	54	46	0	100	35



Table 5

Relation of Men's Perception of a Group  
Spokesman to Section Productivity

(Section Gangs on a Railroad)

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Question: "Is there some one man in the section who speaks up for the men when they want something?"

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	Yes	No	Not ascertained	Total	N
Men in High Producing Sections	9%	47%	44%	100%	156
Men in Low Producing Sections	17%	37%	46%	100%	142

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## (2) Closeness of Supervision

A second major dimension which appears to discriminate between high and low-producing supervisors is the closeness with which they supervise, or the degree to which they delegate authority. Although the high supervisors spend more time performing the supervisory functions, they do not supervise as closely as their low-producing colleagues. This general characteristic is reflected in a number of specific research findings. In the insurance study, low-producing supervisors were found to check up on their employees more frequently, to give them more detailed and more frequent work instructions, and in general to limit their freedom to do the work in their own way. (Table 6) In the company manufacturing earth-moving equipment, the high-producing workers reported more often that they set their own pace on the job. (Table 7)

Closeness of supervision is an interesting example of the necessity for distinguishing between the engineering (or institutional) skill of the supervisor and his human relations skill in motivating people. Close supervision often is employed as an institutional device for insuring that workers follow their job assignments correctly and assiduously. But this very practice also has negative morale and motivational implications, and some supervisors may give more freedom to their employees as a way of increasing their motivation. The greater freedom may produce positive results through the satisfaction that the individual has in participation and in self-determination. There is considerable evidence to support this interpretation in the research findings. In the tractor company studied, workers who perceived their foremen as supervising them less closely were better satisfied with their jobs and with the company.

In the same study, each worker was asked how much he had to say about the way his own job was done, and whether he would like to have more or less to say on this subject. Workers who reported having a lot to say about their own work wanted no less, and were relatively high on the three dimensions of morale--satisfaction with job, supervisor, and company. Workers who reported having little say about how their job should be done wanted more autonomy in this area, and were relatively dissatisfied with their jobs, their supervisors, and the company. Apparently close supervision can interfere with the gratification of some strongly felt needs.

There is a great deal of evidence that this factor of closeness of supervision, which is very important, is by no means determined at the first level of supervision. Rather, the first-level supervisor tends to offer to his men the style of supervision which he experiences with his own supervisor. Or to put it another way, the style of supervision which is characteristic of first-level supervisors reflects in considerable degree the organizational climate which exists at higher levels in the management hierarchy. Among the many findings which bear out this interpretation are the following: In the insurance study the low-producing supervisors reported that they were under

closer supervision from above than did the high-producing supervisors. (Table 8) In the agricultural equipment factory, foremen of high-producing sections indicated relatively more freedom or scope of authority. They stated that they were able to plan their own work as much and as far ahead as they wanted to. (Table 9) In the railroad study there was a tendency for the foremen of high-producing gangs to report relatively less pressure from above and to be more satisfied with the amount of authority which they had on their job, although these findings were not statistically significant.

There is an additional analysis which bears heavily on the notion that supervisory behavior at the first level is conditioned in great degree by practices of higher management. The general hypothesis was that the relationships between the behavior of first-level supervisors and the attitudes of their employees are importantly conditioned by the organizational milieu in which the first-level supervisors are functioning, and particularly by the amount of their power or influence in the department--"their potential degree of control over the social environment in which their employees are functioning." In other words, the foreman who is given so little freedom or authority by his supervisors that he is unable to exert a meaningful influence on the environment in which he and his employees function will be ineffective in dealing with employees, regardless of his human relations skills. His intended supportive actions may even have a negative effect on employee attitudes, insofar as they encourage expectations which cannot be met by him. The data from this analysis of supervisors in a public utility in general support the hypothesis. Under high-influence supervisors, nineteen of twenty-eight correlations between supervisory practices and employee attitudes are positive, though small. Under low-influence supervisors, twenty out of twenty-eight are zero or negative.

Table 6

Relation of Closeness of Supervision of  
Employees to Section Productivity\*

(Sections in an Insurance Company)

	Close supervision	General supervision	Not ascertained	N
Heads of High- Producing Sections	6	5	1	12
Heads of Low- Producing Sections	11	1	0	12

\* The findings in Table 6 are based upon an overall code which defines closeness of supervision as the degree to which the supervisor checks up on his employees frequently, gives them detailed and frequent instructions and, in general, limits the employees' freedom to do the work in their own way. This overall code is derived from the supervisors' discussions of their job.

Table 7

Relation of Men's Perceptions of Pace-setting  
Factors to Individual Productivity

(Employees in an Insurance Company)

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Question: "What is the most important in setting the pace for your work?"

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Employees with productivity of:	Set own pace	Speed of line sets pace	Speed of machines, condition of tools, set my pace	Pressure for pro- duction sets pace	Other, unspecified and not ascertained	T	N
100-119%	46%	14%	17%	9%	14%	100%	327
90-99%	38	12	27	12	11	100	762
80-89%	39	11	27	10	13	100	452
70-79%	38	11	27	9	15	100	269
40-69%	37	5	31	7	20	100	275

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Table 8

Relation of Closeness of Supervision of  
Section Head by his Superior to Section Productivity\*

(Section Heads in an Insurance Company)

	Close or fairly close supervision	Fairly general or quite general supervision	Not ascertained	N
On High Section Heads	2	9	1	12
On Low Section Heads	8	4	0	12

\* Closeness of supervision is based on an overall code, and was defined for coding purposes as the degree to which the section head was given freedom to handle his own problems by his superiors as compared with the degree to which the superior was directly involved in running the section.

Table 9

Relation of Foreman's Perception of Opportunity  
for Planning to Section Productivity

(Foremen in a Tractor Factory)

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Foreman Question: "Are you able to plan your work ahead as much as you would like?"

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Foremen of sections with productivity of:	Can plan ahead as much as needed	Sometimes have trouble planning far enough ahead	Usually can't or hardly ever can plan ahead	Not ascer-tained	Total	N
97-101%	37%	42%	21%	0%	100%	52
91-96%	51	32	17	0	100	71
86-90%	29	41	30	0	100	89
80-85%	29	46	25	0	100	69
50-79%	14	40	46	0	100	35

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### (3) Employee-orientation

A third dimension of supervision which has been demonstrated to be consistently related to productivity is a syndrome of characteristics which can be called "employee-orientation." The employee-oriented supervisor, in contrast to the production-oriented or institution-oriented supervisor gives major attention to creating employee motivation. The specific ways in which he does this may vary from situation to situation, but they contribute to a supportive personal relationship between himself and his work group members. Thus in the railroad study, the workers in high-producing groups more frequently characterized their foremen as taking a personal interest in them and their off-the-job problems. This finding was repeated in a study in heavy industry, in which the high-producing employees reported that their foreman took a personal interest in them. A related finding came from the report of the foremen indicating that the high-producing foremen were more likely to say that the men wanted them to take a personal interest in them, whereas the low-producing foremen were more likely to have the perception that the men resented such a demonstration of interest. It is quite possible that this difference in perception is in part cause and in part effect. The low-producing foreman has a less satisfactory relationship with his employees and he may well be right in thinking that they want no more of the kind of relationship which he offers. At the same time, his conviction that they wish to minimize the relationship undoubtedly contributes to the psychological distance between him and the work group.

Even more consistent relationships were found in those behavior areas which not only reflect smooth interpersonal dealings, but also offer tangible evidence of the supportive intentions of the supervisor. Thus, in the railroad study the high-producing foremen were said by their men to be more understanding and less punitive when mistakes were made. (Table 10) They were also more likely to groom employees for promotion by teaching them new things. (Table 11) In the insurance study, the high-producing supervisors were more employee-oriented and less production-oriented than their low-producing colleagues. The low supervisors emphasized production and technical aspects of the job and tended to think of their employees as "people to get the work done," in contrast to emphasizing training people, taking an interest in employees and considering them primarily as individual human beings. In the same study the supervisors were asked this question: "Some people feel the job of supervisor is tough because they stand between the workers and management. Do you feel that this is a problem?" The high-producing supervisors were predominantly employee-identified, according to their own report. The low-producing supervisors were, for the most part, management-identified. This general statement was borne out by the supervisors' reactions to two aspects of company policy which at the time of the study constituted problems in morale or employee motivation. In both of these areas, the placement policy and the dining room set-up, the high-producing supervisors were more critical and more aware of the situations as sources of employee disaffection than were the low-producing supervisors.



In the study of industrial workers there was a whole cluster of findings which seems to fit this framework. The employees with highest production records were more likely to report a good over-all relationship with their foreman, in terms of the quality of his supervision, the way they got along with him, and the interest he took in them. In addition, they reported good communications with him; they said that the foreman let them know how they were doing, that he was easy to talk to, that it usually helped to talk over a problem with him, and that he took care of things right away. (Table 12) This indicates both a supportive relationship and an effective role in the larger structure. It is perhaps a reflection of the importance of the supervisor's ability to understand and identify with the employees that in this study the foremen who had previously belonged to a labor organization had better production records than those who had not.

In this study also, the employee-identification of the higher-producing supervisors was associated with a greater criticism of certain company policies, although at the same time high-producing supervisors were better satisfied with many aspects of their own jobs, and felt that their own superiors were well pleased with their work. But it was the high-producing foreman who in greater numbers felt that their own supervisors were doing less than a very good job, and were no more than fairly good at handling people.

A number of the supervisory characteristics which we have included in the concept of employee-orientation have important effects upon employee satisfaction as well as productivity. This is particularly true for the foreman's giving reasons for forthcoming changes on the job, demonstrating to employees that he holds other aspects of the work situation to be as important as high productivity, and that his concept of reasonable performance is not excessive. In the tractor company, these characteristics were related to job satisfaction, satisfaction with supervision, and satisfaction with the company as a whole.

A related finding appeared when each employee was asked who in the work situation took the greatest interest in him. The workers who felt that the foreman took the greatest interest in them also were getting the greatest psychological return from their employment in terms of satisfaction with job, supervisor, and company.

There is evidence that the quality of employee-orientation, like closeness of supervision, is in part determined by organizational characteristics and is not merely the reflection of personality traits.<sup>1</sup> For example, the tractor foremen who were reported by their men to make a practice of explaining in advance any changes in the job situation said that they were

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<sup>1</sup> Research findings in this area are reported by Ralph M. Stogdill in "Studies in Naval Leadership, Part II" in Groups, Leadership, and Men, Carnegie Press, 1951 (Harold Guetzkow, ed.)

similarly treated by their own supervisors. The relication of supervisory behavior at successive echelons of large organizations is a phenomenon which deserves further study, particularly to reveal the motivational basis for such behavior and the environmental cues on which it depends.

Table 10

Relation of Men's Perception of Foreman's Reaction  
to Bad Jobs to Section Productivity  
(Section Gangs on a Railroad)

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Question: "What does the foreman do when you do a bad job?"

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	Foreman punitive	Foreman non- punitive	Not ascer- tained	Total	N
Men in High- Producing Sections	35%	54%	11%	100%	156
Men in Low- Producing Sections	50%	36%	14%	100%	142

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Table 11

Relation of Ways Foreman Trains Men for  
Better Jobs to Section Productivity

(Section Gangs on a Railroad)

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Question: "In what way (does the foreman train men for better jobs)?"

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	Teaches men new techniques and duties	Teaches men better or easier ways of doing usual jobs	Doesn't train men	Not ascertained	Total	N
Men in High- Producing Sections	29%	21%	33%	17%	100%	156
Men in Low- Producing Sections	17%	24%	44%	15%	100%	142

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Table 12

Relation of Employee Perceptions of Supervisory Behavior to Productivity  
(Workers in a Tractor Factory)

	<u>Employees with productivity of:</u>				
	<u>100-119%</u>	<u>90-99%</u>	<u>80-89%</u>	<u>70-79%</u>	<u>40-69%</u>
<u>Over-all relationship with foreman<sup>1</sup></u>					
Better than most	24%	21%	17%	16%	14%
About the same as most	71	73	77	76	78
Not as good as most	4	5	5	7	7
Not ascertained	1	1	1	1	1
Total	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>
<u>Foreman interest in employee<sup>2</sup></u>					
Great deal or quite a lot	47%	45%	46%	40%	38%
Little or none	50	54	52	59	61
Not ascertained	3	1	2	1	1
Total	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>
<u>Foreman communication to employee<sup>3</sup></u>					
Always or usually know	59%	60%	54%	49%	55%
A lot of times I don't know or hardly ever know	39	39	45	50	45
Not ascertained	1	1	1	1	0
Total	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>
<u>Foreman accessibility for discussion<sup>4</sup></u>					
Easy to talk to about most things	78%	76%	78%	67%	70%
Hard to talk to about many things	22	22	22	33	29
Not ascertained	0	2	0	0	1
Total	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>
<u>Foreman action following discussion<sup>5</sup></u>					
Usually or always does some good	54%	47%	47%	38%	44%
Sometimes does some good	30	34	35	40	33
Usually does no good or hardly ever does any good	16	18	16	22	22
Not ascertained	0	1	2	0	1
Total	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>
<u>Foreman promptness in taking action<sup>6</sup></u>					
Takes care of things right away	55%	52%	51%	43%	52%
Sometimes takes care of things right away, sometimes doesn't	28	30	28	32	27
Lets things go	16	17	20	25	20
Not ascertained	1	1	1	0	1
Total	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>
<u>Number</u>	327	762	452	269	275

(Footnotes on following page.)

The footnotes in Table 12 refer to the questions asked of the employees:

- 1 "On the whole, how would you say you get along with your foreman?"
- 2 "How much interest does your foreman take in you on the job?"  
(Significant between .05 and .10 level).
- 3 "Does your foreman let you know how you're doing? Do you know where you stand with him?"
- 4 "If you have a problem you would like to talk over with your foreman how easy is it to talk to him?"
- 5 "If you talk over a problem with your foreman, does it do any good?"
- 6 "If there is something that needs to be taken care of, will your foreman do it right away or will he let it go?" (Significant between .05 and .10 level).

#### (4) Group Relationships

The fourth factor which seems to be emerging as a major determinant of productivity in industrial situations involves relationships in the work group. Such a variable was tentatively identified in the insurance study. Employees in the higher-producing groups tended to express a more favorable evaluation of their section (work group) and of their division. This was based on over-all coded ratings of the interview content and also on specific responses to the question "How do you think your section compares with other sections in the company in getting a job done?" Several interpretations of this finding are possible. On the one hand it is conceivable that the employees in high-producing groups were simply reporting what they know to be the objective fact—that their groups had superior work records. However, it is also possible that high involvement in work group was the cause and high productivity the effect. Finally, and perhaps most probably, there is the possibility that pride or involvement in work group and productivity are inter-acting variables, and that an increase in either one tends to bring about an increase in the other.

In the railroad study, both the men and the foremen in high-producing groups evaluated their group performance as better than most, even though they had no formal channels of communication through which to learn of the productivity of other groups. (Table 13)

In the factory manufacturing earth-moving equipment, this area was further explored. It was found that high-producing employees more often said that their groups were better than most others at putting out work. They also reported that they felt they were "really a part of their group," in contrast to the lower producers who were more likely to say that they were "included in some ways but not in others," or that they did not really feel that they were members of the group. Moreover, foremen of the higher-producing groups cited their sections as better than most in the way in which their men helped each other out on the job. Foremen of low-producing groups said their sections were not as good as most in this respect. Nor were these responses merely reflecting some general affect for the group. (Table 14) There was no difference between high and low producers in the characteristics they ascribed to their groups in the areas of skill, know-how, education, and the like. All this tends to support the notion of team spirit or cohesiveness in work group as a factor in productivity.

The relationships in the primary group are also important among the determinants of morale, especially satisfaction with the job and with the larger organization. Workers in the tractor company who reported that they really felt a part of their work group and that they would prefer their present jobs to identical jobs in other groups tended to be high in satisfaction with job and company.

Thus in the area of group relationships as in others, we find that the twin criteria of productivity and morale have many determinants in common. This suggests again that the effect of supervisory behavior on motivation may be basic to understanding productivity differences. Yet the co-existence of high morale and low productivity, or more frequently, low morale and high productivity is sufficiently common so that no consistent relationship between productivity and morale has appeared in any of these research studies. One explanation of this discrepancy has already been suggested, namely that the supervisor can increase productivity in two fairly independent ways: either through his engineering skill or through his ability to motivate his men. Another major explanation is that productivity can be increased in some instances by company practices involving negative sanctions which affect morale adversely.

It is possible also that the lack of a consistently high correlation between morale and productivity in these studies reflects the fact that we are dealing with only one measure of the over-all costs of production--namely, the amount at one point in time. If we were to include the costs of turnover, absence and scrap loss, the correlation with morale might be higher. For example, in the case of a company with high production at a given point in time because of negative sanctions, the impression of over-all efficiency might change if we also had measures of turnover and quality of product.

Table 13

Relation of Employee Evaluation of Work Group  
to Section Productivity<sup>1</sup>

(Employees in an Insurance Company)

	High Pride	Medium Pride	Low Pride	Total	N <sup>2</sup>
Employees in High- Producing Sections	33%	37%	30%	100%	143
Employees in Low- Producing Sections	10%	41%	49%	100%	142

<sup>1</sup> Evaluation of work group is an index score obtained by summing coders' ratings of responses to the following items:

- (a) "How well do you think your section compares with other sections in the company in getting a job done?"
- (b) "How well do you think your division compares with other divisions in the company in getting a job done?"
- (c) An over-all coder rating of the respondent's degree of identification with his section and
- (d) An over-all coder rating of the respondent's degree of identification with his division.

<sup>2</sup> There were 66 employees in high sections and 68 in low sections who could not be coded on one or more items of this index.



Table 14

Relation of Employee Evaluation of Work Group  
to Productivity

(Workers in a Tractor Factory)

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Employee question: "When it comes to putting out work, how does your work group compare to others?"

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Employees with productivity of:	Better than most	The same as most	Not as good as most	Not ascertained	Total	N
100-119%	33%	63%	2%	2%	100%	327
90-99%	32	65	2	1	100	762
80-89%	28	67	3	2	100	452
70-79%	26	67	7	0	100	269
40-69%	21	67	11	1	100	275

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Table 15

Relation of Group Belongingness  
to Productivity

(Workers in a Tractor Factory)

Employee question: "Do you feel you are really a part of your work group?"  
(Significant between .05 and .10 level).

Employees with productivity of:	Really a part	Included in most ways	Included in some ways	Not ascertained	Total	N
100-119%	58%	24%	10%	8%	100%	327
90-99%	56	29	10	5	100	762
80-89%	51	31	13	5	100	452
70-79%	52	28	10	10	100	269
40-69%	46	31	15	8	100	275

## CONCLUSION

We have considered some research findings which suggest four classes of variables to be consistently related to the productivity of an organizational group and to the psychological returns which the group offers its members. These classes of variables--the supervisor's ability to play a differentiated role, the degree of delegation of authority or closeness of supervision, the quality of supportiveness or employee-orientation, and the amount of group cohesiveness--have been developed from a program of studies conducted in complex, ongoing organizations, the majority of them in business or industry.

In reviewing these research findings, one finds confirmation for much of the recent product of small group experimentation by Lewinian psychologists and others. Lewin's work on the decision-making process, the research of Lippitt and White on leadership climate and style, Bavelas' experiments with on-the-job autonomy in pace-setting, the Harwood project of Coch and French, the communications studies of Festinger and his colleagues--all offer results which are in substantial agreement with the findings reported here. Such agreement is especially significant in the light of the differences between most of the small group studies and the work of the Human Relations Program, in method, theory, and research site.

There is much in the experience of the program, however, which reinforces the ideas with which this chapter was begun--that it is necessary to study complex social situations and organizations directly, as well as to attempt laboratory abstractions of their most significant problems and characteristics. This is true not only because such studies facilitate generalization of research results (if they are not phenotypical relationships), but also because a direct grappling with the live organization tends to orient the researcher toward the most real and significant dimensions of organizational structure and function. The study of living organizations, particularly under conditions of change, suggests serious limitations in attempting to understand organizational change in terms of the primary group alone, and even more drastic difficulties in attempting to induce change by dealing only with the primary group. This wholistic emphasis upon the interrelationships in the total structure is of course consistent with the Lewinian point of view.

Primary work groups exist only in a larger organizational context, and many an unsuccessful industrial training program testifies to the almost insurmountable difficulties of producing change by means which fail to take adequate account of that context. To put it another way, the psychological field is an intervening construct and as such is not directly susceptible to manipulation; the field changes when the social psychological environment

changes, and such alterations usually involve broad segments of the organization in addition to the group in which change is proposed. The awareness of industrial employees of these organizational characteristics is great. It suggests, as do many of the research results already discussed, that the full motivation of workers in a complex organizational system can be tapped only when some system of functional representation assures them of an element of control in the larger organization as well as the primary group.

The findings and many of the interpretations presented in this chapter are taken from several of the major studies in the program of human relations research conducted by the Survey Research Center of the University of Michigan. This program is supported by grants from the Office of Naval Research and the Rockefeller Foundation, and by contracts with the organizations in which the studies were conducted. The studies cited were directed by Gerald Gurin, Eugene Jacobson, Robert L. Kahn, Nathan Maccoby, Floyd C. Mann, Nancy C. Morse, and Donald C. Pelz. The results of these studies are presented more fully in the following publications:

Human Relations Research in Large Organizations, Journal of Social Issues, VII, 3 (Issue editors: E. Jacobson, R. Kahn, F. Mann, N. Morse).

Katz, Daniel and Kahn, Robert L., "Human Organization and Worker Motivation" in Industrial Productivity, Industrial Relations Research Association 1951.

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