

Pay Comparability in the 1960s and the 1970s

FINAL REPORT

By:

Oscar Harrison
Cathy Card
Frances Mushal
Linda Pappas
Dean Salpini

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A SUBSIDIARY OF FLOW GENERAL INC.

7655 Old Springhouse Road, McLean, Virginia 22102

Prepared For:

Office of the Assistant Secretary
of Defense (MRA&L)
Washington, D.C., 20310
Contract No. MDA903-79-C-0208

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SECTION 1
INTRODUCTION

BACKGROUND

This report documents the results of the General Research Corporation (GRC) study of nonpecuniary factors that potentially warrant consideration in the Federal approach to pay comparability.

Pay comparability as the approach to adjusting General Schedule pay rates resulted from the Salary Reform Act of 1962. This act established Federal pay comparability based on private sector pay. The mechanism for implementing this process was established with the Pay Comparability Act of 1970 and was further endorsed in 1976 by the President's Panel on Federal Compensation (Rockefeller Commission).

Although a comparability method exists for determining Federal pay, there is reason to suspect that the comparability principle, as currently employed, is inadequate. The changing work ethic (philosophy of work) in America suggests that a pay comparability approach established 5 or 10 years ago requires reexamination today. Specifically, the comparability concept may still be valid, but the "elements" measured to establish comparability may change over time. Today's increased emphasis on noncash benefits and nonpecuniary factors suggests that these deserve consideration in the comparability process.

STUDY OBJECTIVE

The objective of this study was to identify nonpecuniary factors that may be worthy of consideration in the Federal pay comparability process. In order to meet this objective, the contractor was required to perform the following tasks:

- Meet with the Contracting Officer's Technical Representative to discuss the project approach.
- Conduct a thorough review to identify which nonpecuniary factors have been addressed in the literature.

- Chart the development of the use of nonpecuniary factors as work rewards.
- Identify the major and minor nonpecuniary factors to provide the basis for further research.

The contractor was also required to submit an interim and a final report. This report is responsive to that requirement.

ORGANIZATION OF THE REPORT

The sections which follow will address the study findings in detail (Section 2) and provide conclusions and recommendations (Section 3).

SECTION 2

NONPECUNIARY FACTORS AND PAY COMPARABILITY

DEFINITIONS

As an aid in research, it was essential at the outset to define the reward categories. Three were identified. They are defined below and itemized in Table 2.1.

- **Cash Benefits:** Includes salary, wages, and bonuses received directly by the employee. These are the most basic elements in the compensation package and are the basis for the comparability comparison established in the Salary Reform Act of 1962.
- **Noncash Benefits:** These are the commonly called "fringe benefits": goods, services, or deferred money received by the employee but paid for (at least in part) by the employer. They include such items as medical insurance, holidays, paid vacations, pension plans, sick leave, and death benefits.
- **Nonpecuniary Factors:** Factors which are not directly tied to wage and benefit packages but may be considered as part of a job's "compensation package." Some can be physically identified and impose clear-cut costs on the employer (e.g., health and safety of the work place). Other job-related factors are difficult to measure quantitatively and to evaluate and may or may not impose employer costs (e.g., the effects of training on promotion and job security). Still others fall in more subjective categories which involve the measurement of attitudes and perceptions regarding work, a particular organizational setting, and the desirability of certain kinds of work. Those factors affecting career progression and job security are of particular interest to this study.

LITERATURE SEARCH

A thorough review of available literature addressing any aspect of nonpecuniary pay factors was conducted by the GRC project team. The 15 libraries in the Washington metropolitan area listed below were visited during this task.

TABLE 2.1
POTENTIAL COMPENSATION ITEMS PROVIDING BASIS FOR COMPARABILITY

<u>Noncash Benefits</u>		<u>Selected Nonpecuniary Benefits</u>	
<u>Insurance</u> . Medical . Life . Disability . Liability Vacations Holidays Retirement plans Recreation facilities Cafeterias/dining rooms Child care facilities Profit sharing Severance plans Death benefits Company cars Parking Paid professional/trade activities	<u>1. Opportunity for Advancement</u> Closed or open personnel structure Competition basis for recruitment In-house training for advancement Off-job training for advancement Opportunities for disadvantaged groups . Racial and ethnic minorities . Women . Handicapped . Veterans Importance of prior education for advancement	<u>2. Job Security (Cont.)</u> <u>b. Personal Stability</u> Relocation rate within organization (requiring geographical move) Travel rate . Percentage of negative income for community . Amount of travel during work day . Travel for a duration over 24 hours Travel frequency Accountability for performance Opportunity to change jobs both intra- and inter-organizationally	
<u>Cash Benefits</u> Salary Wages Bonuses	<u>2. Job Security</u> <u>a. Work Stability</u> Tenure Ease of firing (including length of grievance procedures, if any) Rate of temporary lay-offs Weighting for seniority Union (collective security) Quit rates Length of queue	<u>3. Situational Factors</u> Psychological and emotional discomforts of work (rigid management environment, poor worker relations) Hours of work . Overtime (required or volunteer) . Flexitime . Shift work Pressure/work load Intrinsic value of work . Sense of challenge . Use of talent/training . Sense of accomplishment . Recognition for work . Self-development . Prestige . Meaningful and worthwhile work Physical and health hazards	

AFL-CIO Library

Army Library

Department of Commerce Library

Department of Health, Education, and Welfare Library

Department of Labor Library

Department of Transportation Library

International Labor Office Library

National Labor Relations Board Library

Office of Personnel Management Library (formerly Civil Service Commission)

American University Library (including Law Library)

Catholic University Library

General Research Corporation Library

George Mason University Library

George Washington University Library

Georgetown University Library

The bibliography resulting from this extensive literature search contains 454 items which have been categorized as follows:

- Primary sources (174 items): Includes books and articles which specifically address nonpecuniary factors in some manner, i.e., noncash benefits, nonwage benefits, job satisfaction indicators (Appendix A).
- Secondary sources (71 items): Includes books and articles addressing primarily such topics as social accounting, employee compensation, training, etc., but contain significant references to or insights into nonpecuniary factors (Appendix B).

- Identified but not examined (209 items): These have been identified by titles from library catalogues or by being references in primary and secondary sources above. Time, however, precluded examination of these items. They are included here as a basis for future research (Appendix C).

As a guide, a literature search model was devised. The model served to focus the researcher's attention on the key elements of information needed, promoted uniformity in data collection, and facilitated data reduction and evaluation. For representative samples of models completed on primary source documents, see Appendix D.

HISTORICAL DEVELOPMENT

The bulk of the research of interest to this study has as its driving interest the concern of psychologists, sociologists, and management with the work-related attitudes of the American worker. Consequently, these works deal with factors affecting employee morale, job satisfaction and dissatisfaction, and worker motivation.

In the first half of this century, concern with worker-related attitudes of Americans was confined almost exclusively to management publications, courses in industrial psychology, and a few scholarly books and journals. In the early 1950s, however, these attitudes began to take on greater significance. In the 1970s they have become a major topic of public discussion, as well as a growing concern of management, government, and organized labor. Part of this increasing concern stems from the belief that the mood of the American work force is changing and that well-tried solutions are no longer adequate for many newly emerging problems confronting workers and their employers.

Research concerned with job satisfaction dates back as far as Hoppock's 1935 community survey of working adults.¹ That it continues at

1

Robert Hoppock, Job Satisfaction (New York: Harper, 1935). Although designed with productivity measurement in mind, the Hawthorne studies in 1924 identified factors affecting job satisfaction as a by-product.

a steady rate is evident in the results of a 1974 literature search conducted by the American Psychological Association, which revealed that 556 reports concerning job satisfaction were published between 1967 and 1972.¹ Our in-depth literature review revealed a gradual increase from the 1940s until the present in the diversity of interest in the nonpecuniary factors related to employee attitudes and job satisfaction. This is demonstrated in Table 2.2. The bibliographies in Appendixes A and B are the data sources for Table 2.2

Two widely publicized and referenced studies of the 1940s were conducted in 1947 by the National Industrial Conference Board (NICB)² and General Motors Corporation (GMC).³ In the National Industrial Conference Board study each employee in six manufacturing plants (located in the east, south, midwest and west) was asked to go through a list of 71 morale factors (Appendix E) and to select and check the one felt to be the most important. Employees were asked to repeat this process until five selections were made. The results revealed the following factors to be the composite first choice of all six participating companies (listed in order of preference):

- Job security -- employment stabilization
- Compensation (base pay)
- Type of work
- Opportunities for advancement in the company
- Profit-sharing plans (excluding employee savings plan)

The next five factors rounding out the top ten ranked factors include:

- Supervisor's temperament and personality
- Vacation and holiday practices

¹Edwin Locke, "The Nature and Consequence of Job Satisfaction," Handbook of Organizational Psychology, Rand McNally, New York, 1974.

²Factors Affecting Employee Morale (Studies in Personnel Policy No. 85), New York: National Industrial Conference Board, 1947.

³C. E. Evans and La V. N. Laseau, My Job Contest (Personnel Psychology Monograph No. 1), Washington: Personnel Psychology, Inc., 1950.

TABLE 2.2
HISTORICAL DEVELOPMENT OF INTEREST IN NONPECUNIARY FACTORS

Nonpecuniary Factor	1940-1950	1951-1960	1961-1970	1971-to date
Opportunity for advancement	X	X	X	X
Opportunities for disadvantaged groups	X		X	X
Job security	X	X	X	X
Hours of work	X	X	X	X
Working conditions	X	X	X	X
Relations with co-workers	X	X	X	X
Nature of supervisor	X	X	X	X
Kind of work	X	X	X	X
Company identification (morale)	X	X	X	X
Lack of feedback	X		X	X
Job satisfaction	X	X	X	X
Competition basis for recruitment		X		X
Importance of prior education for advancement		X		X
Union		X	X	X
Quit rates		X	X	X
Relocation rate within organization		X		X
Travel rate		X	X	X
Accountability for performance		X	X	X
Pressure workload		X	X	X
Intrinsic value of work		X	X	X
Sense of challenge		X	X	X
Use of Talent/Training		X	X	X
Sense of accomplishment		X	X	X
Recognition of work		X	X	X
Self development		X	X	X
Prestige		X	X	X
Meaningful and worthwhile work		X	X	X
Physical and health hazards		X	X	X
Job enrichment		X	X	X
Work autonomy		X	X	X
Grievance system		X		X
Social stress/concern		X	X	X
Participative management		X	X	X
Community conditions		X	X	X
In-house training for advancement			X	X
Opportunity to change jobs inter/intra-organizational			X	X
Psychological and emotional discomfort of work			X	X
Flexitime			X	X
Adequate resources			X	
Rational working hours			X	
Off-Job training for advancement				X
Tenure				X
Ease of firing				X
Length of queue				X
Weighting for seniority				X
Rest breaks				X
Noise level				X
Air conditioning				X
Pleasant and clean surroundings				X
Second career development program				X

- Practice of informing employee of job status (both success and failure)
- Physical working conditions (on-the-job)
- Employee merit or performance rating (an organized and systematic way of appraising performance)

The NICB survey was highly directive inasmuch as employees were limited to the rating of factors in a list prepared in advance by the investigators. The procedure employed by GMC, involving letters written by employees in a competition for prizes known as "My Job Contest," was designed to be less directive. It provided an opportunity for employees to project their attitudes, sentiments, and feelings with respect to their jobs and surrounding conditions under the theme "My Job and Why I Like It." Nevertheless, the results were strikingly similar, as shown in Table 2.3.

These surveys, although different, demonstrated that many objects and situations in the working environment promote or interfere with the satisfaction of personal needs and wants. They also showed that motivation, as expressed through attitudes and sentiments, is far from being solely or primarily a function of basic wages or of wage incentives. In fact, among the most significant findings of psychological research in industry is the clear-cut demonstration that nonfinancial incentives play a tremendous role in satisfying workers' needs and wants. "There seems no question that, particularly as wages rise above the subsistence level and standards of living are raised, other needs and wants, satisfied by plant conditions other than pay, attain higher levels of prepotency."¹

The job satisfaction of the American work force has never been measured as systematically or as continually as have wages, hours, employment, or unemployment. It is, in fact, only as part of recent efforts to develop "social indicators" or to monitor the "quality of life" that any repeated measurement of job satisfaction has even been considered. Virtually all of the thousands of earlier measurements of job satisfaction

¹ Morris S. Viteles, "Motivation and Morale in Industry," W. W. Norton and Co., Inc., New York, 1953, p. 385.

TABLE 2,3
IMPORTANT JOB FACTORS

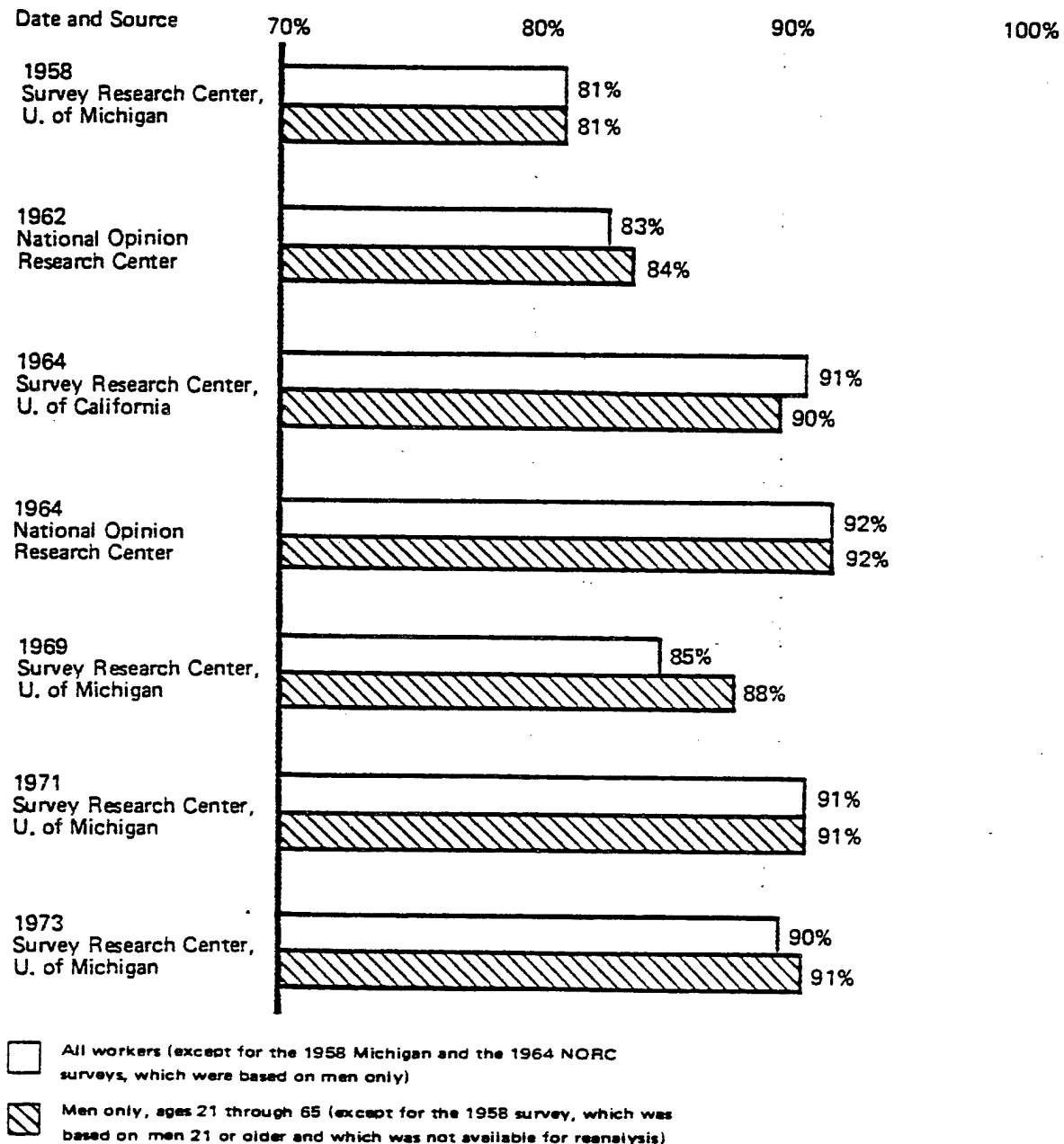
NICB - Five Most Important Factors		GMC - My Job Contest	
<u>Factor</u>	<u>Percent Rating By Employees Of All 6 Companies</u>	<u>Themes</u>	<u>Percent Mentioned</u>
Job security - employment stabilization	44.7	Security	22.8
Compensation (base pay)	27.9	Wages	40.9
Type of work	18.8	Work type	33.7
Opportunity in the company to advance	30.7	Opportunity for advancement	25.6
Profit sharing plans (excluding employee savings plans)	18.7	Benefits from wages	21.5

have been circumscribed by their application to unique populations of workers or by the tendency of most investigators to develop their own job satisfaction measures. The number of measures that have been used repeatedly and that have even modestly respectable credentials is small. However, during the period 1958-73, seven national surveys of workers were conducted by three organizations: the National Opinion Research Center, the Survey Research Center of the University of California, and the Survey Research Center of the University of Michigan. It is, therefore, possible to obtain some idea about national trends in overall job satisfaction by comparing the results of these surveys. All of the surveys asked essentially the same single job satisfaction question, "All in all, how satisfied are you with your job?"

The percentages of workers in the seven research center surveys reporting that they were satisfied with their jobs are shown in Figure 2.1. Spanning a 15-year period from 1958 to 1973, the surveys show that job satisfaction for the working population as a whole increased between 1962 and 1964 and remained high for the last 9 years of the period except for a dip in 1969 that remains to be explained. The shaded bars of Figure 2.1, based on the same surveys, are restricted to men 21 through 65 years old, and show the same trend as for the working population as a whole.

While such job satisfaction trend information is useful and interesting, it is inadequate as a basis for programs and policies intended to improve the conditions under which people work, to effect better job-worker match, to alter the behavior of workers, or to adjust compensation packages. These policies and programs must necessarily be based on more definitive information (or failing that, assumptions) about what workers want from their jobs. Most available information concerning the relative importance of job facets comes from studies wherein workers were asked to rate or rank job facets in terms of how important they are in an ideal or desired job. In the 1969-70 Survey of Working Conditions,¹ importance

¹Robert P. Quinn et al., Survey of Working Conditions, Document 2916-0001, US Government Printing Office, Washington, D.C., 1971.



Source: Quinn, Robert P., Job Satisfaction: Is There a Trend? Manpower Research Monograph No. 30, US Department of Labor, Manpower Administration, US Government Printing Office, Washington, D.C., 1974.

Figure 2.1. Percentage of "Satisfied" Workers, 1958-1973, Based on Seven National Surveys

ratings of 23 factors were obtained from a national probability sample of American workers. The percentages of all workers sampled who rated each facet as "vary important" are shown in the first column of Table 2.4. Table 2.4 assigns each job facet to one of five general areas: Having adequate resources to do one's work, financial rewards, challenge, relations with coworkers, and comfort.¹

Although none of the five general aspects of the job embodied in the five areas was conspicuously more important to the total sample than the others, all four job facets concerning resources appeared among the most highly rated facets, and two of them, "I receive enough help and equipment to get the job done" and "I have enough information to get the job done," were respectively the second and third most important facets. Adequate resources are vital for adequate job performance and, therefore, may be viewed not as ends in themselves, but as instrumental to the procurement of many economic and noneconomic occupational rewards.

Adequate job performance is, at least in principle, one determinant of income. Moreover, the intrinsic satisfaction a worker obtains from his or her job is likely to be quite limited if the work is not done well. Since resource adequacy may be essential to workers with a variety of motivational orientations toward their jobs, it emerges as an aspect of the job that is of considerable importance to most workers.²

The ratings in the first column of Table 2.4 indicate that most of the job facets included in challenge were more important to the total sample than those involving comfort. In fact, comfort was the least important of all five general aspects of the job.

If most workers were primarily concerned with receiving good pay for the expenditure of as little energy as possible, the observed ratings of the comfort facets would have been higher, since comfort generally

¹This assignment was based upon a factor analysis of importance ratings. The factor analysis and data pertinent to its replicability are available in Robert Quinn and William Cobb, Jr., What Workers Want: Factor Analyses of Importance Ratings of Job Facets (Ann Arbor, Mich.: Survey Research Center, 1971).

²Quinn, op. cit.

TABLE 2.4
PERCENTAGE OF WORKERS RATING JOB FACETS AS "VERY IMPORTANT" TO THEM

Job facet	All workers (N=1500) ¹	White-collar workers (N=730) ¹	Blue-collar workers ² (N=685) ¹
<u>RESOURCES</u>			
I receive enough help and equipment to get the job done	68.4	64.5	71.9
I have enough information to get the job done	68.1	67.4	68.5
My responsibilities are clearly defined	61.2	57.6	64.6
My supervisor is competent in doing his job	61.1	59.7	63.0
<u>FINANCIAL REWARDS</u>			
The pay is good	64.2	57.4	72.5
The job security is good	62.5	54.2	71.5
My fringe benefits are good	50.6	39.7	62.4
<u>CHALLENGE</u>			
The work is interesting	73.0	78.5	68.2
I have enough authority to do my job	65.6	66.8	63.5
I have an opportunity to develop my special abilities	63.3	69.4	57.2
I can see the results of my work	61.7	60.0	63.8
I am given a chance to do the things I do best	54.3	54.0	55.0
I am given a lot of freedom to decide how I do my work	52.9	56.4	49.8
The problems I am asked to solve are hard enough	30.4	31.2	29.3
<u>RELATIONS WITH COWORKERS</u>			
My coworkers are friendly and helpful	63.4	60.9	67.0
I am given a lot of chances to make friends	44.0	39.3	48.6
<u>COMFORT</u>			
I have enough time to get the job done	54.4	47.7	60.3
The hours are good	50.8	41.0	61.6
Travel to and from work is convenient	46.2	42.4	49.7
Physical surroundings are pleasant	40.2	32.3	47.8
I am free from conflicting demands that other people make of me	33.1	25.8	40.0
I can forget about my personal problems	30.8	26.5	35.3
I am not asked to do excessive amounts of work	23.0	15.7	29.5

¹ Base N's vary slightly from row to row due to nonresponse to individual questions.

² Farmworkers have been excluded.
SOURCE: 1969-70 Survey of Working Conditions.

reflected a desire for a rather "soft," undemanding, and trouble-free job. Good pay was indeed of considerable importance to workers, but at the same time they desired jobs that were interesting and personally rewarding. Workers, in other words, were highly concerned both with the economic and noneconomic aspects of their jobs. Their noneconomic concerns, however, were less with avoiding interesting, challenging employment than with securing it.

The information contained in a 1976 statistical report of the Department of Commerce¹ concerning the relative importance assigned to particular job characteristics provides some additional insights into factors which underlie overall job satisfaction. As shown in Table 2.5, a survey conducted by the National Opinion Research Center of the University of Chicago identified the relative importance of five selected job characteristics in 1973-74. According to this survey the meaning of the job (that is whether it is important and gives a feeling of accomplishment) clearly ranks first in importance among the five factors specified. Second in importance is the opportunity for advancement (promotion). Income ranks third, job security fourth, and hours of work ranks fifth.

The studies cited herein are fairly representative of the research efforts of psychologists, sociologists, and managers during the past four decades. As illustrated by Table 2.2, it has been a dynamic period in which employee benefits have expanded rapidly. Viteles' assertion in 1953 that "as wages rise above the subsistence level and standards of living are raised, other needs and wants, satisfied by plant conditions other than pay, will attain prepotency"² has been substantiated. Employees and unions have shifted their emphasis from wages and fringe benefits to non-wage facets of work such as the opportunity for advancement, training, hours of work, job security, adequate resources, and the intrinsic values of work.

¹US Department of Commerce, Bureau of the Census, Office of Federal Statistical Policy and Standards, Social Indicators 1976, Washington, D.C., 1977.

²Viteles, op. cit.

TABLE 2.5
RELATIVE IMPORTANCE OF FIVE SELECTED JOB CHARACTERISTICS: 1973-74 AVERAGE
(Percent)

Job Characteristic *	Total	Most Important	Second in Importance	Third in Importance	Fourth in Importance	Fifth in Importance
Meaning.....	100.0	<u>51.2</u>	17.6	12.7	11.0	7.5
Promotion.....	100.0	18.1	<u>36.4</u>	23.0	13.2	9.3
Income.....	100.0	18.5	22.3	<u>30.6</u>	20.0	8.6
Security.....	100.0	7.2	12.6	19.6	<u>29.0</u>	31.6
Hours.....	100.0	4.8	10.8	13.4	25.9	<u>45.1</u>

Source: National Opinion Research Center (NORC) University of Chicago, National Data Program for the Social Sciences, Code Book for the Spring 19-- , General Social Survey (1973 and 1974). Copyright by NORC. Used by permission.

*Job characteristics - The question wording was as follows: "Would you please look at this card and tell me which one thing on this list you would most prefer in a job?" "Which comes next?" "Which is third most important?" "Which is fourth most important?" The specific characteristics listed are identified as follows: MEANING - "Work important and gives a feeling of accomplishment." PROMOTION - "Chances for advancement." INCOME - "High income." SECURITY - "No danger of being fired." HOURS - "Working hours are short, lots of free time."

Will nonwage and nonsalary forms of income continue to increase in importance as in the past? This and other questions about the future of employee benefits were put to a panel of 22 experts from government, business, industry, and academia¹ in 1970. Their answer was that not only will employee benefits as we know them now continue to expand, but also a host of new benefits will emerge by 1985. Their forecast of possible new benefits by 1985 is contained in Appendix F.

IMPORTANCE OF NONPECUNIARY FACTORS TO CATEGORIES OF EMPLOYEES

There is considerable disagreement among studies concerning the importance assigned to specific job facets. Agreement is greater, however, with regard to the general message contained in the data. This message becomes clearer when different ratings provided by groups of employees are examined separately. A case in point is shown in Table 2.4. The second and third columns show importance ratings of job facets for white-collar and blue-collar workers. The most conspicuous difference between the two groups is in the general aspect of the job rated as most important. For white-collar workers it was challenge; for blue-collar workers it was financial rewards. Resource adequacy was second in importance for both groups, and comfort was last. In terms of absolute percentages, blue-collar workers assigned higher ratings than white-collar workers to all general aspects of the job save challenge.

Additional light is shed on white/blue-collar attitude differences by the consistently strong and well-replicated correlations of education with importance ratings. Generally, better educated workers are more concerned than others with having jobs that are challenging and interesting. They are also less concerned than others with relations with co-workers, pay, hours, physical working conditions, fringe benefits, and job security. Most of the collar-color differences decrease considerably when educational level is held constant. The question of whether it is educational level or collar color that makes the critical difference remains to be answered.²

¹T. J. Gordon and R. E. Le Bleu, "Employee Benefits, 1970-1985," Harvard Business Review, January-February 1970, pp. 93-107.

²Quinn, op. cit.

Tables 2.6 through 2.11 present other ratings of job factors by various occupational groups resulting from six different studies. The occupational groups covered by these tables span the entire work group spectrum. The general message regarding occupational group preferences which can be gleaned from these tables is as follows:

- White-collar/blue-collar workers
 - Job security is more important for blue-collar than for white-collar workers.
 - Meaningful and worthwhile work was rated most important in white-collar jobs, while the lack of adequate resources was cited most often as being a major concern.
 - Self-development was ranked second in importance by professionals and ninth by factory workers (Table 2.7).
 - The need for work autonomy was ranked fifth by professionals and twelfth by factory workers (Table 2.7).
 - Intrinsic job components (interesting work, self-expression, satisfaction) were valued more highly by white-collar groups than blue-collar groups.
 - Blue-collar workers consistently placed a greater value on extrinsic components (pay, security, relations with coworkers).
- Male/female workers
 - Men and women did not differ in the extent to which they valued intrinsic or extrinsic job components in general (as did blue-collar vs. white-collar).
 - Women were more concerned with comfort aspects (pleasant and clean surroundings, convenient hours and good transportation) and relations with coworkers than men. Men placed a slightly higher value on self-expression in work security, advancement, and benefits than women.
- Education
 - Better educated workers place more emphasis on interest and challenge of the job and are less concerned about relations with coworkers, pay, physical working conditions, and job security.

TABLE 2.6
EVALUATIONS OF SELECTED JOB CHARACTERISTICS, BY SELECTED OCCUPATION GROUPS: 1969 AND 1973
(Mean Scores)

Occupation group	Overall quality of employment		Satisfaction with-- (1973 only)							Sample size 1973
	1969	1973	Comfort	Challenge	Financial rewards	Relations with co-workers	Resource adequacy	Promo-tions	Job moti-vation	
Professional and technical.....	3.93	3.93	3.08	3.49	3.27	3.28	3.35	2.78	3.31	319
Managers and administrators, except farm.....	3.92	3.84	2.99	3.52	3.28	3.32	3.31	2.92	3.38	328
Sales workers.....	3.77	3.80	3.09	3.37	3.01	3.46	3.38	2.71	3.11	109
Clerical workers.....	3.65	3.64	3.11	2.89	3.18	3.18	3.29	2.65	2.79	355
Craftworkers.....	3.78	3.73	3.07	3.28	3.11	3.19	3.35	2.75	2.88	270
Operatives, except transport ¹	3.48	3.40	2.89	2.70	2.93	3.15	3.19	2.37	2.52	300
Service workers, except private household.....	3.49	3.58	3.06	3.01	2.81	3.29	3.44	2.36	2.95	237
Nonfarm laborers.....	3.48	3.36	3.01	2.85	2.92	3.18	3.33	2.42	2.54	77

Note: A high score denotes a high degree of satisfaction; a low score, a low degree of satisfaction.

¹Mean scores for overall quality of employment relate to all operatives, including transport equipment operatives; mean scores for specified job characteristics relate to operatives other than transport equipment operatives.

Source: Robert P. Quinn and Linda J. Shepard, The 1972-73 Quality of Employment Survey (Ann Arbor, Michigan: The University of Michigan, Institute for Social Research, Survey Research Center, 1974). Copyright by Institute for Social Research. Used by permission.

TABLE 2.7

NONPECUNIARY FACTORS VALUED BY OCCUPATIONAL GROUPS (FEIN)

Factors	White Collar				Blue Collar			
	Professional, Technical, Managerial	Clerical	Sales	Service	Factory	Structural Work	Miscellaneous & Truck Drivers	Farm, Fishery, Forestry
1 - Highest Importance								
Job security	10	6	7	7	2	1	4	4
Psychological and emotional discomfort of work								
- Impact of personal problems on work	17	18	14	18	17	16	16	17
- Clearly defined responsibilities	9	4	6	8	4	5	7	4
- Free from conflicting demands	16	15	12	17	15	15	14	15
- Free from excessive amounts of work	18	17	15	20	18	18	17	16
Hours of work - enough time to get the job done	11	9	5	4	5	6	9	2
Intrinsic value of work								
- Sense of challenge	12	16	13	19	16	17	15	18
- Use of talent/training	7	11	9	10	10	9	8	9
- Sense of accomplishment	5	7	8	6	6	7	5	5
- Self-development	2	8	4	11	9	12	6	11
- Meaningful and worthwhile work	1	1	2	5	5	4	2	6
Relations with coworkers	6	3	4	3	3	2	3	7
Work autonomy	5	12	5	14	12	10	10	12
Nature of supervision	8	4	3	9	7	6	9	8
Adequate resources	4	2	2	1	1	3	1	1
Adequate authority to do the job	3	5	1	2	8	8	4	3
Pleasant and clean surroundings	15	13	11	15	13	11	11	10
Rational working hours	16	15	12	16	15	15	14	15
Social stress/concerns	14	14	8	12	14	13	12	14
Convenient to travel to and from work	13	10	10	13	11	14	13	13

Source: Mitchell Fein, "The Real Needs and Goals of Blue Collar Workers." The Conference Board Record, Vol. 10, February 1973, pp. 26-33.

TABLE 2.8
NONPECUNIARY FACTORS VALUED BY OCCUPATIONAL GROUPS (JURGENSEN)

Factors	Composite Rating	Mechanical		Mechanical		Sales	Clerical Workers
		Women	Men	Unskilled Workers	Skilled Workers		
1 - Highest Importance							
Opportunity for advancement							
Job security	1	2	1	2	1	1	
Hours of work	1	2	1			2	
Working conditions	4	1	2			2	4
Relations with coworkers	4	1	2				
Nature of supervision		1	2			2	1
Kind of work		1	2				
Company identification (morale)	1	2	1	2	1		1

Source: C. E. Jurgensen, "Selected Factors Which Influence Job Preferences," Journal of Applied Psychology, Vol. 31, No. 6, December 1947.

TABLE 2.9
NONPECUNIARY FACTORS VALUED BY OCCUPATIONAL GROUPS (CENTERS AND BUGENTAL)

Factors	Blue Collar		White Collar		Men	Women
	Semi-skilled & Unskilled	Skilled	Clerical & Sales	Professional & Managerial		
Intrinsic value of work	2	2	1	1	1	1
Use of talent/training	4	2	3	1	1	2
Relations with coworkers	1	3	2	4	3	1
Interest value of work	3	2	2	1	1	1
Job security	1	3	3	4	3	3
Job satisfaction	4	2	2	1	2	2

Source: Richard Centers and Daphne E. Bugental, "Intrinsic and Extrinsic Job Motivations Among Different Segments of the Working Population," Journal of Applied Psychology, Vol. 50, No. 3, 1966.

TABLE 2.10

NONPECUNIARY FACTORS VALUED BY OCCUPATIONAL GROUPS (HERSHEY)

Factors	Union		Nonunion			
	Manual Workers	Typographical Workers	Office Workers	Manual Workers	(Older) Manual Workers	(Younger) Manual Workers
1 - Highest Importance						
Hours of work	3	1	2	1	2	3
Use of talent/training						
Working conditions					2	1
Nature of supervision	1	2	1	2	2	1
Grievance system	1	1	2	2		
Opportunity for advancement			1		2	1
Job security	3	1	2	1		

Source: Rexford Hersey, Zest for Work, Harper and Brothers, New York, 1955.

TABLE 2.11
NONPECUNIARY FACTORS VALUED BY OCCUPATIONAL GROUPS (STARCEVICH)

1 - Highest Importance				Order of Importance for Different Occupational Levels
Factors	First-Line Managers	Middle Managers	Professional Employees	
				Sources of Job Satisfaction
Opportunity for advancement	15	13	14	
Job security	7	11	9	
Accountability for performance	10	9	10	
Sense of challenge	8	4	5	
Use of talent/training	3	3	3	
Sense of accomplishment	1	1	1	
Recognition of work	9	5	4	
Self-development	5	7	6	
Meaningful and worthwhile work	2	2	2	
Relations with co-workers	4	6	7	
Relations with supervisor	6	8	8	
Technical supervision	12	12	11	
Management Policies	13	16	16	
Pleasant and clean surroundings	14	14	15	
Social stress/concerns (work group)	11	11	12	
				Sources of Job Dissatisfaction
Opportunity for advancement	5	7	7	
Job security	7	11	9	
Accountability for performance	9	3	4	
Sense of challenge	4	4	3	
Use of talent/training	3	2	2	
Sense of accomplishment	1	1	1	
Recognition of work	2	5	6	
Self-development	8	6	5	
Meaningful and worthwhile work	11	10	11	
Relations with coworkers	17	17	17	
Relations with supervisor	6	8	10	
Technical supervision	12	12	12	
Management policies	13	9	8	
Pleasant and clean surroundings	14	16	16	
Social stress/concerns (work group)	10	13	13	

Source: Matt Starcevich, "Job Factor Importance for Satisfaction and Dissatisfaction Across Different Occupational Levels," Journal of Applied Psychology, Vol. 56, No. 6, 1972.

- Union/nonunion (Table 2.10)
 - Nonunion manual workers were significantly more concerned with job security, amount of pay, and hours of work than union manual workers. In addition, nonunion manual workers valued fair adjustment of grievances and type of man in charge lower than their counterparts.
 - Union typographical workers tended to be more interested in grievance policies, job security, amount of pay, and hours of work than nonunion office workers; nonunion office workers considered promotion, chances to show initiative, and type of man in charge more important.
- Age
 - Older workers are more satisfied with their jobs overall than younger workers.
 - Within nonunion manual workers group, younger workers considered chance of promotion and working conditions more important and hours of work and amount of pay less important than the group as a whole (Table 2.10).

MAJOR AND MINOR NONPECUNIARY FACTORS

Our research has established, among other things, that there are approximately 15 predominant authors on the subject of employee benefits and job satisfaction. Their predominance is based on the extensiveness of their writings and the frequency with which their works have been used as source material by other researchers. The results of a review of their publications, which are listed in Appendixes A and B, to determine how they value various nonpecuniary factors are shown in Table 2.12. The valuations indicated are based on studies and surveys performed by them --some national in scope and some focusing on particular occupational groups. From a careful examination of Table 2.12, in conjunction with the numerous survey results reviewed by the project team, including those represented by Tables 2.6-2.11, the following 15 nonpecuniary factors emerge as the major ones:

TABLE 2.12

VALUATION OF NONPECUNIARY FACTORS BY SIGNIFICANT AUTHORS

Factors	Authors												
	Centers/Bugental	Duncan/Juster	Dunn, L. F.	Friedlander	Herzberg	Hulin	Quinn	Smith, P. C.	Smith, S.	Taubman	Porter	Fein	Raabe
Opportunity for advancement					2	3			1		2		1
Competition basis for recruitment									1				
In-house training for advancement							2		1	2			4
Off-job training for advancement									1	2			
Opportunities for disadvantaged groups							1						
Importance of prior education for advancement		1					3		1	1			
Job security	1	2			2	2	3			2	2	2	1
Ease of firing		2											
Union							1		1				
Quit rates						2	2						
Length of queue									1				
Travel rate												3	
Accountability for performance		2			2		1					2	
Opportunity to change jobs inter/intra-organizationally							4						
Psychological and emotional discomfort of work	2	2				3	4	2		2		4	
Hours of work		2					2			2		2	
Flexitime		2					2						
Shift work							2						
Pressure/workload		2				3	2						
Intrinsic value of work	1			1	1	3	2	1		2	2		
Sense of challenge		2		1	1			1		2	2	4	
Use of talent/training				1			2	1				3	
Sense of accomplishment	1				1		2	1					
Recognition of work				1	1			1				2	
Self-development	1			1	1		2					2	
Meaningful and worthwhile work							2	1			2	1	2
Physical and health hazards		2	1			2	1			2			
Job enrichment					1								
Working conditions		2			2	2	1						
Relations with coworkers	1					4	3	2	1			1	
Interest value of work	1						2				2		
Job satisfaction	1	2			1	1	1				1		
Work autonomy		2								2		3	
Nature of supervision					2	4	2	2				2	3
Adequate resources							1		1	2		1	
Grievance system			2										
Rest breaks			3										
Noise level			4										
Air conditioning			2										
Kind of work						3	2	1					
Company identification (morale)						2							3
Pleasant and clean surroundings		2	3				1					4	2
Rational working hours							2					3	3
Lack of feedback							2						1
Social stress/concerns		2					2					4	
Community conditions						1							

Opportunity for advancement

Training for advancement (in-house and off-the job)

Job security

Sense of challenge

Self-development

Meaningful and worthwhile work

Work autonomy (ability to control hours and function independently,
flexibility of work pace)

Hours of work (flexitime, shift work)

Adequate authority to do the job

Adequate resources

Working conditions

Nature of supervision (including supervisors temperament and person-
ality)

Relations with coworkers

Type of work

Recognition of work

The above list includes those nonpecuniary factors rated consistently as most important by various occupational groups and the predominant authors over the approximately 40-year span addressed in this survey.

POTENTIAL APPROACHES TO QUANTIFICATION

The writings on the subject of workers benefits and attitudes, job satisfaction, social accounting, etc., is extensive, as evidenced by the bibliographies in Appendixes A-C; the attempts to quantify or monetize nonpecuniary factors are minimal. Only three attempts at placing actual monetary values on various nonpecuniary factors have been identified. These are summarized below and presented in greater detail in Appendix D.

Quantifying Nonpecuniary Returns, L. F. Dunn.¹ Dunn's approach involves a survey technique whereby workers are asked in oral interviews to give actual quantitative evaluations of certain nonpecuniary returns on factors in two different dimensions--money and time. Each worker is asked to state: (1) how much, if any, money per week he or she would be willing to pay to have a certain working condition or fringe benefits present on the job (for example, paid sick leave); and (2) the amount of time he or she would be willing to work longer each week--with no extra pay--in order to have the nonpecuniary return present on the job. Monetary and working time (or, equivalently, leisure time) evaluations were obtained in this manner for 10 separate nonpecuniary returns. None of the evaluated items was actually present on the job of the workers in the sample. The results are shown in Tables 2.13 and 2.14 by race, age, and sex. Although the sample Dunn surveyed (textile factory workers) has limited applicability to the Federal Government, his method could be adapted to other target groups and different nonpecuniary factors.

Dollarizing Attitudes, Meyers and Flowers.² Businessmen have become quite comfortable using such economic measures as cash flow, return on investment, and earnings per share. Widespread usage has led to their general acceptance by business organizations, financial institutions, and the general investing public, and they have thus become standardized business terms. The authors of this article present the rationale and procedures for adding human variables to these business terms.

The authors identify three types of factors influencing productivity. These are:

- Company investments (direct and indirect) - include training programs, work design, direct compensation, and supplemental benefits.

¹L. F. Dunn, "Quantifying Nonpecuniary Returns," Journal of Human Resources, pp. 347-359, Summer 1977.

²M. Scott Myers and Vincent S. Flowers, "Dollarizing Attitudes," Atlanta Economic Review, May-June 1974.

TABLE 2.13

MONETARY EVALUATIONS OF NONPECUNIARY BENEFITS, BY RACE, SEX, AND AGE

Nonpecuniary Benefit	All Workers		Diff. in Evaluation by Race: White-Black (t-stat.)	Diff. in Evaluation by Sex: Male-Female (t-stat.)	Age Coeff. (t-stat.)	Constant Term from Multivar. Regress. (t-stat.)
	Percent with Nonzero Evaluation	Average Evaluation Including Zero Responses (Stand. Dev.)				
Lunch break	25.3	\$.19 (.04)	\$.63 (.11)	-\$.19 (-2.10)	-\$.05 (-.64)	\$.33 (4.41)
Rest breaks	17.6	.13 (.03)	.62 (.12)	-.04 (-.62)	-.10 (-1.86)	.21 (3.83)
Cleanliness	36.5	.31 (.07)	.79 (.16)	-.08 (-.48)	.10 (.76)	.34 (2.61)
Work rules	20.0	.19 (.04)	.89 (.14)	-.04 (-.40)	.09 (1.24)	.19 (2.44)
Air conditioning	63.6	.83 (.10)	1.19 (.14)	.13 (.51)	-.34 (-1.70)	.87 (4.24)
Reduce noise	4.1	.03 (.01)	.63 (.12)	-.07 (-2.49)	.005 (.22)	.07 (3.43)
Paid sick leave	85.0	.91 (.08)	.99 (.09)	.19 (.96)	-.20 (-1.23)	.92 (5.80)
Pension plan	92.5	1.88 (.17)	1.95 (.17)	1.02 (2.51)	.45 (1.38)	1.05 (3.21)
Nurse at plant	29.1	.24 (.04)	.77 (.11)	-.003 (-.03)	.06 (.79)	.24 (3.00)
Health insurance	57.9	.83 (.08)	1.34 (.11)	.69 (3.79)	-.13 (-.90)	.43 (2.94)

Source: L. F. Dunn, op. cit.

TABLE 2.14

TIME EVALUATIONS OF NONPECUNIARY BENEFITS, BY RACE, SEX, AND AGE

Nonpecuniary Benefit	All Workers		Diff. in Evaluation by Race: White-Black (t-stat.)	Diff. in Evaluation by Sex: Male-Female (t-stat.)	Age Coeff. (t-stat.)	Constant Term from Multivar. Regress. (t-stat.)
	Percent with Nonzero Evaluation	Average Evaluation Including Zero Responses (Stand. Dev.)				
Lunch break	25.3	.42 hrs. (.07)	1.64 hrs. (.16)	-.08 hrs. (-.46)	-.08 hrs. (-.62)	.53 hrs. (3.96)
Rest breaks	17.6	.35 (.11)	1.96 (.54)	-.24 (-.89)	-.27 (-1.27)	.67 (3.06)
Cleanliness	36.5	.66 (.13)	1.75 (.30)	-.15 (-.48)	-.10 (-.41)	.88 (3.43)
Work rules	20.0	.56 (.17)	2.75 (.75)	-.65 (-1.55)	-.01 (-.04)	1.02 (3.07)
Air conditioning	63.6	1.42 (.17)	2.21 (.23)	-.24 (-.57)	-.44 (-1.33)	1.82 (5.43)
Reduce noise	4.1	.05 (.02)	1.28 (.31)	-.08 (-1.37)	-.03 (-.77)	.12 (2.70)
Paid sick leave	85.0	2.03 (.26)	2.40 (.30)	-.48 (-.74)	.41 (.78)	2.31 (4.43)
Pension plan	92.5	2.69 (.26)	2.91 (.27)	-1.61 (-2.54)	.07 (.14)	3.69 (7.23)
Nurse at plant	29.1	.55 (.09)	1.89 (.24)	-.02 (-.08)	.15 (.85)	.58 (3.16)
Health insurance	57.9	1.09 (.13)	1.88 (.20)	.80 (2.42)	.38 (1.40)	.40 (1.52)

Source: L. F. Dunn, op. cit.

- Community conditions - include home, family, schools, social situation, recreational opportunities, local government, climate, and transportation. Although these community conditions are often presumed to be beyond the control of the organization, some of them are influenced in various ways through the organization's indirect investments such as taxes, donations, pollution controls, civic involvement, and managerial behavior.
- Outside Opportunities - These compete with the organization for the people the organization desires to attract. These include real or imagined opportunities for advancement, growth, responsibility, higher pay, freedom, challenge, adventure, better community, and health improvement. The job attitudes resulting from these forces can cause three types of behavior: low productivity, high productivity, and turnover.

Attitude can be defined as a mental position toward various life situations and, as such, gives direction to a person's knowledge and skills. Therefore, the authors postulate, a reliable and quantitative measure of job attitudes can serve as a valid index of how well the organization is managing its human resources. To the extent that wages and salaries represent investments by the organization to purchase productive skills, attitude scores become meaningful indicators of the extent to which the organization receives an adequate return on this investment in compensation.

The steps involved in this dollarizing attitudes approach are as follows:

- An abbreviated attitude questionnaire is administered to company employees. Traditional attitude surveys may yield misleading results when the attitudes of all respondents are indiscriminately lumped together. For example, a plant manager whose influence can permeate the entire organization

obviously has a more influential attitude than the bench-worker whose attitudes have a relatively narrow sphere of influence. Moreover, the ten-year employee's attitude is a more valid reflection of the long-term or real impact of the organization than the one-year employee whose honeymoon with the company is still not over, or whose attitudes may still be reflecting previous employment experience. Therefore, a scheme for weighting attitudes by job grade and company tenure is used (Table 2.15).

- The job grade and tenure weights for employees are keypunched along with their responses to the attitude survey. A formula is provided for converting attitude scores into financial returns on payroll investment expressed in terms of gain, break even, or deficit. A department manager can then receive for his department an Attitude Index which in itself is a meaningful comparative measure of effectiveness. In addition, he can multiply this index by his annual payroll to determine his dollar gain or deficit per employee. The two indexes which have the greater value for interdepartmental comparisons, or for charting trends, are the Attitude Index and the Gain (or Deficit) per Person (Table 2.15).

This approach can be modified to survey employees attitudes regarding selected nonpecuniary factors as a part of the total compensation package.

Pay and Benefit Preference, Stanley M. Nealey.¹ In this study the Game Board method was used. Each subject was given a hypothetical increase in compensation of \$190 a year and was asked to indicate the manner in which he or she would apportion it between pay and benefits. Preferences were indicated by distributing the \$190 among the various pay and benefits options provided. A subject could use all his money on a pay raise, one benefit, or he could purchase lesser amounts of several benefits. For

¹Stanley M. Nealey, "Pay and Benefit Preference," Individual Relations, Vol. 3, pp. 17-28, 1963.

TABLE 2.15
DOLLARIZING ATTITUDES

Exhibit 1: Attitude Weights

Job Grades		Tenure				
Salaried	Hourly	0-2	3-5	7-10	11-20	21+
35+		7	8	9	10	11
33-34		6	7	8	9	10
29-32		5	6	7	8	9
25-28		4	5	6	7	8
22-24	10-12	3	4	5	6	7
	5-9	2	3	4	5	6
	1-4	1	2	3	4	5

Exhibit 2: Dollarized Attitudes

Individual	Annual Salary	Job Grade	Tenure	Attitude Weight	Attitude Score	Weighted Attitude Score
1. John Doe	\$14,000	28	5	5	1.05	5.25
2. Mary Brown	7,000	7	11	5	1.12	5.60
3. Harry Smith	9,000	12	22	7	1.21	8.47
4. Bill Jones	6,500	5	3	3	1.26	3.78
5. Jim Johnson	18,500	30	4	6	1.15	6.90
	\$55,000			26		30.00

$$\text{Attitude Index} = \frac{(\text{weighted A-Score})}{(\text{Attitude weight})} = \frac{30.00}{26} = 1.15$$

$$\text{Dollarized Attitudes} = \text{Attitude Index (Annual Payroll)} = 1.15(\$55,000) = \$63,250$$

$$\text{Gain} = \$63,250 - \$55,000 = \$8,250 \quad \text{Gain Per Person} = \frac{\$8,250}{5} = \$1,650$$

Exhibit 3: Dollarized Attitudes—Very Favorable

Individual	Annual Salary	Job Grade	Tenure	Attitude Weight	Attitude Score	Weighted Attitude Score
1. John Doe	\$14,000	28	5	5	1.50	7.50
2. Mary Brown	7,000	7	11	5	1.45	7.25
3. Harry Smith	9,000	12	22	7	1.68	11.76
4. Bill Jones	6,500	5	3	3	1.55	4.65
5. Jim Johnson	18,500	30	4	6	1.72	10.32
	\$55,000			26		41.48

$$\text{Attitude Index} = \frac{41.48}{26} = 1.60$$

$$\text{Dollarized Attitudes} = 1.60(\$55,000) = \$88,000$$

$$\text{Gain} = \$33,000 \quad \text{Gain Per Person} = \$6,600$$

Source: Myers and Flowers, op. cit.

TABLE 2.15 (Cont.)
DOLLARIZING ATTITUDES

Exhibit 4: Dollarized Attitudes—Very Unfavorable

Individual	Annual Salary	Job Grade	Tenure	Attitude Weight	Attitude Score	Weighted Attitude Score
1. John Doe	\$14,000	28	5	5	.51	2.55
2. Mary Brown	7,000	7	11	5	.73	3.65
3. Harry Smith	9,000	12	22	7	.65	4.55
4. Bill Jones	6,500	5	3	3	.45	1.35
5. Jim Johnson	18,500	30	4	6	.75	4.50
	\$55,000			26		16.60

$$\text{Attitude Index} = \frac{16.60}{26} = .64$$

$$\text{Dollarized Attitudes} = .64(\$55,000) = \$35,200$$

$$\text{Deficit} = \$19,800 \quad \text{Deficit Per Person} = \$3,960$$

Exhibit 5: Annual Planning Data

Asset Effectiveness Statement, Department 128

	Actual		Plan
	1972	1973	1974
Sales	\$1,500,000	\$2,000,000	\$2,200,000
Cost of sales	800,000	1,000,000	1,050,000
Gross margin	\$ 700,000	\$1,000,000	\$1,150,000
% sales	47.0%	50.0%	52.2%
Other department costs	\$ 319,000	\$ 334,000	\$ 350,000
Department profit	\$ 381,000	\$ 666,000	\$ 800,000
% sales	25.4%	33.3%	36.4%
Asset effectiveness measures			
Total assets	\$4,500,000	\$4,800,000	\$5,000,000
Sales/assets	33.3%	41.7%	44.4%
Profit/assets	8.3%	13.9%	16.0%
People effectiveness measures			
Number of people	80	75	86
Attitude index	1.21	.91	1.10
Total payroll	\$ 640,000	\$ 600,000	\$ 700,000
Turnover %	25%	12%	10%
Sales/person	\$ 18,500	\$ 26,667	\$ 25,581
Profit/person	\$ 4,762	\$ 8,890	\$ 9,302
Attitude gain/person	\$ 1,680	<\$720>	\$ 895

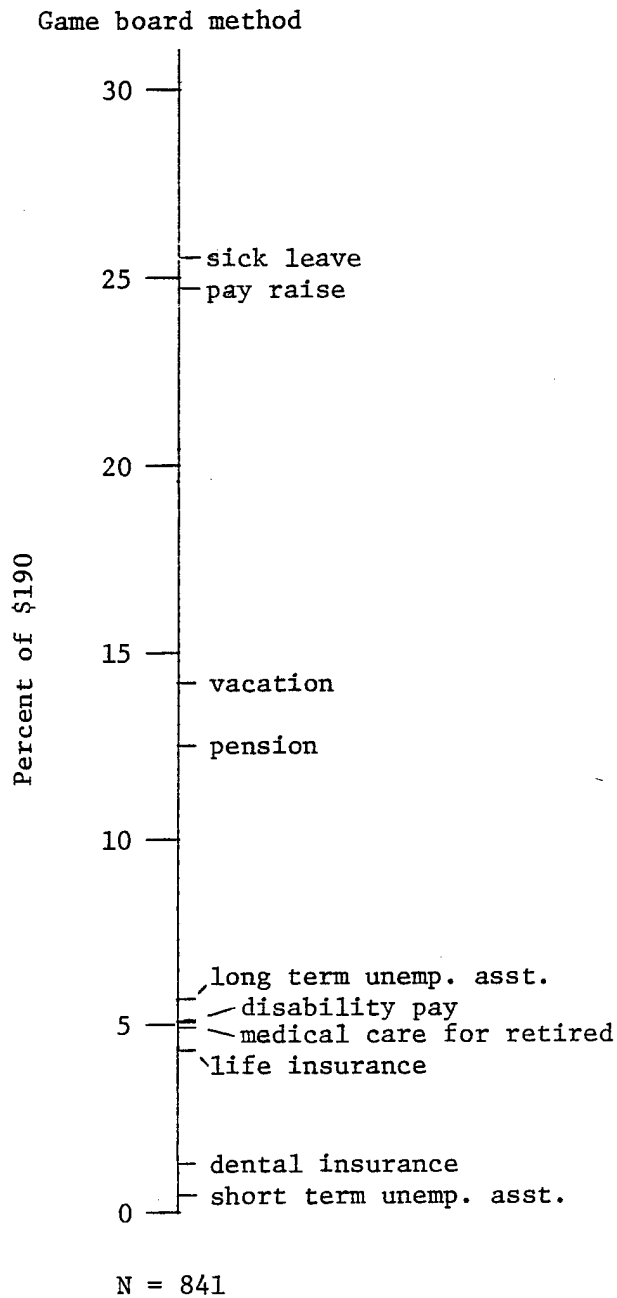
Source: Myers and Flowers, op. cit.

instance, \$60 would buy five days of sick leave a year, while \$50 would buy a year of family dental services. Additionally, the cost of some benefits vary with the age of the subject. For example, a subject under 30 years of age could purchase a \$20 per month pension increase for \$50, while this much pension would cost \$125 for a subject between 45 and 49 years of age. The subjects were provided with cost tables appropriate to their own ages.

The study using the Game Board method was conducted in six manufacturing plants of the General Electric Company in the eastern states. It was referred to as Study III because two other preference identifying approaches not involving monetary considerations were also studied. Ten compensation options were presented in Study III as follows:

- Pay raise of \$190 a year.
- Pension increase of \$45 a month.
- 8 days of additional paid vacation per year.
- Family dental insurance (\$50 deductible for each person).
- Medical care for retired employees.
- 20 days sick leave per year.
- \$8500 additional life insurance.
- Long-term disability pay (supplements social security).
- Short-term unemployment assistance (supplementing state unemployment benefits for short layoffs).
- Long-term unemployment assistance (paid after 6-month layoff or at retirement).

Figure 2.2 shows the combined preferences of the 841 males and females from the six plants sampled in Study III. Sick leave and pay raise account for about 25% of the money expended, while vacation and pension account for about 15 and 13%, respectively. Age and sex preferences were also identified in the study. The approach has applicability by substituting selected nonpecuniary factors for the pay and benefit options listed above to determine employee preferences.



Source: Nealey, op. cit.

Figure 2.2. Group Preferences, Study III

The studies summarized above are the only three examples that we found of actual monetary values being placed upon the various nonpecuniary benefits identified. However, several other authors have devised formulas or procedures of accounting for these factors in the wage dimension of the job. Total earnings, for example, are supposed to include both pecuniary and nonpecuniary payments in an additive model devised by one author.¹ Both types of compensation are affected by a set of earnings determinants, the value of which is determined through a linear regression on wages (W) and nonpecuniaries (NP). Thus, through canonical regression, an additive index of wage, fringe benefits, and working condition variables can be developed. As expected, the working condition variables present the greatest problem as far as estimation is concerned, for there exists no set formula for assessing their value.

Related quantification formulas have been developed on the factors which affect job satisfaction of an employee. Another researcher² devised a linear model in which values, rewards, and degree of control over attainment of rewards interact to influence job satisfaction. The rewards of the job are divided into six basic dimensions: intrinsic, convenience, financial, relationships with coworkers, career, and resource adequacy. These dimensions are then combined to assess their relative contribution to job satisfaction. Since the author seeks to develop a framework which links the variation in the job satisfaction of workers to the factors that influence their attainment of job rewards, this method could provide a rating system for the importance of nonpecuniary factors in the overall job decision. Other authors have derived similar methods of relating the value of these nonpecuniary factors to the job satisfaction of employees, but they are substantially repetitive of the same model.

¹G. J. Duncan, "Earnings Functions and Nonpecuniary Benefits," Journal of Human Resources, Vol. 11, pp. 462-483, Fall 1976.

²Arne L. Kalleberg, "Work Values and Job Rewards: A Theory of Job Satisfaction," American Sociological Review, Vol. 42, No. 1, pp. 124-143, February 1977.

Finally, a few authors have attempted to take an economic view of job satisfaction, where workers' satisfaction will vary with the value of their wages and nonpecuniary benefits together. A series of hedonic wage equations where the personal characteristics of the worker, attributes of the job, and the wage rate of the occupation are combined to yield a function called "worker utility" were developed in 1977.¹ When this utility is equated to a firm's decision to hire an individual, an equilibrium occurs from which a wage rate can be estimated. The resulting equation is a linear regression using these factors as independent variables to arrive at an hourly earnings figure. Consequently, the job characteristic variables could be adjusted to assess the importance of nonpecuniary factors in the compensation structure of the employee.

In a similar vein is the theory that assumes that a worker's desires for nonpecuniary rewards increase at the same rate as his/her desires for pecuniary rewards.² Thus, if this equilibrium does not occur, employee dissatisfaction results, taking the form of quitting, being absent, and producing less work. Two different models based on this theory are introduced; one predicting quit rates and the other examining absenteeism. Demographic variables are included along with hours of work, length of service, past job instability, and relative wage earnings. Once again, these two regressions although not specifically applicable, may be altered to provide a form of accounting for nonpecuniary benefits.

In addition to these quantification models, a number of survey methods have been tried which rate the employees' values of their work or attitudes toward work in general. An index based on the Protestant ethic and work values associated with this belief was developed in 1971.³ Principal components analysis was used to determine the six intrinsic

¹Robert E. B. Lucas, "Hedonic Wage Equations and Psychic Wages in the Returns to Schooling," American Economic Review, September 1977.

²Robert J. Flanagan, et al., "Worker Discontent and Work Place Behavior," Industrial Relations, Vol. 13, No. 2, pp. 101-123, March 1974.

³Stephen Wollack et al., "Development of the Survey of Work Values," Journal of Applied Psychology, Vol. 55, No. 4, pp. 331-338, 1971.

and extrinsic dimensions of work. Quinn et al. also used a similar format of factor analysis in obtaining the data for the Quality of Employment Survey in 1972-73 and 1977. Importance of prior education is estimated in a 1977 model where inherited and acquired skills are a function of the genetic endowments and the environment of the individual.¹ Training is also assessed by the use of background proxies (i.e., urban-rural residence, parent's education, religion). These may contribute knowledge and methodology for an overall rating system of nonpecuniaries, but without adaptation, no specific monetary values.

GRC APPROACH

None of the approaches discussed above has direct application to the Federal Government without varying degrees of modification. Therefore, in light of the increasing importance of these factors to employees and unions, GRC proposes the pilot project outlined below. The ultimate objective of this effort would be to demonstrate the feasibility of monetizing selected nonpecuniary factors associated with Federal employment for consideration in the pay comparability process.

The immediate objective of this proposed pilot project is to conduct a study, based on the work reported herein, leading to:

- The development of a comprehensive survey research design, including a sampling plan and interview guides.
- The development of a comprehensive survey research analysis plan which estimates the monetary value of individual non-pecuniary benefits by observing the differences in pecuniary and nonpecuniary compensation offered individuals in different firms.

¹Paul J. Taubman, "Schooling, Ability, Nonpecuniary Rewards, Socio-Economic Background, and the Lifetime Distribution of Earnings", The Distribution of Economic Well-Being, Ballinger Publishing Co., Cambridge, Mass., 1977.

- A test of the preceding by a survey pre-test.
- A final report detailing study results and recommendations regarding future research.

The overall approach, stated simply, is to collect information from the private sector by onsite surveys, combining observations and interviews, which will (1) identify selected nonpecuniary factors associated with comparable positions in the same salary range and provide a basis for estimating the monetary value of the nonpecuniary factors.

SECTION 3

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

- Nonpecuniary factors have become increasingly important to employees, unions, and employers in recent years in pay and benefit considerations.
- An ample body of research is available to support the determination of the importance of various nonpecuniary factors to occupational groups.
- Attempts to place a monetary value on nonpecuniary factors have been very limited and none identified has gone beyond the research stage.
- It is feasible to devise a method of estimating the monetary value of selected nonpecuniary factors.
- The GRC approach to estimating the monetary value of selected nonpecuniary factors for Federal workers proposed herein, is a workable pilot effort.

RECOMMENDATIONS

GRC recommends that:

- This report be approved as a basis for continuing research on the feasibility of establishing monetary values for selected nonpecuniary factors.
- The GRC approach (see page 38) to determining the monetization potential of selected nonpecuniary factors be adopted as a next step in continuation of this research effort.

APPENDIX A
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(PRIMARY SOURCES)

BIBLIOGRAPHY

PRIMARY SOURCES

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APPENDIX D

REPRESENTATIVE LITERATURE SEARCH MODELS

MODEL FOR LIBRARY LITERATURE SEARCH

I. Basic bibliographical information (author, title, publisher, location, date) and library

Blai, Boris, Jr., "A Job Satisfaction Predictor," Personnel Journal, Vol. 42, No. 9, pp. 453-56, October 1963.

Library: AFL-CIO

II. Identify types of nonpecuniary benefits

III. Define categories (by author's preference)

Job security, Esteem, leadership, competition, dependance, self-satisfaction, power, social service, advancement, independence, and interesting duties.

IV. Importance to various groups (race, sex, age, occupation, geographic location)

V. Comparability to federal workers

The study examines Federal Government employees in Philadelphia. They are broken down occupationally by professional, managerial-official, clerical, service and trades/manual categories.

VI. Quantification, monetizing attempts if existing

VII. Construct abstracts where significant (Xerox copies, inter-library loan books)

Job security was rated significant by service and trades/manual groups, whereas self-actualization and interesting duties tended to be more significant to professional, managerial-official and clerical groups.

VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

MODEL FOR LIBRARY LITERATURE SEARCH

- I. Basic bibliographical information (author, title, publisher, location, date) and library

Brayfield, Arthur H., and Harold F. Rothe, "An Index of Job Satisfaction," Journal of Applied Psychology, Vol. 35, No. 5, October 1951.

Library: Army

- II. Identify types of nonpecuniary benefits

- III. Define categories (by author's preference)

- IV. Importance to various groups (race, sex, age, occupation, geographic location)

- V. Comparability to federal workers

- VI. Quantification, monetizing attempts if existing

- VII. Construct abstracts where significant (Xerox copies, inter-library loan books)

Quantitative index of job satisfaction is created through use of employee attitudes. (See questionnaire next page.)

- VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

Thurstone method of scaling is used as a basis for construction.

VII (cont'd)

An Index of Job Satisfaction

JOB QUESTIONNAIRE

Some jobs are more interesting and satisfying than others. We want to know how people feel about different jobs. This blank contains eighteen statements about jobs. You are to cross out the phrase below each statement which best describes how you feel about your present job. There are no right or wrong answers. We should like your honest opinion on each one of the statements. Work out the sample item numbered (0).

0. There are some conditions concerning my job that could be improved.	STRONGLY AGREE	AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE
1. My job is like a hobby to me.	STRONGLY AGREE	AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE
2. My job is usually interesting enough to keep me from getting bored.	STRONGLY AGREE	AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE
3. It seems that my friends are more interested in their jobs.	STRONGLY AGREE	AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE
4. I consider my job rather unpleasant.	STRONGLY AGREE	AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE
5. I enjoy my work more than my leisure time.	STRONGLY AGREE	AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE
6. I am often bored with my job.	STRONGLY AGREE	AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE
7. I feel fairly well satisfied with my present job.	STRONGLY AGREE	AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE
8. Most of the time I have to force myself to go to work.	STRONGLY AGREE	AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE
9. I am satisfied with my job for the time being.	STRONGLY AGREE	AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE
10. I feel that my job is no more interesting than others I could get.	STRONGLY AGREE	AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE
11. I definitely dislike my work.	STRONGLY AGREE	AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE
12. I feel that I am happier in my work than most other people.	STRONGLY AGREE	AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE
13. Most days I am enthusiastic about my work.	STRONGLY AGREE	AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE
14. Each day of work seems like it will never end.	STRONGLY AGREE	AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE
15. I like my job better than the average worker does.	STRONGLY AGREE	AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE
16. My job is pretty uninteresting.	STRONGLY AGREE	AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE
17. I find real enjoyment in my work.	STRONGLY AGREE	AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE
18. I am disappointed that I ever took this job.	STRONGLY AGREE	AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE

Fig. 1. Revised job satisfaction blank.

MODEL FOR LIBRARY LITERATURE SEARCH

I. Basic bibliographical information (author, title, publisher, location, date) and library

The Conference Board, Education in Industry, by Seymour Lusterman, New York, 1977.

Library: Army

II. Identify types of nonpecuniary benefits

In-house training for advancement, off-job training for advancement, and opportunities for women and minorities.

III. Define categories (by author's preference)

1. Off-the-job training: Occurs through one of three ways--company courses, tuition-aid program courses, or other outside courses (AMA, trade groups, etc.). Four of five companies conducted courses during working hours and half did so after work. Outside courses were also taken both during and after work, while tuition-aid (Continued on next page.)

IV. Importance to various groups (race, sex, age, occupation, geographic location)

Education and training is broken down by occupational groups, women and minorities, and employee expenditures and participation in programs.

V. Comparability to federal workers

Not specifically mentioned, but probably comparable.

VI. Quantification, monetizing attempts if existing

VII Construct abstracts where significant (Xerox copies, inter-library loan books)

This study reports on employee education and training programs in corporations of over 500 or more employees who answered a lengthy questionnaire. Four-fifths of the total amount spent on education and training by industry was accounted for through "in-house" training programs and educational (Continued on next page.)

VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

Further topics discussed by this study include: staffing and organization of education programs (in-house), executives' views of industry/education roles, etc.

Education in Industry (continued)

III. program courses were predominantly engaged in after work. 2. On-the-job learning: Concerning the work community and the job itself, haphazard processes such as learning by observation and imitation, or planned training, such as particular skills, duties or formal off-the-job instruction. 3. Mix of outside and inside resources: Both in-house and off-the-job training may be necessary because of lack of specific courses available, high cost, or company need.

VII. benefits (approximately \$1.6 billion). The other fifth concerned "outside resources"--colleges, universities, etc.--partly occurring during working hours and the rest after-hours in tuition-aid programs (approximately \$400 million). Technical and functional courses accounted for three out of four dollars of direct company expenditures on in-house course programs; however, managerial and supervisory responsibility training also comprised a large amount. About three out of five companies reported having more women and minorities involved in company education. Those larger firms sampled (10,000 or more) were more likely to have additional education programs and training than smaller ones, and accounted for three-fourths of all total expenditures. Financial institutions, utilities, transportation, and communications firms were the most likely to have these programs.

MODEL FOR LIBRARY LITERATURE SEARCH

I. Basic bibliographical information (author, title, publisher, location, date) and library

The Conference Board, Inc., Elements of Corporate Relocation Assistance Policies, by Harriet Gorlin, New York, 1977.

Library: Department of Commerce

II. Identify types of nonpecuniary benefits

Corporate relocation assistance.

III. Define categories (by author's preference)

Relocation allowances: living and travel expenses, the shipment of household goods, and real estate reimbursement programs. (See report for further discussion of these three categories.)

IV. Importance to various groups (race, sex, age, occupation, geographic location)

Main groups: executive level and new hires.

V. Comparability to federal workers

Assume this can be compared to relocation assistance provided federal workers.

VI. Quantification, monetizing attempts if existing

Executive relocation consultants estimated the costs of a "normal" transfer at \$8,000-\$12,000, depending on employee's housing situation (higher estimates also given). Atlas Van Lines estimated \$3,150 (\$1,725 for shipping household goods plus \$1,382 for other transfer expenses).

VII. Construct abstracts where significant (Xerox copies, inter-library loan books)

Analysis of relocation policies based on 58 companies, headquartered in 23 states, employing approximately 1.6 million people. Ninety-two percent of these people worked in 40 industrial or manufacturing firms, which make up 69% of the sample.

VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

Studies referred to include:

Atlas Van Lines, Inc., Results: 9th Annual Survey of Corporate Moving Practices, Evansville, Ind., 1976.

(Continued on next page.)

Gorlin, Elements of Corporate Relocation Assistance Policies (continued)

VIII.

Employee Relocation Council, Comprehensive Survey of Corporate Relocation Policies, Chicago, 1976.

Walter S. Wikstrom, Corporate Response to Employees' Housing Needs, The Conference Board, Inc., New York, 1975.

Dun & Bradstreet, Inc., A Study Concerning Employee Relocation Policies, New York, 1976.

David A. Weeks, Compensating Employees: Lessons of the 1970's, The Conference Board, Inc., New York, Chapter 7, 1976.

MODEL FOR LIBRARY LITERATURE SEARCH

I. Basic bibliographical information (author, title, publisher, location, date) and library

The Conference Board in Canada, Future Trends in Employee Benefits, by H. Humphries, a symposium held in Toronto, April 1974. (H. Humphries actual speaker on this section, partner, Hickling Johnston, Ltd. consulting firm.) Library: HEW

II. Identify types of nonpecuniary benefits

The corporate funded second career development system, a new non-cash benefit is identified as a nonpecuniary benefit of the future. (This benefit pertains to personal stability, the ability to change jobs inter-organizationally.)

III. Define categories (by author's preference)

The corporate funded second career development system is a method of sending surplus managers to second careers thereby resolving two problems: (1) the manager who sees himself on the shelf, and (2) how to keep corporate staff lean and effective.

IV. Importance to various groups (race, sex, age, occupation, geographic location)

Middle management - white collar

V. Comparability to federal workers

The author's thesis and suggested program could be applicable to federal workers.

VI. Quantification, monetizing attempts if existing

No quantification attempted.

VII. Construct abstracts where significant (Xerox copies, inter-library loan books)

Author's thesis is that organizations have an obligation to assist their personnel in such second-career development, even to the point of helping the employee leave the firm. Author's rationale is not altruistic. Rather, it rests on long-term economic consequences (Continued on next page.)

VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

Article addresses future trends only.

H. Humphries (Continued)

VII. if nothing is done to satisfy the needs of the middle manager. The executive at age 45 with salary of \$25,000 with 20 years of service left will cost the firm \$500,000 when benefits and cost of living increases are taken into account. Author suggests that marginal rather than optimal returns will result from the employee who perceives himself as being "on the shelf."

Author's assumptions:

1. That employee is not capable of knowing when a second career should be considered.
2. That employee is not capable of identifying what that second career should be.

Author's suggested program:

Assumes the presence of integrated personnel systems and the 5 to 10 year strategic plan of the company. The strategic plan would define the opportunities and challenges, manpower needs would be established.

Performance appraisal would also have to be established. This system should be future oriented, focussing on ways to meet the firm's future needs for competency in the short run and the individual's self-fulfillment in the long run.

If the manager is told he will go no further, he should be offered services of psychological counseling and appraisal. This would result in objective image of the individual. The individual could then decide whether to stay with the firm or move on to another job.

If employee decides to transfer out of the firm, the company should support this decision by means of sabbatical leave with pay, including payment of necessary tuition. When the employee leaves, he would be eligible for separation pay and other usual exit benefits.

Barriers to implementation:

1. Management attitude: "Why should we support this employee development which could in the long run provide us with increased competition?" Author counters that management should have dealt with employee more effectively if, indeed, there is a real threat of competition.
2. "How can we afford these frills?" Author suggests that the \$500,000 "shelf sitter" adversely affects the corporate image in the minds of young managers in training. The best recruits would applaud a corporation whose policy is one that rigorously clears out the dead wood from the path of upwardly mobile junior executives.

The author suggests that in light of this need for greater mobility, full portability of benefits must be the rule. Example: Canadian federal government permits senior executives to purchase credits equal to the time they were in a previous plan.

MODEL FOR LIBRARY LITERATURE SEARCH

- I. Basic bibliographical information (author, title, publisher, location, date) and library Duncan, Greg J., "Earnings Functions and Non-pecuniary Benefits," The Journal of Human Resource, Vol. XI, 4, pp. 462-4
- II. Identify types of nonpecuniary benefits Health and safety characteristics, rigidity of work schedule, degree of work autonomy, characteristics of grievance procedure, enjoyability, challenge, interest, social relationships, employment stability, income stability.
- III. Define categories (by author's preference) Non-pecuniary benefits are categorized as a) fringe benefits b) general working conditions and c) consumption benefits (Continued on next page.)
- IV. Importance to various groups (race, sex, age, occupation, geographic location) Race, sex, age, occupation, education. Correlation drawn between education and many non-pecuniary benefits. This correlation is the product of preferences, income, and productivity effects. Relationship between job tenure and non-pecuniaries established. Study focusses on whit nonfarm men, ages 21-65.
- V. Comparability to federal workers
Comparability not specifically addressed.
- VI. Quantification, monetizing attempts if existing Non-pecuniary benefits are quantified in terms of importance vis-a-vis one another. Principle quantifiable finding is that education is a significant determinant of fringe benefits for all but one of six non-pecuniary benefit variables in data sets.
- VII. Construct abstracts where significant (Xerox copies, inter-library loan books)
- VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)
Non-pecuniary benefits are treated as a separate component of a comprehensive measure of labor market reward.

Data:
 1. 1972-73 Quality of Employment Survey
 2. The Panel Study of Income Dynamics - 1970-71.

- III. a. Fringe benefits: Defined as goods, services, or deferred money income received by the employee but paid for by the employer.
Examples: Medical insurance, pension plans, paid vacations, sick leave, stock options.

Fringe benefits are not really non-pecuniaries because incomes are effectively increased by the cost to the employer.

- b. Working conditions

Examples: Health and safety characteristics of the job
rigidity of work schedule
degree of work autonomy
characteristics of grievance procedure

- c. Consumption benefits: Defined as those benefits which comprise the positive flow of satisfaction provided by the work situation. Represent subjective reactions of individuals to the job situation.

Examples: Enjoyability
interest
challenge
social relationships

MODEL FOR LIBRARY LITERATURE SEARCH

- I. Basic bibliographical information (author, title, publisher, location, date) and library
Dunn, L. F., "Quantifying Nonpecuniary Returns," Journal of Human Resources
Summer 1977, pp. 347-359
Library: AFL-CIO
- II. Identify types of nonpecuniary benefits Lunch breaks, rest breaks, improvement in conditions of cleanliness, establishment of nonarbitrary work rules and grievance system, air conditioning, a decrease in noise levels, provision of one week paid sick leave, provision of a retirement pension, presence of a trained nurse, adequate health insurance.
- III. Define categories (by author's preference)
Working conditions: lunch breaks, rest breaks, cleanliness, work rules, air conditioning, reduce noise. Fringe benefits: paid sick leave, pension plan, nurse at plant, health insurance.
- IV. Importance to various groups (race, sex, age, occupation, geographic location)
The ten nonpecuniary benefits listed above are compared by race, sex, and age.
- V. Comparability to federal workers
The sample population was a group of nonunionized workers in a spinning and weaving mill in a rural county of a southeastern state. The group has little or no comparability to Federal workers other than possibly certain blue collar workers. However, the survey technique has applicability to various work groups.
- VI. Quantification, monetizing attempts if existing
The author presents a technique for quantifying the effects of nonpecuniary conditions of employment on a labor force. A survey method is employed that obtains quantitative evaluations of nonpecuniary benefits in two different dimensions--money and time. The technique is applied in a field study of a group of factory workers in which (Continued on next page.)
- VII. Construct abstracts where significant (Xerox copies, inter-library loan books)
- VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

Dunn, L. F., "Quantifying Nonpecuniary Returns"

VI. (continued)

ten separate nonpecuniary items are studied. The approach involved a survey technique whereby workers are asked in oral interviews to give actual quantitative evaluations of certain nonpecuniary returns in two different dimensions--money and time. Each worker is asked to state: (1) how much, if any, money per week he would be willing to pay to have a certain working condition or fringe benefit present on his job, for example, paid sick leave; and (2) the amount of time he would be willing to work longer each week--with no extra pay--in order to have the same nonpecuniary return present. None of the evaluated items was actually present on the jobs of the workers in the sample. However, with appropriate wording, it is possible to evaluate either the presence or absence of most job circumstances using the technique.

MODEL FOR LIBRARY LITERATURE SEARCH

I. Basic bibliographical information (author, title, publisher, location, date) and library

Dunn, Paul, et al., Job Satisfaction in Defense Organizations, Office of the Chief of Army Research and Development, Washington, D.C., September 1973. Library: Army

II. Identify types of nonpecuniary benefits

1. Satisfying aspects of work (tasks, functions, and activities).
2. Satisfying aspects of supervision (supervisors, raters, managers, and commanders).
3. Satisfaction with co-workers.
4. Promotions and advancement.

III. Define categories (by author's preference)

Factors of the benefits that caused job satisfaction or dissatisfaction listed on next page.

IV. Importance to various groups (race, sex, age, occupation, geographic location)

"Patterns of job dissatisfaction in Defense were similar to those found in industrial organizations and other Government agencies; i.e., the same job-related factors cause satisfaction or dissatisfaction." (p. vi)
(See next page.)

V. Comparability to federal workers

Survey of job satisfaction attitudes conducted in a structured sample of agencies representing three levels of the Defense hierarchy. Military officers and comparable grade civilians (total of 2680) participated. Results used to compare job satisfaction in Defense with industrial organizations and other Government agencies. (See next page.)

VI. Quantification, monetizing attempts if existing

VII. Construct abstracts where significant (Xerox copies, inter-library loan books)

"This study was intended to be diagnostic only. It was an attempt to identify areas or features of the work environment affecting the morale of both military and civilian personnel. No attempt was made to single out which of the findings are of such prime importance that a change should be made in the Defense organizations' management of the work environment." (p.

VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

Study used Job Description Index (JDI) of P. C. Smith and Porter's Need Satisfaction Questionnaire.

Dunn, Job Satisfaction in Defense Organizations (continued)

III. 1. Satisfying aspects of work: work was respected, useful, and not boring. Dissatisfying aspects of work: frustrating, not creative, not pleasant, and not healthful. 2. Satisfying aspects of supervision: bosses were polite, intelligent, up-to-date, not lazy, and around when needed. Dissatisfying aspects of supervision: bosses do not praise good work, do not tell subordinates where they stand, do not seek subordinates' advice, are hard to please, are not tactful, and are stubborn. Many civilians added that bosses provide inadequate supervision.

3. Satisfaction with co-workers: responsible, intelligent, not lazy, loyal, not boring, pleasant, not hard to meet. Dissatisfaction with co-workers: narrow interests, not stimulating, not ambitious, it was easy to make enemies, and had inadequate privacy. 4. Promotions and advancement: dissatisfaction--opportunities for advancement are not good, promotions are infrequent, nonregular, and not based on ability. Many civilians indicated they are in dead-end jobs.

Dissatisfaction particularly from deficiencies in the following areas:

1. Worthwhile accomplishment. 2. Self-fulfillment (able to use one's own unique capabilities, realizing one's potentialities). 3. Opportunity to participate in setting goals. 4. Opportunity to participate in determining methods and procedures. 5. Being kept informed. 6. Opportunity for personal growth and development. 7. Self-esteem from the individual's point of view. 8. Opportunity for independent thought and action. 9. Opportunity for advancement.

IV. 1. Dissatisfaction varied with age. For officers, there was a trend of decreasing dissatisfaction with increase of age; for civilians, dissatisfaction increased through middle age, then decreased.

2. Dissatisfaction commensurate with levels of formal education. Those with high school education most dissatisfied; those with doctorate or LLB degrees the most satisfied. 3. Dissatisfaction increased as layers of supervision increased. 4. Individual workers (officer and civilian) reported more dissatisfaction than first-line supervisors and troop leaders, who, in turn, reported more dissatisfaction than managers and commanders. 5. Dissatisfaction decreased as rank and grade of officers and civilians increased. 6. Middle-management, middle-command ranks and grades reported the highest proportionate levels of dissatisfaction.

V. In comparing results of the Defense study with current data on managers from other large Government departments, it was noted that officers and civilians in Defense management jobs reported a higher degree of dissatisfaction at the middle-management levels, a lower degree at the bottom-management levels, and a mixture of the two at the other levels. In comparing the Defense study with early-1960 studies of industrial managers, it was found that the officer and civilian managers in Defense were significantly more dissatisfied.

MODEL FOR LIBRARY LITERATURE SEARCH

- I. Basic bibliographical information (author, title, publisher, location, date) and library
Fein, Mitchell, "The Real Needs and Goals of Blue Collar Workers,"
The Conference Board Record, Feb., 1973.
Library: Army
- II. Identify types of nonpecuniary benefits
Adequate resources, interesting work, co-worker relations, authority, responsibility for performance, feedback supervision, use of skills and talents, work autonomy, travel rate, work load, social concerns, physical surroundings pleasant and clean, hours of work, meaningful/worthwhile work, accomplishment
- III. Define categories (by author's preference)
- IV. Importance to various groups (race, sex, age, occupation, geographic location)
The aspects of work are presented in eight occupational categories: Professionals-research labs, professionals-branch office, managers, technicians-manufacturing plants, technicians-branch offices, clerical workers and unskilled workers.
- V. Comparability to federal workers
- VI. Quantification, monetizing attempts if existing
- VII. Construct abstracts where significant (Xerox copies, inter-library loan books)
- VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)
This study used the same sample as the Survey Research Center of the University of Michigan in the Survey of Working Conditions (1970), but the responses were broken down a little differently according to occupational levels. Workers were asked to rank how important 25 aspects of
(Continued on next page.)

Fein, "The Real Needs and Goals of Blue-Collar Wrokers" (continued).

VIII.

work were to them. Workers see the interesting work content of their jobs as lower than they want it, was the most outstanding finding. Opportunities to develop special abilities were also found to be lacking. However, feedback and results of work, as well as authority and resources were deemed adequate.

MODEL FOR LIBRARY LITERATURE SEARCH

I. Basic bibliographical information (author, title, publisher, location, date) and library

Fiss, Barbara L., Flexitime, U.S. Civil Service Commission,
May 15, 1974

Library: Office of Personnel Management

II. Identify types of nonpecuniary benefits

Flexitime

III. Define categories (by author's preference)

Flexitime: fixed times of arrival and departure are replaced by a working day which is composed of two different types of time: core time and flexible time. (Continued on next page.)

IV. Importance to various groups (race, sex, age, occupation, geographic location)

V. Comparability to federal workers

Flexitime is viewed in the context of the federal worker, i.e., flexitime by the week and by the month are considered inappropriate.

VI. Quantification, monetizing attempts if existing

VII. Construct abstracts where significant (Xerox copies, inter-library loan books)

Abstract: Advantages for Management

- | | |
|-------------------------------------|----------------------------|
| 1. Reduction in short term absences | 4. Quiet time |
| 2. Quicker starts | 5. Elimination of lateness |
| 3. Increased service to the public | (Continued on next page.) |

VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

Background: Flexitime came into being as a result of growing concern that workers were discontented. This discontentment is manifested by poor morale, high absenteeism, static or decreased productivity, tardiness and high turnover.

In the sixties, German firms pioneered "gliding time."

Fiss, Flexitime (continued)

III.

Core time: Number of hours designated during which all employees must be present.

Flexible time: All the time designated as part of the schedule of work hours within which the employee may choose his time of arrival and departure from the office.

Requirements of Flexitime

- 1) Employee must be present during core time
- 2) Must account for total number of required hours each day

Variations

Flexitime by day, flexitime by the week, flexitime by the month
Flexitime by the week and by the month are not permissible within the Federal Sector.

VII.

6. Workers become job oriented rather than time oriented.
7. Cross training and cooperation among employees improves as they share skills and know how.
8. Productivity increases for all of above reasons. There are reports of 1-5% gains in productivity.
9. Supervisory skills improve. Flexitime necessitates improved planning.

Advantages for employees:

1. Personal pace setting
2. Reduces "rush hour range" - travel time and travel costs are reduced
3. Outside activities are increased
4. Education may be continued
5. Utilization of recreation facilities
6. Shopping
7. Greater ease in forming car pools

MODEL FOR LIBRARY LITERATURE SEARCH

I. Basic bibliographical information (author, title, publisher, location, date) and library

Guest, Avery M., "Occupation and the Journey to Work," Social Forces, Vol 55, No 1, pp 166-181, September 1976.

Library: GRC

II. Identify types of nonpecuniary benefits

Relationship between home and workplace for various occupational groups across 62 Standard Metropolitan Statistical Areas; relationship between occupational status and the length of the work trip.

III. Define categories (by author's preference)

IV. Importance to various groups (race, sex, age, occupation, geographic location)

1. Higher status workers have higher auto ownership, therefore more mobile.
2. Wish to avoid central city, with high manufacturing concentration, pollution, etc.
3. Also wish to avoid racial minorities, who are concentrated in central city (Continued on next page.)

V. Comparability to federal workers

VI. Quantification, monetizing attempts if existing

VII. Construct abstracts where significant (Xerox copies, inter-library loan books)

"This paper investigates the accuracy of theory and research suggesting that higher-status workers are more likely than other workers to maximize travel distance because of disagreeable features of the area around work-sites. Our evidence suggests that higher-status white, male workers have (Continued on next page.)

VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

Hoover, Edgar M., and Raymond Vernon, Anatomy of a Metropolis, Harvard University Press, Cambridge, Mass., 1959. Inner elite suburbs such as Scarsdale developed as high-status; Manhattan workers traded off travel time for spacious living.

Guest, "Occupation and the Journey to Work" (Continued)

IV.

4. Prefer newer housing, which is more readily available in the suburbs.
5. Seek greater internal and external space, single family versus multi-family dwellings.

VII.

relatively long commuting distances in old metropolitan areas while this is less true of new metropolitan areas. Journey to work patterns thus seem to explain some of the differences in residential structure between new and old metropolitan areas."

MODEL FOR LIBRARY LITERATURE SEARCH

I. Basic bibliographical information (author, title, publisher, location, date) and library

Herzberg, Frederick, "One More Time: How Do You Motivate Employees?", Harvard Business Review, January/February 1968.

Library: GRC

II. Identify types of nonpecuniary benefits

Intrinsic value of work, accountability for performance, job enrichment.

III. Define categories (by author's preference)

1. Motivators: achievement, recognition, responsibility, growth, and advancement; thus motivation is facilitated by the provision of these conditions to the employee.
2. Hygiene Factors: working conditions, pay, status, security; must be included in the work environment to prevent dissatisfaction from occurring, but do not necessarily provide satisfaction.

IV. Importance to various groups (race, sex, age, occupation, geographic location)

Military officers, teachers, housekeepers, accountants, engineers, technicians, female assemblers, professional men and women, hospital maintenance personnel, etc.

V. Comparability to federal workers

VI. Quantification, monetizing attempts if existing

VII. Construct abstracts where significant (Xerox copies, inter-library loan books)

VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

Herzberg's motivator-hygiene theory of job satisfaction:

Job Content-tasks that induce growth in individual vs. Job Environment stimuli inducing pain-avoidance behavior. This theory suggests "that work be enriched to bring about effective utilization of personnel," which occurs through job enrichment (i.e., an employee's psychological growth). (Continued on next page.)

Herzberg, Frederick, "One More Time: How Do You Motivate Employees" continued.

VIII

Vertical job loading should be attempted as opposed to horizontal job loading - "enlarging the meaninglessness of the job." Examples of this process are increasing the accountability of an individual for this work, giving a person a complete natural unit of work (division, etc.), granting additional authority for decisions to specific individuals, making periodic reports available directly to worker himself, etc.

Essential Steps for Job Enrichment:

1. Select jobs where investment is not too costly, attitudes are poor, hygiene is increasingly costly and motivation will improve performance.
2. Eliminate generalities, such as "give them more responsibility."
3. Use only vertical job loading techniques.
4. Avoid direct participation by employees whose jobs are being enriched because they may inject "hygiene" factors into the process, where the content of job must be examined.

MODEL FOR LIBRARY LITERATURE SEARCH

I. Basic bibliographical information (author, title, publisher, location, date) and library

Hersey, Rexford, Zest for Work, Harper and Brothers Publishers, New York, 1955. Library: Army

II. Identify types of nonpecuniary benefits

Employee stock subscription; voice or share in management; fair adjustment of grievances; chance of promotion; steady employment; medical and dental services; safety; amount of pay; working conditions; hours of work; type of man in charge; methods of pay; insurance systems and pensions; chance to show initiative.

III. Define categories (by author's preference)

IV. Importance to various groups (race, sex, age, occupation, geographic location)

Four major studies: two studies involving primarily Pennsylvania Railroad; one study involving the German State Railways; one largely laboratory study specializing in the physiochemical and physiological functioning of normal individual in relation to his emotional reactions. No women were included in any of the intensive shop studies.

V. Comparability to federal workers

VI. Quantification, monetizing attempts if existing

VII. Construct abstracts where significant (Xerox copies, inter-library loan books)

Research was conducted over time from 1927-1954. Workers studied reflected (1) overt behavior, (2) emotional behavior, (3) dominant trends of thought and reverie, (4) such physical and physiological items as could be either detected or measured (i.e., blood pressure). (Continued on next page.)

VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

Hersey, Zest for Work (continued)

VII. Four essential formulas stressed: (1) concentration on the average worker rather than on problem cases; (2) analysis of each man in his organic functioning and total environment; (3) search for the factors making each man happy or unhappy; (4) determination, if possible, of the conditions under which each man was most efficient and what role his emotions played in his adjustment.

TABLE 8. MANAGEMENT POLICIES AND TECHNIQUES: AREAS IN WHICH
EMPLOYEES ARE MOST IRRITATED

Management Practices	Percentage of Employees Irritated						
	Non-Union		Union			Non-Union	
	1932	1952	1937	1934	1934	1932	1928
	150* Office Workers***	300 Manual Workers**	400 Manual Workers**	150 Typo- graphical Workers	200 Younger Manual Workers	200 Unem- ployed	550 Manual Workers**
1. Employee stock subscription	11	5	10	80	3	8	x
2. Voice or share in management	36†	13	8	40	15	17	0
3. Fair adjustment of grievances	25	31	7	38	20	33	2
4. Chance of promotion	51	37	28	20	12	9	9
5. Steady employment	3	3	8	2	1	19	27
6. Medical and dental service	11	13	54	4	2	16	0
7. Safety	3	37	16	2	5	13	0
8. Amount of pay	36	11	11	26	20	44	15
9. Working conditions	29	41	20	34	1	20	14
10. Hours of work	11	15	12	2	8	47	16
11. Type of man in charge	47	38	56	52	12	49	21
12. Methods of pay	15	47	59	20	12	12	6
13. Insurance systems and pensions	17	29	38	22	3	39	1
14. Chance to show initiative	38	38	28	58	4	29	2

* Denotes number of questionnaires.

** These workers, interviewed in 1928, 1937, and 1952, were all employed by the same company.

*** Predominantly a younger group, mostly male students.

† Numbers in italics indicate most frequent choices in each column.

TABLE 9. MANAGEMENT POLICIES AND TECHNIQUES: THOSE WHICH EMPLOYEES
CONSIDER MOST IMPORTANT

Management Practices	Percentage of Employees Considering Important						
	Non-Union		Union			Non-Union	
	1932	1952	1937	1934	1934	1932	1928
	150* Office Workers***	300 Manual Workers**	400 Manual Workers**	150 Typo- graphical Workers	200 Younger Manual Workers	200 Unem- ployed	550 Manual Workers**
1. Employee stock subscription	3	4	2	0	23	5	x
2. Voice or share in management	15	10	3	8	3	11	1
3. Fair adjustment of grievances	23	51	76	50	8	37	12
4. Chance of promotion	83†	26	31	24	71	49	34
5. Steady employment	70	79	86	94	91	86	99
6. Medical and dental services	2	24	2	0	7	14	8
7. Safety	3	44	37	22	37	43	47
8. Amount of pay	70	39	53	86	33	41	96
9. Working conditions	33	56	16	32	44	29	20
10. Hours of work	11	9	16	54	12	38	50
11. Type of man in charge	23	36	72	6	29	21	27
12. Methods of pay	2	18	3	0	1	6	4
13. Insurance systems and pensions	8	41	5	20	26	27	5
14. Chance to show initiative	66	17	2	4	14	6	7

* Denotes number of questionnaires.

** These workers, interviewed in 1928, 1937, and 1952, were all employed by the same company.

*** Predominantly a younger group, mostly male students.

† Numbers in italics indicate most frequent choices in each column.

MODEL FOR LIBRARY LITERATURE SEARCH

I. Basic bibliographical information (author, title, publisher, location, date) and library

Ingraham, Mark H., The Outer Fringe: Faculty Benefits Other Than Annuities and Insurance, University of Wisconsin Press, Madison, 1965.

Library: GRC

II. Identify types of nonpecuniary benefits

Noncash Benefits: housing, educational privileges for faculty members and their families, other educational benefits, health service, loans, emergency funds, moving expenses, discount purchases, recreational athletic facilities and special events, miscellaneous benefits (free meals and coffee or meals at reduced rates, baby-sitting, cabins and retreats (Continued on next page.)

III. Define categories (by author's preference)

1. Housing: includes rental programs and mortgage programs.
2. Educational Privileges: includes waiver of college tuition for faculty children, aid to faculty children going to other institutions; faculty "tuition exchange;" tuition grants; loans. (Continued on next page.)

IV. Importance to various groups (race, sex, age, occupation, geographic location)

V. Comparability to federal workers

VI. Quantification, monetizing attempts if existing

Not done in study, but some of the benefits could be given monetary values (i.e., educational benefits).

VII. Construct abstracts where significant (Xerox copies, inter-library loan books)

Nature, value, and feasibility of staff benefits vary widely from institution to institution. "Some staff benefits are largely means of compensating the faculty in ways that give them more than if the equivalent in cost were paid in salary." (p.5)

VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

Report based on results of answers to a questionnaire, visits to a number of colleges and universities, and personal experience of the author. Break-down of information by public or private institution and percentage of these that provide particular benefits.

Ingraham, Mark H., The Outer Fringe: Faculty Benefits Other Than Annuities and Insurance continued.

II.

special recreational or cultural travel funds, investment facilities, tax privileges, paying recruiting agency fees); leaves, faculty travel expenses, faculty club, parking, and secretarial help

III.

3. Other Education Benefits: aid for pre-college education of faculty children; attendance of faculty and spouses (auditing classes); nursery schools.
4. Health Provisions: emergency service; periodic health examinations; continuation of income during sickness (salary's disability insurance).
5. Leaves: Sabbatical leaves; on institutional funds; on funds from special grants and contracts; leaves of absence without pay; summer leaves

MODEL FOR LIBRARY LITERATURE SEARCH

I. Basic bibliographical information (author, title, publisher, location, date) and library

Jurgensen, C. E., "Selected Factors Which Influence Job Preferences,"
Journal of Applied Psychology, Vol. 31, No. 6, December 1947.

II. Identify types of nonpecuniary benefits

Advancement, benefits, company, coworkers, hours, pay, security, supervisor, type of work, working conditions.

III. Define categories (by author's preference)

1. Advancement: opportunity for promotion.
 2. Benefits: vacation, sick leave, insurance, etc.
 3. Company: pride involved with employer
 4. Coworkers: pleasant, agreeable, and good working companions.
- (Continued on next page.)

IV. Importance to various groups (race, sex, age, occupation, geographic location)

Data on sex, marital status, dependents, age, monthly salary, education, and main occupation was gathered. Men were more interested in security, advancement, and benefits than women. Women were relatively more interested in type of work, coworkers, supervisor, hours, and working conditions. Marital status had little effect, but as dependents increased, greater importance was attached to security, company, (Continued on next page.)

V. Comparability to federal workers

VI. Quantification, monetizing attempts if existing

II. Construct abstracts where significant (Xerox copies, inter-library loan books)

A questionnaire was filled out by 1360 applicants for jobs at the Minneapolis Gas Light Company which asked them to rank order ten factors in job preference and also obtained some personal data. Security, advancement, and type of work were rated as significantly important, while benefits, working conditions and hours were rated significantly less important by applicants.

III. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

Jurgensen, C. E., "Selected Factors Which Influence Job Preferences," continued.

III.

5. Hours: acceptable starting and quitting time, good numbers of hours/day or week, night work involved, etc.
6. Pay: major income during year.
7. Security: steady work, no layoffs, sureness of keeping job.
8. Supervisor: boss who is considerate and fair.
9. Type of Work: interesting work that is well liked.
10. Working Conditions: comfortable and clean, absence of noise, heat, cold, odors, etc.

IV.

coworkers, supervisor and benefits. Security did not increase in importance with increased age nor did advancement decrease, as popularly thought. Education affected job preferences the most; as education increased, advancement, type of work, pay, and working conditions became more important, whereas the other factors declined in importance. Sales applicants were more interested in advancement, type of work, company and pay, and less interested in security, coworkers, hours and benefits than mechanical applicants. Skilled workers showed more interest in advancement and type of work than unskilled workers, within the mechanical applicants. Clerical workers showed more interest in coworkers and company, and less interest in hours and pay than other applicants.

MODEL FOR LIBRARY LITERATURE SEARCH

I. Basic bibliographical information (author, title, publisher, location, date) and library

Juster, F. T. and Greg Duncan, "Going Beyond Current Income," American Behavioral Scientist, Vol. 18, No. 3, January/February 1975, Sage Publications, Inc., Beverly Hills, CA, pages 369-386.

Library: GRC

II. Identify types of nonpecuniary benefits

Nonmoney income - defined as fringe benefits, working conditions and consumption benefits

III. Define categories (by author's preference)

See next page.

IV. Importance to various groups (race, sex, age, occupation, geographic location)

Multiple regression analysis showed that women earn substantially less income than similarly qualified men. However, women are partially compensated for this difference by receiving a significantly higher number of fringe benefits, healthier and safer working conditions, and more stable employment.

V. Comparability to federal workers

Good comparability since the study was based on the R. P. Quinn, and L. J. Shepard (1974) 1972-73 Quality of Employment Survey.

VI. Quantification, monetizing attempts if existing

Fringe benefits as defined can be readily monetized, working conditions are somewhat more difficult to value, and consumption benefits are difficult to quantify. (Further explained on attached sheet.)

VII. Construct abstracts where significant (Xerox copies, inter-library loan books)

VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

III. (continued)

Going Beyond Current Income

F. Thomas Juster

Greg Duncan

University of Michigan

American Behavioral Scientist, Vol. 18, No. 3, Jan./Feb. 1975.

Nonmoney Income:

Fringe Benefits - Goods, services, or deferred money received by the employee but paid for (at least in the first instance) by the employer. Fringe benefits include:

- Medical insurance
- Pension plans (vested plans are worth more than nonvested ones)
- Paid vacation
- Paid sick leave
- Disability insurance
- Free or subsidized meals
- Free vehicle parking
- Profit sharing
- Stock options

Except for pension payments, all of the above are non-taxable -- an additional savings to employee.

Working Conditions

These are somewhat more difficult to value than fringe benefits. Some can be physically identified and impose clean-cut costs on the employer:

- Health and safety of the work plan
- Ventilation
- Lighting
- Restroom facilities
- Luncheon facilities
- Recreational facilities and activities

Other job-related characteristics are difficult to evaluate, and may or may not impose employer costs. These include:

- Degree of work autonomy - ability to control hours, ability to function independently, flexibility of work schedule and work pace.
- The characteristics of grievance procedures.
- The nature of supervision.
- The extent to which adequate resources are provided the employee who does his job well.

Consumption Benefits

In the most general sense, consumption benefits comprise the positive flow of satisfaction yielded by a work situation. They can include direct leisure, where the job situation permits it, or such hard to quantify dimensions of job satisfaction as interest, challenge, social relationships, and enjoyment.

Leisure component on work-leisure ratio - it is a plausible speculation that a great many low-paying jobs are precisely ones where the leisure component is relatively larger than in jobs on an average, while at least some high-paying jobs have exactly the opposite characteristic - a minimal leisure component and an intensive work component.

MODEL FOR LIBRARY LITERATURE SEARCH

I. Basic bibliographical information (author, title, publisher, location, date) and library

Katzell, Raymond A., Daniel Yankelovich, et al., Work, Productivity, and Job Satisfaction, The Psychological Corporation, New York University, New York, 1975.

Library: GRC

II. Identify types of nonpecuniary benefits

III. Define categories (by author's preference)

IV. Importance to various groups (race, sex, age, occupation, geographic location)

V. Comparability to federal workers

VI. Quantification, monetizing attempts if existing

VII. Construct abstracts where significant (Xerox copies, inter-library loan books)

Study assesses the state of knowledge about how work affects the productivity and job satisfaction of workers; focus on how productivity and job satisfaction can be increased together. (Most work in the field has taught how to improve one or the other rather than enhancement of both simultaneously.) (Continued on next page.)

VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

Study mainly reviews recent work in the field. Has extensive bibliography. Also contains glossary.

Katzell, Raymond A., Daniel Yankelovich, et al., Work, Productivity, and Job Satisfaction continued.

VII.

"....one fact that stands out from the massive accumulation of data... worker job satisfaction and productivity do not necessarily follow parallel paths." (p.12)

MODEL FOR LIBRARY LITERATURE SEARCH

I. Basic bibliographical information (author, title, publisher, location, date) and library

Kendel, Ezra S., and Bernard Samoff, eds., Unionizing the Armed Forces, University of Pennsylvania Press, 1977. Library: HEW

II. Identify types of nonpecuniary benefits

Union (collective security), Rights Systems, Appeals Processes, Grievance Arbitration

III. Define categories (by author's preference)

Collective Bargaining in the federal service is viewed as a system through which grievances are processed and certain working conditions are negotiated. There is also significant bargaining over economic issues. "Full collective bargaining" is viewed as having all the rights and protection of (Continued on next page.)

IV. Importance to various groups (race, sex, age, occupation, geographic location)

Nonuniformed federal employees
European military unions
US Armed Forces

V. Comparability to federal workers

VI. Quantification, monetizing attempts if existing

VII. Construct abstracts where significant (Xerox copies, inter-library loan books)

VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

Historical and philosophical underpinnings of the Federal Labor Relations systems for nonuniformed employees. History and traditions of trade unionism. Discusses growth of American Federation of Government Employees (AFGE).

- III. private sector bargaining except the legal right to strike.
"Quasi collective bargaining" may be viewed as having many,
but not all rights and protections of private sector bargaining.

Rights Systems

Most basic rights of the employee are his constitutional rights. The most elaborate and dominant force of employee rights in the federal environment is the Civil Service System.

Appeals Processes

Twelve types of appeals: Adverse action appeals, General Schedule Classification Appeals, Wage Board Classification Appeals, Appeals concerning discriminating Level of competence, Performance ratings, Reduction in Force, Salary Retention, Separation of Probationers, Suspension for thirty days or less, working conditions and other grievances.

Right to Organize

Executive orders 10988, 11491, and 11616 specified the right of workers to organize and bargain with management over working conditions.

Grievance Arbitration

Provides that negotiated grievance procedures and arbitration can deal with the interpretation or application of a negotiated agreement, and cannot deal with matters outside the agreement.

MODEL FOR LIBRARY LITERATURE SEARCH

I. Basic bibliographical information (author, title, publisher, location, date) and library

Lehmann, Kenneth and C. Edward Weber, "Workers on the Move," University of Illinois Bulletin, Vol 50, No. 11, September 1952.
Library: GRC

II. Identify types of nonpecuniary benefits

Main discussion is on labor turnover (see attached page for factors related to turnover)

Factors of job satisfaction: independence and control, physical characteristics of job, adequacy of wages, fairness of treatment, job interest (also security and fringe benefits). (Continued on next page.)

III. Define categories (by author's preference)

See page D-41.

IV. Importance to various groups (race, sex, age, occupation, geographic location)

V. Comparability to federal workers

VI. Quantification, monetizing attempts if existing

VII. Construct abstracts where significant (Xerox copies, inter-library loan books)

Main discussion is on labor turnover. Authors consider the exit interview to be of limited usefulness.

Most commonly used measurements of turnover--rate of separations; rate of accessions

VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

This study particularly refers to labor turnover in a "Defense Economy."

II.

One recent study of turnover¹⁰ attempted to get behind the employees' immediate stated reason for quitting. The results shown below are background causes in the working situations as viewed by the employees who had quit their jobs.

Supervisory problems	30%
General company problems	13
Disliked particular job	11
Disliked company	10
Work load	7
Working conditions	6
Job placement	5
Recreation	5
Hours of work	3
Disliked co-workers	1
	100%

"Supervision," leading the list in the above table, includes such underlying causes as unfairness, treatment of suggestions, over-supervision, and on-the-job training, and accounts for nearly four persons out of ten quitting.

In the same study it was found that direct causes given by employees for quitting jobs were somewhat different from their predisposing or background causes. "Desire for higher wages," "promotion," a "better job," "more schooling," and "better supervision" headed the list of immediate causes.

¹⁰Loken, Robert D., Why They Quit, University of Illinois, College of Commerce and Business Administration, Business Management Service, 1951.

III.

One study of factors in job satisfaction shows five points of primary importance.

1. Independence and control. Involved in this factor are freedom from too close supervision and a chance to voice an opinion on how the job should be done. This and other studies emphasize the important effect supervisors have in influencing job satisfaction.

2. Physical characteristics of the job. The nature of the job itself (clean or dirty, light or heavy, safe or dangerous), physical plant condition (cleanliness, light, ventilation, toilet facilities), and the type of machinery (modern or obsolete, physical condition) all contribute to a worker's satisfaction with his job.

3. Adequacy of wages. Wages play a role in worker satisfaction in the "cost of living" sense--the means by which the worker supports himself and his family. In addition, wages are used by the worker as an estimation of how fairly he is being treated in relation to fellow-workers in his or other plants.

4. Fairness of treatment. The worker's wage position (mentioned above) influences his feelings of fair treatment. Examples of other influences are rewards to the worker as a result of his length of service and performance on the job, prompt settlement of grievances, and promotion (important for its prestige rather than for the extra income).

5. Job interest. The extent to which a job is interesting to the worker is an important factor in influencing job satisfaction. Particularly important are the presence or absence of variety in the work, the extent of contact with people, and the opportunity to use his skills completely.¹¹

These five factors in job satisfaction do not exhaust the list since "security" and "fringe payments" might be included. They are listed as a guide to worker satisfaction--and possible dissatisfaction if they are not provided.

¹¹ Reynolds, L.G., and Joseph Shister, Job Horizons, Harper, 1949. Study carried out in a New England manufacturing city...43% of work force employed in manufacturing industries.

MODEL FOR LIBRARY LITERATURE SEARCH

I. Basic bibliographical information (author, title, publisher, location, date) and library

Leigh, Duane E., The Effect of Job Experience on Earnings Among Middle Aged Men, Institute for Research on Poverty, University of Wisconsin, December 1975. Library: Department of Labor.

II. Identify types of nonpecuniary benefits

Work experience, occupational advancement.

III. Define categories (by author's preference)

Categories not specifically defined.

IV. Importance to various groups (race, sex, age, occupation, geographic location)

Sample: National Longitudinal Surveys (NLS) for men aged 45-59 in 1966.

V. Comparability to federal workers

VI. Quantification, monetizing attempts if existing

No actual monetization attempts made, but potentially useful model developed regarding factors affecting the current wage rate.

VII. Construct abstracts where significant (Xerox copies, inter-library loan books)

Abstract: The purpose of this paper is to improve the specification of job experience as measured by current wage rate. The primary finding is that it is work experience accompanied by occupational advancement rather than simply work experience that affects distribution of wage rates.

VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

Findings:

1. Author noted significant black-white differences with regard to educational attainment.

(Continued on next page.)

Leigh, The Effect of Job Experience... (continued)

VIII.

2. With respect to occupational advancement, effect of schooling was found to have a weaker impact on blacks than whites.
3. The study indicated a strong relationship between occupational advancement and post school vocational training. However, industry of the first job did not have a significant effect on advancement for either blacks or whites.
4. Initial occupation and occupational change had positive impacts on hourly wage rates. The strong showing of the occupational mobility variable in a sample with narrow distribution of length of work experience suggests that it is not work experience per se that influences earnings.

The author concludes: "It is work experience accompanied by promotion up the hierarchy that is the critical variable in explaining earnings inequality."

Schooling is found to have a direct impact on earnings of whites, while the corresponding relationship for blacks is not well defined.

MODEL FOR LIBRARY LITERATURE SEARCH

- I. Basic bibliographical information (author, title, publisher, location, date) and library

Myers, M. Scott and Vincent S. Flowers, "Dollarizing Attitudes," Atlanta Economic Review, May-June 1974, pp. 52-55.

Library: AFL-CIO

- II. Identify types of nonpecuniary benefits

The authors identify three types of factors influencing productivity. These are: company investments (direct and indirect), community conditions, and outside opportunities. The job attitudes resulting from these forces can cause three types of behavior: low productivity, high productivity, and turnover.

- III. Define categories (by author's preference)

Company investments - include training programs, health and recreation programs, work design, direct compensation, and supplemental benefits.

Community conditions - include home, family, schools, social situation, recreational opportunities, local government, climate, and transportation. (Continued on next page.)

- IV. Importance to various groups (race, sex, age, occupation, geographic location)

Not discussed.

- V. Comparability to federal workers

The technique could be adapted to dollarize Federal employees' attitudes concerning nonpecuniary factors.

- VI. Quantification, monetizing attempts if existing

Attitudes are a mental position toward various life situations and, as such, give direction to a person's knowledge and skills. Therefore, the author postulates, a reliable and quantitative measure of job attitudes can serve as a valid (Continued on next page.)

- VII. Construct abstracts where significant (Xerox copies, inter-library loan books)

- VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

Myers, M. Scott and Vincent S. Flowers, "Dollarizing Attitudes," continued

III.

Although these community conditions are often presumed to be beyond the control of the organization, some of them are influenced in various ways through the organization's indirect investments such as taxes, donations, pollution controls, civic involvement, and managerial behavior.

Outside Opportunities - These compete with the organization for the people the organization desires to attract. These include real or imagined opportunities for advancement, growth, responsibility, higher pay, freedom, challenge, adventure, better community, and health improvement.

The interaction of the factors is depicted in Exhibit 1 (page D-48).

VI.

Index of how well the organization is managing its human resources.

Exhibit 2 (page D-48) is a 20-item attitude questionnaire abbreviated by statistical factor analysis from a 95-item attitude survey form. The abbreviated form was refined to have the same predictive value as the longer form which was designed to measure job motivation and company maintenance factors.

Traditional attitude surveys may yield misleading results when the attitudes of all respondents are indiscriminately lumped together. For example, a plant manager whose influence can permeate the entire organization obviously has a more influential attitude than the benchworker whose attitudes have a relatively narrow sphere of influence. Moreover, the ten-year employee's attitude is a more valid reflection of the long-term or real impact of the organization than the one-year employee whose honeymoon with the company is still not over, or whose attitudes may still be reflecting previous employment experience.

Exhibit 3 (page D-49) is a scheme for weighting attitudes by job grade (JG) and company tenure. Thus we see that a newly hired technician in job grade 7 has a weight of 2 applied to this attitude score, while one of his coworkers with 12 years with the company has a weight of 5. His supervisor (JG 26) with four years tenure has an attitude weight of 5, his superintendent (JG 32) with 18 years tenure has a weight of 8, and his plant manager (JG 36) with 12 years tenure, a weight of 10.

The administration of attitude questionnaires to large numbers of employees can provide the basis for establishing normative data for differentiating between "Turn-offs" and "Turn-ons." For example, the questionnaire might be administered randomly to several departments to establish a distribution curve of average favorable responses to the 20 statements. The average favorable percentage score of the department falling at the

Myers, M. Scott and Vincent S. Flowers, "Dollarizing Attitudes," continued

fiftieth percentile could be arbitrarily given a value of 1.00. The average favorable percentage score of the lowest ranked department could be valued at 0.00 and the highest ranked department's score set at 2.00. Therefore, scores significantly lower than 1.00, for example, are more apt to be potential "Turn-offs" or "Turnovers," and scores above 1.00 are more likely to be "Turned-on" high producers.

To the extent that wages and salaries represent investments by the organization to purchase productive skills, attitude scores become meaningful indicators of the extent to which the organization receives an adequate return on this investment in compensation. Exhibit 4 (page D-49) presents the details of a formula for converting attitude scores into financial returns on payroll investment expressed in terms of gain, breakeven, or deficit. The job grade and tenure would be keypunched along with responses to the attitude survey. A department manager could then receive an Attitude Index for his department which in itself is a meaningful comparative measure of effectiveness. In addition, he would multiply this index by his annual payroll to determine his dollar gain or deficit per employee. The two indexes which have the greater value for interdepartmental comparisons, or for charting trends, are the Attitude Index and the Gain (or Deficit) per Person.

Exhibits 5 and 6 (pages D-49 and D-50) show the same department, but in one hypothetical case with very favorable attitudes, and in the other with very unfavorable attitudes.

In addition to the overall Attitude Index for the entire work force, subgroups (e.g., job grade 2, foremen, clerical, and blacks) may be studied to pinpoint and diagnose problems. Moreover, individual items on the questionnaire may be studied separately to diagnose the causes of Attitude Index changes and abnormalities.

Though the Attitude Index or the Gain (or Deficit) per Person may not be seen immediately by managers as a standard index, common usage could make it so, just as they have learned to report in terms of cash flow, return on investment, profit before taxes, earnings per share, and so forth. If included in the criteria of the standard quarterly review, annual plan, or other reports to management, as illustrated in the next section, attitudinal measures would assume the importance accorded to them by organization leaders.

The partial summary of annual planning data shown in Exhibit 7 (page D-50) reflects asset-effectiveness information for the current and prior years and planned data for the coming year. Concentrating exclusively on the traditional economic criteria of sales, costs, and profits can yield a misleading representation of what is really going on. For example, the 1973 profit for Department 128 increased significantly compared to 1972,

Myers, M. Scott and Vincent S. Flowers, "Dollarizing Attitudes," continued

return on non-human investment increased from 8.3% to 13.9%, and turnover was reduced from 25% to 12%. And the 1974 planned data indicate that these favorable trends should continue. Using only these kinds of measurements leads to the conclusion that this manager has been, and will continue to be "successful." He would have little trouble winning financial and management support because, under traditional assumptions, profit making, even when short-range, is considered the best evidence of efficient and effective use of resources.

However, incorporating a measure of employee attitudes into the reported data suggests that although the manager may be winning the annual profit battle, he may be on the verge of losing the war. The department Attitude Index dropped from 1.21 in 1972 to .91 in 1973, resulting in an attitude loss per person of \$2,400. Coupling this unfavorable trend in attitudes with the apparently favorable trend in turnover suggests that employees may be moving from the "turn-on" status to "turnover" or "turn-off" categories.

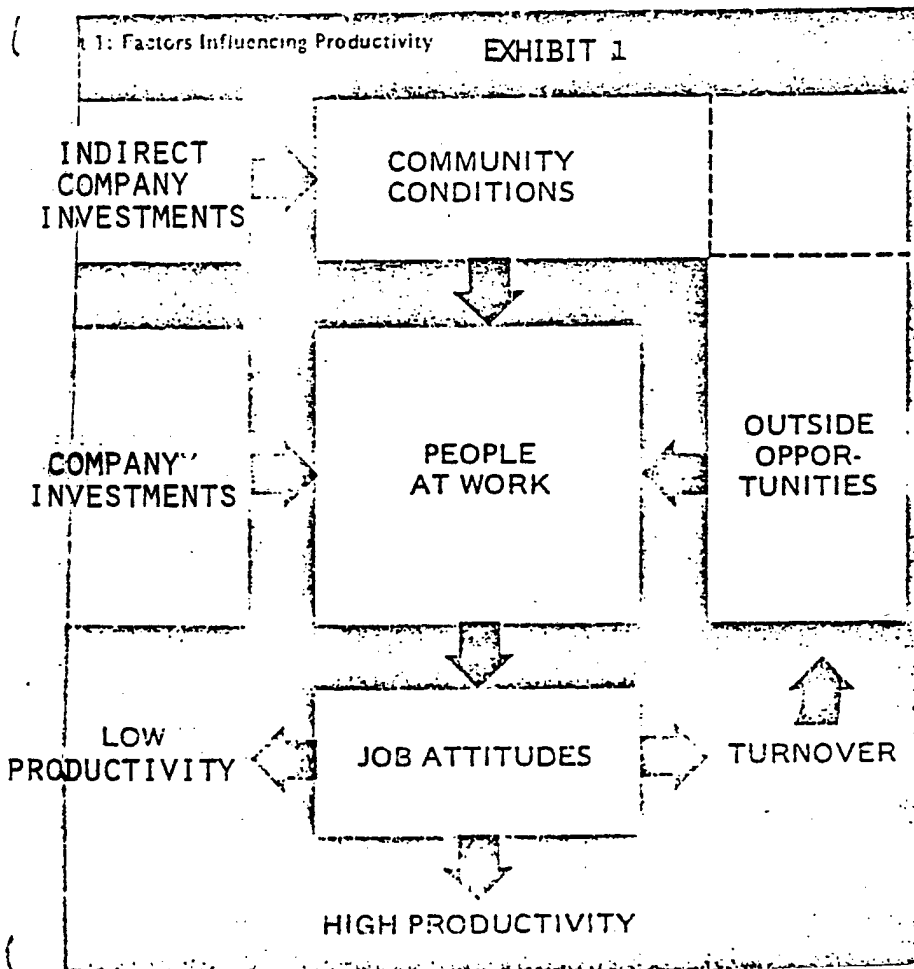


Exhibit 2: Abbreviated Attitude Questionnaire

	Agree	?	Disagree
1. My work is satisfying to me.	()	()	()
2. There is not enough cooperation between my work group and others we work with.	()	()	()
3. There are opportunities here for those who want to get ahead.	()	()	()
4. For my kind of job, working conditions are O.K.	()	()	()
5. We don't get enough information about how well our work group is doing.	()	()	()
6. People in my work group work together as a team.	()	()	()
7. I don't understand the objectives of my department.	()	()	()
8. I can be sure of a job here as long as I do good work.	()	()	()
9. There are too many unnecessary rules to follow here.	()	()	()
10. I have as much freedom as I need to plan my own work.	()	()	()
11. I feel free to tell my supervisor what I think.	()	()	()
12. I'm proud to work for this company.	()	()	()
13. I am paid fairly for the kind of work I do.	()	()	()
14. During the past six months I have seriously considered leaving the company for another job.	()	()	()
15. Favoritism is a problem in my area.	()	()	()
16. Most people here are in jobs that make good use of their abilities.	()	()	()
17. My job seems to be leading to the kind of future I want.	()	()	()
18. They expect too much from us around here.	()	()	()
19. I have clear-cut objectives on which to base my work goals.	()	()	()
20. Compared with other companies, our benefits are good.	()	()	()

Years with the company: () 0-2 () 3-5 () 6-10 () 11-20 () 21+

My job grade: _____

TABLE 2.15
DOLLARIZING ATTITUDES

Exhibit 3: Attitude Weights

Job Grades		Tenure				
Salaried	Hourly	0-2	3-5	7-10	11-20	21+
35+		7	8	9	10	11
33-34		6	7	8	9	10
29-32		5	6	7	8	9
25-28		4	5	6	7	8
22-24	10-12	3	4	5	6	7
	5-9	2	3	4	5	6
	1-4	1	2	3	4	5

Exhibit 4 Dollarized Attitudes

Individual	Annual Salary	Job Grade	Tenure	Attitude Weight	Attitude Score	Weighted Attitude Score
1. John Doe	\$14,000	28	5	5	1.05	5.25
2. Mary Brown	7,000	7	11	5	1.12	5.60
3. Harry Smith	9,000	12	22	7	1.21	8.47
4. Bill Jones	6,500	5	3	3	1.26	3.78
5. Jim Johnson	18,500	30	4	6	1.15	6.90
	<u>\$55,000</u>			<u>26</u>		<u>30.00</u>

$$\text{Attitude Index} = \frac{(\text{weighted A-Score})}{(\text{Attitude weight})} = \frac{30.00}{26} = 1.15$$

$$\text{Dollarized Attitudes} = \text{Attitude Index (Annual Payroll)} = 1.15(\$55,000) = \$63,250$$

$$\text{Gain} = \$63,250 - \$55,000 = \$8,250 \quad \text{Gain Per Person} = \frac{\$8,250}{5} = \$1,650$$

Exhibit 5: Dollarized Attitudes—Very Favorable

Individual	Annual Salary	Job Grade	Tenure	Attitude Weight	Attitude Score	Weighted Attitude Score
1. John Doe	\$14,000	28	5	5	1.50	7.50
2. Mary Brown	7,000	7	11	5	1.45	7.25
3. Harry Smith	9,000	12	22	7	1.68	11.76
4. Bill Jones	6,500	5	3	3	1.55	4.65
5. Jim Johnson	18,500	30	4	6	1.72	10.32
	<u>\$55,000</u>			<u>26</u>		<u>41.48</u>

$$\text{Attitude Index} = \frac{41.48}{26} = 1.60$$

$$\text{Dollarized Attitudes} = 1.60(\$55,000) = \$88,000$$

$$\text{Gain} = \$33,000 \quad \text{Gain Per Person} = \$6,600$$

Source: M. Scott Myers, op. cit.

TABLE 2.15 (Cont.)
DOLLARIZING ATTITUDES

Exhibit 6: Dollarized Attitudes—Very Unfavorable

Individual	Annual Salary	Job Grade	Tenure	Attitude Weight	Attitude Score	Weighted Attitude Score
1. John Doe	\$14,000	28	5	5	.51	2.55
2. Mary Brown	7,000	7	11	5	.73	3.65
3. Harry Smith	9,000	12	22	7	.65	4.55
4. Bill Jones	6,500	5	3	3	.45	1.35
5. Jim Johnson	18,500	30	4	6	.75	4.50
	<u>\$55,000</u>			<u>26</u>		<u>16.60</u>

$$\text{Attitude Index} = \frac{16.60}{26} = .64$$

$$\text{Dollarized Attitudes} = .64(\$55,000) = \$35,200$$

$$\text{Deficit} = \$19,800 \quad \text{Deficit Per Person} = \$3,960$$

Exhibit 7: Annual Planning Data

Asset Effectiveness Statement, Department 128

	Actual		Plan
	1972	1973	1974
Sales	\$1,500,000	\$2,000,000	\$2,200,000
Cost of sales	800,000	1,000,000	1,050,000
Gross margin	\$ 700,000	\$1,000,000	\$1,150,000
% sales	47.0%	50.0%	52.2%
Other department costs	\$ 319,000	\$ 334,000	\$ 350,000
Department profit	\$ 381,000	\$ 666,000	\$ 800,000
% sales	25.4%	33.3%	36.4%
Asset effectiveness measures			
Total assets	\$4,500,000	\$4,800,000	\$5,000,000
Sales/assets	33.3%	41.7%	44.4%
Profit/assets	8.3%	13.9%	16.0%
People effectiveness measures			
Number of people	80	75	86
Attitude index	1.21	.91	1.10
Total payroll	\$ 640,000	\$ 600,000	\$ 700,000
Turnover %	25%	12%	10%
Sales/person	\$ 18,500	\$ 26,667	\$ 25,581
Profit/person	\$ 4,762	\$ 8,890	\$ 9,302
Attitude gain/person	\$ 1,680	<\$720>	\$ 895

Source: M. Scott Myers, op. cit.

MODEL FOR LIBRARY LITERATURE SEARCH

- I. Basic bibliographical information (author, title, publisher, location, date) and library

Miller, Richard B., Participative Management, Quality of Worklife and Job Enrichment, Noyes Data Corporation Management Review Series, Parkridge, NJ, 1977. Library: Office of Personnel Management Library

- II. Identify types of nonpecuniary benefits

- III. Define categories (by author's preference)

- IV. Importance to various groups (race, sex, age, occupation, geographic location)

- V. Comparability to federal workers

- VI. Quantification, monetizing attempts if existing

- VII. Construct abstracts where significant (Xerox copies, inter-library loan books)

This volume contains excerpts from various studies on the "quality of worklife" and related topics which summarize other author's work. Job enrichment and participative management methods are also discussed and applications considered.

- VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

A list of the other studies is attached for further investigation.

Miller, Participative Management, Quality of Worklife and Job Enrichment
(continued)

VIII.

BIBLIOGRAPHY OF PREVIOUS AUTHORS CONCERNED WITH QUALITY OF
WORKLIFE

Glaser, Edward M., Improving the Quality of Worklife and ... in the
Process, Improving Productivity, Manpower Administration, US
Department of Labor, August 1974.

Strauss, George, Improving the Quality of Worklife Managerial Practices,
US Department of Labor, June 1975.

Lawler, Edward E., III, Improving the Quality of Worklife Reward Systems,
University of Michigan for Assistant Secretary for Planning,
Evaluation and Research, US Department of Labor, June 1975.

Hackman, Richard J., Improving the Quality of Worklife Design, Yale
University for US Department of Labor, June 1975.

Silverman, Gerald, Participative Management and Its Role in Motivations
and Productivity, Oklahoma University, December 1974.

Frank, Linda L. & Richard J. Hackman, A Failure of Job Enrichment in the
Case of the Change that Wasn't, Yale University for Manpower
Administration, Office of Naval Research, March 1975.

MODEL FOR LIBRARY LITERATURE SEARCH

I. Basic bibliographical information (author, title, publisher, location, date) and library

Morse, Nancy C., Satisfaction in the White-Collar Job, Survey Research Center, Institute for Social Research, University of Michigan, 1953.

Library: Army

II. Identify types of nonpecuniary benefits

Identifies general satisfaction, intrinsic job satisfaction, financial and job status satisfaction, involvement in the company, satisfaction of employees and supervisors, supervisory practices and employee attitudes, pride in performance of the group.

III. Define categories (by author's preference)

General Satisfaction: When a person likes his job, the company he works for, his pay, and his status, he is generally satisfied with his life in the organization.

Intrinsic job satisfaction, company involvement and pay and job status are factors which relate to general satisfaction. (Continued on next page.)

IV. Importance to various groups (race, sex, age, occupation, geographic location)

Type of work, length of service, salary level, age, sex, marital status, educational level

White-collar: Sample--740 employees, performing clerical work in a large company were studied. Middle class aspirations of 61 supervisors were included

V. Comparability to federal workers

Comparability to federal workers was not specifically addressed although results of study could easily be applied to federal white-collar workers.

VI. Quantification, monetizing attempts if existing

Indices established similar to Quinn's social indicators.

VII. Construct abstracts where significant (Xerox copies, inter-library loan books)

VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

Theoretical considerations: The amount of satisfaction experienced by an employee appears to be a function of both what he/she wanted from a situation and what he/she obtains from it. The greater the amount the individual gets, the greater his satisfaction and, at the same time, the more the individual still desires, the less his satisfaction.

III.

Attitudes Towards Supervisors: Employee with high general morale is more likely to have a favorable attitude towards supervisors. Perceptions of supervisors appear to be less related to intrinsic job satisfaction than to company involvement and financial and job status satisfaction.

Work Group Variables: The degree of group spirit or morale in an office is the only work group variable significantly related to intrinsic job satisfaction, company involvement and financial and job status satisfaction. The level of general satisfaction may be a predictor of the individual's desire to stay or leave the organization.

Intrinsic Job Satisfaction: Degree of satisfaction which the individual feels he derives from performing the content of his job is related to company involvement and financial and job status satisfaction

Type of work performed stands out most clearly as possible determinant of job satisfaction. Relationship established between high skill level and high job satisfaction, however, this does not suggest a relationship between age and job satisfaction.

If the employee has a lower level of aspiration, he will find a less challenging job satisfying.

Length of service significantly relates to type of work. Salary is also related to type of work and intrinsic job satisfaction.

Pay and Job Status: Employees desire for pay and job status appear to depend upon the amount of relevant training and experience he has, cultural expectations and economic need.

Satisfaction with the Organization: Satisfaction with the organization as a place to work appears to be a function of satisfaction with job content and satisfaction with pay and job status.

Differences in satisfaction between employees and supervisors appear to be partly due to differences in needs and partly due to specific environments.

Motivation: This study attempted to gain an understanding of the relationship between satisfaction and the motivation to produce. Two factors associated with productivity were tested for correlation of supervisory practices.

Pride in group performance was related to voluntarism and friendliness, which existed in productive groups.

With regard to type of supervision, the section leader using general supervision rather than close supervision increases employees' aspirations.

MODEL FOR LIBRARY LITERATURE SEARCH

I. Basic bibliographical information (author, title, publisher, location, date) and library

National Industrial Conference Board, Inc., Factors Affecting Employee Morale, by S. Avery Raube, New York, 1947. Library: Commerce Department

II. Identify types of nonpecuniary benefits

List of 71 morale factors. From this list individuals selected those 5 they considered most important in jobs.

(See abstract and lists of factors, pages D-56 through D-61.)

III. Define categories (by author's preference)

IV. Importance to various groups (race, sex, age, occupation, geographic location)

Factors selected by all cooperating employees, according to type of work; according to sex, according to age groups, according to length.

(See abstrage, page D-56.)

V. Comparability to federal workers

Only to the extent that factors selected may be important to federal workers also.

VI. Quantification, monetizing attempts if existing

No attempt to quantify - list included both monetary and nonmonetary factors.

VII. Construct abstracts where significant (Xerox copies, inter-library loan books)

Note: This study often used as reference in later work in the field.

VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

Basis of the survey--comparison of morale factors selected by employees with those factors executives and labor leaders believed were important to employees. Study conducted in mid-1940's.

National Industrial Conference Board, Inc., Factors Affecting Employee Morale (continued)

ABSTRACT

National Industrial Conference Board, Inc., Factors Affecting Employee Morale, by S. Avery Raube, New York, 1947

Basis of the Study

A variety of answers have been given to the questions:

- What do employees want most?
- What factor or factors have the greatest effect on the employee's attitude toward his job and company?
- Which factors have the least influence?

The primary effort in the study was to find out directly from employees what factors they considered most important compared to those that executives and labor leaders thought employees considered important.

Phases of the Study

Study planned in three steps:

1. Survey of executives to find out what factors they believed important to their employees.
2. Labor leaders also asked to select the factors which they believed had the greatest effect on employee's attitudes toward their jobs and company.

(These phases done during 1944--included more than 100 executives and approximately 50 labor leaders.)

3. Six companies selected for employee survey (also asked the top policy making executives in these firms to predict the factors, in order of importance, that would be selected by employees of their companies).

Companies - 5 manufacturers and 1 printing and publishing

Locations - N.C., Pa., Minn., Ohio, Calif.

Findings of the Study

First Factor in Importance - All Cooperating Employees

Job Security-Employment Stabilization	30.6%
Compensation (Base Pay)	8.7%
Type of Work	7.2%
Opportunities in the Company for Advancement	4.7%
Profit-Sharing Plans (Excluding Employee Savings Plans)	3.8%
Supervisors' Temperament and Personality	3.5%
Vacation and Holiday Practices	3.3%
Practice of Informing You of Your Job Status (Both of Your Success and Failures)	3.1%
Physical Working Conditions (on-the-job)	3.1%

(Note: This table indicates the percentage of employees who selected each factor as being of first importance in job--i.e., 30.6% selected job security as most important, 8.7% selected compensation as most important, etc.)

Total, Five Most Important Factors - All Cooperating Employees

<u>Employees</u>	44.7%
Job Security - Employment Stabilization	44.7%
Opportunities in the Company for Advancement	30.7%
Compensation (Base Pay)	27.9%
Employee Financial Benefits, such as Group Life Insurance, Sickness Insurance, and Pensions	24.4%
Practice of Informing you of Your Job Status (Both of your success and failures)	19.2%

(Note: This shows results when all of the five selections made by each employee are tabulated, i.e., how frequently was each factor ranked somewhere among the top five factors.)

First Factor in Importance - Clerical and Numerical Workers

<u>Clerical</u>	<u>Nonclerical</u>
Job Security	Job Security
Type of Work	Compensation (Base Pay)
Compensation (Base Pay)	Vacation and Holiday Practices
Opportunity in Company for Advancement	Physical Working Conditions
Practice of Informing you of your job status	Supervisors' Temperament and Personality

Total, Five Most Important Factors - Clerical and Nonclerical Workers

<u>Clerical</u>	<u>Nonclerical</u>
Opportunity for Advancement	Job Security
Job Security	Financial benefits (life insurance, etc.)
Compensation	Compensation
Type of Work	Opportunity for Advancement
Informing you of your job status	Supervisors' Temperament and personality

First Factor in Importance--Male and Female Employees

<u>Male</u>	<u>Female</u>
Job Security	Job Security
Compensation	Compensation
Type of work	Type of Work
Opportunity for Advancement	Physical Working Conditions
Profit-Sharing Plans	Supervisors' Temperament

Total, Five Most Important Factors - Male and Female Employees

<u>Male</u>	<u>Female</u>
Job Security	Job Security
Opportunity for Advancement	Compensation
Compensation	Opportunity for Advancement
Financial Benefits (Life Insurance, etc.)	Supervisors' Temperament
Profit-Sharing Plans	Informing you of Job Status

First Factors in Importance Selected by Employees in Three Age Groups

<u>Under 30 years</u>	<u>30-50 years</u>	<u>50 years and over</u>
Job Security	Job Security	Job Security
Compensation	Compensation	Vacation & Holiday
Type of Work	Type of Work	Profit-Sharing
Opportunity for Advancement	Profit-Sharing	Supervisors' Temperament
Physical Work Conditions	Opportunity for Advancement	Merit or Performance Rating

Total, Five Most Important Factors Selected by Employees in Three Age Groups

<u>Under 30 years</u>	<u>30-50 Years</u>	<u>50 Years and over</u>
Job Security	Job Security	Job Security
Opportunity for Advancement	Opportunity for Advancement	Financial Benefits (insurance)
Compensation	Financial Benefits (i.e., insurance)	Compensation
Type of Work		Vacation & Holiday
		Physical Working Conditions

FIRST FACTOR IN IMPORTANCE BY LENGTH OF SERVICE GROUPS

<u>Under 6 months</u>	<u>6 months to 1 yr</u>	<u>1 to 4 yrs</u>	<u>4 to 10 yrs</u>	<u>10 to 20 yrs</u>	<u>20 yrs and over</u>
Job Security Informing you of your job status Compensation Type of Work Ability to get along with others	Job Security Compensation Opportunity for Advance- ment Type of Work Merit of Performance Rating	Job Security Compensation Type of Work Physical Working Conditions Profit-Sharing Plans	Job Security Type of Work Compensation Opportunity for Advancement Vacation & Holiday	Job Security Compensation Opportunity for Advancement Type of Work Supervisors' Tempera- ment	Job Security Vacation & Holiday Compensation Type of Work Labor Unions

TOTAL, FIVE MOST IMPORTANT FACTORS BY LENGTH OF SERVICE GROUPS

Job Security Informing you of your job status Compensation Type of Work Financial Benefits (i.e., insurance)	Job Security Opportunity for Advance- ment Financial Benefits (i.e., insurance) Informing you of your job status Compensation	Job Security Opportunity for Advancement Financial Benefits (i.e., insurance) Compensation Informing you of your job status	Job Security Compensation Opportunity for Advance- ment Financial Benefits (i.e., insurance) Type of Work	Job Security Compensation Opportunity for Advancement Vacation & Holiday Hiring outsiders vs promotion from within	Job Security Vacation & Holiday Financial Benefits (i.e., insurance) Compensation Opportunity for Advancement
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Comparison of Factors Selected by Employee and Those Selected by
Executive and Labor Leaders

First Factor of Importance Selected by Employees, by 50 Executives
and 42 Labor Leaders

<u>Employees' Selections</u>	<u>Executives' Predictions</u>	<u>Labor Leaders' Predictions</u>
Job Security	Compensation	Compensation
Compensation	Job Security	Job Security
Type of Work	Company's Attitude toward	Labor Unions
Opportunity for Advancement	employees	Union (employee/
Profit-sharing plans	Extra compensation plans	management relations)
	(bonuses)	Company's attitude
	Profit-sharing plans	toward employees

Total, Five Most Important Factors Selected by Employees by 50 Executives
and 42 Labor Leaders

<u>Employees' Selections</u>	<u>Executives' Predictions</u>	<u>Labor Leaders' Predictions</u>
Job Security	Compensation	Compensation
Opportunity for Advancement	Job Security	Job Security
Compensation	Vacation & Holiday	Total hours worked
Financial Benefits	Opportunity for Advancement	per day per week
(i.e., insurance)	Physical working conditions	Labor Unions
Informing you of your job status		

LIST OF MORALE FACTORS

1. Vacation and holiday practices
2. Leave of absence practices (non-military)
3. Job security—employment stabilization
4. Employee merit or performance rating (an organized and systematic method of appraising your performance)
5. Practice of informing you of your job status (both of your success and failures)
6. Personnel counselling
7. Compensation (base pay)
8. Formal plans for determining basic rates of pay (job evaluation programs)
9. Extra compensation plans (all types of bonuses)
10. Profit-sharing plans (excluding employee savings plans)
11. Employee savings and thrift plans
12. Training of wage earners (rank-and-file employees)
13. Training of supervisors and foremen
14. Training of executives
15. Induction training (including orientation)
16. Company medical and health programs
- 16a. Accident prevention activities
17. Employee feeding facilities (restaurants, lunch rooms, cafeterias, canteens, mobile kitchens)
18. Total hours worked per day per week
19. Shifts (time starting and finishing work)
20. Transportation facilities (to and from work)
21. Housing facilities
22. Smoking privileges
23. Physical working conditions (on-the-job)
24. Physical condition of recreation rooms, lavatories, and other personal facilities
25. General outside physical appearance of plant
26. Rest periods
27. Length of lunch period
28. Frequency and method of paying wages
29. Employee financial benefits, such as group life insurance, sickness insurance, and pensions
31. Social and recreational activities
33. Termination allowances (dismissal compensation)
34. Labor unions
35. Type of union leadership
36. Employment records—accuracy and completeness of employees' history with the company
37. Music on the job
38. Employment of mixed nationalities
39. Employment of mixed races
40. Labor turnover rate (its effect on morale of employees)
41. Opportunities in the company for advancement
42. Practice of hiring outsiders for responsible jobs vs. "promotion from within"
43. Type of company's product (its social importance) DURING WAR
- 43a. Type of company's product (its social importance) DURING PEACETIME
44. Knowledge of company's products
45. Knowledge of competitors' products
46. Knowledge of company's customers
47. Company's reputation with the public
48. Company's reputation with its customers
49. Your knowledge of company's finances
50. Type and condition of tools and equipment
51. Employee suggestion systems
52. Methods of handling grievances
53. Contact with executives (opportunity to see them occasionally)
54. Your burden of state and federal taxes
55. Marital status (single or married)
56. Domestic relations and home conditions
57. Employment methods, including selection, interviewing and placement
58. Laws affecting relations between employers and employees
59. Policies and practices regarding discharge of employees
60. Policy with respect to wearing uniforms (or regulating working attire)
61. Production Drives:
 - (a) Based upon cooperative effort of management and employees (wartime)
 - (b) Incentive ideas stimulated by company (peacetime)
62. Location of plant (on "right" or "wrong" side of "the tracks")
63. Your own temperament—ability to get along with others
64. Your confidence in yourself
65. Your family's attitude toward your company and job
66. Company's attitude toward employees (its interpretation of policies—whether liberal or conservative)
68. Supervisors' temperament and personality
69. Bulletin boards, house organs and other methods of disseminating information to employees
70. Quality of supervision
71. Type of work

MODEL FOR LIBRARY LITERATURE SEARCH

- I. Basic bibliographical information (author, title, publisher, location, date) and library

Organization for Economic Cooperation and Development, Forms of Wage and Salary Payment for High Productivity, International Seminars, 1967.

Library: Department of Labor

- II. Identify types of nonpecuniary benefits

Limitation of output or low productivity are explained in terms of four nonpecuniary factors: moral weakness, inadequate managerial control, working group norms, adaptation to environment, and collective bargaining.

- III. Define categories (by author's preference)

1. If the moral weakness or idleness theory could be proven, the author emphasizes the difficulty in devising a pay scheme to remedy this. The only alternative is to strengthen the link between income and consumption aspirations. (Continued on next page.)

- IV. Importance to various groups (race, sex, age, occupation, geographic location)

- V. Comparability to federal workers

Comparability to federal workers not discussed specifically

- VI. Quantification, monetizing attempts if existing

- VII Construct abstracts where significant (Xerox copies, inter-library loan books)

- VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

Organization for Economic Cooperation and Development, Forms of Wage and Salary Payment for High Productivity (continued)

III.

2. Adequate managerial control (with regard to production) includes:

- a. Scheduling and controlling work flow efficiently
- b. Setting performance standards scientifically
- c. Proper selection and training for well defined tasks
- d. Adequate and regular rewards to sustain the work level

3. Norms of Working Groups:

The performance levels of individuals are influenced as much by group norms as they are by formal administrative and supervisory influences.

"If the work group perceives administrative structure or behavior as hostile, or unpredictable, it is likely that behavior norms and social sanctions upon individual deviations from them will become protective and restrictive."

Remedies to this negative form of group behavior include consultative supervisory processes, improved communications systems.

4. Adaptation to Environment

With respect to productivity, relevant variables within the environment are the labor and product markets within the enterprise, the general level of economic activity, the technology employed, the work flow arrangements, the structure of working groups, the nature of arrangements for individual and collective bargaining, the motives of individuals and the values and expectations they bring to their jobs.

MODEL FOR LIBRARY LITERATURE SEARCH

I. Basic bibliographical information (author, title, publisher, location, date) and library

Prybil, Lawrence D., "Job Satisfaction in Relation to Job Performance and Occupational Level," Personnel Journal, Vol 52, No. 2, pp. 94-100, February 1973.

Library: AFL-CIO

II. Identify types of nonpecuniary benefits

Salary, Security, Relations/Co-workers, Prestige, Autonomy, Self-actualization.

III. Define categories (by author's preference)

Job Performance Criteria: Compatibility, Quality of Work, Work under pressure, work toward promotion

IV. Importance to various groups (race, sex, age, occupation, geographic location)

University Library Personnel (knowledge-oriented organization):
Librarians, Clerical Workers, Service Personnel

V. Comparability to federal workers

VI. Quantification, monetizing attempts if existing

VII. Construct abstracts where significant (Xerox copies, inter-library loan books)

Job performance of satisfied library personnel are not rated superior to unsatisfied groups by supervisors.

Job satisfaction does not appear to be related to occupational level: clerical workers most satisfied--service personnel least satisfied.

VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

MODEL FOR LIBRARY LITERATURE SEARCH

- I. Basic bibliographical information (author, title, publisher, location, date) and library
Quinn, Robert P., and Martha S. Baldi de Mandilovitch, Education and Job Satisfaction: A Questionable Payoff, U.S. Department of HEW, National Institute of Education, Education and Work Group, Washington, D.C., March 1977. Library: Office of Personnel Management
- II. Identify types of nonpecuniary benefits
Job satisfaction. (Also reference to 1972-73 Quality of Employment Survey on specific aspects of job-comfort, challenge, financial rewards, and resource adequacy.)
- III. Define categories (by author's preference)
Relationship between education and overall job satisfaction.
- IV. Importance to various groups (race, sex, age, occupation, geographic location)
No relationship was found between education level and job satisfaction among workers who had not gone to college, but those who had obtained college degrees were consistently more satisfied with their jobs than were others.
- V. Comparability to federal workers
- VI. Quantification, monetizing attempts if existing
- VII. Construct abstracts where significant (Xerox copies, inter-library loan books)
Report concentrated on attempting to answer two questions: (1) What is the relationship between education and job satisfaction? (2) How may this relationship be understood in socio-psychological terms? (Continued on next page.)
- VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)
Sources of information: previously published research bearing either directly or indirectly upon the relationship between education and job satisfaction; and secondary analyses of nine national surveys that (Continued on next page.)

Quinn and de Mandilovitch (continued)

VII. Since some of the surveys used as basis for the study provided more than one measure of job satisfaction, there were 12 separate estimates of the correlation between level of education and job satisfaction. "All of the observed relationships were modest at best, the correlations never exceeding .12. There was clearly no increment in job satisfaction with each succeeding year of education."

..."When satisfaction with specific facets of jobs were examined, education level was found to be significantly related only to satisfaction with the financial rewards provided by jobs and to how challenging and self-developing these jobs were."

..."Four measures of education level were developed that expressed a worker's education in relative rather than absolute terms. The number of years of education a worker had attained was measured relative to: that required by his or her occupation as indicated in the Dictionary of Occupational Titles; that which the worker felt was needed by his or her job; that of others in the worker's occupation; that attained by others in his or her work group.... The most dissatisfied workers were those who were too highly educated for their jobs."

..."The social-psychological model developed to understand the relationship between education and job satisfaction suggested that to the extent that education was rewarded occupationally, education level should be positively related to quality of employment. Moreover, this relationship should be stronger than that between education level and job satisfaction. The data indicated that both inferences were correct... education appeared to have little direct effect upon job satisfaction. Its effect was instead an indirect one, with education providing workers with generally "better," and hence more satisfying, jobs."

"Education level also appeared to be associated with the importance that workers attached to various aspects of their jobs. It was not clear from the data, however, whether these associations represented the direct effects of education or could be explained instead by the intervening effects of quality of employment."

Note A: Also have Xerox of Appendix D of this study - Components of Quality of Employment Indicators.

Note B: Authors have used some information from 1972-73 Quality of Employment Survey.

VIII. had been designed for purposes other than understanding the relationship between education and job satisfaction. (See Xerox of Appendix C of report for surveys used.)

MODEL FOR LIBRARY LITERATURE SEARCH

I. Basic bibliographical information (author, title, publisher, location, date) and library

Rainville, Jean-Marie, "Comparative Effects of the Pace of Work and Job Enrichment on Job Satisfaction Among Manufacturing Workers," Labor & Society, Vol. 2, No. 3, pp. 289-300, July 1977.

Library: AFL-CIO

II. Identify types of nonpecuniary benefits

Intrinsic values.

III. Define categories (by author's preference)

Specific Factors Examined: Pace of work, job enrichment, frequency of layoffs, job security, chances of promotion.

IV. Importance to various groups (race, sex, age, occupation, geographic location)

A group of manufacturing workers was the sample used.

V. Comparability to federal workers

VI. Quantification, monetizing attempts if existing

VII. Construct abstracts where significant (Xerox copies, inter-library loan books)

Job security remains the main preoccupation of all manufacturing workers. Thus, job enrichment does not necessarily compensate the workers for job dissatisfaction. However, increasing the wages of slow paced workers does increase their job satisfaction.

VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

MODEL FOR LIBRARY LITERATURE SEARCH

I. Basic bibliographical information (author, title, publisher, location, date) and library

Shapiro, Jack H. and Louis W. Stern, "Job Satisfaction: Male and Female, Professional and Nonprofessional Workers," Personnel Journal, Vol 54, No. 7, 388-389, July 1975.

Library: AFL-CIO

II. Identify types of nonpecuniary benefits

Opportunity for Disadvantaged Groups Coworkers
Pay
Supervision
Promotion
Work (itself)

III. Define categories (by author's preference)

IV. Importance to various groups (race, sex, age, occupation, geographic location)

Professionals

Public Service Organization (Psychologist, Medical Workers); Higher Educational Level

Non-professionals

Industrial Manufacturer of Aerospace Equipment (production, shipping, quality control, clerical); Lower Educational Level

V. Comparability to federal workers

VI. Quantification, monetizing attempts if existing

"Satisfaction with work and promotions was higher for males than females, regardless of whether individual was a professional or a nonprofessional."
Professional men more satisfied with pay than were women.
Nonprofessional women more satisfied with pay than were men.

(Continued on next page.)

VII. Construct abstracts where significant (Xerox copies, inter-library loan books)

VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

Shapiro, "Job Satisfaction: Male and Female, Professional and Nonprofessional Workers," (continued)

VI.

Nonprofessional women more satisfied with job "on the whole" than were men.

Professional men were more satisfied with job than women.

Holds true across black and white race differentials, too.

MODEL FOR LIBRARY LITERATURE SEARCH

I. Basic bibliographical information (author, title, publisher, location, date) and library

Sirota, David, "The Myth and Realities of Worker Discontent," Wharton Quarterly, pp. 5-9, Spring 1974.

Library: AFL-CIO

II. Identify types of nonpecuniary benefits

Turnover, work pressure, and meaning of work.

III. Define categories (by author's preference)

Specific Characteristics: Personal, job itself, management, compensation, advancement, obstacles to doing work, work load amount.

IV. Importance to various groups (race, sex, age, occupation, geographic location)

V. Comparability to federal workers

VI. Quantification, monetizing attempts if existing

VII. Construct abstracts where significant (Xerox copies, inter-library loan books)

Two studies: A study conducted at the bank found their problem was "pay-check enrichment." However, the construction company found major factor was job itself; many people were doing work considered to be "beneath their level of training and competence."

VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

Motivation theory based on E. H. Schein's concept of "Complex Man" which states that job satisfaction is almost always unrelated to satisfacton with pay.

MODEL FOR LIBRARY LITERATURE SEARCH

- I. Basic bibliographical information (author, title, publisher, location, date) and library
Taubman, Paul J, "Schooling, Ability, Nonpecuniary Rewards, Socioeconomic Background, and the Lifetime Distribution of Earnings," The Distribution of Economic Well-Being, F. Thomas Juster, ed., Cambridge, Mass., Ballinger Publishing Co., 1977.
Library: Department of Labor

II. Identify types of nonpecuniary benefits

1. Importance of prior education for advancement: Inherited & Acquired Skills (author's terminology)
2. Training
3. Independence (self-employed or employed by a firm)
4. Prospects of future financial success (Continued on next page.)

III. Define categories (by author's preference)

Importance of prior education for advancement: Level of skill possessed at a given point in time as determined by genetic endowments and the environment.
(Continued on next page.)

IV. Importance to various groups (race, sex, age, occupation, geographic location)

White, male, same sample over a 15-year period.

V. Comparability to federal workers

Private and public sector comparability not specifically addressed.

VI. Quantification, monetizing attempts if existing (see also next page)

1. Importance of prior education: modified procedure for estimation:

$$X_{ji} = C_j G_i + d_j N_i$$

X = inherited and acquired skills

G = genetic endowments

N = environment

i = individual

VII. Construct abstracts where significant (Xerox copies, inter-library loan books)

VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

- Sample
1. 1943-NBER-TH Sample drawn from a group of 75,000 men volunteered to enter Army Air Force's pilot, bombardier, and navigator training program.
 2. Sources of Inequality of Earnings, 1955 Sample of 17,000 men in both civilian and military drawn from above sample.
 3. 1969-1970-5,100 sample chosen from above.

II. (continued)

6. Chance to help others (Addition to proposal listing)
7. Sense of challenge
8. Job security
9. Free time (Included in "Hours of Work.")

III. (continued)

2. Training: Learning or increasing skill levels in a variety of ways.
Training institutions cited: family, peer group, school, military, job.
- 3-9. Nonpecuniaries: Nonmonetary rewards from a job. "Since we expect people to base their job decisions on the total of pecuniary and nonpecuniary rewards, jobs which pay heavily in a nonpecuniary form should have a compensatory change in wage payments."

VI. (continued)

2. Training: monetized via use of proxies, i.e., family income and wealth, religion, urban or rural residence, parents' education and occupation, schooling, measures of college quality.
- 3-9. Survey questions:
"Assuming you thought that financial possibilities were equal, would you prefer to work for somebody else or no preference?"

"As best you can remember, what factors influenced your decision to enter the occupational field you are in at the present time?"

MODEL FOR LIBRARY LITERATURE SEARCH

I. Basic bibliographical information (author, title, publisher, location, date) and library

Smith, Patricia Cain, C. L. Hulin and Lorne M. Kendall, The Measurement of Satisfaction in Work and Retirement, Rand McNally and Co., Chicago, 1969.

Library: Army

II. Identify types of nonpecuniary benefits

Intrinsic value of work, psychological and emotional discomforts, opportunity advancement

III. Define categories (by author's preference)

1. Type of work - fascinating, boring, satisfying, challenging, pleasant, accomplishment, etc.
 2. Pay - high pay, underpaid, income adequate, luxuries provided, etc.
- (Continued on next page)

IV. Importance to various groups (race, sex, age, occupation, geographic location)

V. Comparability to federal workers

VI. Quantification, monetizing attempts if existing

VII. Construct abstracts where significant (Xerox copies, inter-library loan books)

See table on page D-75.

VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

Model for job satisfaction. (JDI) measures satisfactions within five job area type of work, pay, opportunities for promotion, supervision and co-workers on the job.

Smith, Hulin, and Dendall, The Measurement of Satisfaction in Work and Retirement (continued)

III.

3. Promotions - opportunity for advancement, unfair promotion policy, regular or infrequent, etc.
4. Co-workers - responsible, intelligent, slow, fast, loyal, lazy, stimulating, hard to meet, etc.
5. Supervision - help when needed, hard to please, tactful, influential, annoying, stubborn, etc.

TABLE 4.11
Items in Final Version of JDI

Each of the five scales was presented on a separate page.

The instructions for each scale asked the subject to put Y beside an item if the item described the particular aspect of his job (work, pay, etc.), N if the item did not describe that aspect, or ? if he could not decide.

The response shown beside each item is the one scored in the "satisfied" direction for each scale.

WORK		PAY	
<u>Y</u>	Fascinating	<u>Y</u>	Income adequate for normal expenses
<u>N</u>	Routine	<u>Y</u>	Satisfactory profit sharing
<u>Y</u>	Satisfying	<u>N</u>	Barely live on income
<u>N</u>	Boring	<u>N</u>	Bad
<u>Y</u>	Good	<u>Y</u>	Income provides luxuries
<u>Y</u>	Creative	<u>N</u>	Insecure
<u>Y</u>	Respected	<u>N</u>	Less than I deserve
<u>N</u>	Hot	<u>Y</u>	Highly paid
<u>Y</u>	Pleasant	<u>N</u>	Underpaid
<u>Y</u>	Useful	PROMOTIONS	
<u>N</u>	Tiresome	<u>Y</u>	Good opportunity for advancement
<u>Y</u>	Healthful	<u>N</u>	Opportunity somewhat limited
<u>Y</u>	Challenging	<u>Y</u>	Promotion on ability
<u>N</u>	On your feet	<u>N</u>	Dead-end job
<u>N</u>	Frustrating	<u>Y</u>	Good chance for promotion
<u>N</u>	Simple	<u>N</u>	Unfair promotion policy
<u>N</u>	Endless	<u>N</u>	Infrequent promotions
<u>Y</u>	Gives sense of accomplishment	<u>Y</u>	Regular promotions
		<u>Y</u>	Fairly good chance for promotion
SUPERVISION		CO-WORKERS	
<u>Y</u>	Asks my advice	<u>Y</u>	Stimulating
<u>N</u>	Hard to please	<u>N</u>	Boring
<u>N</u>	Impolite	<u>N</u>	Slow
<u>Y</u>	Praises good work	<u>Y</u>	Ambitious
<u>Y</u>	Tactful	<u>N</u>	Stupid
<u>Y</u>	Influential	<u>Y</u>	Responsible
<u>Y</u>	Up-to-date	<u>Y</u>	Fast
<u>N</u>	Doesn't supervise enough	<u>Y</u>	Intelligent
<u>N</u>	Quick tempered	<u>N</u>	Easy to make enemies
<u>Y</u>	Tells me where I stand	<u>N</u>	Talk too much
<u>N</u>	Annoying	<u>Y</u>	Smart
<u>N</u>	Stubborn	<u>N</u>	Lazy
<u>Y</u>	Knows job well	<u>N</u>	Unpleasant
<u>N</u>	Bad	<u>N</u>	No privacy
<u>Y</u>	Intelligent	<u>Y</u>	Active
<u>Y</u>	Leaves me on my own	<u>N</u>	Narrow interests
<u>N</u>	Lazy	<u>Y</u>	Loyal
<u>Y</u>	Around when needed	<u>N</u>	Hard to meet

MODEL FOR LIBRARY LITERATURE SEARCH

I. Basic bibliographical information (author, title, publisher, location, date) and library

Smith, Sharon P., Equal Pay in the Public Sector: Fact or Fantasy, Industrial Relations Section: Princeton University, 1977.

II. Identify types of nonpecuniary benefits

1. Profit Considerations - (Nature of firm)
2. Inside knowledge of pay legislation
3. Competition among government entities
4. On the job training
5. Competition basis for recruitment
6. Prior education
7. Length of queue
8. Unions-(collective security)

III. Define categories (by author's preference)

1. No profit considerations to provide check on wages.
2. Inside knowledge of pay legislation. Government workers are likely to form a single strong lobbying group. This could be seen in relation to job security.
3. Competition among government entities with respect to level and quality of services provided, their cost and the quality of employees, These factors push wage higher. (Continued on next page.)

IV. Importance to various groups (race, sex, age, occupation, geographic location)

Smith measures what comparable people (vs. comparable jobs) earn in public and private sectors.
Classifications: age, education, race, sex, location.

V. Comparability to federal workers

Specifically discusses the upward bias in public sector pay vis-a-vis private sector pay.

VI. Quantification, monetizing attempts if existing

Attempts to monetize:

1. Prior education
2. On the job training
3. Union wage effects on salary

VII. Construct abstracts where significant (Xerox copies, inter-library loan books)

VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

1. In France, public sector worker seen to obtain guarantee of job progressions. In the legal sense, these workers are subject to different rights and responsibilities. (Continued on next page.)

- III. 4. On the job training: Government employment may be viewed as a sort of on the job training which enables individuals to receive higher salaries in private employment.
7. Length of queue: Wages should depend not only on comparisons of total compensation (wages plus fringe benefits) but also on a consideration of the queues exist for public jobs when comparisons of total compensation indicate comparability between the two sectors and yet there are vacancies in the private sector, some unmeasured form of compensation must give public sector an advantage of private sector.
8. Unions-(collective security): Wellington and Winter (1971) argue public sector unions are inherently more powerful than private sector unions for following reasons:
1. political nature of decision making process
 2. demand for government services is inelastic
 3. government services are essential
 4. disruption of services is inconvenient

General effect of unionization is to raise salaries by as much as 15%.

- VIII. 2. New York City - City construction workers are paid 90% of prevailing private sector. This discrepancy explicitly recognizes that government construction workers are usually assured of work throughout the year, private sector workers have unstable employment.
3. San Francisco: No recognition of public benefits. City workers are paid private sector wages and then some.
4. Studies cited on impact of public sector unionization on salaries, i.e., Schmenner (1973), Ashenfelter (1971).

Additional Non-Pecuniaries:

- a. Nature of the firm - no profit orientation therefore no check on wages. However, recent budget crises indicate resistance to increased wages.
Public Sector: Low employment elasticities in public sector relative to private sector.
- b. Political considerations - Inside knowledge of pay legislation therefore, government workers are likely to form a single strong lobbying group.
- c. Competition among government entities with respect to level and quality of services provided pushes wages higher.
- d. High level employment in government enables individuals to receive higher salaries in private employment. Government service is on the job training.
- e. Growth of firm as a factor in determining growth potential for the individual.
- f. Additional situational factors: relations with co-workers and availability of resources needed to carry out the job.

MODEL FOR LIBRARY LITERATURE SEARCH

I. Basic bibliographical information (author, title, publisher, location, date) and library

Tannir, Anis A., and David T. Hartgen, Who Favors Work-Schedule Changes, and Why? New York State Department of Transportation, Planning Division, Albany, June 1977. Library: Department of Transportation.

II. Identify types of nonpecuniary benefits

Alternative work-schedule changes (to determine whether the desire to avoid traffic congestion is a primary determinant of attitudes).

III. Define categories (by author's preference)

Questionnaire on travel patterns, attitudes toward components of work schedules, and perceived schedule-change impacts on family life, travel patterns, and working environment.

IV. Importance to various groups (race, sex, age, occupation, geographic location)

Sample was white collar employees. Most preferred arrangements: 5-day variable hours, 4-day variable hours, and 5-day individual-specific hours; support strongest among younger employees with children in school; weakest among single and older employees and carpoolers.

V. Comparability to federal workers

Assume there could be comparability to federal workers.

VI. Quantification, monetizing attempts if existing

No attempt to quantify.

VII. Construct abstracts where significant (Xerox copies, inter-library loan books)

Results - basic motivation behind favoring work schedule changes is employee's desire to introduce flexibility into family, leisure, and work activities. Avoiding traffic congestion was a contributing but not major factor.

VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

Technique known as trade-off analysis was used to determine the most preferred programs and the characteristics of those in favor and opposed to schedule change.

MODEL FOR LIBRARY LITERATURE SEARCH

I. Basic bibliographical information (author, title, publisher, location, date) and library

Thompson, Duane E., and R. P. Borglum, "A Case Study of Employee Attitudes and Labor Unrest," Industrial and Labor Relations Review, pp. 74-83, October 1973.

Library: AFL-CIO

II. Identify types of nonpecuniary benefits

Work pressure, emotional discomforts

III. Define categories (by author's preference)

The author investigated these specific factors: Pressure on the job, peer relations, immediate supervisor, identify with the company and organizational policy.

IV. Importance to various groups (race, sex, age, occupation, geographic location)

Meat-packing production and maintenance employees were used in this study.

V. Comparability to federal workers

VI. Quantification, monetizing attempts if existing

VII. Construct abstracts where significant (Xerox copies, inter-library loan books)

High levels of dissatisfaction with pressures on the job, pay, and fringe benefits, led to emotional discomforts for the employees surveyed. Organizational policy and peer relations could not be significantly proven to cause unrest or emotional disturbance as previously believed.

VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

MODEL FOR LIBRARY LITERATURE SEARCH

I. Basic bibliographical information (author, title, publisher, location, date) and library

Viteles, Morris S., Motivation and Morale in Industry, W. W. Norton & Company, Inc., New York 1953. Library: GRC

II. Identify types of nonpecuniary benefits

Need for security; status, recognition, and supervision; satisfaction of ego-involved needs; social organization and social motives.

III. Define categories (by author's preference)

Author mainly describes these benefits by referring to various studies which have been done by others, however, he does draw some conclusions. (See next page for author's comments.)

IV. Importance to various groups (race, sex, age, occupation, geographic location)

V. Comparability to federal workers

VI. Quantification, monetizing attempts if existing

No quantification.

VII. Construct abstracts where significant (Xerox copies, inter-library loan books)

Book gives extensive coverage of work done in the field up to time of publication; good for reference and background information, but too detailed for abstract.

VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

"...a comprehensive description and critical evaluation of American and British experimental studies and attitude surveys bearing upon the sources of motivation and the determinants of morale in industry." (p. ix, Preface)
Historic development - early theories, surveys.

Viteles, Motivation and Morale in Industry (continued)

III.

1. "The outcomes of employee attitude surveys support the conclusion that economic security, as represented in steady work and regular compensation, is a basic need for the worker which must be considered in the formulation of personnel policies and practices in industry and business." p. 311

2. "Everywhere among the workers, the nature of his job and not solely the earning power determines the social standing awarded the worker by his fellow-citizens." (Quoted from W. Williams, Mainsprings of Men, Charles Scribner's Sons, 1925) p. 320

"Attitude surveys have confirmed Williams' observations and have further shown that levels of job satisfaction and morale are related to the worker's perception of his status and role in the social microcosm of industry and in society at large. Studies involving both young people and adults have shown that there is a wide range in the prestige values attached to various jobs." p. 320

3. "...the status of the job itself--its potential in arousing feelings of pride, worth, and recognition--is an important element in moulding attitudes and in gratifying psychological needs." p. 325

4. "Experimental studies described in earlier chapters clearly indicate that the quality of supervision exercises a significant influence upon employee production, satisfaction and morale. Employee attitude surveys provide additional evidence that job satisfaction and morale are dependent upon the extent to which supervisors take into consideration employees' needs for recognition and status." p. 325

5. [Ego-Involved Needs] "'Treatment like a human being' requires job conditions and personnel policies and practices suitable for gratifying a number of powerful wants and needs such as

'1. the urge to achieve a position of security;

'2. the desire to achieve status and promotion;

'3. the desire of people to earn the approval of those amongst whom they work;

'4. the desire of workers to build a set of social values around the job and into the factory community in which they spend so much of these lives.'" pp. 385-386 (Quoted from W. B. D. Brown,

"Incentives within the Factory," Occupational Psychology, Vol. 19, pp. 82-92, 1945)

6. [Social Organization and Social Motives] "An important outcome of studies of motivation and morale is the finding that successful supervision achieves results by paying attention not only to the workers as an individual, but to the relationships and interactions within the group to which the worker belongs." (T. N. Whitehead, "Social Motives in Economic Activities," Occupational Psychology, Vol. 12, pp. 271-90, 1938) p. 389

MODEL FOR LIBRARY LITERATURE SEARCH

I. Basic bibliographical information (author, title, publisher, location, date) and library

White, Bernard J., "The Criteria of Job Satisfaction: Is Interesting Work Most Important," Monthly Labor Review, pp. 30-34, May 1977.
Library: AFL-CIO

II. Identify types of nonpecuniary benefits

Meaning of Work, Job Security, Relations w/co-workers, Responsibility, Oppty for Advancement, Sense of Accomplishment

III. Define categories (by author's preference)

Work Interesting, Enough Help To Do Job, Info To Do Job, Authority, Oppty to Develop Abilities, Job Security, Results of Work, Co-Worker Relations, Clearly Defined Responsibilities

IV. Importance to various groups (race, sex, age, occupation, geographic location)

Blue and White Collar, Partial-Blue Collar
Professional, Technical and Managerial--White-Collar
Service, Miscellaneous--Partial-Blue Collar
Factory, Structural-Blue Collar

V. Comparability to federal workers

VI. Quantification, monetizing attempts if existing

VII. Construct abstracts where significant (Xerox copies, inter-library loan books)

Pay and Fringe Benefits most important to Blue & Partial-Blue Collar Workers, with Job Security and oppty to develop skills close behind; white-collar workers, on the other hand, see opportunities for skill development and attaining enough help and equipment to do job as most important and rate fringe benefits and security low.

VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

MODEL FOR LIBRARY LITERATURE SEARCH

I. Basic bibliographical information (author, title, publisher, location, date) and library

Wikstrom, Walter S., Corporate Response to Employees' Housing Needs, The Conference Board, Inc., New York 1975.
Library: Army

II. Identify types of nonpecuniary benefits

Employee Housing
Also reference to degree of difficulty recruiting or transferring employees

III. Define categories (by author's preference)

Information on Housing, Loans for Purchase of Housing, List of Local Real Estate Brokers, Purchasing Employees' Former Homes, Use of Relocation Firm, Company-owned Housing for Employees, Arranging for Services of Fair Housing Agencies, Company Stimulates Construction of Needed Housing, Company has built (Continued on next page.)

IV. Importance to various groups (race, sex, age, occupation, geographic location)

V. Comparability to federal workers

Assume there could be a comparison made

VI. Quantification, monetizing attempts if existing

VII. Construct abstracts where significant (Xerox copies, inter-library loan books)

See next page for results of survey (by categories listed in III, above).

VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

Survey sample confined to the largest manufacturing, banking, and insurance companies (from Fortune's Directory of 1,000 Industrials, Best's Insurance Reports, Polk's World Bank Directory). Total of 950 companies selected.

Wikstrom, Corporate Response to Employees' Housing Needs (continued)

III.

Housing, Housing Services and Equal Employment Goals. See Table 1, page D-85, for further definitions or categories.

VII.

Table 1: Housing Services Provided by Large United States Corporations

Companies Providing Service		Service Provided to Employees
Number	Percent	
265	55	INFORMATION: At its various locations the company maintains a file of general information about the community and surrounding residential areas, e.g. Chamber of Commerce booklets, and makes this information available to interested employees who request it.
205	43	HOUSING LOANS: The company provides financial assistance to relocating employees by making loans for purchasing housing.
186	39	BROKER LISTS: At its various locations the company maintains lists of local real estate brokers and makes this information available to interested employees.
142	30	HOUSE PURCHASE: The company provides financial assistance to relocating employees by purchasing, or arranging for the purchase of, the house the employee is leaving.
69	14	RELOCATION FIRM: The company uses, or arranges for its employees to use, the services of a <i>commercial</i> home-finding service (not a real estate broker) or a <i>commercial</i> employee-relocation consultant as an aid to employees seeking housing.
32	7	COMPANY HOUSING: The company owns or leases houses or apartments which it sells or leases to employees.
19	4	HOUSING AGENCIES: The company uses, or arranges for its employees to use, the services of a <i>noncommercial</i> voluntary agency or government agency that assists individuals to find satisfactory housing, or that provides such housing directly.
11	2	STIMULATE CONSTRUCTION: The company has used persuasion or various incentives to stimulate local builders to construct needed housing near the company's facilities.
9	2	COMPANY-BUILT HOUSING: The company itself has built needed housing near its facilities and sells or leases this housing to employees, or has been a partner in such ventures.
376	76	Report providing one or more of the above services.
115	24	Report providing no housing services
482	100	Total response to survey.

MODEL FOR LIBRARY LITERATURE SEARCH

I. Basic bibliographical information (author, title, publisher, location, date) and library

Wollack, S., J. G. Goodale, J. P. Wijting, and P. C. Smith, "Development of the Survey of Work Values," Journal of Applied Psychology, Vol. 55, No. 4, pp. 331-38, 1971. Library: Office of Personnel Management

II. Identify types of nonpecuniary benefits

The authors selected six dimensions that cover intrinsic and extrinsic aspects of work: (1) price in work, (2) job involvement, (3) activity preference, (4) attitude toward earnings, (5) social status of job, (6) upward striving.

III. Define categories (by author's preference)

(1) Pride: satisfaction and enjoyment derived from doing a job well.
(2) Involvement: degree to which a worker takes an active interest in co-workers' and company's functions and wants to contribute to job-related decisions. (3) Activity: preference of worker to keep himself busy on the job. (Continued on next page.)

IV. Importance to various groups (race, sex, age, occupation, geographic location)

The SWV was used to determine occupational groups ranging from professional to unskilled employees. Results seem to confirm that white-collar workers have a more favorable view of work than blue-collar workers. Clerical workers also seemed to value status more and job involvement less than the other occupational groups. (Continued on next page.)

V. Comparability to federal workers

To test the intercorrelations present and reliability of the SWV, a sample of government employees was administered the survey along with the industrial workers and insurance employees. All groups supported the reliability of the six intrinsic/extrinsic subscale dimensions mentioned previously. Another study of (Continued on next page.)

VI. Quantification, monetizing attempts if existing

VII. Construct abstracts where significant (Xerox copies, inter-library loan books)

The survey of work values (SWV) is intended to be an index of a person's attitudes toward work in general, as opposed to a specific job. It is based on the Protestant Ethic and the work values associated with this belief. The six factors were derived from a principal components analysis relying on both factor (Continued on next page.)

VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

Wollack, et al. (continued)

III. (4) Earnings: value an individual places in making money on the job. (5) Status: effect the job has on a person's standing among friends, relatives, co-workers, and in his own eyes. (6) Striving: desire to seek continually a higher level job and better standard of living.

IV. Biographical factors were examined by the SWV subscales, too, yielding a composite of a white, rural, poor male whose family has had some police trouble and who has had less education than his parents. His scores on the SWV reflected an emphasis on social rewards or status of the job, but a devaluation of activity and involvement in the job.

V. civil service employees showed that a composite of high attitudes toward earnings, low preference for work activity, and low social status described a black with parents from the South, holding a low-level non-supervisory job.

VII. analysis and reallocation methods for obtaining subscales.

MODEL FOR LIBRARY LITERATURE SEARCH

I. Basic bibliographical information (author, title, publisher, location, date) and library

Yoshida, Koichi, and Torihara Mitsunori, "Redesigning Jobs for a Better Quality of Working Life: The Case of the Tokyo Gas Co.," International Labor Review, Vol. 116, No. 2, pp. 139-51, September/October 1977.
Library: AFL-CIO

II. Identify types of nonpecuniary benefits

Intrinsic value of work, working conditions, personnel structure.

III. Define categories (by author's preference)

Specific Categories Examined: Lack of loyalty, poor communications, a lack of frank exchange of opinions, prestige, promotion, intrinsic meaning of job.

IV. Importance to various groups (race, sex, age, occupation, geographic location)

Blue-collar workers vs. white-collar workers

V. Comparability to federal workers

VI. Quantification, monetizing attempts if existing

VII. Construct abstracts where significant (Xerox copies, inter-library loan books)

The union operation of the plant offered valuable suggestions and played a major role in carrying out the improvement of the quality of worklife.

VIII. Annotation: Historical perspective, major motivation theories, use of previous theory, trends (definitions and studies done)

APPENDIX E

FACTORS AFFECTING EMPLOYEE MORALE

APPENDIX E

LIST OF MORALE FACTORS

1. Vacation and holiday practices
2. Leave of absence practices (non-military)
3. Job security—employment stabilization
4. Employee merit or performance rating (an organized and systematic method of appraising your performance)
5. Practice of informing you of your job status (both of your success and failures)
6. Personnel counselling
7. Compensation (base pay)
8. Formal plans for determining basic rates of pay (job evaluation programs)
9. Extra compensation plans (all types of bonuses)
10. Profit-sharing plans (excluding employee savings plans).
11. Employee savings and thrift plans
12. Training of wage earners (rank-and-file employees)
13. Training of supervisors and foremen
14. Training of executives
15. Induction training (including orientation)
16. Company medical and health programs
- 16a. Accident prevention activities
17. Employee feeding facilities (restaurants, lunch rooms, cafeterias, canteens, mobile kitchens)
18. Total hours worked per day per week
19. Shifts (time starting and finishing work)
20. Transportation facilities (to and from work)
21. Housing facilities
22. Smoking privileges
23. Physical working conditions (on-the-job)
24. Physical condition of recreation rooms, lavatories, and other personal facilities
25. General outside physical appearance of plant
26. Rest periods
27. Length of lunch period
28. Frequency and method of paying wages
29. Employee financial benefits, such as group life insurance, sickness insurance, and pensions
31. Social and recreational activities
33. Termination allowances (dismissal compensation)
34. Labor unions
35. Type of union leadership
36. Employment records—accuracy and completeness of employees' history with the company
37. Music on the job
38. Employment of mixed nationalities
39. Employment of mixed races
40. Labor turnover rate (its effect on morale of employ
41. Opportunities in the company for advancement
42. Practice of hiring outsiders for responsible jobs "promotion from within"
43. Type of company's product (its social importance DURING WAR
- 43a. Type of company's product (its social importance DURING PEACETIME
44. Knowledge of company's products
45. Knowledge of competitors' products
46. Knowledge of company's customers
47. Company's reputation with the public
48. Company's reputation with its customers
49. Your knowledge of company's finances
50. Type and condition of tools and equipment
51. Employee suggestion systems
52. Methods of handling grievances
53. Contact with executives (opportunity to see them occasionally)
54. Your burden of state and federal taxes
55. Marital status (single or married)
56. Domestic relations and home conditions
57. Employment methods, including selection, interview and placement
58. Laws affecting relations between employers and employees
59. Policies and practices regarding discharge of employees
60. Policy with respect to wearing uniforms (or regular working attire)
61. Production Drives:
 - (a) Based upon cooperative effort of management and employees (wartime)
 - (b) Incentive ideas stimulated by company (peacetime)
62. Location of plant (on "right" or "wrong" side of "tracks")
63. Your own temperament—ability to get along with others
64. Your confidence in yourself
65. Your family's attitude toward your company and
66. Company's attitude toward employees (its interpretation of policies—whether liberal or conservative)
68. Supervisors' temperament and personality
69. Bulletin boards, house organs and other methods disseminating information to employees
70. Quality of supervision
71. Type of work

APPENDIX F
EMERGENCE OF NEW BENEFITS

APPENDIX F

Emergence of new benefits

What about new employee benefits (new, at least, to most companies) that may become significant by 1985? The panelists were asked to describe such benefits in terms of:

1. Time of appearance on economic scene.
2. Time of general acceptance.
3. The major group responsible for producing general acceptance.
4. The sector of industry which will first utilize the benefit.

The forecasts are summarized in *Exhibit IV*. The column labeled "Diffusion time" lists the time between the (a) median estimate of the earliest year of occurrence and (b) the median estimate of the time at which the benefit will come into general use. The column labeled "Year of earliest occurrence" shows either the median estimate of the panel or the earlier, median, and later estimates; if no consensus was obtained, the degree of agreement or disagreement is listed instead of the dates.

Manufacturing is judged to be the industrial sector likely to be affected first, and organized labor emerges as the group primarily responsible for bringing a majority of the new benefits into being. The panelists believe government will take the lead in several new benefit areas:

- Guaranteeing a minimum annual income.
- Setting forms of guaranteed employment.
- Acting as an employer of last resort.
- Providing maternity benefits for all, including unwed mothers.
- Providing custodial care and coverage for new prosthetic devices. (Labor is also regarded as a likely initiator for these medical benefits.)

It is expected that management will initiate several kinds of benefits. These fall mainly in the areas of employee services and time off with pay.

Note that many of the benefits are forecasted to occur rather soon, in most cases prior to 1975. This appears to be characteristic of a Delphi inquiry; generally a greater number of nearer-term events are forecasted than more distant events.

The diffusion times are also worth noting. They show that a delay of from four to ten years can be expected between initiation and widespread adoption of any new benefit.

Exhibit IV. Forecasts of possible new benefits by 1985

Text set in color indicates relatively strong agreement.
Maj.—Majority estimate Fin.—Finance Mfg.—Manufacturing
Min.—Minority estimate Govt.—Government Mgmt.—Management

Benefit	Year of earliest occurrence	Diffusion time	Motivating sector	Sector of initial implementation
A. General				
1. Cooperative benefit programs among businesses on areawide national basis.	Maj.—prior to 1976; min.—never			
2. Company payment of all benefit costs.	Maj.—prior to 1982; min.—never			
3. Government payment of all benefit costs.	Never			
B. Income security				
1. Employer-conducted retraining as part of severance benefits.	Maj.—prior to 1976; min.—never			
2. Annual wage guaranteed by employer.	Maj.—prior to 1982; min.—never			
3. Minimum annual income guaranteed by government.	1972-1976-1979	6 yrs.	Govt.	Mfg.
4. Guaranteed employment, for example:				
a. Most employees under contract to their employers.	1972-1976-1979	6 yrs.	Labor, Govt.	Mfg.
b. Jobs guaranteed for everyone, with the government the employer of last resort.	1972-1976-1979	6 yrs.	Govt.	Mfg.
5. Profit sharing becoming an expected portion of income.	Uncertain (half say 1970; half say never)			
6. Limitation of plans permitting employees to trade benefit program for cash in hand.	Never			
7. Salary adjustments based on the economic needs of poorer and larger families.	Never			
8. Bonuses offered to selected employees for joining the corporation.	Uncertain (half say 1972; half say never)			
C. Medical costs				
1. Maternity benefits for unwed mothers.	1974	8 yrs.	Govt.	Mfg.
2. Inclusion of a major portion of costs for custodial care (greater than 50%), e.g., at-home nurses.	1972-1976-1982	No time lapse	Labor, Govt.	Mfg.
3. Coverage extended to cover new prosthetics (artificial hearts, and so forth) and new exotic medical procedures (transplants, aging control, and so on).	1972-1976-1985	6 yrs.	Labor, Govt.	Mfg.
D. Retirement				
1. Optional retirement at age 55 with full benefits for all employees.	Maj.—prior to 1976; min.—after 1985 or never	6 yrs.	Labor	Mfg.
2. Pension plans extended to include benefits for retirees other than money, such as:				
a. Recreation.	1972	10 yrs.	Labor	Mfg.
b. Education.	1972	10 yrs.	Labor	Mfg.
c. Medical services.	1970	12 yrs.	Labor	Mfg.
d. Residential costs.	1972	10 yrs.	Labor	Mfg.
e. Apartments in company-sponsored retirement communities.	1972	10 yrs.	Labor	Mfg.
f. Legal services.	1972	10 yrs.	Labor	Mfg.

Exhibit IV. Forecasts of possible new benefits by 1985 (continued)

Benefit	Year of earliest occurrence	Diffusion time	Motivating sector	Sector of initial implementation
E. Protection of family				
1. Life insurance in which cost-of-living adjustments are routinely applied to both coverage and premiums.	Maj.—prior to 1982; min.—never			
2. Disability insurance having cost-of-living adjustments applied to both coverage and premiums.	1972	10 yrs.	Labor	Mfg.
3. Full payment by employer for most insurance needs of most employees and their families.	Maj.—prior to 1982; min.—never			
4. Companies taking over the job of education for employee family members (company-run private schools for children, particularly in areas where below-average school systems exist).	Uncertain (half say 1979; half say never)			
5. Redefinition of "dependent" to permit recognition of new kinds of family relations (probationary marriages, communal arrangements).	Never			
F. Employee services				
1. Standard use of flexible working periods:				
a. Selection of hours worked during the day.	Maj.—prior to 1982; min.—after 1985 or never			
b. Selection of days worked during the week.	Maj.—prior to 1982; min.—after 1985 or never			
2. Employees involved in community affairs through:				
a. Cosponsorship of education centers.	1972	7 yrs.	Mgmt.	Mfg.
b. Assisting in the direction of institutions such as hospitals or schools.	1972	10 yrs.	Mgmt.	Mfg.
c. Tax-deductible contributions to a state education fund for each employee using related educational facilities.	1972	10 yrs.	Mgmt.	Mfg.
3. Credit assistance to all employees through "employer credit card" or cosigning of credit notes (employee credit card connotes purchasing on credit with automatic payroll deduction).	Maj.—prior to 1982; min.—after 1985 or never			
4. Subsidized housing for employees.	1972	10 yrs.	Labor	Mfg.
5. Free concert and theater tickets, and so on.	Maj.—prior to 1976; min.—never			
6. Opening of company-sponsored educational program to outsiders.	Maj.—prior to 1982; min.—never			
7. In-house advanced degree programs geared to the work of the employees.	1972		Mgmt.	Mfg.
8. Employer-operated programs for general education, not necessarily job-related.	Maj.—prior to 1982; min.—after 1985 or never			
9. Formal program designed to encourage career planning on the part of employees.	Maj.—prior to 1982; min.—never			
10. Increased access to facilities used by the corporation, such as computers for personal use.	Maj.—prior to 1982; min.—never			

Exhibit IV. Forecasts of possible new benefits by 1985 (continued)

Benefit	Year of earliest occurrence	Diffusion time	Motivating sector	Sector of initial implementation
G. Time off with pay				
1. More generous time-off provisions (25% increase) for:				
a. Civic and political activities.	1972	10 yrs.	Labor	Mfg.
b. Professional activities, such as conferences and papers.	1972	10 yrs.	Labor, Mgmt.	Mfg.
c. Pregnancy.	1972-1974-1976	8 yrs.	Labor	Mfg.
d. Personal reasons.	1972-1976-1976	6 yrs.	Labor	Mfg.
2. Shortening of workday through employer's permitting increased travel time to get to and from work.	1972	4 yrs.	Labor	Mfg.
3. Educational-leave pay available to employees whenever they choose to take such leave:				
a. Short courses, a few hours a week.	1972	7 yrs.	Mgmt.	Mfg., Fin.
b. Courses involving several weeks.	1972	7 yrs.	Mgmt.	Mfg., Fin.
c. Courses as long as a year.	1972	10 yrs.	Mgmt.	Mfg., Fin.
4. Several shorter workweeks during the year, permitting, say, half a dozen mini-vacation weekends.	1972	4 yrs.	Labor	Mfg., Fin.
5. Complete flexibility in scheduling time off through:				
a. Variable-length vacations with carry-over of all unused time.	Maj.—prior to 1982; min.—after 1985 or never			
b. Closer attention to husband-wife vacations when both work.	Maj.—prior to 1982; min.—after 1985 or never			
6. Replacement of "sick days" by "crisis days" (presumably, the need for sick days will decrease with increasing health of the work force; "crisis days" are characterized by assassinations, Cuba-type complications, and so forth).	Never			