



Work System Characteristics and Employee Responses: An Exploratory Study

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ABSTRACT

This study is concerned with the problem of detecting and measuring, in simple, practical terms, characteristics of work situations which have significant impact on the satisfactions and attitudes of employees. Ten work group "cases" are described, and questionnaire data from the 50 members of these groups are presented. The key operational concepts are work group structure (organicity), job enrichment elements, personal need-fulfilment and attitudes to quality and productivity. Results indicate that group "organicity" is a potentially important factor in work system design.

INTRODUCTION

Concern about high unemployment and employee turnover and absenteeism in all sectors of the economy has led to some speculation about a decline in "the work ethic". A number of studies attest, however, that the work ethic is alive and well, but that the work itself is at fault — the quality of work life in the industrial and post-industrial world does not meet the psychological and social needs of a large proportion of the working populace (e.g., U.S. Dept. of H.E.W., 19 ; Burstein et al., 1975). The question addressed in this study is the following:

Can characteristic features of work situations be detected and measured, in simple, practical terms, which have significant impact on the satisfactions and attitudes of the employees in those situations?

Partial answers to the question are already to be found in the research literature on job satisfaction, job enrichment, quality of work life, etc. For instance, the "socio-technical system" (STS) approach to the problem has developed an intervention technique and a set of design principles which emphasize that a work organization must be designed not only as a technically effective production system, but also as a vehicle for its members to fulfil their social and psychological needs (e.g., Trist & Bamforth, 1951; Rice, 1958; Emery, 1959; Herbst, 1974; Cherns, 1976; Susman, 1976).

Research stemming from the work of Turner and Lawrence (1965) on "requisite task attributes", and of Herzberg (1966) on "job enrichment", has contributed a "diagnostic" method for assessing perceived characteristics of jobs. As developed by Hackman and others (1)* this method measures employees' own "feedback", "task identity", etc. This line of research is currently

* See Footnotes

developing and expanding to provide a theoretical model of psychological response to work environments, and to include variables such as job involvement (2), job longevity (3), organization structure (4) and personality traits (5).

The 1970's have seen a considerable amount of literature on the "quality of working life" - not only from academic sources, but from government, trade union and management writers. While this literature is certainly relevant to the question under study here, only the empirical and measurement-oriented research that it contains has direct application, and this can be subsumed under the two streams already mentioned - the socio-technical and the job-diagnostic.

The present study takes the position, on practical grounds, that the measurement of work system characteristics needs to be simple yet reliable, and that concepts and measures should be valid in a wide range of different kinds of work. That is, methods should not be intrusive or time-consuming for the subjects, nor specific to certain occupations, industries, etc. The measuring instruments used have been designed or chosen with this in mind. Job characteristics, for instance, are approached through the Hackman conceptual framework, but using a simple questionnaire designed for jobs ranging from professional to low-skilled work.

In addition to characteristics of the job or task itself, this study introduces the concept of work group structure as a potential determinant of attitudes. In addition to job satisfaction and need-fulfilment, it introduces employee attitudes to quality and productivity as dependent variables.

RESEARCH METHOD

1. The Sample

The sample consists of 50 employees, in ten different work groups, selected from four quite different organizations. The work groups were

selected to include routine, manual jobs, clerical jobs of various degrees of complexity; and scientific and technical jobs involving various degrees of problem solving and innovative thinking. None of the jobs has supervisory responsibility beyond that of "working leader" within the group.

TABLE 1 about here

Within each group, occupations are more or less the same; but across groups, occupations cover a wide range of socio-economic and prestige strata (Hall, 1969). The four organizations from which the sample is drawn are: a factory, a hospital, a scientific research foundation and a supermarket chain. This wide cross-sectional diversity has been sought in the expectation that the method and the underlying theory can be applied to all kinds of jobs.

2. The Variables

The main independent variables examined refer to characteristics of the job itself and of the work group in which the job is done. The dependent variables refer to the opportunity an employee has to fulfil psychological needs in his or her job, and to the employee's attitudes to quality and productivity.

2.1 Job Characteristics

Job characteristics were measured in terms of the task attributes: "variety", "autonomy", "task identity" and "feedback", operationalized on the following lines for application across a wide range of occupations:

1. Many different things to do. (Variety 1.)
2. Not a routine, predictable task. (Variety 2.)
3. Not governed by instructions and/or standard procedures (Autonomy 1.)

- | | |
|---|-------------------------------|
| 4. Work independently of others. | (Autonomy 2.) |
| 5. Integral part of department's work | (Task Identity 1.) |
| 6. Not just a cog in a machine. | (Task Identity 2.) |
| 7. Aware of contributing usefully. | (Feedback 1.-
"positive") |
| 8. Fault is traced back to person
responsible. | (Feedback 2.-
"negative"). |

The instrument used is an 8-item schedule of paired-opposite statements, with a 1-to-5 scale between each pair, (See Appendix B). For each of the four attributes, one item has the positive aspect on the right hand side (score 5), and the other item (as above) has it on the left (score 1). Scores are adjusted accordingly. Items are distributed without pattern on the schedule.

2.2 Work Group Structure:

Burns and Stalker (1961) used an "organic-mechanistic" concept to distinguish between rigid, bureaucratic organizations (mechanistic) and flexible, adaptive, network organizations (organic). A scale based on this concept, adapted for small work groups (Meadows, 1980) was used to assess work group structure in this study. The instrument is a nine-item questionnaire which forms the basis of a semi-structured interview; the interviewer scores the subject's responses on a 1-to-5 scale. The nine items cover aspects of the sharing of roles, tasks and responsibilities; participation in planning and decision making; freedom to criticize; and a supportive rather than directive leadership. The variable is called "organicity".

2.3 Employee Satisfaction:

Two short questionnaires were used to measure satisfaction. The first aims at the degree to which certain of an employee's psychological needs are fulfilled by his or her job ("need fulfilment"). The method and format are adapted from Porter's (1961) studies of deficiencies in need fulfilment among managers. Three self-report items describe feelings a person might have in his or her job:

1. The feeling that you can have a say in what your group does, and how.
2. The feeling of learning something, and "growing" in the job.
3. The feeling of getting somewhere, personally.

The second questionnaire calls for self-ratings on "job satisfaction", "pay satisfaction" and "interest", (See Appendix B).

2.4 Employee Attitudes:

While employee satisfaction is clearly a social good, the quality and quantity of goods or services produced is of more direct economic interest. However, across a set of different jobs, relative performance is not so easily measured as relative satisfaction or attitudes. In this study it is assumed that a favourable attitude to quality and a favourable attitude to productivity are probable antecedents to high performance, and also that they might depend upon job characteristics and work group structure. More specifically, the employee's awareness of, and concern for, matters of quality and "output" (i.e., productivity) in the job are taken as indicators of attitudes favourable to job performance.

Questionnaire items were constructed for:

1. General awareness - e.g., "How much does your department expect to get done in (an appropriate time-period: day, week, etc.)?"
2. Awareness of causes and effects - e.g., "What do you think the output rates depend on?"
3. Awareness of own influence - e.g., "How much effect can you, yourself, have on the department reaching its output goals?"
4. Personal concern - e.g., "How important is it to you, to get this much done?"

These questions, and similar set for "quality", were used to guide a semi-structured interview, in which the subject's responses were scored by the interviewer on a 1-to-5 scale. "Awareness" scores range from "no idea" (1) to "few tentative ideas" (3), to "clear and specific" (5). "Concern" scores range from "no concern" (1) to "moderate" (3) to "very strong" (5). (See Appendix B).

2.5 Demographic Variables:

While this exploratory study does not deal primarily with demographic factors, some attention was paid to testing the effects of age, sex and status. The occupations in the sample cover a wide range of socio-economic and prestige status levels; the differences are between groups rather than within groups. Using a classification system developed by Hall (1969), the 10 groups were ranked in order of status. Hall uses a National Opinion Centre survey (U.S.) of occupational prestige, a socio-economic index based on income and education (Duncan), and a U.S. Census Bureau classification of occupations.

3. Procedure

The interviewer observed each of the work groups in action over the course of one day, and discussed its operation with a closely involved supervisor or

manager. A short description of each group was then written, and the group was scored, by the observer, on the four task attributes and on work group structure (organicity).

The same interviewer conducted private interviews with each of the 50 subjects, during working hours, in the course of which the questionnaires were completed. Subjects were assured of confidentiality. Attendance was organized by management in each case, but was not obligatory. All members of the groups concerned who were present on the interview day were included. The schedules on job characteristics and on employee satisfaction were completed, during the interview, by the employees themselves. The schedules on group structure and on attitudes to quality and productivity were completed, during the interview, by the interviewer.

Questionnaire formats are provided in Appendix B.

RESULTS

1. The 10 Case Descriptions

Of the ten work groups described, three work in laboratories, on tasks that require relatively high degrees of skill and training. Two work in office clerical settings, differing as to the interpersonal skill and technical knowledge required. Two groups work in a retail store, and differ mainly in the amount of contact with other people (day and night shifts). Three groups work in a factory; while their tasks are quite different, they have in common that the production technology rules largely what they do, and when.

The case descriptions are provided in Appendix A.

On the basis of the observations, scores were assigned to each group for the independent variables (variety, autonomy, task identity, feedback; organicity).

These scores are summarized in the first two columns of Table 2; "job enrichment" is the unweighted average of the four task attributes.

From the 50 individual questionnaires, attitude and satisfaction data were averaged for each group (need fulfilment, attitude to quality, attitude to productivity). These scores are summarized in columns 3 to 5 of Table 2.

The ten groups were ranked by occupational status, following Hall's system, and are listed in this order in Table 2.

Table 2 about here

1.1 Analysis for Occupational Status

Both organicity of group structure and overall job enrichment tend to vary monotonically with occupational status. Notable exceptions are the "chemists" and the "accounting clerks", who score lower than their status would predict.

Need-fulfilment also varies directly with status, with certain notable exceptions:

(a) the "chemists" scored relatively low on need-fulfilment; this might be explained by their relatively low scores on organicity and job enrichment.

(b) the "warehousemen" scored relatively high on need-fulfilment; it was noted in the interviews that the warehousemen are mainly middle-aged, unskilled men, several of whom expressed sentiments of gratitude at having safe, not-too-demanding jobs. This could explain a general sentiment of satisfaction (= 3.5).

(c) the "day-shift grocery clerks", by contrast, are young men, working in a busy, public environment (stimulating). In the

interviews, several exhibited high aspiration levels and some sentiments of frustration. This group scored lowest of all on need fulfilment (= 1.9), despite their medium status. While the attitude data show no strong pattern of relationship to status, the following points are worth noting:

- (a) the 5 higher-status did score significantly higher in attitude-to-quality than the 5 lower-status groups. (Student's "t", $p < .01$).
- (b) the "day-shift grocery clerks" scored relatively high on both attitudes, and the "warehousemen" scored relatively low. In line with the above argument concerning need-fulfilment, this might be explained by relatively high and low (respectively) levels of arousal and aspiration.

1.2 Analysis by Job and Work Group Characteristics

Organicity, job enrichment and occupational status are clearly correlated with each other in these 10 groups, and the pattern of association with the employee response variables is along the lines noted above. A much larger sample of groups would be needed to adequately test a contingency hypotheses inter-relating organicity, job enrichment and status with the response variables, on a group by group basis. However, the correlation analysis, below, of individual self-report data can also be used to explore the positive association of job enrichment and organicity with need-fulfilment and attitudes.

2. The 50 Individual Employees

Table 3 summarizes the correlations among the variables, based on the individual questionnaire data.

Among the job characteristics, strong convergence is shown only by the two "variety" items, and by the two "task identity" items. In Table 3, each of the 8 items is shown separately, and then as the unweighted sum ("job enrichment").

The "organicity" scale is substantially homogeneous, as found in previous research ($\alpha = 0.89$), and is shown as a single variable.

"Need fulfilment" is also shown as one variable, the three items being correlated ($r = .45, .49, .66; p < .001$). The other satisfaction items are shown separately.

"Attitude to quality" is shown as one variable, the four component items being strongly correlated ($r = .60$ to $.84; p < .001$). "Attitude to productivity" is shown as one variable for the same reason ($r = .54$ to $.72; p < .001$).

TABLE 3 about here

2.1 The Satisfaction Variables

Need-fulfilment tends to vary positively with both variety items, with positive feedback and with organicity of group structure. Interest in the job has a similar pattern of relationships with the independent variables. General job satisfaction varies positively with positive feedback, but negatively with autonomy - 2 (freedom from others). Pay satisfaction shows no significant response to any of the independent variables.

2.2 The Attitude Variables

Attitudes to quality and to productivity appear to respond positively to both variety items, to autonomy-1 (decisions) but not to autonomy-2 (freedom from others), and most strongly to organicity.

Since the variables which mainly affect satisfaction and attitudes are, according to the above findings, "variety", "positive feedback"

and "autonomy-1" in the job itself and "organicity" in the group structure, a multiple regression analysis was performed to see if these effects could be separated. The results are summarized in Table 4.

TABLE 4 about here

Much of the variation in attitudes to quality and to productivity is explained by organicity of group structure and decision-autonomy (i.e., autonomy-1). Task variety contributes something to the quality attitude, but not to the productivity attitude. Positive feedback makes no unique contribution to either. With need-fulfilment and general job satisfaction, however, the picture is different. Much of the variation in need-fulfilment is accounted for by both variety and positive feedback. Organicity, while substantially correlated with the criterion, contributes no unique explanation.

2.3 Effects of Age and Sex

The possible effects of age and sex on satisfaction were also considered. Mean scores on need-fulfilment were compared (a) across four age categories, ranging from under 21 to over 55, and (b) between male and female employees in the non-manual half of the sample. The differences in means were not statistically significant in any of these comparisons, (Student's "t").

DISCUSSION

The characteristics of the work situation that emerge most clearly from this exploratory study, as having a significant impact on employees, are "variety" in the work itself and "organicity" in the work group structure.

The concept of organic structure, with its elements of sharing, participation, etc., implies a variety of activity for each group member. This implied association is confirmed in the case descriptions, where relatively routine work is mitigated by organic structure (e.g., the "Personnel Clerks" and the "Medical Technologists"), and again in the overall sample by the correlation between "variety" and "organicity" ($r = 0.47$, $p < .001$).

"Positive feedback" (recognition of worth) is important to employee satisfaction - more so than "negative feedback" (blame). However, neither kind of feedback, as perceived by the respondents, is correlated with attitudes to quality and productivity. Positive feedback, like variety, is also associated with organic group structure ($r = 0.33$). Those groups in which members appear to interact a lot ("Medical Technologists", "Personnel Clerks", "Engineers") scored highest in feedback, and also in organicity.

"Decision autonomy" is notable among the job characteristics for its positive correlation with attitudes to quality and productivity, although not with the satisfaction variables. "Freedom from others", meaning little call for co-ordination or integration with fellow workers, shows a weak but consistent tendency to correlate negatively with the satisfaction and attitude variables. This may simply mean that knowing one's job more thoroughly than anybody else does not necessarily lead one to get more satisfaction from it; and that the resulting sense of isolation (freedom) engenders a feeling of responsibility, but not of satisfaction or fulfilment. Organicity, which represents a degree of interaction and inter-dependence within a group, correlates more strongly with the response variables than either of the "autonomy" items, in most cases.

This suggests that the idea of self-control and exercising expert skill within an interactive group (Touraine, 1962) might be the important side of autonomy as a job characteristic.

The "task identity" measures failed to correlate significantly with any of the response variables. This could be due to a limitation in the sample; the respondents all showed a reasonably clear perception of their place in the scheme of production, etc., and none seemed to think of their jobs as very trivial. It is possible that workers in other situations (e.g., assembly lines) would respond differently to these items.

The eight items representing "task attributes" did not show the convergence into four factors to the degree suggested by the Hackman & Lawler (1971) conceptualization. Recent research on the dimensionality of task design, using instruments developed from the task attributes concept by Hackman and Oldham (1975) and by Sims, Szilagyí & Keller, (1976), has also shown inconsistency across job-types, (Dunham, Brief & Aldag, 1977). How much of this inconsistency is due to measurement problems, and how much to the underlying constructs, remains to be resolved (Pierce & Dunham, 1978).

The analysis of cases indicates that, by and large, jobs that are more complex, requiring more "professional" training, also have higher occupational status and produce more favourable satisfaction responses from the incumbents. In several cases, however, the satisfaction responses deviate from those predicted by the model. The deviations can be explained in nearly every case by an unusually high or low score on the job and work group characteristics discussed above - notably, organicity of group, variety of tasks and positive feedback; (e.g., "chemists"; "accounting clerks"; "personnel clerks").

The analysis suggests certain hypotheses and areas for future research:

(1) Autonomy is a complex concept. The idea of independence in the face of organizational repression and coercion has had most attention in the research. However, other dimensions of autonomy, such as the expression of

of one's personality, and the plying of a set of personal skills to a whole task within an organizational framework should be developed. The possibility of ungoverned autonomy leading to "anomie" should be considered.

(2) The concept of feedback should be developed, not simply as a channeling back to the worker of output and quality control data, but as a characteristic of the worker's interaction within a network of relationships.

(3) Feedback, autonomy, variety (and, possibly, task identity) operate most effectively through the group interaction an employee experiences. In other words, in their preoccupation with "the work itself", job design researchers and practitioners may be led away from the key unit of analysis and design - the small work group.

(4) The concept of organic work group structure represents a set of relationships between an employee and his co-workers. The job characteristics studied represent a set of relationships between an employee and his work. On the basis of the above analysis, the following testable hypotheses are proposed:

- (a) that, when a group is more organic in structure, it provides to its members more variety of tasks and more informative feedback; also (tentatively) it can provide a stronger sense of task identity, and more autonomy in the "other" senses suggested above.
- (b) that a more organic structure, in combination with these job characteristics leads to higher degree of job satisfaction and more favourable attitudes to quality and productivity and, ultimately, to better performance in general.

Finally, a note on attitudes to quality and to productivity - these two variables were introduced as proxies for performance ratings, which are very difficult to compare across different occupations. Both variables are correlated

positively in the sample with several of the independent variables - notably, with "variety" and "decision autonomy", and with "organicity". This trend cannot be attributed to more training and "professionalism" inculcating a sense of responsibility, because it was noted in the case analysis that no significant distinction in these attitudes could be made between the higher and lower status halves of the sample. Both attitudes are correlated in the sample, positively (if not strongly) with all the satisfaction variables except "pay".

The amount of variance in these attitudes, and their correlation with key variables, suggest that they could be useful general indicators of organizational performance. Possibly, they are of more direct interest to employers than are the satisfaction variables. The connection between attitudes and performance is testable in settings where jobs are comparable and reliable ratings are available. Taken together, these comments strongly recommend the concept and the instruments for further development.

SUMMARY AND CONCLUSIONS

This project set out to explore the relationships among work group and job characteristics and employee attitudes and satisfaction. While the sample taken was small, it was chosen to include a wide variety of occupations. Case observation and description was used as a primary basis of analysis, with correlational analysis of self-report data as a supplement. The case descriptions of work groups not only produced similar conclusions to the correlation analysis, but also serve to clothe the statistical inference of the latter in a practical and illustrative context.

The study has suggested more specific and more interesting hypotheses than it has proved; this is in accord with its objectives, as an exploratory study.

The results suggest the following conclusions, with regard to this small sample.

(1) Personal need-fulfilment, general job satisfaction and interest in work are positively associated with certain job characteristics - particularly, with "variety" and "positive feedback". Satisfaction with pay is not.

(2) Autonomy in the job is a complex concept. As measured here, it is associated only with positive attitudes to quality and productivity - not with satisfaction. Further development of the concept is called for.

(3) Attitudes to quality and productivity are promising proxies for "performance" in this kind of research.

(4) Work group structure, as measured in this study by the "organicity" construct, figures as a potentially important factor in job design.

Footnotes

1. HACKMAN and LAWLER (1971); HACKAMN and OLDHAM (1975).
2. SAAL (1978)
3. KATZ (1978)
4. NEWMAN (1975)
5. RABINOWITZ, HALL and GOODALE (1977).

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TABLE 1

Composition of the Sample

<u>Organization</u>	<u>Work Group</u>	<u>n</u>	<u>Work Setting</u>
Grocery Chain (Head Office)	Personnel Clerks	6	Office
	Accounting Clerks	6	Office
Grocery Chain (Supermarket)	Grocery Clerks (day shift)	4	Store
	Grocery Clerks (night shift)	4	Store
Research Foundation	Engineers (R&D)	4	Laboratory
	Chemists (R&D)	7	Laboratory
Hospital	Medical Technolo- gists	4	Laboratory
Pain Factory	Paint Mixers	5	Factory
	Paint Fillers	5	Factory
	Warehousemen	5	Factory

TABLE 2

Work Groups, scored on
the Main Variables

	Organicity (a)	Job En- richment (a)	Need Ful- filment (b)	Attitude Quality (b)	Attitude Productivity (b)
Chemists	3	3.0	3.2	4.3	3.2
Engineers	4	4.0	4.3	4.4	3.9
Medical Tech- nologists	3.5	3.3	4.7	4.5	4.2
Accounting Clerks	2.5	2.8	3.9	3.6	3.3
Personnel Clerks	3.5	3.3	4.5	3.8	3.8
Grocery Clerks (day)	1.5	2.5	1.9	4.1	4.2
Grocery Clerks (night)	2	1.4	2.8	2.9	2.9
Paint Mixers	1.5	2.1	2.9	2.9	2.0
Paint Fillers	1	2.0	2.5	4.1	4.1
Warehousemen	1	1.6	3.5	2.3	2.3

All scales 1-5 (5 = max.)

a Estimated from observation of group.

b Group mean scores from individual self-report.

TABLE 3

Correlation Matrix

(Pearson Product-Moment Coefficient, "r")

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Variety 1																
2. Variety 2	76															
3. Autonomy 1	21	30														
4. Autonomy 2	00	-05	19													
5. Identity 1	-17	-27	-27	-22												
6. Identity 2	-01	-22	-13	-28	60											
7. Feedback 1	15	-03	10	-07	18	20										
8. Feedback 2	18	-03	06	-01	21	42	21									
9. Job Enrichment	67	50	45	20	22	37	48	55								
10. Organicity	47	43	30	10	-01	00	33	06	51							
11. Need-fulfilment	45	34	08	-06	-25	-18	32	-16	28	30						
12. Job Satisfaction	24	11	-05	-30	02	09	37	30	22	24	53					
13. Interest in job	55	34	09	-07	-14	-02	34	11	38	44	48	54				
14. Pay Satisfaction	-03	-24	-18	-13	07	23	21	23	03	-03	41	32	14			
15. Attitude quality	38	42	39	-11	00	13	15	13	44	55	20	34	49	-01		
16. Attitude productivity	17	20	48	-22	04	16	21	04	31	45	09	36	35	17		

n = 50
 p = .05 r = .24
 p = .01 r = .32
 p = .001 r = .42

TABLE 4

Partial Regression Coefficients, and R²

	Attitude to Quality		Attitude to Productivity		Need-Fulfilment		Job Satisfaction	
	B ^a	F	B	F	B	F	B	F
Organicity	.41	7.97	.35	5.52	.02	.01	.10	.37
Variety (2 items)	.18	1.70	-.08	.33	.44	9.47	.16	1.02
Autonomy - 1	.22	3.11	.40	9.50	-.08	.39	-.15	1.16
Pos. Feedback	-.01	.01	.06	.21	.31	5.53	.35	5.83
Multiple R	.62		.59		.55		.43	
R ²	.38		.34		.30		.19	
Overall F	6.93		5.88		4.82		2.60	
Significance	.000		.001		.003		.049	

^a B = partial regression coefficient (standardized), i.e., BETA.

APPENDIX A

Case Descriptions

THE ACCOUNTING CLERKS

The accounting department of the Regional Head Office of a supermarket chain centralizes the data processing and general accounting of approximately sixty stores, and employs 80-85 people. The small group of 7 persons described here are part of the larger department, but have their own particular duties, supervisor and office.

Their job is differentiated from the routine data processing and bookkeeping; the group assembles statistical data and draws up financial statements for managerial control purposes, and also takes care of payroll, rental and tax payments, inter-departmental billings, etc. Both manual and computer-based accounting methods are involved. Many of the duties require substantial knowledge of accounting methods and of the company in general, and an ability to prepare financial information for higher level management. Punctuality and accuracy of reports, payments and transfers are crucial, and demand a high level of competence and responsibility.

Five members of the group share these main duties, by each specializing in a particular area (e.g., payroll; rental payments; statistical reports). Special knowledge of systems, data sources and people in other departments is required and this makes interchange of duties difficult. When a clerk is absent, work tends to pile up. These five - four female and one male - all have seniority and experience (5 to 18 years). The supervisor devotes much of her time to co-ordinating operations, internally and with the larger department, and concerns herself with the development of her employees. The seventh member is a clerk-typist who provides a general stenographic service to the group.

Job Characteristics:

For most clerks in the group there is some variety of duties and activities, although the same cycle does tend to repeat itself periodically. The requirement for punctilious reporting and detailed knowledge of a special area indicates considerable autonomy, in the sense of personal competence and responsibility, although the framework of standard systems and procedures controls the timing and form of the

work. Individuals can achieve some task identity through collecting data from various parts of the company and presenting it to top management; however, their perspectives are restricted by narrow specialization in their assigned areas. Feedback on individual performance is quite strong, but mainly in the negative sense: missed deadlines and inaccuracies are quickly referred to the guilty party, either directly or through the supervisor.

<u>Estimated score:</u> (high 5, low 1)	Variety	2
	Autonomy	3
	Task identity	3
	Feedback	3

Work Group Structure:

The group operates successfully as a team of expert specialists. Each member has a special set of tasks, more or less jealously guarded, in which he or she cultivates skill, knowledge and contacts. Relations are friendly in the group, but there is little interaction related to the work itself; clerks cannot usually help one another much in absences or overloads; conflicts between work roles occasionally produce interpersonal frictions which require the attention of the supervisor. The opportunity exists, to take part in the group's affairs, but the nature of the work tends to keep the clerks thinking in terms of their own special areas.

<u>Estimated score:</u> (high 5, low 1)	Organicity	2½
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THE CHEMISTS

This nine person group forms part of the Materials Chemistry Department of an independent research and development organization. Their duties include the testing and analysis of a wide variety of materials used in the construction and manufacturing industries, and of effluent wastes.

The group's projects vary from one-time tests to long term testing or research contracts. Any member of the group can engage in technical discussions with a client, actual or potential; however, all formal projects, contracts and reports are handled by or through the supervisor. The group is organized in three sub-

sections, with a scientist in charge of each; projects, are assigned by the supervisor to one or another of these sub-sections according to the type of material or technical expertise involved. The other five members of the group are assigned as subordinates in the three sub-sections according to their personal skills and to the current workloads. Once a project is assigned to a scientist's section, he is responsible for its progress, outcome, cost control, client relations, etc. Those assigned to assist the scientist in charge of the project are directly responsible to him and, indirectly, to the supervisor.

The basis of the group's work is to provide sophisticated skills and equipment which individual firms cannot afford; therefore, the group is under pressure to keep the equipment busy and to utilize the special skills of the staff members. Thus, while the skill level and potential variety of the work is high, there is some tendency to seek repetitive testing jobs, and to confine individuals to their specialities.

Job Characteristics:

Variety, in the sense of having a number of different things to do, is present in all the jobs to some degree; the main restriction is the tendency noted above to view routine or repetitive work as the "bread and butter". Autonomy is also clearly present, although not always evenly distributed; personal skills and competence are important; the part played by automatic equipment and standardized techniques tends to lessen the degree of self control. The opportunity for task identity is evident for the scientists in charge of projects, but less so for their assistants. Feedback on personal performance, in a small group that is formally sub-divided, may be largely confined to the negative kind, such as fixing blame; direct feedback from clients has to find its way through the channels.

<u>Estimated score:</u>	Variety	3
(high 5, low 1)	Autonomy	3
	Task identity	3
	Feedback	3

Work Group Structure:

The group has a formal structure in that three scientists respond separately to the supervisor, and the other members respond to one or another of these three. The calibre of the technical work being high, all staff participate in significant ways; however, individuals tend to be associated more with certain projects and sub-groups than with the group as a whole. The three small sub-groups are more or less organic in themselves, but seem to be relatively separate from one another within the overall group. Most of the authority for planning, decision making and external liaison is with the three scientists and the supervisor.

<u>Estimated score:</u>	Organicity	3
(high 5, low 1)		

THE ENGINEERS

This group of engineers and technologists forms part of the engineering test and development laboratory of an independent research and development organization. Their duties range across the fields of acoustic, electronic and mechanical engineering, and are mainly concerned with instrumentation and testing procedures.

Projects come to the group, usually from outside clients, and are allocated to individual engineers and technologists by the group's supervisor, in consultation with the engineering director. Sometimes, but not necessarily, other group members are consulted in the allocation of projects. Contact with a client may be made by anyone in the group, but the supervisor must be kept informed, and the supervisor makes all contracts and approves all reports.

An engineer or technologist normally has several projects going at the same time, on which he works alone or with a colleague or an assistant. There is a system of rank within the organization which reflects academic qualifications and experience. However, in the group there is no explicit hierarchy of status and authority. Jobs are assigned on the basis of special skill and knowledge, and individuals work together in co-operation rather than in superior-subordinate relationships. Contact with clients and other departments is encouraged, and all members are expected to seek "new business" for the group. Client contact is not restricted to certain ranks or positions. The engineer or technologist is expected to work within a time and cost budget; he can work directly with the

client on technical matters, keeping management informed of progress. The work is often inventive and technically sophisticated, requiring a high level of specialized skill; while not all members have professional academic qualifications, the service provided to clients is clearly a professional one - with all this implies as to ethics, competence and responsibility.

The equipment and facilities used by the group represent a high capital outlay; they often require special expertise for their operation and specialized work to keep them busy. Thus, the technology and the "market" catered to are closely interdependent.

Job Characteristics:

Engineers and technologists work mainly within their specialties, which restricts variety in the job; however, all group members seem to become involved in the full range of client contact, project development and reporting, as well as working at the bench. This wide involvement indicates task identity. The kind of autonomy that comes with the exercise of personal skill and responsibility is also present in the highly technical nature of the work. Technical and administrative responsibility is evident in all the jobs to some degree. Feedback on performance is largely informal, and is strongly enhanced by client contact for all members of the group.

<u>Estimated score:</u>	Variety	4
(high 5, low 1)	Autonomy	4
	Task identity	4
	Feedback	4

Work Group Structure:

There are marked differences in skills, and a division of labour among them; however, there are no formal barriers to members collaborating with one another, taking responsibility, or offering opinions, regardless of formal qualifications. Supervision is general and supportive rather than close and directive. All members are encouraged to take part in most phases of the work, and cost control. Ultimate responsibility for and control of the group is in the hands of the supervisor.

<u>Estimated score:</u>	Organicity	4
(high 5, low 1)		

THE GROCERY CLERKS

The grocery clerks work in a large, modern supermarket in a suburban shopping plaza. The market stocks the conventional mix of foodstuffs and miscellaneous household supplies. Most of the merchandise comes in during the day in trucks; the goods are unloaded by the drivers and taken into temporary storage by the market's receiving clerk. The main task of the grocery clerks is to transfer the grocery supplies to the display counters and shelves. Each clerk takes care of a set of shelves and merchandise assigned more or less permanently to him or her; for example, bread and beverages; paper, pet food and household items. In a typical supermarket, the grocery section includes four or five clerks during shopping hours, and a similar number on night shift, when the store is closed.

The day shift clerk's main job is to keep his shelves looking neat and attractive and filled with merchandise. The items carried and the prices are prescribed by management. The clerk's job is to put those items on the shelves, properly arranged and price-labelled. When a particular item is depleted, the clerk must "flatten down" the shelf (i.e., straighten out the array of remaining stock) and enter the item on the store's re-order list. Then he has to move new stock from storage to his shelf location and replenish the shelves, price-labelling each article as he goes.

The clerks on day shift are expected to assist customers in finding items from anywhere in the store, advising them about products, and generally being helpful. At periods of heavy traffic, they have to help out at the front of the store, packing customers' purchases, rounding up buggies and generally reducing the confusion. These interruptions have welcome aspects; the day's work is broken up into different routines; there is considerable contact with the customers and with the overall operations of the supermarket.

While some staple items move steadily the year around, others vary greatly with the season, the weather and other factors. In coping with irregular supply and demand, the grocery clerk is called upon to use judgment in deciding priorities and re-order points. When in doubt he asks the advice of the grocery manager. The grocery manager co-ordinates the clerks' activities, assigns special tasks

and helps them to organize their work where necessary. The overall operation of the supermarket is administered by the Store Manager, with the assistance of a Bookkeeper.

Night shift clerks work from midnight to morning. They have no customer contact and little contact with other store personnel, including management. The night crew is supervised by a working leader who holds the all-important keys. The task consists essentially of "flattening down" the shelves, breaking out cartons of new merchandise, applying price labels and stacking the articles on the shelves.

The supermarket is a very different place during the night shift. There are no customers to require assistance; no cashiers to see and talk to; no comings and goings; no cash registers sounding; even the parking lot is empty. The store is brightly lit inside; outside the plate-glass front, the world looks dark and deserted. Sometimes a produce truck delivers, at about 3:30 a.m. Apart from that there are no interruptions. The sole task is to straighten and replenish the shelves after the bustle and depletions of the day. The night clerks have music from an all-night radio program; they chat a little and sing a little. The atmosphere is busy but casual. Absenteeism is a problem with the night crew.

Job Characteristics:

The work is fairly routine and repetitive. There is more variety on the day shift, when the customers are in the store. While there exists some call to exercise judgment and discretion (priorities, organization of work, customer enquiries), the clerks are supervised within fairly rigid rules and procedures, particularly on the day shift. The night shift clerks have more freedom to organize and pace their own work (autonomy), but have less variety of tasks and less contact with the general activity of the supermarket (task identity). Feedback is quite strong for day clerks on an informal basis, from customers, co-workers and supervisors; night clerks get little feedback beyond complaints about work left undone.

		<u>Day</u>	<u>Night</u>
<u>Estimated scores:</u>	Variety	2	1
(high 5, low 1)	Autonomy	2	2½
	Task identity	3	1
	Feedback	3	1

Work Group Structure:

The grocery clerks are a group in that their tasks are similar and complementary. However, they tend to work independently of one another, particularly on the day shift; the night shift crew is a more cohesive group and its members are more prone to help one another. The leadership is not strongly centralized; clerks are supposed to take initiatives within a simple framework of duties and regulations; leadership is more formal on days than on nights. Individual clerks have little say in their affairs as a group, or in the supermarket as a whole; the night crew has more say in its own organization than has the day shift.

<u>Estimated score:</u>	<u>Day</u>	<u>Night</u>
(high 5, low 1)	Organicity 1½	2

THE MEDICAL TECHNOLOGISTS

The small group of technologists on whom this description is based work in a blood bank laboratory, located in the hematology department of a large hospital. Samples of blood taken from patients come to the laboratory, each accompanied by a requisition which typically requests blood-type tests to be performed and blood to be delivered for transfusion.

The technologists are trained in the technical and strictly disciplined skills of blood typing. Speed and reliability are, literally, a matter of life and death. The technologists are also required to have a general knowledge of blood chemistry and physiology, and of the medical implications of their work. They are encouraged by their supervisors, in the course of their work, to deal with many kinds of blood samples to widen their practical knowledge and strengthen their confidence and competence. The general rule is for one technologist to deal completely with one sample; however, there is a certain amount of discussion and consultation within the group of each other's work. There is no formal system of assigning requisitions to individual technologists; it is normal for anybody and everybody to do what ever is needed at any time. Fast and effective response is expected by the hospital and accepted as normal by the group.

The group has a formal supervisor (Assistant Chief Technologist), and there are three formal levels of Technologist, reflecting experience and accomplishment. The supervisor and senior levels direct "interesting" samples and problems to

juniors who would benefit by the experience, offer advice and information when needed, and generally see that sound practices are followed. The technologist not infrequently has to confer with doctors or other medical staff; this is done directly and person to person, not through a supervisor.

Job Characteristics:

Variety is not absent, since the requisitions are not all the same and different technical and organizational problems can arise. However, the samples are all blood, the requisitions are of the same general type and the test procedures are standard and routine. Autonomy, in the sense of applying one's own expert knowledge without close supervision, is present. Methods, however, are highly standardized. Task identity is high, in the sense that technologists can feel part of an important life-saving enterprise; their own decisions involve life and death. Yet, they do not ordinarily see the patients whose blood they deal with. Feedback is not evident in any formal sense; however, the norms of fast response, technical reliability and forthright dealings with the doctors are maintained through an active informal feedback system. This can perhaps be best described as a habit of "openness" and directness in dealing with one another.

<u>Estimated score:</u>	Variety	2
(high 5, low 1)	Autonomy	3
	Task identity	4
	Feedback	4

Work Group Structure:

The blood bank group acts as a team; it is normal for whoever is available to attend to whatever needs doing; experience and workloads are shared evenly. The leadership is supportive rather than directive, and tends to co-ordinate the others rather than control them. There is a strong sense among the members of involvement in the affairs of the group, and of representing the group to outsiders. Methods and procedures are strictly standardized.

<u>Estimated score:</u>	Organicity	3½
(high 5, low 1)		

THE PAINT FILLERS

Paint for decorative purposes is usually manufactured in large bulk amounts and then "filled off" into conveniently sized cans for distribution to dealers and customers. The paint fillers have the task of taking a batch of, say, a thousand gallons and packaging it in quart- and gallon-sized cans. The cans have press-on lids and, in the case of gallons, wire handles. Each can bears a label and a code stamp indicating the time and place it was filled.

A filling machine labels the cans, fills them with paint and puts on the lids and handles. The paint filler's task is to "feed" the machine and to take corrective action if something goes wrong. The normal duties of machine tending are clearly defined, standard and routine. However, if the machine is not functioning properly, the operator has to decide whether to fix it himself or to send for help. Most paint fillers have had some training in mechanical repairs and can do simple adjustments and repairs.

The filling department is located on the main floor of an open plan factory. The operators can see the filling operation as part of a chain of processes, from raw materials to finished product. Fillers may transfer to other processes and learn to do the jobs involved. There is no formal job rotation arrangement, but management sanctions transfers for experience wherever possible. Some operators do move around in this way, but others prefer to stay in one job.

The filling department consists normally of four operators per shift. Each filler has his own machine to look after; while they are close enough to each other to consult or chat, they do not ordinarily need to work together. There are up to three shifts a day, depending on the season. A shift supervisor co-ordinates the overall manufacturing operation; the paint fillers respond to a packing and filling supervisor who is responsible to the shift supervisor. All fillers receive the same hourly wage.

Job Characteristics:

The handling of breakdowns introduces a little variety into the job, and involves occasional use of mechanical and problem-solving skills requiring initiative and judgment (autonomy). However, the job is mainly routine, repetitive and specified by simple standard procedures. Operators do not normally get involved in other processes or other parts of the business; however, the overall manufacturing process is

readily visible and comprehensible (task identity). Feedback on the fillers' own performance is limited to pressure to keep the machines running and to complete outstanding orders.

<u>Estimated scores:</u>	Variety	1
(high 5, low 1)	Autonomy	2
	Task identity	3
	Feedback	2

Work Group Structure:

The paint fillers are conscious of being a work group, distinct from mixers, packers, etc. However, they interact little with each other and work independently in comparative isolation. Co-ordination within the group is arbitrary, through a highly centralized formal leadership. Individual fillers have little or no say in how the group operates.

<u>Estimated score:</u>	Organicity	1
(high 5, low 1)		

THE PAINT MIXERS

The main task of the paint mixers is to take the liquid and dry powder ingredients of paint and to mix them, in large batches, ready for use. The ingredients, quantities and operations are carefully specified in advance by formulating technologists. The mixer loads the prescribed amounts of pigments, resins, solvents and "additives", in the correct order, into a mixing tank. This involves some hard manual work (slitting and tipping heavy bags of pigment) and also the operation of electrically powered equipment (solvent and resin pumps, etc.).

The mixer usually works single-handed, on his "own" batch. If something abnormal happens, the mixer might take corrective action himself, or ask a superior or a staff technician for advice or instructions. The actual mixing is done with power equipment; when it is finished the paint is tested by a staff specialist, and then remains in the tank until "filled off" by a separate department (see Paint Fillers). The mixer then cleans the empty tank ready for the next batch. The mixers keep their own work area clean and see that the machinery

is in good working order. Mechanical maintenance and repairs are done by a separate department.

The mixing department supervisor allocates work and equipment according to a prescribed production schedule, and to the availability and know-how of his operators. He allocates work through the "production technicians"; these latter rank somewhat higher than ordinary mixers, and they do some supervising, but they also take part in the general work of the department. The supervisor sees that all mixers eventually learn all the jobs of the department, through instruction and working with others; none of the requisite skills takes more than a few days to learn.

The mixing department works shifts and, since many batches take more than one shift to complete, the mixer who begins a batch does not always see it through to completion. Usually it will be finished by someone else before he comes on duty again.

Job Characteristics:

Variety is certainly present in the range of the mixer's duties. However, the overall pattern is repetitive. While supervision is not particularly close, the mixing operation is so closely bound by standard procedures that the mixer has little call to use his personal skill or initiative. Autonomy, therefore, is rate low. Task identity is moderately high, in that the mixer can easily see how his work fits into the overall work of the factory, of which his mixing role is a major part. The shift change, however, prevents him from seeing batches through from start to finish. Feedback on quality and production achievement is given, but mainly on an informal level; individual operators do not seem to be very aware of performance information.

Estimated scores:

(high 5, low 1)

Variety	2
Autonomy	1½
Task identity	3
Feedback	2

Work Group Structure:

The mixers are an identifiable work group, in that they are aware of belonging together and of having a more or less common task. Leadership and authority appear to be strongly centralized in the supervisor, with some delegation to working leaders (production technicians). Allocation of work is arbitrary and there is little interaction while the job is being done. Operators have little say in what is done or how.

Estimated score: Organicity 1½
(high 5, low 1)

THE PERSONNEL CLERKS

The Personnel Services Group is a department in the Ontario Regional Head Office of a large supermarket chain. The group consists of eight female employees, including a manager, and their function is to maintain records of all personnel in the Region. They do not belong to a union. The work is partly clerical, in the recording, filing, and retrieval of information, and partly personal contact, in the answering of enquiries.

To compile information, the clerks have to collect data on wage rates, standard payroll deductions, benefits, etc., and to enter them into a computer file and a regular office file. The computer file is printed out and checked weekly by the clerks. Whenever an employee has a change of status, such as transfer, termination, marriage, increase in dependents or wage increase, the files must be altered. Most requests for information come from store managers or their bookkeepers - occasionally from outside agencies, or from individual employees.

The work is organized in such a way that each clerk takes care of a group of a dozen or so stores, assigned to her as her "clients". Nearly all the clients require the same kind of services and file the same kind of data. The clerk provides the whole range of information services to her clients; this is in contrast with an earlier arrangement in this department, when the clerks specialised in particular functions, one doing health insurance, another taxation, etc. (see Ontario Ministry of Labour, Employment Information Series, no. 14).

Since all the clerks are able to handle all technical aspects of the work, they can substitute for each other during temporary absences and help each other in peak overloads. This co-operative "smoothing" is a notable feature in the group's atmosphere and the service provided. A new employee is trained by the supervisor and by her fellow employees in the full range of duties. The group holds a monthly meeting to discuss its problems and possibilities for improvement.

Job Characteristics:

While the range of clerical duties is not very wide, each clerk covers the full range, giving the job a moderate amount of variety. The standardized clerical systems restrict personal autonomy; however, the personal relations with their "own" clients, and the informal mutual support among the group members in absences and overloads indicate a degree of self-control and individual initiative. Each clerk handles exclusively the requests that come from her own clients; this encourages a personal involvement in the function of the department, responsibility for satisfying the client's needs, and continuity with recurring or long term problems. The work content, while not of crucial importance, does touch on people's personal lives. The sense of task identity is therefore high throughout the group. In a similar way, close contact with clients leads to direct informal feedback.

<u>Estimated scores:</u>	Variety	2
(high 5, low 1)	Autonomy	3
	Task identity	4
	Feedback	4

Work Group Structure:

Although each of the clerks is assigned a separate group of client stores, there is a strong sense of sharing in the group. That is, the basic work role is shared by all, and there is a norm of mutual support - both moral and technical. The group's leaders help, advise and co-ordinate rather than direct operations; however, they are treated with marked deference. A team spirit and a pride in the group's good service are evident. All members take an active part in deciding group affairs.

<u>Estimated score:</u>	Organicity	3½
(high 5, low 1)		

THE WAREHOUSEMEN

The "finished goods" warehouse is a department of a paint factory. Paint products are stored in the warehouse and shipped out to customers as required. Five or six operators work in the warehouse on each of two shifts, under the direction of a supervisor. The supervisor allocates work to individual operators and decides work priorities in consultation with higher levels of management.

The job of the warehouseman consists mainly of moving cartons of paint from place to place with the help of mechanical lift trucks. Paint from the production line is stacked in labelled racks in coded locations. Customers' orders are picked from the racks and assembled at the shipping dock. Once his task has been assigned to him by the supervisor, the warehouseman works at it alone and with only general supervision until it is completed. There is little need for discussion of the work or for co-operation between operators. In picking and assembling an order the warehouseman exercises some skill and knowledge in finding the items and bringing them together for shipment. An ability to recognize code numbers and to remember locations helps him to work fast and accurately.

In addition to stacking and order-picking, the warehousemen help to load trucks, keep the area clean and tidy, and ensure that the electric trucks are charged and in good working order. Occasionally they do special jobs such as re-labelling stock or tinting white "bases" to standard colours using a tinting machine. The warehouseman sees little of the paint-making process, and has little contact with operators outside his own area. He works with truck drivers, but has no contact at all with dealers and customers who receive the orders that he assembles. When a customer complains about a wrong or damaged shipment, any fault attributed to the warehousemen is brought to their attention indirectly, through management and supervision.

Job Characteristics:

The job involves repetition of the same basic operations; however, the number of different products handled in a day is quite large, and there are different activities involved from time to time (variety). Warehousemen have little decision making to do, but they can exercise some personal skill and memory (autonomy). Their department is relatively isolated, but they have some contact with the outside world through the shipping dock (task identity).

Feedback on performance is occasional and not consistent or personal.

<u>Estimated scores:</u>	Variety	2
(high 5, low 1)	Autonomy	2
	Task identity	1½
	Feedback	1

Work Group Structure:

The group is co-ordinated through a supervisor who assigns work on the basis of available manpower and priority of orders. Warehousemen work independently and do not co-operate much. They consult on operating safety, but not on other group matters.

<u>Estimated score:</u>	Organicity	1
(high 5, low 1)		

APPENDIX B

JOB CHARACTERISTICS

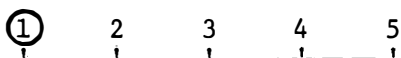
On the next page you will find eight pairs of statements, with a numbered scale between each pair.

Each pair of statements refers to a certain characteristic of a job. They could apply to any job.

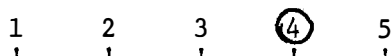
The statement on the left describes one extreme, and the statement on the right describes the opposite. Some jobs would be at one extreme or the other, but most jobs would be somewhere in between.

Think about your own current job. Decide where your job falls on the scale between the two statements.

For instance, if you think the statement on the left describes your job perfectly, and the one on the right is completely wrong, then put a circle around the "1" on the scale, so:



But, if you think the truth lies closer to the other statement, on the right, but not quite so extreme, you might circle the "4", so:



and so on.

Do the same for each of the eight items. There are no right or wrong answers. Your opinion is what is wanted.

Please note: The scores you give will be kept strictly confidential.
No need to put your name on the page.

JOB CHARACTERISTICS

- | | | |
|--|--|--|
| 1. I get a lot of different kinds of things to do. | 1 2 3 4 5
└───┬───┬───┬───┬───┘ | My job consists of repeating the same thing over and over. |
| 2. I get frequent reports on how my efforts are contributing to the overall achievement of the department. | 1 2 3 4 5
└───┬───┬───┬───┬───┘ | I am not aware of how (or if) I am contributing usefully to the overall achievement of the department. |
| 3. I work by detailed instructions and/or standard procedures. | 1 2 3 4 5
└───┬───┬───┬───┬───┘ | I have to make nearly all the decisions about what I do in my job. |
| 4. My own job is a large part of what my department does. | 1 2 3 4 5
└───┬───┬───┬───┬───┘ | My job is just a very small cog in a very large machine. |
| 5. My job is mostly routine. | 1 2 3 4 5
└───┬───┬───┬───┬───┘ | I never know what I'll have to do next. |
| 6. My job is not really related to what the rest of the department does. | 1 2 3 4 5
└───┬───┬───┬───┬───┘ | It is easy to see how the work I do fits in to the overall job of the department. |
| 7. I can go pretty much my own way in doing my job. | 1 2 3 4 5
└───┬───┬───┬───┬───┘ | My work requires me to co-ordinate what I do closely with other people. |
| 8. If unsatisfactory work is turned out, the fault is never traced back to the person(s) responsible. | 1 2 3 4 5
└───┬───┬───┬───┬───┘ | If a person turns out poor work, he or she very soon hears about it. |

STRUCTURE QUESTIONNAIRE

Is there a system in your group for allocating jobs (work) to individuals?	1	2	3	4	5	__	041
Do you get a "piece" of the task to work on alone, or do you normally work as one of a team?	1	2	3	4	5	__	042
How is it decided, when a new job (batch, programme, etc.) comes up, just what part <u>you</u> will play?	1	2	3	4	5	__	043
In the normal course of your work, is it always quite clear to you what you are <u>not</u> expected to do?	1	2	3	4	5	__	044
In your group (department, etc.), is it very clear who is in charge at all times?							
Is he (she) always the one who has most influence in deciding what to do in any matter concerning the group (department, etc.)?	1	2	3	4	5	__	045
Do you spend a lot of time dealing with people (i.e., consulting, discussing, instructing, keeping informed, etc.)?							
Are most of these personal dealings with (a) your own supervisors and/or subordinates, or (b) other people?							
Are the communications you receive from your supervisors mainly (a) orders and instructions, or (b) information and advice?							
If you have subordinates, what do you give them?							
What would you say is the overall proportion of a/b?	1	2	3	4	5	__	046
When decisions are made in your group (dept., etc.), about how things will be done, when and by whom, do you play an influential part in the discussion and planning?	1	2	3	4	5	__	047
Do you ever voice disagreement with these decisions?	1	2	3	4	5	__	048
Do you feel free to criticize other members of your group (department, etc.)?	1	2	3	4	5	__	049

Response guidelines for Structure Questionnaire

- 041 1 Yes, definitely a system
 3 In a general way
 5 None at all
- 042 1 In isolation
 3 Co-operation
 5 Team approach
- 043 1 I don't know
 3 The boss decides (workload)
 5 I negotiate it
- 044 1 Yes, very clear
 3 Not always
 5 No guidelines at all
- 045 1 Yes, definitely
 3 Open to suggestions
 5 No, others usually are
- 046 1 entirely O & I
 3 About 50/50
 5 entirely I & A
- 047 1 Yes, definitely
 3 Sometimes; somewhat
 5 Not at all
- 048 1 Yes, often
 3 Occasionally
 5 Certainly not!
- 049 1 Yes, certainly
 3 Doubtful
 5 Certainly not!

SATISFACTION QUESTIONNAIRE (1)

The six items listed below describe feelings a person might have in their job. Consider your own feelings about the job you now have. Please answer the three questions about each item by putting a circle around a number on the 7-point scale.

Score 1 for "hardly at all"; 7 for "a great deal"; 4 for "a moderate amount" and so on.

1. The feeling that you can have a say in what your group does, and how.
How much is there now? 1 2 3 4 5 6 7
How much should there be? 1 2 3 4 5 6 7
How important is this to you? 1 2 3 4 5 6 7

2. The feeling of learning something, and "growing" in the job.
How much is there now? 1 2 3 4 5 6 7
How much should there be? 1 2 3 4 5 6 7
How important is this to you? 1 2 3 4 5 6 7

3. The feeling of getting somewhere, personally.
How much is there now? 1 2 3 4 5 6 7
How much should there be? 1 2 3 4 5 6 7
How important is this to you? 1 2 3 4 5 6 7

SATISFACTION QUESTIONNAIRE (2)

Would you please answer the following questions by putting a check-mark against the response that you feel is nearest to the truth as you see it.

4. Do you feel your job is reasonably well paid?
 well paid
 not too bad
 poorly paid

5. Generally speaking, are you satisfied with your job?
 very satisfied
 moderately
 not satisfied

6. Do you find your work interesting?
 very interesting
 moderately
 not interesting

Comments:

ATTITUDE QUESTIONNAIRE

1. QUALITY

Does your department have to pay a lot of attention to how good the (product) is that they turn out? (A) 1 2 3 4 5 __ 021

Do you care much, personally, about this kind of thing? (B) 1 2 3 4 5 __ 022

Can you state some of the things your dept. can actually do to make sure the (product) is good? (A) 1 2 3 4 5 __ 023

How much effect can you, yourself, have on the quality of the (product)? (A) 1 2 3 4 5 __ 024

2. OUTPUT

How much work does your department expect to get done in a day (a week, etc.)? (A) 1 2 3 4 5 __ 031

How important is it to you, to get this much done? (B) 1 2 3 4 5 __ 032

What do you think the output rates depend on? (A) 1 2 3 4 5 __ 033

How much effect can you, yourself, have on the department reaching its output goals? (A) 1 2 3 4 5 __ 034

Scale "A"

No idea	1
Vague generality	2
Few, tentative ideas	3
Definite; unclear	4
Clear; specific	5

Scale "B"

No concern	1
Slight concern	2
Moderate concern	3
Strong concern	4
Very strong concern	5

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