

## DOCUMENT RESUME

ED 067 495

VT 016 715

TITLE Survey of Working Conditions. Final Report on Univariate and Bivariate Tables.

INSTITUTION Michigan Univ., Ann Arbor: Survey Research Center.

SPONS AGENCY Department of Labor, Washington, D. C. Employment Standards Administration.

PUB DATE Nov 70

NOTE 502p.

AVAILABLE FROM Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 (2916-0001, \$3.50)

EDRS PRICE MF-\$0.65 HC-\$19.74

DESCRIPTORS Health; Income; \*Industrial Relations; Interpersonal Relationship; \*Job Satisfaction; \*Labor Conditions; \*Labor Problems; Labor Standards; Measurement Techniques; \*National Surveys; Safety; Tables (Data); Work Environment

## ABSTRACT

A nationwide survey of employed persons was conducted to provide information on labor standards problems, assess the impact of working conditions on workers, develop job satisfaction measures, and establish statistics for similar data collections. The survey revealed that the majority of workers expressed satisfaction with their jobs but they also identified problems in labor standards areas, principally those involving health, safety, and income. But even more than these traditional labor standards areas, workers considered problems of job content and work relationships to be of major importance. Two job satisfaction measures suitable for use in surveys of workers in heterogeneous occupations were developed, Jobsat '70 and Content Free Job Satisfaction. Determination of their validity will depend on future use. There was not necessarily a high correlation between work-related problems and job satisfaction. Results of the survey are presented in detailed statistical tabulations, with narrative data to highlight the problems reported by workers and to describe measures employed in the analysis. (MF)

ED 067495

U S DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
OFFICE OF EDUCATION  
THIS DOCUMENT HAS BEEN REPRO-  
DUCED EXACTLY AS RECEIVED FROM  
THE PERSON OR ORGANIZATION ORIG-  
INATING IT. POINTS OF VIEW OR OPIN-  
IONS STATED DO NOT NECESSARILY  
REPRESENT OFFICIAL OFFICE OF EDU-  
CATION POSITION OR POLICY

## ACKNOWLEDGEMENTS

The study staff consisted of Robert P. Quinn, Stanley Seashore, Robert L. Kahn, Thomas Mangione, Douglas Campbell, Graham L. Staines, Margaret McCullough, Nancy Oliker and Marci Shulman.

Neal Herrick, Thomas Brown, and Richard Wilson of the Workplace Standards Administration were helpful throughout the study.

We are also grateful to the other staff of the Department of Labor, particularly Maxine Anderson, who patiently guided us through the intricacies of the world of labor standards.

Parts of this report have been blatantly plagiarized from a briefer report of the study prepared for the Monthly Labor Review by Neal Herrick and Robert Quinn.

This research report was prepared under contract with the Workplace Standards Administration (now Employment Standards Administration), U. S. Department of Labor. Researchers undertaking such projects under Government sponsorship are encouraged to express their own judgment. Interpretations or viewpoints stated in this document do not necessarily represent the official position or policy of the Department of Labor.

CONTENTS

	<u>Page</u>
Introduction.....	1
Methodology.....	6
Outcome Measures.....	30
Comparisons Among Labor Standards Problem Areas.....	86
Income and Income-Related Problems.....	119
Health and Safety.....	165
Hours and Other Time-Related Problems.....	207
Transportation to and from Work.....	241
Union Management.....	256
Discrimination.....	275
Problems with Employment Agencies.....	300
Interpersonal Relations.....	318
Job Security.....	360
Content of Work.....	371
Conclusion.....	410

LIST OF TABLES

Table	Page
2.1. Sample Characteristics of Working Conditions Sample and Comparison Samples on Sex . . . . .	25
2.2. Sample Characteristics of Working Conditions Sample and Comparison Samples on Race . . . . .	25
2.3. Sample Characteristics of Working Conditions Sample and Comparison Samples on Age . . . . .	25
2.4. Sample Characteristics of Working Conditions Sample and Comparison Samples on Formal Education . . . . .	25
2.5. Sample Characteristics of Working Conditions Sample and Comparison Samples on Marital Status . . . . .	26
2.6. Sample Characteristics of Working Conditions Sample and Comparison Samples on Self-Employed vs. Wage-and-Salary . . . . .	26
2.7. Sample Characteristics of Working Conditions Sample and Comparison Samples on Blue-Collar vs. White-Collar Status . . . . .	26
2.8. Sample Characteristics of Working Conditions Sample and Comparison Samples on Occupation Prestige . . . . .	27
2.9. Sample Characteristics of Working Conditions Sample and Comparison Samples on Occupation Group . . . . .	27
2.10. Sample Characteristics of Working Conditions Sample and Comparison Samples on Industry Groups . . . . .	28
2.11. Sampling Errors Obtained in a Previous Survey Research Center Survey of Worker . . . . .	29
3.1. Loadings of Importance Items on Five Factors . . . . .	53
3.2. Importance of Various Aspects of Working Conditions . . . . .	55
3.3. Job Satisfaction: Specific Dimensions . . . . .	57
3.4. Job Satisfaction . . . . .	59
3.5. Job Satisfaction . . . . .	59
3.6. Job Satisfaction . . . . .	59
3.7. Job Satisfaction . . . . .	60

LIST OF TABLES (cont.)

Table	Page
3.8. Job Satisfaction . . . . .	60
3.9. Job Satisfaction . . . . .	60
3.10. Job Satisfaction . . . . .	61
3.11. Job Satisfaction . . . . .	61
3.12. Attraction to Work . . . . .	61
3.13. Items Comprising Index of Job-related Tension . . . . .	62
3.14. Loadings of Self-Report Form Items on Mental Health Factors . . . . .	63
3.15. Items Composing Four Factors Derived From Self-Report Forms . . . . .	64
3.16. Life Satisfaction I . . . . .	65
3.17. Life Satisfaction II . . . . .	65
3.18. Overall Statistics for Outcome Measures . . . . .	66
3.19. Intercorrelations Among the Outcome Measures . . . . .	67
3.20. Outcome Measure Norms for Sample Subpopulations Based on Sex of Workers . . . . .	68
3.21. Outcome Measure Norms for Sample Subpopulations Based on Race of Workers . . . . .	69
3.22. Outcome Measure Norms for Sample Subpopulations Based on Age of Workers . . . . .	70
3.23. Outcome Measure Norms for Sample Subpopulations Based on Education of Workers . . . . .	72
3.24. Outcome Measure Norms for Sample Subpopulations Based on Employment Status of Workers . . . . .	74
3.25. Outcome Measure Norms for Sample Subpopulations Based on Collar Status of Workers . . . . .	75
3.26. Outcome Measure Norms for Sample Subpopulations Based on Tenure on Present Job of Workers . . . . .	76
3.27. Outcome Measure Norms for Sample Subpopulations Based on Occupational Prestige of Workers' Jobs . . . . .	78

LIST OF TABLES (cont.)

Table	Page
3.28. Outcome Measure Norms for Sample Subpopulations Based on Industry of Workers' Jobs . . . . .	80
3.29. Outcome Measure Norms for Sample Subpopulations Based on Occupation of Workers . . . . .	82
3.30. Summary of Tables 3.20 through 3.27 Showing Subpopulation Group Scoring Significantly Highest on Each Outcome Measure . . . . .	84
4.1. Relative Importance to Workers of Eighteen Areas of Labor Standards Concern . . . . .	106
4.2. Frequency and Severity of Labor Standards Problems Among All Workers . . . . .	108
4.3. Reports of Multiple Problems in Labor Standards Areas . . . . .	110
4.4. Total Number of Labor Standards Problems among Demographic and Occupational Subgroups . . . . .	111
4.5. Outcome Measures in Relation to Total Number of Labor Standards Areas in which Worker Reports One or More Problems . . . . .	114
4.6. Biggest Problems on the Job . . . . .	116
4.7. Agent to Whom Worker Would Go for Help with a Working Conditions Problem . . . . .	117
4.8. Readiness to Use Government Agency for Help with a Working Conditions Problem . . . . .	118
5.1. Annual Personal Income from Primary Job . . . . .	129
5.2. Annual Personal Income from Primary Job for Full Time Workers . . . . .	129
5.3. Outcome Measures in Relation to Annual Personal Income from Primary Job . . . . .	130
5.4. Adequacy of Total Family Income for Letting Worker Live as "Comfortably as He Would Like to Live" and for Meeting "Usual Monthly Bills and Expenses" . . . . .	132
5.5. Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups (Inadequate Total Family Income for Meeting Expenses). . . . .	133

LIST OF TABLES (cont.)

Table	Page
5.6. Outcome Measures in Relation to Adequacy of Total Family Income for Meeting Expenses . . . . .	137
5.7. Fringe Benefits Received by Workers . . . . .	138
5.8. Vacation Days Received by Workers . . . . .	139
5.9. Outcome Measures in Relation to Vacation Days Received by Workers . . . . .	140
5.10. Sick Leave Days Received by Workers . . . . .	142
5.11. Outcome Measures in Relation to Sick Leave Days Received by Workers . . . . .	143
5.12. Child Care While Worker is on Job . . . . .	145
5.13. Child Care While Female Worker is on Job . . . . .	145
5.14. Influence of Children on Workers' Hours On Job . . . . .	146
5.15. Influence of Children on Female Workers' Hours on Job . . . . .	146
5.16. Additional Fringe Benefits Desires . . . . .	147
5.17. Problems with Fringe Benefits - Types of Problems . . . . .	147
5.18. Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups (Inadequate Fringe Benefits) . . . . .	148
5.19. Outcome Measures in Relation to Adequacy of Workers' Fringe Benefits . . . . .	152
5.20. Wage Garnishment . . . . .	153
5.21. Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups (Wage Garnishment or Assignment) . . . . .	154
5.22. Outcome Measures in Relation to Wage Garnishment . . . . .	158
5.23. Problems with Failure to Receive Wages (Excluding Garnishment) . . . . .	159
5.24. Problems with Failure to Receive Wages - Types of Problems . . . . .	159
5.25. Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups (Failure to Receive Wages) . . . . .	160



LIST OF TABLES (cont.)

Table	Page
5.26. Outcome Measures in Relation to Wage Problems Other Than Garnishment . . . . .	164
6.1. Health and Safety Hazards. . . . .	173
6.2. Health and Safety Hazards--Types of Problems . . . . .	173
6.3. Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups (Health And Safety Hazards) . . . . .	175
6.4. Outcome Measures in Relation to Exposure to Health and Safety Hazards. . . . .	179
6.5. Place Where Worker Spends Most of His Working Time . . . . .	180
6.6. Percentage of Workers with Problems Concerning Unpleasant Physical Working Conditions . . . . .	180
6.7. Problems with Unpleasant Physical Working Conditions--Types Of Problems . . . . .	181
6.8. Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups (Unpleasant Physical Conditions). . . . .	182
6.9. Outcome Measures in Relation to Unpleasant Physical Working Conditions. . . . .	186
6.10. Work-related Illness or Injury . . . . .	187
6.11. Work-related Illness or Injury--Types of Illness or Injuries. . . . .	187
6.12. Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups (Work-Related Illness or Injury). . . . .	189
6.13. Outcome Measures in Relation to Work-related Illness or Injury. . . . .	193
6.14. Total Expenses Covered by Personal, Company, or Governmental Insurance Programs Following a Work-related Illness or Injury . . . . .	194
6.15. Percentage of Workers with Problems Concerning Inadequate Expense Coverage During a Work-related Illness or Injury. . . . .	194
6.16. Labor Standards Problems Among Major Demographic and Occupational Subgroups (Inadequate Expense Coverage During Illness) . . . . .	195

LIST OF TABLES (cont.)

Tables	Page
6.17. Effects of Work-related Illness or Injury on Subsequent Re-employment . . . . .	199
6.18. Outcome Measures in Relation to Inadequate Expense Coverage Following Work-related Illness or Injury: . . .	200
6.19. Possession of Physical or Nervous Handicap Limiting Work . . . . .	201
6.20. Physical or Nervous Handicaps--Types of Conditions. . . . .	201
6.21. Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups (Occupational Handicap). . . . .	202
6.22. Outcome Measures in Relation to Possession of an Occupational Handicap. . . . .	206
7.1. Unsteady Employment . . . . .	214
7.2. Frequency and Severity of Labor Standards Problems Among Major Demographic and Occupational Subgroups (Unsteady Employment). . . . .	215
7.3. Outcome Measures in Relation to Unsteady Employment . . . . .	219
7.4. Regularity of Work Schedule . . . . .	221
7.5. Outcome Measures in Relation to Regularity of Work Schedule. . . . .	222
7.6. Hours Worked Per Week on Main Job . . . . .	224
7.7. Hours Worked Per Week on Secondary Job. . . . .	224
7.8. Normal Time of Arrival on Job . . . . .	225
7.9. Outcome Measures in Relation to Normal Time of Arrival On Job . . . . .	226
7.10. Definition of Overtime. . . . .	228
7.11. Compensation Worker Receives for Overtime . . . . .	228
7.12. How Often Worker Puts in Overtime . . . . .	229
7.13. Outcome Measures in Relation to How Often Worker Puts In Overtime. . . . .	230
7.14. Worker's Control Over Whether He Will Work Overtime . . . . .	231

LIST OF TABLES (cont.)

Tables	Page
7.15. Outcome Measures in Relation to Worker's Freedom To Refuse Overtime Work . . . . .	232
7.16. Worker's Preference Concerning Amount of Overtime He would Like to Work . . . . .	234
7.17. Percentage of Workers with Problems Concerning Inconvenient Or Excessive Hours. . . . .	234
7.18. Problems with Hours, Work Schedule, and Overtime--Types Of Problems . . . . .	235
7.19. Outcome Measures in Relation to Problems with Inconvenient Or Excessive Hours. . . . .	236
7.20. Frequency and Severity of Labor Standards Problems Among Major Demographic and Occupational Subgroups (Inconvenient or Excessive Hours) . . . . .	237
8.1. Work Place Reported To by Worker . . . . .	244
8.2. Miles Traveled by Worker from Home to Work Site. . . . .	244
8.3. Time Spent in Transportation to Work Each Day. . . . .	244
8.4. Outcome Measures in Relation to Time Worker Spends in Going to Work . . . . .	245
8.5. Means of Transportation to Work. . . . .	244
8.6. Estimation of Travel Expenses in Relation to Earnings. . . . .	247
8.7. Outcome Measures in Relation to Cost of Travel to Work . . . . .	248
8.8. Percentage of Workers with Problems Concerning Travel To and From Work. . . . .	250
8.9. Problems with Travel To and From Work--Types of Problems . . . . .	250
8.10. Labor Standards Problems Among Major Demographic and Occupational Subgroups (Transportation Problems). . . . .	251
8.11. Outcome Measures in Relation to Transportation Problems. . . . .	255
9.1. Union Affiliation. . . . .	259
9.2. Outcome Measures in Relation to Union Membership . . . . .	260
9.3. Percentage of Union Members Reporting Problems with How Democratically Their Unions were Run. . . . .	262

LIST OF TABLES (cont.)

Table	Page
9.4. Labor Standards Problems Among Major Demographic and Occupational Subgroups (How Democratically Unions are Run) . . . . .	263
9.5. Outcome Measures in Relation to Problems Concerning How Democratically Workers Feel their Unions are Run . . . . .	267
9.6. Percentage of Union Members Reporting Problems with How Well their Unions were Managed . . . . .	268
9.7. Labor Standards Problems Among Major Demographic and Occupational Subgroups (How well Unions are Managed) . . . . .	269
9.8. Outcome Measures in Relation to Problems Concerning How Well Workers Feel their Unions are Managed . . . . .	273
9.9. Problems Concerning Unions - Types of Problems . . . . .	274
10.1. Discrimination on Basis of Race or National Origin . . . . .	282
10.2. Forms of Work-related Discrimination Based on Race or National Origin . . . . .	282
10.3. Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups (Race or National Origin Discrimination) . . . . .	283
10.4. Outcome Measures in Relation to Race or National Origin Discrimination . . . . .	287
10.5. Discrimination on Basis of Age . . . . .	288
10.6. Forms of Work-related Discrimination Based on Age . . . . .	288
10.7. Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups (Age Discrimination) . . . . .	289
10.8. Outcome Measures in Relation to Age Discrimination . . . . .	293
10.9. Percentage of Women with Problems Concerning Sex Discrimination . . . . .	294
10.10. Forms of Work-related Discrimination Based on Sex . . . . .	294

x

LIST OF TABLES (cont.)

Table	Page
10.11. Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups (Sex Discrimination) . . . . .	295
10.12. Outcome Measures in Relation to Sex Discrimination . . . . .	299
11.1. Worker's Use of Employment Agencies . . . . .	305
11.2. Use of Employment Agencies in the Past Three Years in Relation to Demographic Variables . . . . .	305
11.3. Use of Private versus State Employment Agencies in the Past Three Years in Relation to Demographic Variables . . . . .	306
11.4. Success of Employment Agency in Finding Worker a Job . . . . .	307
11.5. Success of Employment Agency in Finding Worker the Kind of Job He Wanted . . . . .	307
11.6. Percentage of Workers with Problems Concerning Employment Agencies . . . . .	308
11.7. Problems with Employment Agencies -- Types of Problems . . . . .	308
11.8. Labor Standards Problems Among Major Demographic and Occupational Subgroups (Mistreatment by State Employment Agencies) . . . . .	309
11.9. Labor Standards Problems Among Major Demographic and Occupational Subgroups (Mistreatment by Private Employment Agencies) . . . . .	313
11.10. Outcome Measures in Relation to the Problems of Mistreatment by Employment Agencies . . . . .	316
2.1. Worker's Description of His Immediate Superior . . . . .	323
2.2. Outcome Measures in Relation to First Supervision Index: Nurturance of Subordinates . . . . .	324
2.3. Outcome Measures in Relation to Second Supervision Index: Closeness of Supervision I . . . . .	326
2.4. Outcome Measures in Relation to Third Supervision Index: Closeness of Supervision II . . . . .	328
2.5. Outcome Measures in Relation to Fourth Supervision Index: Competence of Supervisor . . . . .	330

LIST OF TABLES (cont.)

Table	Page
12.6. Percentage of Workers with Problems Concerning Their Immediate Supervisor . . . . .	332
12.7. Problem with Immediate Superior -- Types of Problems . . . . .	332
12.8. Outcome Measures in Relation to Problems with Worker's Immediate Superior . . . . .	333
12.9. Percentage of Workers with Problems Concerning Invasion of Privacy . . . . .	335
12.10. Problems with Invasion of Privacy -- Types of Problems . . . . .	335
12.11. Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups (Invasion of Privacy). . . . .	336
12.12. Outcome Measures in Relation to Invasion of Privacy . . . . .	340
12.13. Percentage of Workers Who Supervise Others . . . . .	341
12.14. Outcome Measures in Relation to Whether Worker Supervises Anyone . . . . .	342
12.15. Frequency with which Worker Deals with Outsiders . . . . .	343
12.16. Outcome Measures in Relation to Frequency of Dealing with Outsiders . . . . .	344
12.17. Percentage of Workers with Problems Concerning Outsiders Who have Business Dealings with Worker's Company . . . . .	346
12.18. Problems with Outsiders who have Business Dealings with Worker's Company . . . . .	347
12.19. Outcome Measures in Relation to Problems in Dealing with Outsiders . . . . .	348
13.1. Importance of Chances for Promotion . . . . .	353
13.2. Satisfaction with Chances for Promotion . . . . .	353
13.3. Worker's Perception of How Fairly his Employer Handles Promotions . . . . .	353
13.4. Outcome Measures in Relation to Worker's Perception of How Fairly His Employer Handles Promotions . . . . .	354
13.5. Worker's Expected Promotion Time as Compared to His Desired Promotion Time . . . . .	356

LIST OF TABLES (cont.)

Table	Page
13.6. Summary Table on Worker's Expected Promotion Time as Compared to his Desired Promotion Time . . . . .	357
13.7. Outcome Measures in Relation to Discrepancy between Expected and Desired Promotion Time . . . . .	358
14.1. Probability of Automation . . . . .	364
14.2. Job Security in Face of Automation . . . . .	364
14.3. Ease of Getting Comparable Job . . . . .	364
14.4. Outcome Measures in Relation to Probability of Automation . . . . .	365
14.5. Outcome Measures in Relation to Job Security in Face of Automation . . . . .	367
14.6. Outcome Measures in Relation to Ease of Getting Comparable Job . . . . .	369
15.1. Ease of Changing Job Assignment . . . . .	379
15.2. Outcome Measures in Relation to the Ease with which Worker Could Secure a New Job Assignment . . . . .	380
15.3. Selected Demand Characteristics of Worker's Job . . . . .	382
15.4. Outcome Measures in Relation to Worker's Job Requiring that He Work Very Fast . . . . .	383
15.5. Outcome Measures in Relation to Worker's Job Requiring that He Work Very Hard . . . . .	385
15.6. Outcome Measures in Relation to Worker's Job Requiring that He Exert Physical Effort . . . . .	387
15.7. Outcome Measures in Relation to Worker's Job Requiring that He Not Make Mistakes . . . . .	389
15.8. Outcome Measures in Relation to the Repetitiousness of Worker's Job . . . . .	391
15.9. Outcome Measures in Relation to Worker's Job Requiring that He Use His Hands . . . . .	393
15.10. Items in Index of Enriching Job Demands . . . . .	395
15.11. Correlation among Items in Index of Enriching Job Demands . . . . .	395

LIST OF TABLES (cont.)

Table	Page
15.12. Outcome Measures in Relation to Amount of Enriching Job Demands Experienced by Worker on His Job . . . . .	396
15.13. Autonomy Provided Worker on His Job . . . . .	398
15.14. Outcome Measures in Relation to Autonomy Provided Worker on His Job . . . . .	399
15.15. Amount of Resources Available to the Worker for Doing His Job . . . . .	401
15.16. Outcome Measures in Relation to the Adequacy of Resources Available to the Worker for Doing His Job . . . . .	402
15.17. Utilization of Worker Skills by the Job . . . . .	404
15.18. Outcome Measures in Relation to Utilization of Worker's Skills by His Job . . . . .	405
15.19. Worker's Education as Compared to Education Level Needed on the Job . . . . .	406
15.20. Utilization of Worker's Education by His Job . . . . .	407
15.21. Outcome Measures in Relation to Utilization of Worker's Education by His Job . . . . .	408
16.1. Unadjusted and Adjusted Mean Differences Between Members and Nonmembers in Psychological Outcomes Holding Constant Confounding Demographic Variables and Job Characteristics Singly and in Combination . . . . .	429
16.2. Characteristics of Workers on Their Jobs Most Highly Correlated with Overall Job Satisfaction . . . . .	432



## 1. INTRODUCTION

Chaos and disaster have traditionally been the harbingers of governmental programs intended to help the American worker. The depression of the 1930's produced the Social Security Act, the Fair Labor Standards Act, and the Public Contracts Act. Scandal in the early 1960's resulted in legislation governing the finances of labor unions. In November, 1968, 78 workers died in a Farmington, West Virginia mining tragedy. Less than a year later the Coal Mine Health and Safety Act passed the Senate by a vote of 72 to 0.

Some disasters, however, are fragmented in time and space and therefore fail to produce social change. For example, the economic and emotional impact of a disabling accident without workmen's compensation is felt mainly by injured workers and their families. Despite the tragic dimensions of this problem and the length of time it has existed, in the neighborhood of one-half million families a year are now left without income due to disabling occupational accidents, and those who are compensated receive far less in relation to their income than was the case 40 years ago. But because of an information system which leans heavily upon dramatic and publicized disasters to stimulate governmental progress, workmen's compensation in America continues to be a national disgrace.

Responsible government must assure that headline-making chaos and disaster are not the sole prerequisites of action. There are other,

2

more accurate ways of assessing the magnitude of problems than by their suitability for television and press coverage. With the development of reliable economic indicators, some economic difficulties have been avoided by the application of fiscal and monetary controls. Through the use of unemployment statistics, extended benefits have been triggered in times and places of high unemployment. The major responsibility of government is not to offer palliatives in times of crisis but is instead to keep the crisis from occurring in the first place, and in doing so it must be altered to the bellwethers of crisis. To solve the problems of American workers before their isolated personal difficulties become national disasters, requires an effective information system of social indicators that will assure the systematic and periodic collection of data relevant to the conditions faced by workers. Three essential components of such a system are:

--"objective" data indicating the relative orders of magnitude of problems within various working conditions problem areas (e.g., the industrial safety statistics data published by the Bureau of Labor Statistics)

--the considered judgments of those in labor, government, business, and relevant academic disciplines who are experienced in providing solutions to working conditions problems

--more "subjective" data reflecting appraisals of working conditions provided by the American workers themselves.

Although the first two sources of information have, with ever-increasing sophistication, been employed for many years, the third has not. Generally the American worker has not been invited to participate directly in the development of programs that vitally effect his

well-being, nor has he often been asked directly to indicate his needs relevant to the development of such programs. He can, of course, express his views through his union or the ballot-box, but unions represent a minority of workers, and working conditions have in recent years not provided exciting political issues. Little is therefore known about which job-related problems today's workers regard as most important, and even less is known about their aspirations and their attitudes toward work. The worker himself has been neglected as a major participant in information systems designed to stimulate planned social change affecting the conditions under which he works.

The Department of Labor, sharing this view, contracted with The University of Michigan's Survey Research Center to conduct a nationwide survey of employed persons. In doing so, The Department recognized two major possibilities: first, that the proportion in which its resources were allocated to existing programs might not reflect the actual significance of these programs to workers, and second, that, in its concentration on traditional "labor standards" problem areas (described below), it might be ignoring some even more important problems confronting workers.

The principal aims of the survey were the following:

1. to assess the frequency and severity of labor standards problems;
2. to provide information indicating which major demographic or occupational subgroups were most affected by these problems;
3. to determine the most important problems confronting workers, be these problems either within or outside of traditional labor standards areas;
4. to develop job satisfaction measures suitable for administration to samples of workers in heterogeneous occupations; in addition, the study also attempted to develop an equally brief and convenient measure of mental health;

5. to assess the impact of working conditions upon the well-being of workers as indicated by their job satisfaction and mental health;

6. to establish base-line statistics in the event that subsequent surveys collect similar data on working conditions, job satisfaction, or mental health;

7. to establish normative statistics in the event that other investigators collect similar data information from more limited subgroups of workers (e.g., those in particular occupations or living in particular geographical areas).

The results of this survey are reported below. The analyses upon which the report is based have so far been quite rudimentary, confined for the most part to the compilation of univariate and bivariate statistics. Until the completion of additional analyses, which have been planned but not yet begun, many of the conclusions reported below require considerable qualification. Such qualification is necessary principally due to the confounding of certain variables. For example, one can note with interest that workers who receive a greater number of paid vacation days report greater job satisfaction than those who have fewer days. However, on the basis of the analysis to date it cannot be concluded that more vacation days themselves contribute to job satisfaction, since people who receive more paid vacation tend to be concentrated in certain occupations or income levels which may instead be the more relevant determinants of job satisfaction.

The bulk of the report consists of statistical tables grouped into 13 major content areas (see Table of Contents). Preceding each set of tables is a brief commentary on the tables. These commentaries are intended: to give a verbal summary of the tables for people who do not

like to read tables; to highlight the problems reported by workers in each of the content areas investigated; and to describe any derived, multi-item measures employed in the analysis.

## 2. METHODOLOGY

### SAMPLE SELECTION

All data in this report were obtained through personal interviews with 1,533 currently-employed workers. Workers were selected through the Survey Research Center's probability sampling methods (Kish and Hess, 1965) and were drawn from the universe of all dwellings in 48 states (excluding Hawaii and Alaska) and the District of Columbia.

A worker was eligible to be interviewed if he (or she) was living in a household,\* was 16 years old or older, and was currently doing any work for pay for 20 hours a week or more. Workers were also interviewed if they worked for pay but were currently away from work due to strike, sickness, weather, vacation, or for personal reasons. The sample was therefore not representative of the entire labor force but was instead a sample of the population of employed workers who met the above sample eligibility criteria. As a result of these eligibility criteria the sample excluded many "casual" workers who put in only a few hours each week, unpaid labor, students who might work only during summer months, and young people who worked only a few hours a week and earned money from

---

\* A household includes all persons living in a dwelling. The Survey Research Center uses the dwelling unit concept defined by the United States Bureau of the Census, U.S. Census of Housing: 1950, Vol. I, "General Characteristics, Part I: U.S. Summary," page XVI. Dwelling units on military reservations are excluded from the study universe. Also excluded are persons living in nondwelling unit quarters; examples of these are: large rooming houses, residential clubs, dormitories, hospitals and penal institutions.

7

such "youthful" occupations as delivering papers or baby-sitting. A more important limitation of the study's sample was its exclusion of unemployed members of the labor force and of those outside the labor force who might like to be working but at the time of the study were not looking for jobs. As a result, inferences based on the survey data suggesting ways to draw more people into the labor force should be regarded only as hints. For example, Table 7.9 shows that many of the working mothers interviewed would work more hours if a day-care center were available to them. The present study's sample does not permit extrapolations to any conclusions about whether more non-working mothers might go to work given the availability of day-care services. Likewise, the discrimination data below is confined to on-the-job discrimination. Nothing can be concluded from the present study as to how discrimination affects workers joining the labor force or securing employment.

A further limitation of the sample selection was its neglect of the geographical boundaries that define the country's major political units. The sample is strictly a national one and does not permit any conclusions about working conditions in particular states, cities, or other such geographical units. To obtain accurate statistics in any one such unit would have required a sample as large as the whole national sample. Although it is possible to divide the sample into the country's major geographical quadrants or to distinguish among workers in terms of their nearness to central cities, no such geographical distinctions have been made in the present report.

Since interviews were conducted with all members of a household who met the sample eligibility criteria just described, the 1,533 workers interviewed represented considerably less than 1,533 households. Because all eligible workers were interviewed in each of the sampled households,

every worker in the population had an equal probability of being selected. As a result of the sample's thus being self-weighting, no sampling weights were required in the analysis of the data.

Sampling procedures began with 2,736 sample listings which yielded 1951 eligible workers. Interviews were successfully completed with 1,533 of these workers, yielding a response rate of 78.6 percent. Thirteen and three-tenths percent of the non-interviews were attributable to refusals by workers, and 8.1 percent were attributable to other reasons.

Interviews were conducted in late November and early December of 1969, with a few interviews with hard-to-contact workers continuing into early January, 1970.

#### DEMOGRAPHIC AND OCCUPATIONAL DISTRIBUTION OF THE SAMPLE

A breakdown of the total national sample into various demographic and occupational subgroups is presented in the left-hand column of Tables 2-1 through 2-10. Comparable national statistics obtained from government surveys with greater coverage are presented in the right-hand column. The latter statistics have been percentagized from raw numbers given in Employment and Earnings and the 1970 Statistics on Manpower. In the cases of age and occupation, the comparisons are only approximate due to differences in the breakdowns of the subgroups. The present survey employed age classifications of younger workers that differed from those of the Department of Labor and did not define a distinct "blue-collar" subgroup as an occupational subgroup.

The greatest departures of the present sample from what might have been anticipated on the basis of Department of Labor statistics occurred with regard to marital status, employment status, and industry. The present sample has fewer single workers (12.4 percent) than would be



expected according to Department of Labor estimates of 18.9 percent (Table 2.5). This might have resulted from the sample's excluding all people working less than 20 hours a week, the comparable cut-off in the Department of Labor statistics being 15 hours. The present sample could thereby have included fewer young, un-married, part-time workers. Self-employed workers also appear somewhat more highly represented in the sample than in the Department of Labor sample (Table 2.6). Part of this discrepancy might have resulted from differences in the definition of self-employment and in the application of the definition in particular cases. An additional comparison statistic can be found in Phillips (1962) whose data, based on Department of Commerce statistics, show 13 percent of workers to have been self-employed in 1960, down 3.5 percent from 1950. A comparable decrease from 1960 to 1970 would have resulted in self-employed workers now constituting about ten percent of the working labor force--a figure slightly lower than that in the present survey and slightly higher than that indicated in Department of Labor statistics. The largest discrepancy is to be found in the industry grouping of workers, the present sample containing more workers in service industries and fewer in government than in the comparison sample (Table 2.10). That the comparison sample excluded self-employed workers, who could obviously not work for the government, can account for only part of the discrepancy. A more important source of the discrepancy probably lies in the fact that the workers who, for example, said that they were guards were designated "service" in the present sample since they were not questioned as to whether they worked for a public or private protection service. These and many other service workers who were employed by municipalities and other governmental bodies may not have been coded as being in "government"

in the present survey, but they may have been so coded in the comparison data. The difference is likely to reflect, therefore, a coding difference rather than one of sampling.

Table 2.8, for which no contemporary comparative statistics are available, classifies sampled workers according to the Duncan Decile score of occupational prestige. When first developed, the Duncan Decile scale divided the entire labor force of 1950 into tenths according to the prestige of their occupations as determined by ratings provided by a national sample of Americans. To each occupation Duncan (Reiss, 1961) then affixed a decile prestige score, the lowest decile representing occupations with the lowest prestige ratings. Table 2.8 translates the occupations of workers in the present survey into the same set of deciles as originally employed by Duncan. Had the distribution of workers according to their occupational prestige remained unchanged since 1950, ten percent of workers in the present survey should have been in each category. The data indicated instead that considerably more than ten percent of those interviewed were in the three highest occupational prestige categories and fewer were in the lowest categories. This is less likely to indicate any bias in the present survey's sample than to suggest that in the 20 years since the original decile norms were established the number of workers in "higher status" occupations has increased considerably.

#### CONTENT OF THE INTERVIEWS

The interviews, which generally lasted from an hour to an hour and a half, began with questions about what the worker wanted out of a job. Following this, the bulk of the interview consisted of the questions concerning a variety of working conditions problem areas. The interview

concluded with questions concerning job satisfaction, demographic information, and finally, the mental health questionnaire. The only part of the interview that required writing on the worker's part was the mental health questionnaire. Each of the items constituting the Jobsat '70 measure of job satisfaction, the related set of "importance" items and the "labor standards importance" items was printed on a separate IBM card. In the two importance questions the worker was asked to sort the cards into four piles according to how important each item was to him; in the job satisfaction question, he sorted the cards according to how true each statement on the card was of his present job. These techniques are described in greater detail later.

Questioning with regard to each of the working conditions problem areas followed the same general outline, asking the worker to indicate whether he had a problem in the area and, if so, to describe the problem and to indicate its severity, how important the area was to him and how satisfied he was with this particular aspect of his job. Pretesting indicated, however, that a rigid adherence to identical lines of questioning for each problem area without variations in format not only tired the worker but appeared as well to decrease the reporting of problems as the interview progressed. Some workers appeared not to have been reporting problems simply to avoid having to answer all the "follow up" questions in the problem area; they had learned to spot a "problem" question early in the interview. For this reason, in the final form of the interview the formats of the various problem areas were made quite similar, and the importance and satisfaction aspects of each problem area were separated from more specific questions about the problem area and were included instead in the interview's card sorts. The problem areas appeared in the interview in the following sequence: promotions, content

of the worker's job, interpersonal relations, hours and other time-related matters, health and safety, transportation to work, income and income related matters, job security, relations with unions, and dealings with employment agencies.

In cases where a worker held more than one job, he was asked to discuss only the job on which he spent the greatest amount of time.

The time referent of questions was almost always the present, and the worker was not asked to discuss past feelings or events. There were exceptions to this only in several problem areas where it was felt that the annual occurrence of the problem would be very small. In these areas the worker was asked about his having experienced the problem at any time in the last three years. This extended time referent applied to the areas of: work-related illness or injury, inadequate expense coverage following a work related illness or injury, dealings with employment agencies, wage garnishment or assignment, and employers' withholding wages. A complete set of interviewing materials appears in Appendix A.

#### PRETESTING

The construction of the national survey interview required the solution of two rather unusual problems. First, the interview had to be suitable for someone in any occupation ranging from Abalone fisherman to Zoologist. It could not have too much of a "blue-collar sound," nor could it sound too much as if it had been designed for white-collar workers or managers. Second, the interview had to ask questions in a number of labor standards areas where data collection through surveys of workers had in the past been either limited or non-existent, and few

questioning precedents had been set as a result. A related problem was the translating of essentially legal concepts (e.g., overtime) into terms that would be more usable by all workers.

Two small-scale pretests of a dozen workers each conducted in Detroit were able to detect some of the grosser miswordings and ambiguities in the original instrument. However, with so few respondents, many of the questions had not been tested because they had not even been asked; this was due to their being follow-up questions to prior questions concerning rare events (e.g., wage garnishment). Moreover, two dozen interviews could hardly represent anything but a most limited range of occupations.

For these reasons a more extensive pretest was undertaken with 311 workers in several Michigan communities. The sample of workers in this pretest (described more fully in the report of Phase I of the study) was selected to secure a wide variety of jobs rather than to secure representativeness of a larger population of workers. An attempt was made to select workers from each of the cells in Roe's (1956) occupational classification scheme which classifies jobs in terms of both their status and their "situs" (a dimension describing the general type of activity engaged in). Higher-status workers were intentionally over-selected, since this group frequently presents the greatest problem of applicability of interview questions about work.

In addition to meeting the requirements that a pretest include a wide range of occupations and be sufficiently large that most of the "rare event" questions would be asked at least of a few workers, the size of the pretest sample was additionally useful in the development of some of the national survey's multi-item measures. With the pretest data it was possible to factor analyze several of the sets of items (i.e., the mental health, job satisfaction, and supervision items) and to estimate both the reliabilities and correlations with social desirability of various combinations of items.

As a result, many questions which would not otherwise have survived item analysis in the national sample were eliminated between the Phase I pretest and the development of the instrument for the national survey.

#### CONVENTIONS EMPLOYED IN TABLES

All tables present workers' responses to questions (or indices based on combinations of questions) as means or percentages. The number of workers upon which each set of figures is based is included in parentheses in each table.

Many questions were asked only of particular subgroups of workers. In any case where a question was not asked of all 1,533 workers, a footnote to the table indicates the subgroup of workers who are excluded from the percentages. Where this "exclusion" footnote became very long and complicated, a simpler "inclusion" footnote was used instead to describe the subgroup of workers who were asked the question.

All but a handful of the tables exclude from their percentages those workers who did not provide codeable information. This "missing data" group of workers in a particular table consisted principally of: workers who could not answer the question as it was phrased; workers who, through interviewer error, were not asked a question they should have been asked; and workers whose answer are rendered uncodeable through faulty interviewer transcription. In a handful of questions where workers' "don't know" answers were of some intrinsic interest (e.g., Table 5.10), the "don't know" response category was included in the computation of the percentages.

Most of the percentages in the tables may therefore be read as indicating that "this percentage of workers (barring any exclusions described in the footnote of the table) said such-and-such in response

to this question." A very important subset of the tables should, however, not be read in this way; these tables are principally those which describe the specific problems encountered by workers in a particular working conditions area. In these tables the percentages are based upon the total number of problems reported by workers rather than the total number of workers who reported a problem. This frequent switch in the base upon which percentages are reported was necessitated by the interview's permitting a worker to report more than one problem with reference to many areas of working conditions. For example, Table 12.10 affixes a percentage of 50.9 percent to employers' invasion of workers' privacy by looking into their home lives. This percentage should not be interpreted as indicating that 50.9 percent of all workers reported invasion of privacy by such activity on the part of their employers. Nor should it even be interpreted as indicating that among all workers who reported that their employers invaded their privacy 50.9 percent said that their employers did so by looking into their home lives. Instead, it should be read as follows: among the total set of problems reported by workers who indicated that their employers invaded their privacy, 50.9 percent of the reported problems involved employers looking into workers' home lives. The reader of the tables should therefore be cautious in his interpretation of all tables such as Table 12.10 where the heading of the column of percentages refers to something other than percentage of workers.

In each of the 19 labor standards problem areas there are four basic types of tables.

1. Number of workers reporting a problem--These short descriptive tables are quite uncomplicated and indicate only the percentage of workers who did and did not report a problem in a particular area. The interview

question which elicited information relevant to the problem is printed at the top of the table, and what constituted a problem is defined more specifically in Section 4 of the report. One typical such descriptive table is Table 5.16 concerning fringe benefits.

2. Descriptive breakdown of the problems reported by workers --

After a worker indicated that he had a problem in a particular area, subsequent questioning provided more specific information on the problem he was facing. For example, if a worker indicated that there were additional fringe benefits that were not presently available to him but which he would like to have made available (i.e., if he "had a problem" with fringe benefits), he was then asked to name the one additional fringe benefit that he would most like to have available. The breakdown of workers' responses to this question are presented in Table 5.17.

3. Frequency and severity of labor standards problems for major demographic occupational subgroups--Table 5.18, one typical such table, shows the frequency of fringe benefits problems for major subgroups of workers defined by their sex, race, age, education, employment status, industry group, occupational group, and collar color. In each of these tables the first column indicates the particular demographic or occupational classification being used in each line of the table. The number in the second column is the number of workers in the sample who fell into each of the demographic or occupational questions and who were not coded as "missing information" on the particular problem question. The percentage in the third column is the percentage of workers who reported one or more problems in each area in response to the relevant problem question.

The remaining entries are workers' ratings of the severity of the problems they reported in each of the labor standards areas. The questions upon which the data in these columns were based were all slight variations

of the single "severity" question, "how much of a problem is this for you? Each of these "severity questions" was asked of a worker immediately after he had reported the existence and had described the details of a problem he was experiencing in a particular area; the severity questions were hence scattered throughout the interview at appropriate points rather than being asked of workers in a single block. Workers who reported a problem in an area and were asked the follow-up severity questions were provided with four possible fixed-alternative answers to the severity question: no problem at all; a slight problem; a sizeable problem; a great problem. It may at first seem strange that in each area some workers responded "no problem at all" after they had just finished reporting and describing a problem. These workers were not necessarily contradicting what they had just said; instead they were using "no problem at all" in a colloquial sense in order to dismiss the problem they had described as trivial (e.g., "I had a problem getting wages once when my paycheck was a few days late, but this really didn't create any problem for me at all."). The percentage of workers (and, in parentheses, the number of workers) rating the problem they reported in the area as being either "sizeable" or "great" appear in the final columns of the tables. The "average severity" rating of all problems reported in a particular labor standards area is presented to the left of these columns of severity rating percentages. This "average severity" score was a simple arithmetic mean of the severity ratings, assigning to the four categories of severity ratings the following scoring weights: 1 = "no problem at all"; 2 = "a slight problem"; 3 = "a sizeable problem"; 4 = "a great problem." A numerically high average severity score corresponds to a high severity rating. At times the percentages in the "severity" columns are based on ridiculously small numbers, occasionally even one person. Such percentages signify



nothing. They are nevertheless included in the table in case one wishes to combine various lines of the tables to compute new severity ratings based on more reliable numbers of cases (e.g., combining the several industries into two major types of industry).

Two tests of statistical significance were applied to the frequency and severity data for each subset of occupational or demographic comparisons. To test whether the frequencies of reported problems were associated with a particular demographic or occupational variable being used as a "control," chi-square tests of association were used. The values of the chi-squares (printed as  $X^2$ ), the degrees of freedom, and the significance levels of the chi-squares appear at the bottom of each subset of problem frequencies. To test whether the severity ratings were associated with the demographic or occupational variables, one-way analyses of variance were performed using the demographic or occupational variables as independent variables and mean severity ratings as dependent variables. The values of the F-ratios, the degrees of freedom for  $N_1$  and  $N_2$ , and significance levels (two-tailed) of the F-ratios appear at the bottom of each subset of severity ratings. Where the independent variable is binary (e.g., sex) a t-test rather than an F-ratio is more customary. For the sake of consistency, however, F ratios have been used throughout. The corresponding t value may be approximated by taking the square root of the reported F-ratio.

4. Association between working conditions and outcome measures-- The extent to which experiencing problems in each of the labor standards areas (and in a number of other working conditions areas as well) is associated with job satisfaction and mental health as indicated in tables such as Table 5.19. The dependent variables in these tables are the study's 13 mental health and job satisfaction measures described in detail in Section 3. Each column of figures describes workers' scores on one of

these measures. In each case a numerically high score indicates a high level of whatever commodity is described in the column heading (e.g., high job satisfaction, high depression, high life satisfaction, etc.). The rows of each table indicate various levels of the working condition investigated. For example, in the table concerning problems with fringe benefits, one row indicates the scores on the outcome measures of workers with fringe benefits problems and the other indicates the scores of workers not faced with these problems.

All such tables ask the same question: to what extent is each of the working conditions measured related to job satisfaction and/or mental health as assessed in the outcome measures? Summary statistics indicating the size and reliability of the observed relationships are presented at the bottom of each column. The principal statistical test employed was a one-way analysis of variance; the form of reporting the results of such tests is identical to that used in the demographic and occupational breakdowns (see above). In each F-test the independent variable was the particular working condition, and the dependent variable was the job satisfaction or mental health outcome measure. Two additional statistics are also presented. The first is the correlation ratio ( $\eta$ ) indicating the strength of association between the working condition measure and the outcome measure. All  $\eta$ s are positive and no inference can be made from them about the direction of association; even a markedly curvilinear relationship can produce a substantial  $\eta$  value. Where the working condition was measured by a continuous variable (especially some of the multi-item indices) a product moment correlation is also presented. In these cases the direction in which the working condition was scored can be inferred from the numerals down the left side of the table. In most cases, however, it will be easier to forget about signs and simply infer the form of the relationship by observing the mean scores in the columns.

Two cautions should be observed in making inferences from the statistical tests reported below. First, the tests assume simple random sampling; an assumption not met due to the clustering in the study's sample selection. The statistics may, as a result, somewhat overestimate the significance of observed differences. Differences that are only barely significant at the .05 level should therefore be treated as of dubious statistical significance--especially if the means upon which they are based form an irregular or uninterpretable pattern. In addition, among the large numbers of significance tests that were run, around five percent can be expected to be "chance findings". Little faith should therefore be put in the occasional puzzling finding of borderline significance which indicates a relationship with an erratic shape, is not amenable to interpretation even by the most eccentric of hypotheses, and is not consistent with other findings in the report.

A second caution should be exercised in treating each bivariate table as presenting a set of descriptive statistics rather than as simply a convenient means of indicating the form of a relationship. On the basis of Table 3.22, for example, it might reliably be concluded that overall job satisfaction increases significantly with age. Although considerable confidence can be placed in this conclusion, the statistics for any particular age range are considerably less reliable than the overall statistics due to the reduced number of cases in single age classifications. In addition, even what looks like a linear relationship, with the relevant means or percentages on the dependent variable measure consistently increasing with each increase on the independent variable, can occasionally appear erratic at some point when the mean or percentage of some small subgroup is out of line with the others. The F-test, moreover, indicates only that there is an overall association between the

independent variable and the dependent variable; nothing can be inferred about the significance of the difference between two particular subgroups (e.g., between two adjacent age groups). Although one may conclude on the basis of Table 3.22 that older workers are more satisfied than younger ones, those workers in the 21-29 age range are not necessarily significantly more satisfied than younger ones.

All statistical tests reported below, unless otherwise noted, employ two-tail probability levels. The term "significant" in the text refers to tests that are significant beyond the .05 level.

The sampling error of the descriptive statistics reported below should also be taken into consideration in reviewing the information presented in the tables below. Sample statistics reflect the random variations arising from interviewing only a fraction of the population. The distribution of individuals selected for a sample generally differs by an unknown amount from that of the population from which the sample is drawn. The value that would be obtained if interviews were taken by the same survey procedures with the entire population will be referred to as the population value. If different samples were used under the same survey conditions, some of the estimates would be larger than the population value and some would be smaller. The sampling error is a measure of the deviation of a sample statistic from the corresponding population value, but it does not measure the sampling variability of a particular sample estimate. The sampling error leads to the construction of an interval or range, on either side of the sample estimate, that includes the population value in a specified proportion of cases in a large number of samplings.

As used here, the term "sampling error" means two standard errors; it is the range, on either side of the sample estimate, chosen to obtain the 95 percent level of confidence. Estimates of such sampling errors

for a somewhat similar sample are given in Table 2.11. If a greater degree of confidence is required, a range wider than the two standard errors can be used. On the other hand, most of the time the actual error of sampling will be less than two standard errors; in about 68 percent of cases, a range of one standard error on either side of the sample estimate includes the population value.

For example, if 55.0 percent of 1,533 workers report being "very satisfied" with their job security, this percentage is subject to a sampling error of about 3.3 percentage points. Thus the statement that the range of 51.7 to 58.3 includes the population value would be true for at least 95 percent of every 100 samples drawn like the one for this study. The chances are that in five of every 100 samples the population value would be outside that range.

Standard errors also vary with the percentage being estimated and reach a maximum, for samples of a given size, when the percentage is 50 percent. The relative size of the error decreases as the size of the percentage departs from 50 percent. The relation of sampling error to sample size and the proportion (or percentage) being estimated is evident in the formula for the computation of sampling errors for simple random samples. The sampling error of such a sample is equal to  $2\sqrt{[p(1-p)] / (n-1)}$  where  $p$  is the proportion under consideration and  $n$  is the sample size. Although the survey uses a complex rather than a simple random sample, the relationship of sampling error to sample size and the proportion being estimated is somewhat similar to that of the preceding formula.

There are other important factors that influence the size of the sampling error of any characteristic based on interviews from the entire sample or from some specific subgroup. Stratification at several stages of sampling tends to reduce sampling error while clustering of the sample in a limited number of counties, cities, blocks and rural areas tends to

increase sampling variation. The joint effect of such factors varies for every type of estimate and for every subgroup of the population. The fact that sampling errors in this study are frequently higher than simple random sampling errors arises because dwellings and respondents were sampled in clusters, a procedure that may increase sampling error if the characteristic being sampled also occurs in clusters. The measures of sampling errors to be computed for the present study take into consideration the particular characteristics of the Survey Research Center sample; the sampling errors will not be derived on assumptions of simple random sampling.

Table 2.11 is an illustrative table of sampling errors. Technically, each descriptive statistic in a survey has its unique sampling error, depending upon both the variable measured and the subgroup of the sample one is observing (e.g., the percentage of blacks reporting problems with inadequate incomes). Only (a) when all the study's main measures and relevant subgroups have been defined, (b) when sampling errors have been computed on these, and (c) when the sampling errors have been found to be consistent from measure to measure and from subgroup to subgroup, can such a summary table as 2.11 be constructed. Preparation of such a "tailor-made" set of sampling errors for the present study appears, therefore, to be somewhat premature since a third phase of analysis is currently being planned. Later analyses will undoubtedly lead to the generation of some new summary indices whose errors should be taken into account in estimating overall sampling error. Also new subgroups are likely to be defined, particularly those which reclassify women somewhat more finely in terms of their relation to the labor force and those which demarcate the "middle-majority" of workers whose problems of late have been of increasing concern to the Department of Labor. Only when a more

accurate definition has been made of these new variables and subgroups can a precise table of sampling errors be constructed. Meanwhile, Table 2.11, based on a 1967 Survey Research Center survey of workers' experiences with automation may provide some general guidelines for the magnitude of the sampling errors likely to characterize data from the present survey.

Sample Characteristics of Working Conditions Sample and Comparison Samples

Data from Working Conditions Survey

Data from Comparison Samples

Sex

<u>Table 2.1-a<sup>1</sup></u>		<u>Table 2.1-b<sup>2</sup></u>	
Male	65.1%	61.6%	Male
Female	34.9	38.4	Female

Race

<u>Table 2.2-a<sup>1</sup></u>		<u>Table 2.2-b<sup>2</sup></u>	
White	89.0%	89.2%	White
Negro and other races	11.0	10.8	Negro and other races

Age

<u>Table 2.3-a<sup>1</sup></u>		<u>Table 3.2-b<sup>2</sup></u>	
16-20	6.4%	7.6%	16-19
21-29	21.8	32.7	20-34
30-44	32.0	20.7	35-44
45-55	22.3	21.2	45-55
55-64	13.9	13.9	55-64
65 and over	3.6	3.9	65 and over

Formal education

<u>Table 2.4-a<sup>1</sup></u>		<u>Table 2.4-b<sup>3,4</sup></u>	
8 years or less	15.8%	18.6%	8 years or less
Some high school	17.6	17.8	Some high school
High school diploma	36.2	38.4	High school diploma
Some college	16.5	12.6	Some college
College degree or more	13.9	12.6	College degree or more



Sample Characteristics of Working Conditions Sample and Comparison Samples

Data from Working Conditions Survey

Data from Comparison Samples

Marital Status

<u>Table 2.5-a<sup>1</sup></u>		<u>Table 2.5-b<sup>2,5</sup></u>	
Single	12.4%	18.9%	Single
Married	76.7	70.9	Married
Widowed, Separated, or Divorced	10.9	10.3	Widowed, Separated, or Divorced

Self-Employed vs. Wage-and-Salary

<u>Table 2.6-a<sup>1</sup></u>		<u>Table 2.6-b<sup>2</sup></u>	
Self-Employed	13.4%	8.9%	Self-Employed
Wage-and-Salary	86.6	91.1	Wage-and-Salary

Blue-Collar vs. White-Collar Status

<u>Table 2.7-a<sup>1</sup></u>		<u>Table 2.7-b<sup>2,6</sup></u>	
White-Collar	49.4%	48.6%	White-Collar
Blue-Collar	46.4	48.0	Blue-Collar
Farm Workers	4.2	3.3	Farm Workers

(continued)

Sample Characteristics of Working Conditions Sample and Comparison SamplesData from Working Conditions SurveyData from Comparison SamplesOccupation PrestigeTable 2.8-a<sup>1</sup>

Lowest 10th	4.0%	
2nd	8.1	
3rd	2.9	
4th	12.0	
5th	5.5	No available comparison
6th	8.7	
7th	8.4	
8th	17.7	
9th	17.9	
Highest 10th	14.8	

Occupation GroupTable 2.9-a<sup>1</sup>

Professional, Technical and Managerial	25.7%	24.6%
Clerical and Sales	21.8	24.0
Service	12.1	12.4
Farming, fishery, and forestry	4.5	3.3
Total of following five categories	36.0	35.6
Structural work	10.4	
Machine trades	7.8	
Bench work	6.3	
Processing	1.8	
Miscellaneous	9.7	

Table 2.9-b<sup>2</sup>

Professional, Technical and Managerial
Clerical and Sales
Service
Farming, fishery, and forestry
Blue-collar workers (include craftsmen and foremen; operators and nonfarm laborers).

(continued)

Sample Characteristics of Working Conditions Sample and Comparison SamplesData from Working Conditions SurveyData from Comparison SamplesIndustry Groups (SIC)

	<u>Table 2.10-a</u> <sup>1</sup>		<u>Table 2.10-b</u> <sup>2,7</sup>	
Services	26.2%	15.5%		Services
Manufacturing	25.2	27.6		Manufacturing
Wholesale and retail sales	18.2	21.6		Wholesale and retail sales
Contract construction	8.1	4.6		Contract construction
Transportation, communication, electric, gas and sanitary	6.2	6.2		Transportation and public utilities
Government	5.3	17.3		Government
Finance, insurance and real estate	4.9	5.0		Finance, insurance and real estate
Agriculture, forestry and fisheries	4.5	1.3		Agriculture, forestry and fisheries
Mining	1.4	0.9		Mining

<sup>1</sup>Source--SRC Working Conditions Survey.<sup>2</sup>Source--Employment and Earnings. 16 (7), January, 1970<sup>3</sup>Source--Statistics on Manpower. 1970 Manpower Report of the President<sup>4</sup>Includes all civilian labor force, not necessarily just those employed<sup>5</sup>Excludes workers in agriculture.<sup>6</sup>Category "blue-collar workers" includes service workers.<sup>7</sup>Excludes self-employed workers.

Table 2.11 Sampling Errors Obtained in a Previous Survey Research Center Survey of Worker

Estimated percentages	Number of Interviews							
	1500	1000	700	500	400	300	200	100
50%	3.5	4.0	4.6	5.4	5.9	6.8	8.2	11
30 or 70%	3.2	3.7	4.3	5.0	5.5	6.2	7.5	10
20 or 80%	2.8	3.2	3.7	4.3	4.8	5.4	6.6	9.1
10 or 90%	2.1	2.4	2.8	3.2	3.6	4.1	4.9	6.9
5 or 95%	1.5	1.8	2.0	2.4	2.6	3.0	3.6	5.0

The figures in this table represent two standard errors. Hence, for most items the chances are 95 in 100 that the value being estimated lies within a range equal to the estimated percentage plus and minus the sampling error.

### 3. OUTCOME MEASURES

A major purpose of the study was the development of measures of job satisfaction suitable for administration in surveys of samples of workers in various heterogeneous occupations. A second major purpose was the assessment of the possible effect of various working conditions upon the psychological well-being of workers. The most obviously relevant set of such "outcome measures" were workers' satisfaction both with their jobs in general and with particular aspects of their jobs. A second set of measures, grouped under the general rubric of "mental health," were also included among the study's outcome measures. It was, however, anticipated that these mental health measures would be substantially less highly correlated with the study's working conditions measures than would be the job satisfaction measures.

The inclusion of these job satisfaction and mental health outcome measures served two additional purposes:

1. The outcome measures provided one criterion of judging the "importance" to workers of the working conditions they experienced. This matter, to be discussed more in Section 4 and in the reports' conclusion, is based on the simple premise of field theory that "things which are real have real effects." Suppose, for example that two different working conditions problems confront equal numbers of workers and that they do not differ in the severity of the forms in which they occur. Suppose further that workers indicate that they are concerned with being protected equally against both types of problems. In this stand-

off situation which working condition should command the greater attention of programs of the government and others? If the presence of the first problem had deleterious effects on workers' mental health and was associated with low job satisfaction, while the second problem was related to neither job satisfaction nor mental health, we would suggest that the first problem was more relevant to workers' well-being and hence the superior claimant for being the target of action programs designed to improve working conditions.

2. The observed correlations between the outcome measures and the study's measures of working conditions help to establish the construct validity of the survey's working conditions measures. The construct validity of an instrument is a rather subtle concept and cannot be readily translated into numerical values. A measure is said to have construct validity to the extent that its use produces findings that are consistent with accepted theories, previous research findings, and plain common sense. Thus, if one were to develop a brand new measure of occupational status and it showed that blacks as a whole had higher occupational status than whites, the status measure would be suspect, especially if a whole host of such "incongruous" findings were obtained using the status measure. However, the construct validity of a measure need not be destroyed by its production of one, two, or even more "unexpected" or "incongruous" findings. Indeed, such incongruities may even send the analysis off into fruitful new areas. It is only after a sizeable body of data obtained from either one or many studies employing the measure has been examined that one can begin to assess the "construct" validity of a particular measure.

Two examples may bring the concept of construct validity a little closer to home. Several measures of the economic aspects of the worker's

job and the economic problems he faced were employed in the study. The study also employed a measure of satisfaction with the pay aspects of the workers job. To the extent that the measures of the financial aspects of the worker's job are substantially related to his satisfaction with his pay, fringe benefits, etc., the former measures may be said to have some degree of construct validity. In the process, the construct validity of the satisfaction measure is also bolstered. By way of an additional example, the study developed a measure indicating the extent to which the worker was satisfied with how challenging and self-developing his job was; at the same time it developed measures relevant to the autonomy provided the worker, how enriching the demands of his job were, and how well his job utilized the worker's skills and education. To the extent that the former measure of satisfaction with challenge is found to be substantially related to the study's measures of the latter working conditions which might possibly contribute to making a job challenging, the construct validities of both the satisfaction measure and the working conditions measures receive some support. The development of the survey's job satisfaction and mental health measures is described in the pages below, and some of the basic statistical properties of the measures are presented in the subsequent set of tables.

#### JOB SATISFACTION

At the onset of the study it was recognized that there were many good measures of job satisfaction available, a few of them quite good. However, each that was reviewed for possible inclusion in the survey suffered from one or more limitations. Some were beautifully custom-tailored to

a particular population (e.g., blue-collar workers or managers) and hence unsuitable for workers at large. Some were simply too long, requiring up to an hour of administration time. Others had formats that were too complex or wordings that were too difficult; some of the "simpler" ones were too obviously designed to be used for blue-collar workers only. Most failed to recognize that having adequate resources for adequate job performance might be a matter of considerable interest to workers. Their most common limitation, however, was their failure to make any allowances for differences among workers in terms of what the workers wanted out of their jobs. Most made the implicit assumption that all workers wanted the same things out of their jobs and assigned overall satisfaction scores on the basis of workers' satisfaction with these things without any differential weighting of items to account for individual differences.

In view of these limitations an attempt was made to construct a brief measure of job satisfaction which was not "new" in the sense that it consisted of wholly new questions. With the exception of the "resources" questions, most were modifications of questions used in other instruments. The only "new" aspects of the measure consisted in its providing two distinct sets of scores for each worker and in the technique by which the measure was administered. Moreover, neither of these two aspects of the measure was wholly new since their use had indeed already been pioneered by others; their uniqueness lay only in their combination in a single measure of job satisfaction.

The raw materials for the survey's job satisfaction measures was a series of evaluative, job-relevant statements (e.g., "the pay is good"). For each such statement two types of information were obtained from each worker. He was first asked to indicate the importance of each such



aspect of a job to him by rating the statement in terms of how important it was to him in any job. He was later in the interview asked to tell how satisfied he was with the same aspect of his job by rating the evaluative statement in terms of how true it was of his job. For each worker two scores could therefore be obtained, the first indicating how important to him was each such aspect of a job and the second indicating how satisfied he was with the same aspect of his present job.

This two-fold collection of information on each aspect of the job--information on its importance to the worker as well as his satisfaction with it--permitted the study (by a factor analysis described below) to define dimensions of job satisfaction in terms that were more relevant to individual needs than to characteristics of working environments. In addition, it provided the opportunity to incorporate into the scoring of overall job satisfaction measures considerations of differences among workers as to what they wanted out of their jobs. The data in the present report has, however, not taken advantage of this opportunity. There are currently available several theoretical models which in one way or another suggest rationales for combining importance and satisfaction ratings (or related concepts) in a variety of ways, most conspicuously those of Vroom (1964), Porter (1962), and Pelz (1966). Each implies a different arithmetic. Moreover, they suggested that even the most sophisticated of combinations of importance and satisfaction ratings is no improvement over simple job satisfaction scores which ignore importance ratings entirely. Determining the best procedures for combining importance and satisfaction ratings remains to be done.

A second unique aspect of the administration of the surveys' job satisfaction measures was its use of "card-sort" techniques patterned after those of Hunt, Schupp, Cobb (1966). To obtain the importance

ratings each worker was presented with a set of IBM cards with a declarative statement printed on each card (e.g., "the chances for promotion are good"). He was also given four IBM cards with a response category printed on each ("very important," "somewhat important," "not too important," "not at all important"). The four response cards were placed before him and he was asked to put each of the descriptive statements on top of the response card that best indicated the importance to him of the condition described. No restriction was made as to how many cards could be put in each pile. Once the worker had finished sorting his cards, the four piles were assembled by the interviewer and returned with the interview for direct computer processing. A similar card-sort technique was used to obtain the survey's job satisfaction ratings (Table 3.3) and the importance ratings of labor standards problems described in Table 4.1. The importance card sort was administered at the beginning of the interview, the labor standards card sort a few minutes later, and the job satisfaction sort near the completion of the interview.

Replication of the study's three measures that employed card sorts need not be confined to using the card-sort technique. The card sorts obtained no more information that could be obtained by standard check-box questionnaire procedures. It is not known, however, how such changes in technique might affect workers' responses on the three measures, nor was any evaluation made in the survey of which technique might obtain more valid results. Both techniques are characterized both by common and unique response sets. Superficially, the card-sort technique has some obvious advantages: since the cards are directly machine processed, no coding is necessary; the respondent cannot accidentally "skip" an item, since every card must be accounted for (although

the respondent is free to indicate that there are some cards he cannot sort for one reason or another); the card sort is less "test-like" than a check-box questionnaire; being obviously computerized and "not seen by human eyes" the IBM cards have a quite anonymous quality; and finally-- and a point not to be underestimated--respondents appeared to enjoy the novelty of sorting the cards. However, two obvious draw-backs of use of the card sorts became apparent in the survey. First, considerable time had to be spent "editing" the card sorts to determine that the interviewer had picked them up properly and that no cards were backwards, upside down, damaged or otherwise computer-unworthy. Second, the U.S. mails do not treat IBM cards kindly, and many interviews arrived with minor damages that necessitated the cards being reproduced. Other studies at the Survey Research Center employing different methods of card packaging and transmission report less of a problem of damaged cards than was encountered in the present survey.

The Phase I pretest of the study's job satisfaction measure employed 43 statements for which workers provided both importance and satisfaction ratings. Once these data were collected, however, a considerable problem of data reduction remained, since this heterogeneous set of items had to be reduced to a more manageable number of meaningful subsets. This problem was equivalent to asking whether there were any general categories of things that workers wanted out of their jobs--whether there was a limited set of dimensions underlying what workers sought from their work. To answer this question, the statistical technique of factor

analysis was employed.\* Factor analysis is a treatment of data which is used to uncover fundamental dimensions or factors that underlie the pattern of responses to a series of separate questions. It is based on the notion that each of a given number of responses may be an imperfect measure of a more general underlying dimension. This statistical technique discovers the number of such dimensions that account for the total pattern of responses and also notes the contribution that each separate characteristic makes to each of these factors. In Phase I a factor analysis of the 43 "importance" items yielded six independent and identifiable factors which were provisionally termed Comfort, Challenge, Supervision, Resources, Pay and Promotions, and Relations with Co-workers.

In the Phase II national survey a similar procedure was employed. Only those 25 items which had substantial loadings on one of the original Phase I factors were included as importance and satisfaction items in Phase II national survey. On a random half-sample of workers interviewed in the national survey a new factor analysis was performed on the importance items. The results of this factor analysis are presented in Table 3.1 which gives the loadings of each importance item on each of the five orthogonal factors emerging in the Phase II factor analysis.\*\*

Factor I, "Comfort," which is very similar to the Comfort factor from Phase I, describes a worker's desire for a job which provides solid

---

\*All factor analyses described in this report employed the principal axis method with a Varimax rotation.

\*\*The items in Table 3:1 are listed so as to facilitate reading of the table and their order does not correspond to the order in which they were presented in the interview.

creature comforts and which presents no problems for him. There is no indication that a worker endorsing the items on this factor wishes his job to be exciting, interesting or challenging--only serene and easy--in short, a "soft" and untroublesome job. Comfort is a factor that is not commonly reported in studies of work-related values or job-satisfaction, possibly because the relevant items are infrequently administered simultaneously in a single study. Few studies consider in the same breath such superficially diverse matters as freedom from role conflict and convenient hours; but, according to the Phase II factor analysis, these aspects of jobs do--at least in worker's eyes--have something in common as job desiderata.

Factor II, "Challenge," which is identical to the Challenge factor from Phase I, reflects a worker's desire to be stimulated and challenged by his job and to be able to exercise his acquired skills in his work. This factor corresponds somewhat to what in other studies' factor analyses of job satisfaction emerges as a "type of work" factor. This factor also corresponds to Herzberg's satisfier, motivator, or context factor. However, Herzberg's second factor, composed of dissatisfiers, hygiene, or context items, was not identifiable in the analysis as a single factor; instead, its components were distributed among the other four factors.

Pay, fringe benefits, and job security comprise a third factor and are examples of what sometimes has been referred to as extrinsic rewards. This third factor is labeled in the tables as "Pay."

Factor IV contains only two items, both of which concern "Co-worker Relations." This factor has appeared frequently in factor analyses of job satisfaction in other studies, and an identical factor appeared in Phase I of the present study.

The fifth and final factor emerging from the Phase II factor analysis was "Resources," and it represents the worker's wish for adequate resources with which to do his job well: Help, equipment, information, and competent supervision. Supervision, which appeared as an independent sixth factor in the Phase I factor analysis, disappeared entirely in the Phase II factor analysis. Two of the items from the Phase I supervision factor ("my supervisor is competent in doing his job" and "my responsibilities are clearly defined") appeared in the Phase II analysis as part of the more general Resources factor. The third Phase I supervision item ("my supervisor is very concerned about the welfare of those under him") did not have a very high loading on any single Phase II factor. The disappearance of a separate Supervision factor in Phase II suggests that workers do not generally desire good supervision as a unique commodity, viewing it instead as a "special case" of their more general desire to be provided with the resources necessary to do a good job.

In general the factor structure of Phase II replicated that derived in Phase I. The major exceptions were the Resources factor's engulfing of the Phase I supervision factor and the movement between factors of items concerning job security and adequate time in which to do one's work. Also, the item concerning chances for promotion did not load heavily on any of the Phase II factors and was not included in Phase II measures of importance or satisfaction.

The results of the Phase II factor analysis in some ways differ considerably from other reported factor analyses of materials or questionnaire items relevant to job satisfaction. This discrepancy may have resulted for a variety of reasons. First, other existing factor analyses of job satisfaction or work-related values are generally based

on data obtained from less heterogeneous samples of workers, being confined, for example, to workers in a particular industry, company, occupational level, etc. The Phase II factor analysis is, to the best of our knowledge, the first such analysis to be performed with a national probability sample of American workers.\* Second, the variety of items in the Phase II importance and satisfaction series of questions was unusually diverse and entered into such generally untouched areas as resource adequacy, an area neglected in most studies of job satisfaction. Third, and perhaps most importantly, the Phase II factor analysis was performed on the importance items rather than job satisfaction items. Since the purpose of the factor analysis was to construct indices that would indicate how well workers were being supplied by their jobs with what they wanted from these jobs, it seemed sensible to group items according to workers' needs; the factor analysis was therefore performed on the importance items rather than the satisfaction items. Most other factor analyses in the area of workers' needs and job satisfaction proceed the other way around, factor-analyzing job satisfaction items rather than importance items (if indeed they have such items--which is usually not the case). In Phase I both the importance and satisfaction items were factor analyzed. These two analyses yielded generally similar

---

\*This is not necessarily a virtue. Many statisticians advocate the use of factor analysis only on fairly homogenous samples. But since the purpose of the technique's application was to aid in the development of a measure applicable to a heterogeneous population, its use appeared justified for this circumscribed purpose--particularly since a major aim of the study was to compare the job satisfaction scores of the various subgroups of workers contributing to this heterogeneity. A major priority in additional analyses of the data from the present study is the repeating of these factor analyses for several population subgroups. One such repeat has already been attempted in Fine's (1970) report on the self-employed which has indicated that among the self-employed the Resources factor assumes a greater prominence than it does among workers as a whole.

factors, but those factors emerging from the analysis of the importance items were on the whole clearer and more readily interpretable. Because of this Phase I analysis no comparable factor analysis of the Phase II satisfaction items was attempted.

The factor analyses just described were conducted in order to construct easily usable measures of job satisfaction. In Phase II this construction was carried out by creating, for each of the five factors, both an "importance" and a "satisfaction" score for each worker. The importance scores characterized each worker in terms of the importance to him of the working conditions loading on a particular factor. For each worker a simple arithmetic mean was computed over all the items which had "substantial" loadings on each factor, defined as a loading of .40 or greater. Five "importance" scores were thus constructed, corresponding to each of the five factors. Using the same factorially determined grouping of items, five satisfaction scores reflected the degree to which the worker was satisfied with his work situation in each of the five areas described above. One overall satisfaction score was also computed by obtaining the arithmetic mean of each worker's degree of satisfaction with all the 23 items included in the five factors.\* This 23 item index, designated in later tables as Jobsat '70, is one of two indicators of overall satisfaction used in analyses of Phase II data.

Once these indices were constructed their split-half reliabilities were computed on the remaining half-sample of 760 workers. These reliabilities are as follows:

---

\*Two items, "my supervisor is very concerned about the welfare of those under him" and "the chances for promotion are good", were not included in any index because of their low and equivocal factor loadings.



<u>Index</u>	<u>Split-half Reliability</u>
<u>Jobsat '70</u> (overall job satisfaction)	.86
<u>Job Satisfaction Subscales</u>	
I Comfort	.71
II Challenge	.81
III Financial Rewards	.73
IV Relations with Co-workers	.48*
V Resources	.70
<u>Importance Subscales</u>	
I Comfort	.80
II Challenge	.76
III Financial Rewards	.76
IV Relations with Co-workers	.52*
V Resources	.74

\*This subscale contained only two items.

Analyses reported in the tables in this report did not use individual importance or satisfaction items but used instead workers' scores on the above indices, comparing index scores in various demographic subgroups of workers or those who confront various types of working conditions problems. Before the separate items comprising these indices thus drop forever from public view, Tables 3.2 and 3.3 may be of some interim interest.

Table 3.2 lists all 23 index items and indicates the importance that workers attached to each of these aspects of working conditions. Among the items in the Comfort factor, the most highly valued possessions were enough time in which to do one's job, good working hours, and convenient travel to and from work. The most important aspects of Challenge were interesting work, having enough authority to do one's job, and the opportunities to develop one's special abilities and see the results of one's work. Good pay and job security were the most

important aspects of the Pay factor. With regard to their relations with co-workers, workers were more concerned with their co-workers being friendly and helpful than with the chances their jobs offered to let them make friends of their co-workers. All of the resources included in Factor V were about equally important.

The single most important aspect of workers' jobs was, according to Table 3.2, that they do interesting work. Among the five factors the most important one to workers was the availability of adequate resources. Many different interpretations may be made of Table 3.2 depending upon how one reads it. One highly oversimplified interpretation of the table--subject to welcome dispute--is this: the biggest concern of workers was that they have interesting and self-developing jobs, and equally importantly, that they be provided by their employers with the resources adequate for their successful performance of these jobs; they further wanted their jobs to be well-paying and to provide them with co-workers who were friendly and helpful. There was considerably less demand, according to Table 3.2, for "comfortable," easy, undemanding jobs.

Table 3.3 indicates the degree of workers' satisfaction with the same 23 aspects of work included in Table 3.2. Among the Comfort aspects of their jobs workers were most satisfied with their travel to and from work and with the hours they worked. The percentages listed under the Challenge factor indicate that a sizeable number of workers felt that their jobs failed to use their abilities fully. Only a little more than a third of workers reported that the problems they were asked to solve on their jobs were hard enough; over half of all workers felt that their jobs either did not fully give them an opportunity to develop their special abilities or provide them with a chance to do the things they

did best. The greatest amount of dissatisfaction indicated by Table 3.3 occurred with regard to fringe benefits, 21.9 percent of workers indicating that it was "not at all true" that their fringe benefits were good.

While such indices as those derived from the factor analysis described above are useful in defining levels of importance and satisfaction with regard to specific areas of job satisfaction, there remains the problem of assessing a worker's overall level of job-satisfaction independent of any particular content area. Although Jobsat '70 was the first major attempt in the present study to construct a measure of overall job satisfaction, Jobsat '70 was constructed exclusively from job satisfaction items that referred to specific content areas of workers' jobs. It was most heavily weighted with items that loaded on the Comfort and Challenge factors. Jobsat '70 only assessed job satisfaction with regard to those aspects of the job which the designers of the present study had included in the initial pool of job satisfaction items in Phase I. Although this initial pool of job satisfaction items was intended to be as wide as possible and drew heavily on existing job satisfaction research, it is nonetheless conceivable that the 23 content areas covered by the Jobsat '70 index failed to include some areas which were of vital concern to workers. Suppose, for a ludicrous example, that the single biggest determinant of job satisfaction was the sex-appeal of one's co-workers. Since Jobsat '70 did not enquire specifically about this sex appeal, the Jobsat '70 would be deficient in assessing workers' degree of job satisfaction. In view of this limitation of Jobsat '70 an independent measure of job satisfaction was constructed in Phase II from interview questions which assessed job satisfaction without reference to any particular aspect of a worker's

job. Several such "aspect free" questions were asked of workers; they were all variations, some direct and some not so direct, of the same basic content-free question: "All-in-all, how satisfied are you with your job?" These items together with workers' responses to them are presented in Tables 3.4 through 3.11. The logic underlying a few of these items is a bit oblique; for example, a worker was scored as "satisfied" if he said he often got so wrapped up in his work that he lost track of the time, or if he said that it was very unlikely that he intended to make a genuine effort to find a new job with another employer within the next year. The positive and statistically significant intercorrelations among these eight content-free job satisfaction items were sufficiently high to justify their inclusion in a single index of overall content-free job satisfaction. The correlations which led to the construction of this index were based on a random half-sample of the 1,533 workers in Phase II. The split-half reliability of this index of content-free job satisfaction, computed on the remaining half-sample of workers, was .80. The correlation of this index with the only other indicator of overall Job Satisfaction in Phase II, Jobsat '70, was .49.

Table 3.12 presents workers' responses to one additional question that was included in the interview, not to measure workers' satisfaction with their present jobs, but to measure their attraction to work in general. Data obtained in response to this question indicated that two-thirds of workers would continue to work if they were provided with enough income to rule out work as an economic necessity. An earlier study reported by Weiss and Kahn in 1960 asked this question of male workers and found that 80 percent of workers would continue to work if they were not economically required to do so. A comparison of the 1960 and 1969 responses of male workers to this question indicates that a decline has occurred in the

percentage of workers who would continue to work if their economic situation did not require them to work (from 80 percent to 73.3 percent). The last decade apparently has been a statistically significant decrease in the proportion of workers who are attracted to work for non-economic reasons.

#### MENTAL HEALTH

In addition to the outcome measures of job satisfaction, the survey also included several measures of workers' psychological well-being or mental health. Work at the Survey Research Center in recent years has indicated that the mental health of workers can be regarded to a substantial degree as affected by characteristics of their work situations. Obviously the relationship between characteristics of a person's job and his mental health will not be as strong as the relationship between characteristics of his job and the extent of his satisfaction with it. It was nevertheless anticipated that the study might identify both frequent and sizeable relations between measures of working conditions and measures of mental health. Such identification was intended to serve two purposes. First, it obviously could provide some insights into which working conditions might be the greatest contributors to workers' mental health. Clearly, no causal relationships between working conditions and mental health could be established due to the survey's data being cross-sectional and lacking all those properties of controlled or natural experiments that could firmly establish any kind of causality. Lack of conclusive evidence as to causal relationships, does not, however, diminish the role of cross-sectional data in providing suggestions as to what causal relationships may indeed exist. A second reason for the inclusion of mental health measures in the study was that it provided one criterion for evaluating the "importance" to workers of

various types of working conditions. As was suggested at the beginning of the section, one means of evaluating the importance of something to a worker is determining that its presence or absence is substantially associated with his psychological well-being. To the extent that any of the study's mental health measures were significantly related to an aspect of workers' jobs, the latter characteristic of their job can thereby be regarded as in one sense as "important" to them.

The survey in no way attempted to develop a comprehensive means of assessing mental health. A thorough assessment of all the nuances of even one aspect of mental health (e.g., depression) would have consumed the entire interview. The survey's nine-item measure of feelings of depression could hardly have reflected such nuances. The mental health measures were included for mainly illustrative purposes--so that some very general assessment might be made of the possible effects of various working conditions. The six "mental health" measures employed in the study are described below. The first and last of these, Job-related Tension and Life Satisfaction, were appropriated from earlier studies, and their form of administration and scoring did not differ much from that used earlier in their histories. The other four measures, introduced at the end of the survey's interview as a part of a "Self-Report Form" check-box questionnaire, underwent considerable modification in the early stages of the survey. Relevant statistical properties of all these mental health measures and the history of the "Self-Report Form" are described below.

Job Tension--The national survey included an eight item index of job-related tension, a longer form of which had already been used in one national survey of workers (Kahn, et al., 1964). It had also been previously employed in many studies of more limited populations, ranging

from blue-collar workers in the food processing industry to scientists engaged in aerospace research. Since interviewing time was at such a premium in the national survey, the number of items in this Tension Index was reduced prior to its inclusion. To effect this reduction, all 15 of the original Tension Index's items were included in Phase I interview. They are listed on page 89 of the set of descriptive tables produced from the Phase I data. On the basis of an examination of the correlations among all 15 items, only those eight items were retained for the national survey which exhibited the highest average intercorrelations. The eight items which thus survived this Phase I analysis and were included in the national survey are listed in Table 3.13. The split-half reliability of the Job-related Tension Index obtained from the national survey data was .82. Since workers' responses to particular items in the index may be of some interest, the percentage of workers giving each of the five fixed-alternative answers to each of the items is also presented in Table 3.13.

Self-Report Form--In the construction of the mental health indices there were two severe constraints: (1) a severe time restriction, radically limited the number of items that could be administered, and (2) certain items frequently used in mental health measures were considered too "touchy" for inclusion in a government-supported national survey (e.g., questions concerning one's dreams). In spite of this, the study managed to develop a very brief and inoffensive-sounding 23 item mental health measure which assesses mental health on four factorially distinct dimensions. The four mental health scores assigned to each worker in the national survey have, given the limited number of items involved, quite respectable reliabilities and, more importantly, are responsive to the effects upon the worker of poor working conditions.

The initial pool of mental health items used in Phase I were drawn from questionnaires and interviews previously used by Lipman et al. (1967), Gurin et al. (1960), and Hunt et al. (1969). A Phase I factor analysis of this data yielded five orthogonal factors. For Phase II, those items were retained which had the highest loadings on each of the Phase I factors. In Phase II a comparable factor analysis was performed on the 27 retained items employing a random half-sample of 760 workers from the national sample. This factor analysis yielded four orthogonal factors. The loading of each item on each of the four factors is presented in Table 3.14.

On the basis of this factor analysis a single score was assigned to each worker representing his score on each factor. Each worker's score was computed by taking the arithmetic means of the items included in each factor. Only those items loading .40 or more on a factor were included in these scores. Once these factor scores were computed, the split-half reliability of each score was computed on the remaining random half-sample of 760 workers. The four mental health factors were labeled as follows: Somatic Complaints, Depression, Zest, and Performance Debilitation. The items which make up these indices and their split-half reliabilities are included in Table 3.15.

Life Satisfaction--Both the items in the national survey's Life Satisfaction Index (Tables 3.16 and 3.17) had been used previously in large-scale surveys. The first of these items, shown in Table 3.16, was used in 1958 by Gurin, et al. (1960) in a national probability survey of American adults and again in 1962 by Bradburn and Caplovitz (1965) in a study of 2,000 people in four Illinois towns. The second item, shown in Table 3.17, was previously employed



in 1965 in Converse and Robinsons' (in press) nationwide survey of adults and again in a currently unpublished 1968 survey of adults conducted by the Survey Research Center. Robinson and Shaver (1969) have summarized their review of data obtained from use of the items as follows:

. . . we have found a number of constant relationships when respondents in social surveys are asked to report on their general satisfaction with life. First of all, it was found that there has been relatively little change in the percentage of the population expressing discontent. . . . A second constancy was that people who express satisfaction at one time period are quite likely to express satisfaction if interviewed some months later. . . . A third constancy centered around the relations with standard demographic variables. . . . The pattern of correlations with other psychological attitudes is another area where consistent results have been located.

The percentage of workers in the present study reporting various degrees of life satisfaction in response to the two items did not differ appreciably from the percentages reported in earlier studies, as the following figures indicate:

Item: Life Satisfaction I

<u>Year</u>	<u>Study</u>	<u>Percentage of people reporting that they are:</u>		
		<u>Very happy</u>	<u>Pretty happy</u>	<u>Not too happy</u>
1958	Gurin et al.	35%	54%	11%
1962	Bradburn and Caplovitz	24	59	17
1969	Working Conditions	31	57	12

Item: Life Satisfaction II

<u>Year</u>	<u>Study</u>	<u>Percentage of people reporting that their life is:</u>		
		<u>Completely satisfying</u>	<u>Pretty satisfying</u>	<u>Not very satisfying</u>
1965	Converse and Robinson	24%	65%	11%
1968	Survey Research Center	24	66	10
1969	Working Conditions	20	66	13

OVERALL STATISTICS AND RELATIONSHIPS AMONG THE OUTCOME VARIABLES

Table 3.18 summarizes some general statistics on each of the 13 job satisfaction and mental health outcome measures. It includes the overall mean score for each index based on all workers in the sample, the standard deviation of these scores, their split-half reliabilities, and the correlations between each outcome measure and a measure of social desirability response set. Content Free Job Satisfaction, Job-related Tension and Life Satisfaction scores all ranged between 1.00 and 5.00, with 5.00 being a high score (reflecting the named end of the scale, e.g. high satisfaction or high job tension); the remaining ten indices were scored between 1.00 and 4.00, with 4.00 being a high score.

The intercorrelations among the 13 outcome measures are shown in Table 3.19. The patterns of correlations were what one might expect: the highest correlations were those among the job satisfaction indices, while the next highest correlations were those among the mental health indices, and the lowest correlations were those between the mental health measures and the job satisfaction measures.

Tables 3.20 through 3.29 provide the subgroup norms on the thirteen outcome measures for various sample subgroups based on selected demographic and occupational characteristics. These characteristics were sex, race, age, education, employment status, collar color, tenure, occupational prestige, worker's industry, and

---

\*This measure of social desirability was a short form of the Crowne-Marlowe Social Desirability Scale. It consists of twelve items which were administered immediately after the mental health questions. The short form correlated .89 with the complete form of the Crowne-Marlowe. The latter figure was obtained from another study of 237 blue-collar workers. A relatively high score on the social desirability scale indicates that the worker was likely to give socially desirable responses.

worker's occupation.

Table 3.30 summarizes Tables 3.20 through 3.27.\* As can easily be seen in Table 3.30, the following subgroups of workers were "better-off" in terms of the thirteen outcome measures: men, whites, older workers, better-educated workers, self-employed workers, white-collar workers and farm workers, and workers with high occupational prestige and long job tenure.

Further information concerning relationships between the outcome measures and various working conditions will be presented in each of the following sections. In addition, there is a summary table at the end of the report indicating which working conditions were most strongly associated with overall job satisfaction.

---

\* Occupation and industry are omitted from the summary table because the data employing these two variables were too complicated to be comprehended by the simple format of Table 3.30.

Table 3.1--Loadings of Importance Items on Five Factors\*

	<u>Factor</u>				
	<u>I</u>	<u>II</u>	<u>III</u>	<u>IV</u>	<u>V</u>
	<u>Comfort</u>	<u>Challenge</u>	<u>Pay</u>	<u>Relations with co-workers</u>	<u>Resources</u>
I have enough time to get the job done	50	17	11	-01	42
The hours are good	59	-08	16	17	11
Travel to and from work is convenient	41	07	17	18	12
Physical surroundings are pleasant	51	18	15	23	14
I am free from conflicting demands that other people make of me	56	26	10	03	17
I can forget about my personal problems	55	33	-07	18	05
I am not asked to do excessive amounts of work	47	-05	11	-01	10
The work is interesting	-06	51	28	30	18
I have enough authority to do my job	17	50	12	07	36
I have an opportunity to develop my special abilities	-12	56	12	22	20
I can see the results of my work	24	50	02	24	22
I am given a chance to do the things I do best	21	54	23	04	18
I am given a lot of freedom	10	64	13	-01	09
The problems I am asked to solve are hard enough	15	60	03	08	04

Table 3.1--Loadings of Importance Items on Five Factors (continued)\*

	<u>Factor</u>				
	<u>I</u>	<u>II</u>	<u>III</u>	<u>IV</u>	<u>V</u>
	<u>Comfort</u>	<u>Challenge</u>	<u>Pay</u>	<u>Relations with co-workers</u>	<u>Resources</u>
The pay is good	14	16	60	10	17
The job security is good	30	11	51	10	16
My fringe benefits are good	36	10	58	08	15
My co-workers are friendly and helpful	19	24	17	56	24
I am given a lot of chances to make friends	23	08	13	51	06
I receive enough help and equipment to get the job done	16	15	20	06	56
I have enough information to get the job done	17	28	20	14	45
My responsibilities are clearly defined	33	19	18	20	46
My supervisor is competent in doing his job	22	21	04	30	46
My supervisor is very concerned about the welfare of those under him	38	21	10	34	29
The chances for promotion are good	-04	28	37	24	03

\* Decimal points have been omitted from the factor loadings

Table 3.2--Importance of Various Aspects of Working Conditions

Through the "card sort" technique the worker was asked to indicate how important each of the following things was to him in a job.

Factor I: Comfort	Percentage*			
	Very Important	Somewhat Important	Not Too Important	Not at All Important
I have enough time to get the job done (1501)	54.4%	29.4%	10.9%	5.3%
The hours are good (1496)	50.8	25.0	13.5	10.7
Travel to and from work is convenient (1505)	46.2	29.3	14.8	9.8
Physical surroundings are pleasant (1504)	40.2	35.0	16.8	8.0
I am free from conflicting demands that other people make of me (1491)	33.1	27.0	22.2	17.6
I can forget about my personal problems (1488)	30.8	23.5	21.2	24.5
I am not asked to do excessive amounts of work (1495)	23.0	26.7	25.6	24.7
<u>Factor II: Challenge</u>				
The work is interesting (1503)	73.0%	17.2%	5.8%	4.0%
I have enough authority to do my job (1504)	65.6	23.0	7.3	4.1
I have an opportunity to develop my special abilities (1496)	63.3	20.5	9.9	6.4
I can see the results of my work (1506)	61.7	25.2	8.3	4.8
I am given a chance to do the things I do best (1503)	54.3	28.5	11.4	5.8
I am given a lot of freedom to decide how I do my work (1506)	52.9	29.4	12.3	5.4
The problems I am asked to solve are hard enough (1487)	30.4	34.4	19.9	15.3

Table 3.2--Importance of Various Aspects of Working Conditions (continued)

	Percentage*			
	Very Important	Somewhat Important	Not Too Important	Not at All Important
<u>Factor III: Pay</u>				
The pay is good (1504)	64.2%	26.1%	6.6%	3.2%
The job security is good (1499)	62.5	22.8	7.9	6.7
My fringe benefits are good (1473)	50.6	26.7	13.3	9.3
<u>Factor IV: Relations with Co-workers</u>				
My co-workers are friendly and helpful (1502)	63.4%	26.2%	6.4%	3.9%
I am given a lot of chances to make friends (1510)	44.0	30.2	15.4	10.5
<u>Factor V: Resources</u>				
I receive enough help and equipment to get the job done (1502)	68.4%	22.0%	6.5%	3.2%
I have enough information to get the job done (1502)	68.1	23.0	5.8	3.1
My responsibilities are clearly defined (1499)	61.2	23.2	9.4	6.1
My supervisor is competent in doing his job (1453)	61.1	23.3	8.7	7.0

\*The number of respondents is indicated in parentheses after each statement. Items under each factor are rank-ordered according to the percentage responding to "Very important".

Table 3.3--Job Satisfaction: Specific Dimensions

Through the "card sort" technique the worker was asked to indicate how true each of the following statements was of his job.

	Percentage*			
	Very True	Somewhat True	Not Too True	Not At All True
<u>Factor I: Comfort</u>				
Travel to and from work is convenient (1498)	61.5%	20.7%	9.3%	8.5%
The hours are good (1501)	56.7	23.9	10.0	9.4
Physical surroundings are pleasant (1506)	48.3	28.5	14.7	8.6
I have enough time to get the job done (1506)	45.9	36.5	11.7	5.9
I am not asked to do excessive amounts of work (1492)	43.2	31.5	14.8	10.5
I can forget about my personal problems (1497)	38.0	32.9	16.9	12.2
I am free from conflicting demands other people make of me (1495)	35.3	33.7	19.3	11.7
<u>Factor II: Challenge</u>				
I have enough authority to do my job (1506)	66.7%	24.4%	6.6%	2.3%
I can see the results of my work (1510)	65.2	24.4	7.2	3.2
The work is interesting (1511)	63.4	22.0	8.9	5.7
I am given a lot of freedom to decide how I do my work (1513)	53.7	25.5	12.7	8.1
I have an opportunity to develop my special abilities (1508)	45.8	24.1	16.0	14.1
I am given a chance to do the things I do best (1505)	45.4	26.4	15.5	12.6
The problems I am asked to solve are hard enough (1498)	38.6	33.0	17.2	11.2

Table 3.3--Job Satisfaction: Specific Dimensions (continued)

	Percentage*			
	Very True	Somewhat True	Not Too True	Not At All True
<u>Factor III: Pay</u>				
The pay is good (1504)	40.3%	32.7%	15.4%	11.6%
The job security is good (1499)	55.0	24.5	10.0	10.5
My fringe benefits are good (1463)	40.3	24.5	13.3	21.9
<u>Factor IV: Relations with Co-workers</u>				
My co-workers are friendly and helpful (1482)	63.4%	27.2%	5.9%	3.5%
I am given a lot of chances to make friends (1501)	56.5	24.3	13.0	6.2
<u>Factor V: Resources</u>				
I have enough information to get the job done (1508)	64.0%	28.2%	6.1%	1.7%
My responsibilities are clearly defined (1501)	61.8	26.4	8.0	3.9
I receive enough help and equipment to get the job done (1506)	59.5	27.6	8.8	4.1
My supervisor is competent in doing his job (1389)	59.0	25.0	8.2	7.8

\*The number of respondents is indicated in parentheses after each statement. Statements under each factor are rank-ordered according to the percentage responding to "Very True".



Table 3.4--Job Satisfaction

All in all, how satisfied would you say you are with your job--very satisfied, somewhat satisfied, not too satisfied, or not at all satisfied?

<u>Degree of satisfaction</u>	<u>Percentage (N = 1529)</u>
Very satisfied	46.4%
Somewhat satisfied	39.0
Not too satisfied	11.3
Not at all satisfied	3.2

Table 3.5--Job Satisfaction

How often do you get so wrapped up in your work that you lose track of the time--very often, pretty often, once in a while, or never?

<u>How often "wrapped up"</u>	<u>Percentage (N = 1533)</u>
Very often	31.4%
Pretty often	26.0
Once in a while	29.4
Never	13.2

Table 3.6--Job Satisfaction

If a good friend of yours told you (he/she) was interested in working in a job like yours for your employer, what would you tell (him/her)? Would you strongly recommend this job, would you have doubts about recommending it, or would you strongly advise (him/her) against this sort of job?

<u>Worker's recommendation</u>	<u>Percentage (N = 1499)</u>
Worker would strongly recommend it	63.2%
Worker would have doubts about recommending it	24.7
Worker would advise friend against it	12.1

Table 3.7--Job Satisfaction

Knowing what you know now, if you had to decide all over again whether to take the job you now have, what would you decide? Would you decide without any hesitation to take the same job, would you have some second thoughts, or would you decide definitely not to take the same job?

<u>Worker's decision</u>	<u>Percentage (N = 1528)</u>
Decide without hesitation to take same job	64.0%
Have some second thoughts	26.9
Decide definitely <u>not</u> to take the job	9.1

Table 3.8--Job Satisfaction

How often do you leave work with a good feeling that you've done something particularly well--very often, pretty often, once in a while, or never?

<u>How often have this "good feeling"</u>	<u>Percentage (N = 1533)</u>
Very often	36.5%
Pretty often	41.5
Once in a while	18.8
Never	3.1

Table 3.9--Job Satisfaction

Taking everything into consideration, how likely is it that you will make a genuine effort to find a new job with another employer within the next year--very likely, somewhat likely, or not at all likely?

<u>Likelihood of effort to find new job</u>	<u>Percentage (N = 1312)*</u>
Very likely that worker will look for new job	15.9%
Somewhat likely that worker will look for new job	14.6
Not at all likely that worker will look for new job	69.5

\*Excludes self-employed workers.

Table 3.10--Job Satisfaction

In general how well would you say that your job measures up to the sort of job you wanted when you took it? Would you say it is very much like the job you wanted, somewhat like the job you wanted, or not very much like the job you wanted?

<u>Extent to which current job "measures up"</u>	<u>Percentage (N = 1503)</u>
Very much like the job worker wanted	63.1%
Somewhat like the job worker wanted	23.6
Not very much like the job worker wanted	13.4

Table 3.11--Job Satisfaction

Before we talk about your present job, I'd like to get some idea of the kind of job you'd most like to have. If you were free to go into any type of job you wanted, what would your choice be?

<u>Desired change</u>	<u>Percentage (N = 1450)</u>
Worker would want the job he now has	49.2%
Worker would want to retire or not work at all	6.3
Worker would prefer some other job to the job he now has	44.4

Table 3.12--Attraction to Work

If you were to get enough money to live as comfortably as you'd like for the rest of your life, would you continue to work?

<u>Probable work situation</u>	<u>Percentage (N = 1523)</u>
Would continue to work	67.4%
Would not continue to work	32.6

Table 3.13-Items Comprising Index of Job-related Tension

All of us occasionally feel bothered by certain kinds of things in our work. I'll read a list of things that sometimes bother people, and I would like you to tell me how frequently you feel bothered by each of them.

	Percentage				
	<u>Nearly all the time</u>	<u>Rather often</u>	<u>Some- times</u>	<u>Rarely</u>	<u>Never</u>
The fact that you can't get information needed to carry out your job (N=1529)	3.1%	7.1%	27.7%	30.8%	31.3%
Not knowing just what the people you work with expect of you (N=1529)	2.6	4.6	19.9	31.9	41.1
Thinking that the amount of work you have to do may interfere with how well it gets done (N=1532)	6.9	11.9	30.1	21.9	29.2
Feeling that you have to do things that are against your better judgement (N=1529)	2.3	7.1	27.3	29.1	34.3
Being unclear on just what the scope and responsibilities of your job are (N=1521)	1.4	4.1	13.3	26.1	55.0
Feeling unable to influence your immediate supervisor's decisions and his actions that effect you (N=1296)*	3.6	8.2	22.0	28.0	38.1
Feeling that you have too little authority to carry out the responsibilities assigned to you (N=1303)*	1.9	4.5	13.4	27.2	53.0
Not knowing what your supervisor thinks of you, how he evaluates your performance (N=1295)*	3.6	5.0	16.1	26.6	48.8

\*Excludes self-employed workers.

Table 3.14-Loadings of Self-Report Form Items on Mental Health Factors\*

	Factor			
	I	II	III	IV
My hands sweat so that they feel damp and clammy	31	-13	07	16
I get a soreness in my muscles	61	-15	-04	08
I get headaches	40	-29	00	14
I get a numbness or tingling in parts of my body	66	-12	03	12
I feel my heart pounding or racing	53	-24	03	12
I get a weakness in parts of my body	66	-24	11	23
I get pains in the lower part of my back	56	-22	-05	07
I get pains in my heart or chest	52	-23	20	12
I get heavy feelings in my arms or legs	65	-13	16	17
I feel depressed	32	-64	09	09
I feel inferior to others	19	-43	07	15
I feel low in spirits	29	-58	02	22
I feel others do not understand me	28	-47	02	20
I feel lonely	17	-62	12	21
I feel hopeless about the future	24	-53	28	16
I feel trapped or caught	33	-53	25	14
I blame myself for things	10	-42	-06	38
I feel blocked or stymied in getting things done	26	-42	09	38
I expect to succeed in things I do	-05	02	-35	-06
I am able to work under a great deal of pressure	-02	-09	-34	-16
I feel happy	-01	25	-57	09
I feel that life is worthwhile	-02	16	-48	10
I can carry out things the way I expect to	-04	-03	-52	-09
I have to do things very slowly in order to be sure that I am doing them right	15	-10	06	43
I have trouble remembering things	26	-17	04	57
I have difficulty in making decisions	10	-33	06	56
I have trouble in concentrating	22	-34	11	57

\*Decimal points are not included in factor loadings.

Table 3.15 Items Composing Four Factors Derived From Self-Report Forms

Factor I: Somatic Complaints

Items:

I get a numbness or tingling in parts of my body  
 I get a weakness in parts of my body  
 I get heavy feelings in my arms or legs  
 I get a soreness in my muscles  
 I get pains in the lower part of my back  
 I feel my heart pounding or racing  
 I get pains in my heart or chest  
 I get headaches

Split-half reliability=.83

Factor II: Depression

Items:

I feel depressed  
 I feel lonely  
 I feel low in spirits  
 I feel trapped or caught  
 I feel hopeless about the future  
 I feel that others do not understand me  
 I feel inferior to others  
 I blame myself for things  
 I feel blocked or stymied in getting things done

Split-half reliability=.85

Factor III: Zest

Items:

I feel happy  
 I can carry out things the way I expect to  
 I feel that life is worthwhile

Split-half reliability=.62

Factor IV: Performance Debilitation

Items:

I have trouble remembering things  
 I have trouble in concentrating  
 I have difficulty in making decisions  
 I have to do things very slowly in order to be sure that I am doing them right

Split-half reliability=.73

Table 3.16-Life Satisfaction I

Taking all things together, how would you say things are these days?  
Would you say you're very happy, pretty happy, or not too happy these days?

<u>Degree of happiness</u>	<u>Percentage (N = 1530)</u>
Worker is generally very happy.	31.2%
Worker is generally pretty happy	56.6
Worker is generally not too happy	12.2

Table 3.17-Life Satisfaction II

In general, how satisfying do you find the ways you're spending your life these days? Would you call it completely satisfying, pretty satisfying, or not very satisfying?

<u>Satisfaction</u>	<u>Percentage (N = 1532)</u>
Worker's life is completely satisfying	20.4%
Worker's life is pretty satisfying	66.5
Worker's life is not very satisfying	13.1

Table 3.18 Overall Statistics for Outcome Measures

	Job Satisfaction Measures						Content Free Job Satisfaction
	Jobsat '70	Comfort	Challenge	Pay	Co-worker Relations	Resources	
Overall Mean Score	3.2	3.1	3.3	3.0	3.4	3.4	3.6
Standard Deviation	.48	.59	.65	.84	.69	.59	.92
Split-half Reliabilities	.86	.71	.81	.73	.48	.70	.80
Correlations with Social Desirability Scale*	.18	.16	.15	.06	.10	.14	.16

01

Mental Health Measures

	Job-Related			Mental Health Measures		Performance Debilitation	Life Satisfaction
	Tension	Somatic Complaints	Depression	Zest			
Overall Mean Score	2.0	1.9	2.1	3.6	2.2	3.3	
Standard Deviation	.71	.60	.57	.51	.63	1.07	
Split-half Reliabilities	.82	.83	.85	.62	.73	.72	
Correlations with Social Desirability Scale*	-.22	-.12	-.31	.06	-.18	.14	

\*The social desirability scale is a twelve-item form of the Crowne-Marlowe Index of Social Desirability. The correlation between the full Crowne-Marlowe scale and the twelve-item-short form was .89. This correlation was based on another study's sample of 237 blue-collar workers.



Table 3.15 Intercorrelations Among the Outcome Measures

	1	2	3	4	5	6	7	8	9	10	11	12
1. JobSat '70	-											
2. Comfort	.82	-										
3. Challenge	.81	.49	-									
4. Pay	.62	.40	.38	-								
5. Co-worker Relations	.58	.40	.41	.26	-							
6. Resources	.71	.56	.44	.30	.39	-						
7. Content Free Job Satisfaction	.49	.31	.49	.38	.23	.30	-					
8. Job Tension	-.37	-.38	-.22	-.13	-.12	-.47	-.33	-				
9. Somatic Complaints	-.15	-.13	-.10	-.14	-.06	-.08	-.20	.19	-			
10. Depression	-.24	-.19	-.18	-.20	.12	-.18	-.30	.32	.59	-		
11. Zest	.23	.15	.21	.13	.17	.19	.27	-.13	-.11	-.20	-	
12. Performance Debilitation	-.07	-.05	-.03	-.11	.01	-.06	-.10	.18	.46	.53	-.10	-
13. Life Satisfaction	.27	.20	.22	.20	.18	.19	.38	-.24	-.18	-.36	.27	-.12
	JS'70	Com	Chall	Pay	C.Rel	Res	CFJS	Ten	SomCom	Dep	Zest	PerfDeb

\*Degrees of freedom for each correlation is approximately 1500.



Table 3.20 Outcome Measure Norms for Sample Subpopulations based on Sex of Worker

Characteristic of worker or worker's job	Sex	n	Job Satisfaction Outcome Measures					"Content Free"
			JobSat '70	Comfort	Challenge	Pay	Co-worker Relations	
1. Male		983	3.27	3.12	3.34	3.09	3.43	3.63
2. Female		527	3.19	3.17	3.12	2.92	3.38	3.50
Eta			.08	.04	.16	.10	.03	.01
F			INAP	INAP	INAP	INAP	INAP	INAP
F			10.08	2.15	39.18	15.83	1.48	.07
df			(1,1508)	(1,1506)	(1,1508)	(1,1500)	(1,1469)	7.41
P			.01	n.s.	.001	.001	n.s.	(1,1526)
								.01

Characteristic of worker or worker's job	Sex	n	Mental Health Outcome Measures					Life Satisfaction
			Job-related Tension	Somatic Complaints	Depression	Performance Debilitation	Resources	
1. Male		983	2.01	1.85	1.98	3.62	2.11	3.32
2. Female		527	2.03	1.97	2.20	3.60	2.24	3.16
Eta			.01	.10	.19	.02	.10	.07
F			INAP	INAP	INAP	INAP	INAP	INAP
F			0.20	14.43	55.36	1.00	15.37	8.08
df			(1,1530)	(1,1508)	(1,1501)	(1,1507)	(1,1498)	(1,1530)
P			n.s.	.001	.001	n.s.	.001	.01

Table 3.21 Outcome Measure Norms for Sample Subpopulation based on Race of Worker \*

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures					"Content Free"
		JobSat '70	Comfort	Challenge	Pay	Co-worker Relations	
1. White	1337	3.26	3.16	3.29	3.04	3.44	3.63
2. Black	154	3.10	3.04	3.02	2.94	3.25	3.21
3. Other	10	3.07	2.95	3.20	2.97	2.65	3.25
Eta		.11	.07	.13	.04	.12	.14
F		INAP	INAP	INAP	INAP	INAP	INAP
F		8.59	3.43	12.20	1.19	10.94	15.87
df		(2, 1498)	(2, 1496)	(2, 1498)	(2, 1490)	(2, 1459)	(2, 1516)
P		.001	.05	.001	n.s.	.001	.001

Characteristic of worker or worker's job	n	Mental Health Outcome Measures					Performance Debilitation	Life Satisfaction
		Job-related Tension	Somatic Complaints	Depression	Zest	Resources		
1. White	1337	2.03	1.88	2.04	3.64	2.16	2.29	
2. Black	154	1.93	1.98	2.17	3.38	2.16	1.99	
3. Other	10	2.17	1.97	1.69	3.54	1.83	2.40	
Eta		.04	.05	.08	.16	.04	.09	
F		INAP	INAP	INAP	INAP	INAP	INAP	
F		1.51	2.11	5.46	19.29	1.39	5.92	
df		(2, 1520)	(2, 1498)	(2, 1491)	(2, 1497)	(2, 1488)	(2, 1520)	
P		n.s.	n.s.	.01	.001	n.s.	.01	

\*In this table and in subsequent tables only the number of cases relevant to the Jobsat '70 column is shown. The total number of cases upon which each column is based may, however, be inferred from the degrees of freedom for the F-ratio provided at the bottom of each column.

Table 3.22 Outcome Measure Norms for Sample Subpopulations Based on Age of Worker

Characteristic of worker or worker's job	n	JobSat '70	Job Satisfaction Outcome Measures				Co-worker Relations	Resources	"Content Free"
			Comfort	Challenge	Pay				
1. Under 21	96	3.07	3.05	2.88	2.82	3.47	3.38	3.08	
2. 21-29	330	3.13	3.04	3.09	2.98	3.36	3.37	3.32	
3. 30-44	486	3.25	3.11	3.31	3.07	3.43	3.40	3.67	
4. 45-54	335	3.29	3.08	3.35	3.07	3.43	3.47	3.72	
5. 55-64	203	3.32	3.28	3.36	3.05	3.36	3.52	3.78	
6. 65 and over	53	3.45	3.43	3.55	3.01	3.52	3.64	3.68	
Eta		.18	.16	.23	.08	.06	.11	.23	
F		.18	.15	.21	.05	.01	.10	.19	
df		10.17	7.57	17.05	1.97	1.12	3.57	16.70	
P		(5,1498)	(5,1496)	(5,1498)	(5,1490)	(5,1460)	(5,1484)	(5,1516)	
		.001	.001	.001	n.s.	n.s.	.01	.001	

Table 3.22 Outcome Measure Norms for Sample Subpopulations Based on Age of Workers (continued)

Characteristic of worker or worker's job	n	Mental Health Outcome Measures						Zest	Performance Debilitation	Life Satisfaction
		Job-related Tension	Somatic Complaints	Depression	Zest	Performance Debilitation	Life Satisfaction			
1. Under 21	96	2.28	1.94	2.18	3.47	2.23	3.13			
2. 21-29	330	2.13	1.83	2.08	3.59	2.17	3.19			
3. 30-44	486	2.07	1.86	2.06	3.62	2.11	3.23			
4. 45-54	336	1.94	1.95	2.04	3.66	2.15	3.33			
5. 55-64	203	1.81	1.92	1.98	3.63	2.16	3.34			
6. 65 and over	53	1.84	1.96	2.01	3.58	2.15	3.36			
Eta		.18	.08	.08	.08	.10	.06			
F		10.49	1.75	1.95	2.15	3.13	1.30			
df		(5,1520)	(5,1498)	(5,1491)	(5,1497)	(5,1488)	(5,1520)			
P		.001	n.s.	n.s.	n.s.	.01	n.s.			

Table 3.23 Outcome Measure Norms for Sample Subpopulations Based on Education of Workers

Characteristic of worker or worker's job	n	JobSat '70	Job Satisfaction Outcome Measures					Resources	"Content Free"
			Comfort	Challenge	Pay	Co-worker Relations	Resources		
0. None	5	3.12	2.88	3.42	2.50	3.00	3.40	3.53	
1. Some grade school	105	3.26	3.23	3.23	2.92	3.36	3.53	3.58	
2. Completed grade school	121	3.23	3.18	3.28	2.86	3.47	3.43	3.55	
3. Some high school	266	3.23	3.16	3.21	2.89	3.49	3.46	3.46	
4. High school diploma	552	3.24	3.14	3.23	3.03	3.41	3.46	3.57	
5. Some college	250	3.24	3.12	3.24	3.18	3.43	3.38	3.55	
6. College degree	109	3.27	3.13	3.36	3.25	3.31	3.31	3.75	
7. Graduate or professional training	102	5.25	3.03	3.46	3.11	3.30	3.35	3.91	
Eta		.03	.07	.10	.15	.09	.09	.12	
F		.01	.06	.06	.13	.04	.08	.08	
df		.07	1.17	2.19	4.79	1.61	1.88	3.29	
p		(7,1502)	(7,1500)	(7,1502)	(7,1494)	(7,1463)	(7,1487)	(7,1520)	
		n.s.	n.s.	.05	.001	n.s.	n.s.	.01	



Table 3.23 Outcome Measure Norms for Sample Subpopulations Based on Education of Workers (continued)

Characteristic of worker or worker's job	n	Mental Health Outcome Measures					
		Job-related Tension	Somatic Complaints	Depression	Zest	Performance Debilitation	Life Satisfaction
0. None	5	1.29	2.66	2.12	3.32	2.78	2.71
1. Some grade school	105	1.75	1.98	2.06	3.41	2.12	3.11
2. Completed grade school	121	1.81	2.00	2.01	3.50	2.23	3.17
3. Some high school	266	2.03	2.03	2.13	3.54	2.27	3.17
4. High school diploma	552	2.05	1.89	2.07	3.64	2.15	3.31
5. Some college	250	2.08	1.83	2.01	3.70	2.08	3.31
6. College degree	109	2.16	1.61	2.00	3.71	2.04	3.21
7. Graduate or professional training	102	2.12	1.72	2.00	3.72	2.13	3.47
Eta		.17	.21	.08	.18	.17	.09
I		.14	-0.18	-0.04	.17	-0.07	.07
F		6.38	5.56	1.32	6.99	3.40	1.87
df		(7,1524)	(7,1502)	(7,1495)	(7,1501)	(7,1492)	(7,1524)
P		.001	.001	n.s.	.001	.01	n.s.

Table 3.24 Outcome Measure Norms for Sample Subpopulations Based on Employment Status of Workers

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures					Co-worker relations	Resources	"Content Free"
		Jobsat '70	Comfort	Challenge	Pay				
Self-employed versus wage-and-salary status									
1. Self-employed	201	3.32	3.09	3.64	2.89	3.40	3.46	3.77	
2. Wage-and-salary	1310	3.23	3.15	3.20	3.05	3.41	3.43	3.56	
Eta		.07	.03	.23	.07	.00	.02	.08	
F		INAP	INAP	INAP	INAP	INAP	INAP	INAP	
df		6.65	1.73	85.03	6.47	.04	.62	9.42	
P		(1,1509)	(1,1507)	(1,1509)	(1,1501)	(1,1470)	(1,1494)	(1,1527)	
		.01	n.s.	.001	.05	n.s.	n.s.	.01	

Mental Health Outcome Measures

Characteristic of worker or worker's job	n	Mental Health Outcome Measures				Zest	Performance Debilitation	Life Satisfaction
		Somatic Complaints	Depression					
Self-employed versus wage-and-salary status								
1. Self-employed	201	1.99	2.97	2.03	3.66	2.27	3.43	
2. Wage-and-salary	1310	2.02	2.88	2.96	3.61	2.14	3.24	
Eta		.02	.05	.01	.04	.07	.06	
F		INAP	INAP	INAP	INAP	INAP	INAP	
df		.48	4.48	.33	1.94	8.05	6.01	
P		(1,1531)	(1,1509)	(1,1502)	(1,1508)	(1,1499)	(1,1531)	
		n.s.	.05	n.s.	n.s.	.01	.05	



Table 3.25 Outcome Measure Norms for Sample Subpopulations Based on Collar Status of Workers

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures				Co-worker Relations	Resources	"Content Free"
		Comfort	Challenge	Pay	JobSat '70			
1. White-collar	751	3.14	3.36	3.12	3.43	3.41	3.63	
2. Blue-collar	695	3.15	3.14	2.99	3.42	3.45	3.21	
3. Other	63	3.04	3.49	2.43	3.13	3.41	3.25	
Eta		.05	.19	.17	.08	.04	.14	
F		INAP	INAP	INAP	INAP	INAP	INAP	
df		1.15	18.03	14.85	3.27	.82	15.87	
P		(3,1505)	(3,1507)	(3,1499)	(3,1468)	(3,1492)	(2,1516)	
		n.s.	.001	.001	.05	n.s.	.001	

Mental Health Outcome Measures

Characteristic of worker or worker's job	n	Mental Health Outcome Measures				Performance Rehabilitation	Life Satisfaction
		Somatic Complaints	Depression	Zest	Job-related Tension		
1. White-collar	751	1.81	2.05	3.68	2.14	3.29	
2. Blue-collar	695	1.95	2.04	3.55	2.14	2.99	
3. Other	63	2.22	2.22	3.59	2.49	3.40	75
Eta		.16	.06	.13	.11	.09	
F		INAP	INAP	INAP	INAP	INAP	
df		13.45	2.09	3.15	6.44	5.92	
P		(3,1507)	(3,1500)	(3,1506)	(3,1497)	(3,1520)	
		.001	n.s.	.001	.001	.001	

Table 3.26 Outcome Measure Norms for Sample Subpopulations Based on Tenure on Present Job of Workers

Characteristic of worker or worker's job	n	JobSat '70	Job Satisfaction Outcome Measures				Co-worker Relations	Resources	"Content Free"
			Comfort	Challenge	Pay				
1. Less than 30 days	23	3.12	3.21	2.96	2.80	3.54	3.43	3.34	
2. 1-3 months	120	3.23	3.16	3.15	3.00	3.48	3.49	3.47	
3. 3-12 months	290	3.17	3.13	3.09	2.96	3.42	3.41	3.46	
4. 1-3 years	325	3.23	3.12	3.27	3.00	3.42	3.44	3.54	
5. 3-5 years	169	3.26	3.16	3.27	3.14	3.44	3.43	3.61	
6. 5-10 years	213	3.32	3.18	3.43	3.16	3.40	3.44	3.73	
7. 10-20 years	223	3.24	3.12	3.30	3.07	3.36	3.40	3.66	
8. More than 20 years	122	3.32	3.16	3.46	2.98	3.39	3.51	3.74	
Eta		.11	.04	.19	.10	.05	.05	.12	
F		.08	.01	.17	.05	-.04	.00	.11	
df		2.37	.29	8.32	1.92	.56	.56	2.90	
p		(7,1477)	(7,1475)	(7,1477)	(7,1467)	(7,1410)	(7,1462)	(7,1495)	
		.05	n.s.	.001	n.s.	n.s.	n.s.	.01	

Table 3.26 Outcome Measure Norms for Sample Subpopulations Based on Tenure on Present Job of Workers (continued)

Characteristic of worker or worker's job	n	Mental Health Outcome Measures					
		Job-related Tension	Somatic Complaints	Depression	Zest	Performance Debilitation	Life Satisfaction
<u>Tenure on present job</u>							
1. Less than 30 days	23	2.23	1.97	2.23	3.36	2.12	2.92
2. 1-3 months	120	2.04	1.80	2.06	3.56	2.21	3.18
3. 3-12 months	290	1.99	1.89	2.08	3.59	2.15	3.22
4. 1-3 years	325	2.07	1.92	2.08	3.56	2.12	3.22
5. 3-5 years	169	2.06	1.88	2.08	3.65	2.17	3.26
6. 5-10 years	213	2.03	1.83	2.02	3.57	2.14	3.28
7. 10-20 years	223	2.01	1.90	2.61	3.66	2.12	3.35
8. More than 20 years	122	1.88	2.00	2.29	3.66	2.01	3.41
Eta		.08	.07	.06	.11	.08	.07
I		-.04	.03	-.55	.09	.02	.07
F		1.44	1.44	.87	2.64	1.25	1.17
df		(7,1499)	(7,1477)	(7,1470)	(7,1476)	(7,1467)	(7,1499)
p		n.s.	n.s.	n.s.	.01	n.s.	n.s.

Table 3.27 Outcome Measure Norms for Sample Subpopulations Based on Occupational Prestige of Workers' Jobs

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures					Resources	"Content Free"
		JobSat '70	Comfort	Challenge	Pay	Co-worker Relations		
1. Lowest	58	3.12	3.17	2.94	2.73	3.24	2.49	2.25
2. .	121	3.08	3.07	2.92	2.85	3.26	2.44	2.23
3. .	44	3.25	3.07	3.69	2.54	3.22	2.44	2.79
4. .	177	3.19	3.19	3.08	2.85	3.49	2.50	2.39
5. .	83	3.23	3.19	3.21	2.89	3.42	2.44	2.45
6. .	130	3.24	3.15	3.22	3.12	3.46	2.40	2.52
7. .	127	3.25	3.15	3.22	3.12	3.46	2.40	2.52
8. .	268	3.24	3.14	3.22	3.14	3.39	2.44	2.56
9. .	275	3.31	3.18	3.39	3.15	3.42	2.41	2.79
10. Highest	226	3.31	3.08	3.49	3.25	3.39	2.35	2.88
Eta		.14	.07	.28	.22	.12	.08	.22
F		.13	.01	.22	.19	.04	.05	.20
F		3.30	.86	14.99	6.28	2.56	1.00	8.93
df		(9,1499)	(9,1499)	(9,1459)	(9,1491)	(9,1460)	(9,1484)	(9,1517)
p		.001	n.s.	.001	.001	.01	n.s.	.001

Table 3.27 Outcome Measure Norms for Sample Subpopulations Based on Occupational Prestige of Workers' Jobs (continued)

Characteristic of worker or worker's job	n	Mental Health Outcome Measures					
		Job-related Tension	Somatic Complaints	Depression	Zest	Performance Debilitation	Life Satisfaction
1. Lowest Prestige of Occupation	58	1.81	2.20	2.28	3.43	2.22	2.90
2.	121	1.93	2.02	2.12	3.41	2.15	2.93
3.	44	1.77	2.22	2.12	3.65	2.48	3.42
4.	177	2.02	1.97	2.07	3.59	2.10	3.20
5.	83	1.94	1.89	1.97	3.53	2.14	3.14
6.	130	1.97	1.97	2.09	3.53	2.23	3.31
7.	127	1.99	1.91	2.05	3.62	2.29	3.37
8.	268	2.06	1.83	2.05	3.65	2.12	3.27
9.	275	2.05	1.81	2.01	3.71	2.09	3.44
10. Highest	226	2.15	1.72	2.01	3.70	2.12	3.30
Eta		.13	.21	.11	.18	.14	.14
F		.11	.19	.08	.15	.06	.11
F		2.78	7.60	1.91	5.79	3.21	3.48
df		(9,1521)	(9,1499)	(9,1492)	(9,1498)	(9,1489)	(9,1521)
P		.01	.001	.05	.001	.001	.001

Table 3.28 Outcome Measure Norms for Sample Subpopulations Based on Industry of Worker's Job

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures						Resources	"Content Free"
		Jobsat '70	Comfort	Challenge	Pay	Co-worker Relations	Resources		
1. Agriculture, fisheries, forestry	66	3.20	3.79	3.51	2.51	3.14	3.40	3.61	
2. Mining	22	3.32	3.27	3.91	3.10	3.50	3.47	3.37	
3. Contract construction	121	3.25	3.14	3.38	2.98	3.36	3.39	3.70	
4. Manufacturing	375	3.25	3.19	3.18	3.21	3.46	3.43	3.50	
5. Transportation, communication, electricity, gas, sanitation	93	3.27	3.13	3.22	3.27	3.37	3.47	3.72	
6. Wholesale, retail trade	271	3.19	3.12	2.75	2.81	3.51	3.48	3.34	
7. Finance, insurance, real estate	75	3.22	3.15	3.24	3.15	3.32	3.29	3.62	
8. Services	393	3.25	3.12	3.36	3.00	3.35	3.43	3.74	
9. Government	80	3.23	3.13	3.16	3.23	3.51	3.43	3.64	
Eta		.06	.06	.16	.23	.12	.07	.16	
F		INAP	INAP	INAP	INAP	INAP	INAP	INAP	
F		.71	.68	4.86	10.11	2.83	.89	5.01	
df		(8,1487)	(8,1485)	(8,1487)	(8,1479)	(8,1479)	(8,1472)	(8,1505)	
P		n.s.	n.s.	.001	.001	.01	n.s.	.001	

Table 3.28 Outcome Measure Norms for Sample Subpopulations Based on Industry of Worker's Job. (continued)

Characteristic of worker or worker's job	n	Mental Health Outcome Measures					Performance Debilitation	Life Satisfaction
		Job-related Tension	Somatic Complaints	Depression	Zest			
1. Agriculture, fisheries, forestry	66	1.80	2.17	2.18	3.56	2.43	3.28	
2. Mining	22	2.02	2.14	2.05	3.67	2.16	3.54	
3. Contract construction	121	2.01	1.82	1.89	3.66	2.05	3.41	
4. Manufacturing	375	2.05	1.89	2.05	3.57	2.15	3.21	
5. Transportation, communication, electricity, gas, sanitation	93	1.84	1.76	1.92	3.60	1.97	3.49	
6. Wholesale, retail trade	271	2.04	1.92	2.10	3.57	2.19	3.20	
7. Finance, insurance, real estate	75	2.26	1.89	2.23	3.61	2.26	3.12	
8. Services	393	2.00	1.88	2.08	3.67	2.17	3.28	
9. Government	80	2.06	1.82	2.02	3.64	2.06	3.16	
Eta		.12	.13	.16	.09	.14	.09	
F		INAP	INAP	INAP	INAP	INAP	INAP	
F		2.87	3.33	5.14	1.52	3.66	1.48	
df		(8,1509)	(8,1487)	(8,1480)	(8,1486)	(8,1477)	(8,1509)	
P		.01	.001	.001	n.s.	.001	n.s.	



Table 3.29 Outcome Measure Norms for Sample Subpopulations Based on Occupation of Worker

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures					"Content Free"	
		Jobgat '70	Comfort	Challenge	Pay	Co-worker Relations		Resources
1. Professional, managerial, technical	391	3.33	3.11	3.50	3.23	3.44	3.41	3.84
2. Clerical, sales	333	3.23	3.20	3.16	3.04	3.44	3.44	3.54
3. Service	178	3.08	3.03	3.03	2.67	3.32	3.46	3.24
4. Farming, forestry, fisheries	67	3.20	3.08	3.50	2.50	3.19	3.44	3.63
5. Processing	28	3.26	3.23	3.08	3.13	3.52	3.56	3.32
6. Machine trades	116	3.24	3.11	3.26	3.05	3.44	3.47	3.60
7. Bench work	94	3.30	3.26	3.12	3.24	3.53	3.53	3.53
8. Structural work	158	3.25	3.18	3.28	3.06	3.41	3.39	3.67
9. Miscellaneous	146	3.18	3.14	3.14	2.96	3.36	3.36	3.40
Eta		.15	.10	.26	.24	.10	.07	.21
F		INAP	INAP	INAP	INAP	INAP	INAP	INAP
F		4.54	2.10	14.05	11.78	1.69	.98	8.60
df		(8,1502)	(8,1500)	(8,1502)	(8,1494)	(8,1463)	(8,1487)	(8,1520)
p		.001	.05	.001	.001	n.s.	n.s.	.001



Table 3.29 Outcome Measure Norms for Sample Subpopulations Based on Occupation of Worker (continued)

Characteristic of worker or worker's job	n	Mental Health Outcome Measures					
		Job-related Tension	Somatic Complaints	Depression	Zest	Performance Debilitation	Life Satisfaction
1. Professional, managerial, technical	391	2.13	1.74	1.99	3.70	2.09	3.38
2. Clerical, sales	333	2.05	1.86	2.24	3.65	2.21	3.25
3. Service	178	1.98	2.09	2.20	3.47	2.19	2.97
4. Farming, forestry, fisheries	67	1.75	2.19	2.19	3.59	2.44	3.28
5. Processing	28	1.83	2.18	2.11	3.64	2.04	2.86
6. Machine trades	116	2.00	1.81	1.95	3.54	2.15	3.34
7. Bench work	94	1.98	2.04	2.15	3.56	2.31	3.20
8. Structural work	158	1.95	1.82	1.89	3.60	2.07	3.33
9. Miscellaneous	146	1.98	1.96	1.97	3.57	2.06	3.40
Eta		.13	.23	.18	.15	.15	.13
F		INAP	INAP	INAP	INAP	INAP	INAP
F		3.28	10.71	6.58	4.30	4.45	3.32
df		(8,1524)	(8,1502)	(8,1495)	(8,1501)	(8,1492)	(8,1524)
p		.001	.001	.001	.001	.001	.001

Table 3.30--Summary of Tables 3.20 through 3.27 Showing Subpopulation Group Scoring Significantly Highest on Each Outcome Measure\*

Demographic Characteristic	Job Satisfaction Outcome Measures						
	Jobsat '70	Comfort	Challenge	Pay	Co-worker Relations	Resources	Content Free
Sex	Men	n.s.	Men	Men	n.s.	n.s.	Men
Race	Whites	Whites	Whites	n.s.	Whites	n.s.	Whites
Age	Older	Older	Older	n.s.	n.s.	Older	Older
Education	n.s.	n.s.	Mixed	Higher	n.s.	n.s.	Higher
Employment status	Self-employed	n.s.	Self-employed	Wage-and-salary	n.s.	n.s.	Self-employed
Collar color	White-collar	n.s.	Farmers	White-collar	n.s.	n.s.	White-collar
Job tenure	Long	n.s.	Long	Long	n.s.	n.s.	Long
Occupational prestige	High	Middle	High	High	n.s.	n.s.	High

Table 3.30--Summary of Tables 3.20 through 3.27 Showing Subpopulation Group Scoring Significantly Highest on Each Outcome Measure\* (continued)

Demographic Characteristics	Mental Health Outcome Measures					
	Job-Related Tension	Somatic Complaints	Depression	Zest	Performance Debilitation	Life Satisfaction
Sex	n.s.	Women	Women	n.s.	Women	Men
Race	n.s.	n.s.	Blacks	Whites	n.s.	"Others"
Age	Younger	n.s.	n.s.	n.s.	Younger	Older
Education	Higher	Lower	n.s.	Higher	Lower	n.s.
Employment status	n.s.	Self-employed	n.s.	n.s.	Self-employed	Self-employed
Collar color	n.s.	Farmers	n.s.	n.s.	Farmers	Farmers
Job tenure	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
Occupational prestige	High	Low	Low	High	Low	High

\*The groups identified in the table had the highest mean scores on those outcome measures for which there were significant differences between the categories of workers within each demographic or occupational variable listed in the table. For example, sex was significantly associated with Jobsat '70, with men being more satisfied than women, but sex was not significantly (n.s.) associated with job related tension.



#### 4. COMPARISONS AMONG LABOR STANDARDS PROBLEM AREAS

A principal aim of the study was to provide the Workplace Standards Administration with information that would be useful in its evaluation of existing and planned priorities among its current areas of program concern. For this purpose 19 working conditions problems were singled out for investigation. These 19 areas, listed below, represent problems within the more general areas of income and income loss, health and safety, hours and work schedule, discrimination, unions, employment agencies, and transportation to work. In the pages to follow these areas will be referred to as "labor standards problem areas."

Although the content of the list was historically rather than theoretically determined, there are a number of almost true statements that can be made of it:

1. It reflects what, at the time of the study, were the "traditional" interests of the Workplace Standards Administration. There are three exceptions to this. First, invasion of privacy had at the time of the study received little programmatic attention by the Department of Labor. Secondly, only selected aspects of transportation problems (especially as they affected income and the securing of jobs) were regarded as very relevant to Department of Labor interests, many such problems being regarded as more legitimately in the province of the Department of Transportation. Finally, most Department of Labor efforts to deal with workers' problems with their physical working conditions had been directed to eliminating those conditions which were actually or potentially dangerous, with less

emphasis on those which were simply "uncomfortable" or "unpleasant."

2. It reflects the types of problems workers face on their jobs. There are two exceptions to this which somewhat complicated the design of a "job focused" interview. First, the worker's experiences with employment agencies, although an area of Workplace Standards concern, has nothing to do with the quality of the conditions the worker faces on his job. It is more relevant to job seeking activities, than to what a person experiences at work. Second, the income adequacy questions in the interview focused upon family income rather than the worker's income from his job.

3. Many of the problems on the list had in the past been the targets of either legislation or other types of governmental action. There was a heavy emphasis upon problems that could be attacked through mechanisms that had already been established.

4. Many of the areas are frequently central issues in labor negotiations.

5. The most commonly shared quality of all the problem areas is what they do not cover. They do not deal at all with the content of the worker's job--what he actually does rather than the conditions under which he does it. Doing dangerous work is the single exception. Problems with supervision or career development are omitted from the list except indirectly as they become issues of discrimination. Generally the list concentrates upon the extrinsic rather than the intrinsic aspects of the worker's job, and the content of work is admitted to the list only as it effects the worker's physical rather than his psychological well-being.

The remainder of this report uses a series of abbreviated descriptions of each of these labor standards problem areas (e.g., "inadequate fringe

benefits"). Lest these abbreviations be misinterpreted, it is useful to understand precisely what is referred to in the tables and commentaries, as constituting a "problem" confronting a worker in a particular content area. The following two-column list is provided for this purpose. The short-hand label for each problem area is listed in the left column; the right column indicates the particular interview response of a worker that would result in his being coded as having a "problem" in the area.

<u>Problem Area</u>	<u>Interview Response of Worker Which Resulted in His Being Coded as Having a Problem in this Area</u>
Inadequate fringe benefits	Worker cited a fringe benefit in response to the question "Are there any fringe benefits that you're not getting that you'd like to be getting?" This question was not asked of self-employed workers.
Health and safety hazards	Worker cited one or more hazards in response to the question: "Does your job at any time expose you to what you feel are dangerous or unhealthy conditions?"
Transportation problems	Worker cited one or more things he would like changed in response to the question: "What things concerning travel to and from work do you consider problems and would like to see changed?" This question was not asked of workers who lived at, or adjacent to their work sites.
Unpleasant physical conditions	Worker indicated that he would "like it to be better" in response to the question: "Are the physical conditions at the place where you spend most of your working time as comfortable and pleasant as you would like or would you like them to be better?" This question was asked only of workers who worked in one location.
Inconvenient or excessive hours	Worker cited one or more problems in response to the question: "Could you tell me what problems or difficulties you run into concerning the hours you work, your work schedule, or overtime?"
Inadequate income	The referent of this question was "the total yearly income before taxes of (the worker's) immediate family--including (the worker's) own wages, the wages of everyone else in the family, and income from any other source." Workers coded as having a problem in this area were those who said "no" to the question "Do you feel that this total income is enough to meet your family's usual monthly expenses and bills?"

Work-related  
illness or  
injury

Worker cited one or more illness or injury in response to the question: "Within the last three years have you ever had any illness or injury that you think was caused or made more severe by any job you had during this period?"

Unsteady  
employment

Worker mentioned some conditions other than "steady employment" in response to the question: "Do you think of your job as one where you have regular, steady work throughout the year, is it seasonal, are there frequent lay-offs, or what?"

Occupational  
handicaps

Worker cited one or more handicap in response to the question: "Do you have anything you regard as a physical or nervous condition that limits the amount or kind of work you do?"

Invasion  
of privacy

Worker cited one or more type of invasion of privacy in response to the question: "Do you feel that your supervisor or the personnel office where you work ever go into your personal matters that you think are none of their business?" This question was not asked of self-employed workers.

Mistreatment  
by employment  
agencies

Worker cited one or more problems in response to the question: "Could you tell me what problems or difficulties you ran into in dealing with the agency?" This question was asked only of workers who at some time in the past three years tried to find a job through a private or state employment agency.

Insufficiently  
democratic  
union management

Worker cited one or more problem in response to the question: "Could you tell me about any problems you feel there are with your union regarding how democratically it's run?" This question was asked only of union members.

Insufficiently  
well-managed  
union

Worker cited one or more problems in response to the question: "Could you tell me any problems you feel there are with your union regarding how well it is managed?" This question was asked only of union members.

Failure to  
receive wages

Worker cited one or more cases of failure to receive wages in response to the question: "Other than garnishment or assignment, have you at any time in the last three years had any trouble in getting your wages paid in full, or on time, or regularly?" This question was asked only of workers who in the last three years had worked at some time on a basis other than that of self-employment.

Age discrimination

Worker cited one or more example of discrimination in response to the question: "Do you feel in any way discriminated against on your job because of your age?"

Inadequate expense coverage during illness	Worker responded <u>other than</u> "most or all" to <u>either</u> of the following questions: "While you were ill, how much of your medical, surgical, or hospital expenses were covered by any personal, company, or governmental insurances or programs--most or all, some, only a little, or none?" and "While you were ill, how much of your <u>living</u> expenses were covered by any personal, company, or governmental insurances or programs--most or all, some, only a little, or none?" These questions were asked only of workers who in the last three years had a work-related illness or injury which kept them from working for more than two weeks.
Race or national origin discrimination	Worker cited one or more example of discrimination in response to the question: "Do you feel in <u>any</u> way discriminated against on your job because of your race or national origin?"
Sex discrimination	Worker cited one or more example of discrimination in response to the question: "Do you feel in <u>any</u> way discriminated against on your job because you are a woman?" This question was asked of women only.
Wage garnishment or assignment	Worker cited one or more case of garnishment or assignment in response to the question: "In the last three years have your wages ever been garnisheed or assigned?" This question was asked only of workers who in the last three years had worked at some time on a basis other than that of self-employment.

Specific descriptive data relevant to each of these problem areas will be presented in the later sub-sections of this report. In the present section, however, the emphasis is upon comparisons among problem areas rather than upon examining the nuances of any particular area. How helpful the data in this section will be depends in part upon the strategy which one adopts for determining what defines a "top priority" area of concern. Several alternative strategies are available, and these are described below. Accompanying each strategy is an indication of where in the present report the relevant data may be obtained.

Strategy 1 treats the worker as, in effect, a consumer of the Department of Labor's services. A top priority is thereby assigned to protect the worker from that against which he most wants to be protected.



(sometimes even in spite of a low probability that the noxious condition will occur or that it will occur in a severe form). Data relevant to this strategy are presented in Table 4.1.

Strategy 2 defines a top priority problem area as one in which the greatest percentage of workers report having a problem. Data in Table 4.2, to be described in more detail below, is of very direct help in applying this strategy, since it shows the percentage of all employed workers reporting one or more problems in each of the 19 problem areas.

Strategy 3 defines a top priority problem area as one in which the problems reported (regardless of their frequency) are regarded as most severe by the workers who experience them. Data relevant to this strategy are presented through the severity ratings in Table 4.2.

Strategy 4 assigns a top priority to a problem which is inordinately experienced by a particular subgroup of the working population. According to this strategy top priority is assigned to those problems that plague such subgroups as black workers, women workers, blue-collar workers, etc. Data relevant to this strategy will be presented in 19 tables presented throughout this report. Each of these tables presents the frequency and severity of a particular labor standards problem area for major subgroups of workers defined by their sex, race, age, education, employment status, industry group, occupation group, and collar color. In addition, Table 4.4 indicates how these subgroups differ in terms of the total number of problems they experience in the 19 labor standards areas.

Strategy 5 assigns a top priority to what workers regard as the "single biggest" problem they face on their jobs. Data relevant to this strategy is presented in Table 4.6.

Strategy 6 assigns a top priority to a problem area which has the greatest impact upon the psychological well-being of the worker. The

study's measures of workers' well-being in terms of their job satisfaction and mental health were described in the preceding section. Throughout the remainder of this report many tables will show the first-order associations between working conditions and the study's measures of workers' well-being. The data in these tables will be summarized in the report's conclusion.

The first table below presents data relevant to the first of these strategies--assigning a top priority to protecting workers from what they want to be protected against regardless of the frequency or severity of the actual occurrence of problems in a particular area. To secure the data upon which Table 4.1 is based each worker was presented with a list of 18 labor standards areas\* and asked the following question: "I'd like to know how important it is to you that each of these problems doesn't happen to you--how important it is that the government, a union, your employer, or someone else protect you against each of these things?" The worker was then presented with four fixed-alternative answers with which he could respond: very important, somewhat important, not too important, and not at all important. Worker's importance ratings thus obtained are presented in Table 4.1, listed in descending order of the percentage of workers citing the area as "very important."

The areas most important to workers, according to Table 4.1, were generally those which involved either health or money. A very high importance rating was, as a result, assigned to an area which combined into a single problem both matters of health and income--not being able to pay all one's bills in the event of illness. Certain areas probably

---

\* The "problem" questions later in the interview differentiated union management that was less than fully democratic from that which was less than fully efficient. Since this distinction was not maintained in the importance ratings, Table 4.1 contains one less problem area than does Table 4.2.

received their comparatively low importance ratings because of their low likelihood of becoming actual problems for large numbers of workers--for example, sex discrimination, race discrimination, and wage garnishment. It is further interesting to note in Table 4.1 the comparatively low importance which workers assigned to the problem areas of hours and transportation to work.

Data relevant to the second strategy described above (assigning a top priority to a problem area in which the greatest percentage of workers report a problem) is presented in Table 4.2. The first column of the table provides the short-hand label for each of the 19 problem areas. The percentage in the third column is the percentage of all workers who reported one or more problems in each area in response to the series of "problem" questions described above. The base upon which each percentage was computed is presented in the second column, and it excludes workers who failed to answer the question or said "don't know." There are some peculiarities regarding this base which should be taken into account in reading the percentages in column three. In order to make comparisons across problem areas in terms of the percentage of workers reporting a problem, it was necessary to maintain a constant percentage base such that each percentage would be "percentage of all workers" rather than percentage of shifting subgroups of workers--for example, percentage of union workers, percentage of wage and salary workers, etc. At the same time it was impossible, or occasionally would have sounded silly to ask some of the "problem" questions to certain workers. As a result certain questions were omitted for certain groups of workers. Questions about problems with unions were, for instance, not asked of workers who did not belong to a union, men were not asked about sex discrimination, and self-employed workers were not asked about fringe benefits. Such

selective questioning creates a problem, however, when one wishes to determine the percentage of all workers who have a problem in a particular area. How should those workers be treated who were not asked a particular "problem" question--as having a problem or not? In the construction of Table 4.2 this question was answered through the arbitrary (and sometimes highly debatable) placement of certain subgroups of workers in the "no problems" category. These arbitrary placements were as follows:

<u>Problem area</u>	<u>Subgroup of workers arbitrarily classified as having "no problem" in the area</u>
Inadequate fringe benefits	Currently self-employed workers
Transportation problems	Workers who lived at, or adjacent to their places of work
Invasion of privacy	Currently self-employed workers
Mistreatment by employment agencies	Workers who had not dealt with an employment agency within the last three years
Insufficiently democratic union management	Workers who did not belong to a union
Insufficiently well-managed union	Workers who did not belong to a union
Failure to receive wages	Workers who had been exclusively self-employed for last three years
Inadequate expense coverage during illness	Workers who within the last three years had no work-related illness or injury which kept them from working for two weeks or more
Sex discrimination	Men
Wage garnishment or assignment	Workers who had been exclusively self-employed for last three years

In one case, however, even such an arbitrary decision as those above was impossible. The "problems" question concerning unpleasant physical working conditions was not asked of workers who did not work at one

identifiable location. To ask about each place of work traveled to by a worker who moved around would not have been very useful, since it would have been necessary to find out how much time was spent in each location in order to get an idea of how extensive were the worker's problems with unpleasant physical conditions; but such questioning would have exceeded the time limitations of the interview. It would, however, have been grossly misleading to assign these multiple-worksite workers to the "no problems" category. Since over half of the multiple-worksite workers spent most of their working time traveling around the neighborhood or community, it would be most unusual were they not at some time or other exposed to unpleasant physical conditions. Yet it would not be entirely justified to classify them arbitrarily as having problems with unpleasant physical conditions. As a result of this dilemma, they have been entirely excluded from the Unpleasant Physical Conditions line of Table 4.2. The percentage on this line should therefore be read as follows: thirty-three and four-tenths percent of all workers who work at one identifiable worksite reported unpleasant physical conditions (rather than thirty-three and four-tenths of all workers).

Percentages of workers reporting problems computed over bases which do not involve the arbitrary decisions made above (e.g. the percentage of women reporting sex discrimination) will be found in later pages of this report in the sets of tables for the various working conditions content area.

After indicating that he had a problem in a particular area, the worker was then asked to rate its severity. These ratings, described in greater detail in Section 2, were all obtained in response to slight variations of the single "severity" question, "How much of a problem is this for you?" The last column of the table presents the total number of

workers who reported a "sizeable" or "great" problem in the area. The column to the left of that is the percentage of those reporting a problem who rated it as "sizeable" or "great"; note that this is not a percentage of all workers, but only a percentage of the workers who reported a problem. The mean severity ratings provided by those reporting problems are given in the third column from the right with the number of workers providing severity ratings presented in the preceding column.\*

The data from Table 4.2 are perhaps more readily summarized in the chart presented in Figure 1. This chart locates each of the labor standards areas simultaneously on two dimensions. The first dimension, the vertical axis, corresponds to the percentage of all workers reporting a problem in the area (the second column of numbers in Table 4.2); the second dimension, the horizontal axis, corresponds to the average severity rating of all problems reported in a particular area (the fourth column of numbers in Table 4.2). A problem area in which problems were both frequent and severe would appear in the top left-hand corner of the chart; a problem area in which problems were neither frequent nor severe would appear in the bottom right-hand corner of the chart. The four general quadrants of the chart might therefore be interpreted as follows:

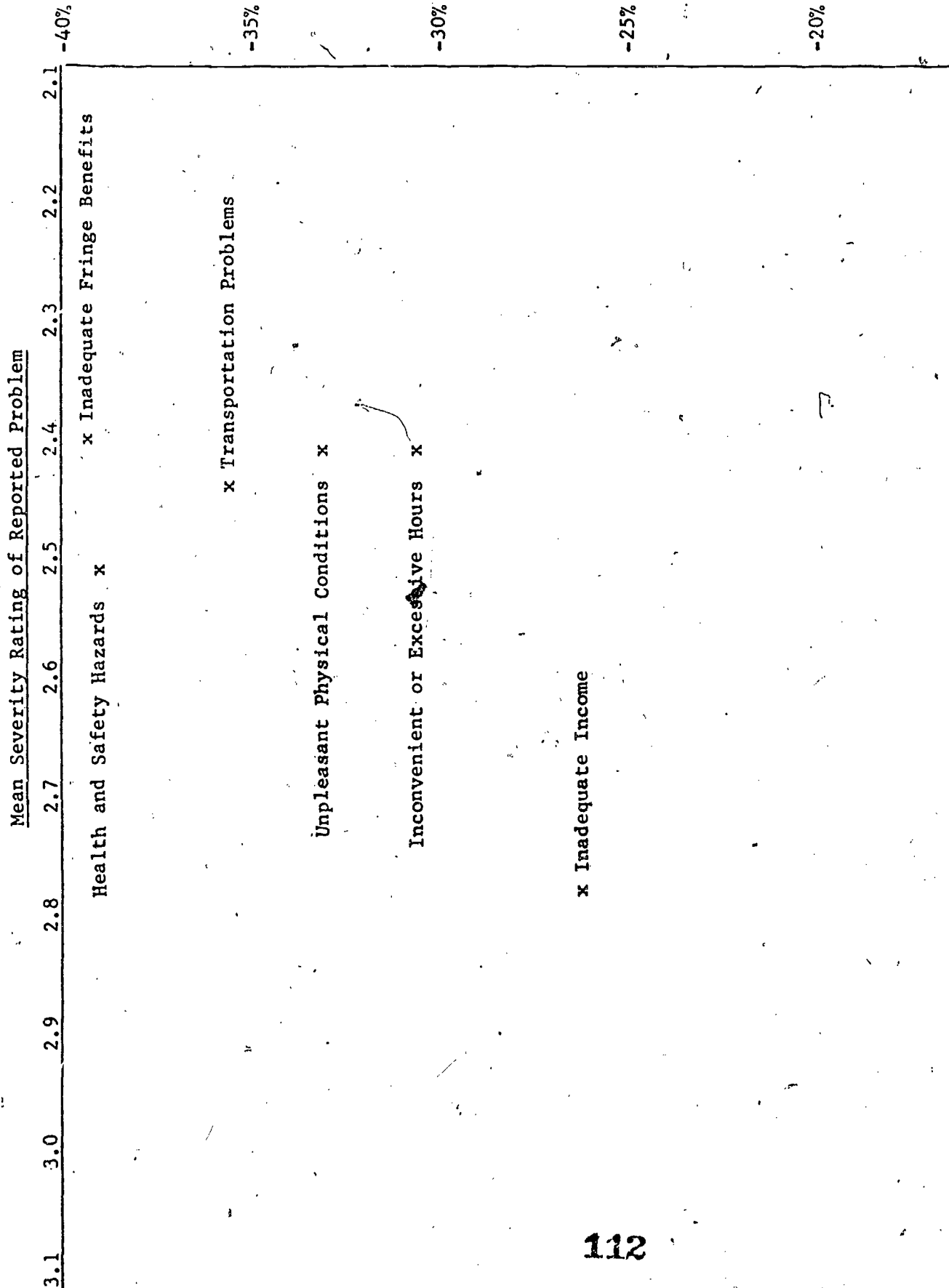
Mean Severity Rating of Reported Problems

Problem areas which are both frequent and severe	Problem areas which are frequent but not severe	Percentage of Workers Reporting Problems
Problem areas which are severe but not frequent	Problem areas which are neither frequent nor severe	

\* Occasionally a few more workers provided severity ratings than had actually reported problems. Since the severity ratings contained a "no problem at all" category, this need not have struck them as inconsistent, although it appears as an inconsistency in the tables. The percentage obtained by dividing the figures in column three in Table 4.2 by those in column one may therefore at times exceed the percentages given in column two. A similar inconsistency will also be evident in later comparable tables in the report.

Percentage of Workers Reporting Problems

Figure 1: Frequency and Severity of Labor Standards Problems



Percentage of Workers Reporting Problems

-15%

-10%

-5%

-0%

x Work Related Illness or Injury

Unsteady Employment x

Occupational Handicaps x

Invasion of Privacy x

x Mistreatment by Employment Agencies

x Undemocratic Union Management

x Incompetent Union Management

x Failure to Receive Wages

x Age Discrimination

Inadequate Expense Coverage During Illness x

Race or National Origin x  
Discrimination

x Sex Discrimination

x Wage Garnishment or Assignment



Figure 1 indicates that there were six problem areas which greatly exceeded all others in terms of the percentage of workers who reported problems: inadequate fringe benefits, health and safety hazards, transportation problems, unpleasant physical working conditions, inconvenient or excessive hours, and inadequate income. Only one of these areas also appears in the "high" severity side of the table-- inadequate income. Several problem areas had severity ratings as high, or higher than, the severity rating of inadequate income; these areas were, however, characterized by comparatively few workers as creating problems for them. These areas were: work-related illness or injury, mistreatment by employment agencies, insufficiently democratic and insufficiently managed unions, race or national origin discrimination, and wage garnishment or assignment. Wage garnishment and assignment had the singular distinction of being the area in which simultaneously the fewest and yet the most severe problems were reported. Several other areas qualified as representing neither very frequent nor very severe problems: unsteady employment, occupational handicaps, invasion of privacy, failure to receive wages, age discrimination, inadequate expense coverage during illness, and sex discrimination.

Tables 4.3 and 4.4 deal not with comparisons among labor standards problem areas but instead with the frequency of labor standards problems viewed as a whole. Table 4.3 indicates the percentage of workers reporting problems in various numbers of labor standards areas. The table undercounts the total number of problems experienced by workers in these areas since it makes no allowance for a worker having multiple problems in a single area. For example, two workers may both have been coded as having a problem with unpleasant physical working conditions although the first worker reported three problems in this area and the

second appeared to be reporting only one problem. The data could not sustain finer distinctions among numbers of specific problems in any one area. One worker, for instance, may have complained about excessive heat, occasional excessive cold, and too much smoke in the air. A second worker thinking about precisely the same conditions might only have mentioned "poor ventilation." It would have been arbitrary to have coded the first worker as having three times as many problems as the second worker. Although this example is fairly clear-cut, there were far more ambiguous cases in which it could in no way be determined when a worker was describing several discrete problems rather than different ramifications of one basic problem.

While the data in Table 4.3 are not so extreme as to indicate that "when troubles come, they come not as single spies but in battalions," they at least suggest that problems are likely to come in small squads. Seventy percent of all workers, for example, encountered problems in two or more of the areas. Fortunately, no worker reported problems in all 19 areas; the "loser" was instead one hapless worker who reported problems in 14 of the areas. Only 11.5 percent of all workers reported being wholly free of all the labor standards problems that were assessed.

Table 4.4, employing the same measure as Table 4.3, contrasts several major demographic and occupational subgroups in terms of the total number of labor standards areas in which workers in each subgroup reported problems. Later tables will contrast the same subgroups in terms of the frequency and severity of specific labor standards problems. Reading down the list of labor standards problem areas presented above, one might easily form the impression that the principal recipients of Department of Labor interest are wage-and-salary, blue-collar workers who are perhaps in some way disadvantaged. The data in Table 4.4 indicate, however, that this impression would be only partly correct. Granted,

reports of labor standards problems were more frequent among wage-and-salary workers than among the self-employed and more common among blue-collar workers than among those with white-collar. But the observed differences in employment status and collar color, while certainly statistically significant, were not very striking. More interesting is the large absolute percentages of self-employed workers (33.0 percent) and white-collar workers (42.2 percent) reporting problems in three or more labor standards areas. Surprisingly, neither education nor industry group was related to the summary problems measure, and occupation group was only barely so. Among the demographic variables investigated neither sex nor race was related to the number of labor standards problems. But the relationship between the problems measure and age was considerable. Younger workers reported sizeably more than their fair share of problems in labor standards areas. Table 3.22 has already demonstrated that younger workers were also the least satisfied overall with their jobs.

The associations between the study's job satisfaction and mental health outcome measures and the number of labor standards areas in which workers reported problems are presented in Table 4.5. The tally of labor standards problems was substantially related to all the outcome measures, with workers who reported problems in greater numbers of areas also exhibiting less job satisfaction (both overall and in the five more specific areas of job satisfaction), greater feelings of Job-related Tension, higher scores on the three "negative" Mental Health indices (Somatic Complaints, Depression, and Performance Debilitation), higher scores on the "positive" Mental Health index (Zest) and greater Life Satisfaction. Although it is hardly surprising that the experience of labor standards problems was correlated with job satisfaction and job-related tension, such correlations nevertheless provide some indication

of the construct validity of the study's job satisfaction and tension measures. The correlations between the summary labor standards measure and the stress-related mental health measures was somewhat higher than had been anticipated considering that (a) labor standards problems represent only a limited number of the types of problems confronting workers and (b) many factors other than working conditions problems obviously contribute to workers' mental health.

The preceding discussion and most of that which follows in the commentaries and tables in later pages concentrate upon workers' experiences exclusively with problems in the more traditional labor standards areas. Since these areas encompass only a restricted range of the problems facing workers, it is possible that even the most important of the labor standards problems appears somewhat less important when compared to a less arbitrarily restricted range of working conditions problems. For this reason, workers were asked the open-ended question, "All in all, what do you feel is the single biggest problem or difficulty you encounter on your job?" Their responses to this question (Table 4.6) indicated that many of what most workers regarded as their "single biggest" problems were quite remote from traditional labor standards areas. Forty-one and seven-tenths percent of the "single biggest" problems mentioned involved surmounting obstacles in performing activities required by the job: 14.3 percent concerned work overload; 9.4 percent concerned inadequate availability of resources for task performance; and 18.0 percent concerned technical problems associated with performing the work. The second most frequently mentioned cluster of problems were interpersonal ones involving either workers' supervisors (7.8 percent), their subordinates (7.2 percent), or other people with whom they dealt on their jobs (9.5 percent). The importance to workers of problems in labor standards areas, paled somewhat

when compared to the full range of problems that workers regarded as their "biggest" were those which Table 4.2 has already shown to be the most frequent as well--problems with pay and fringe benefits, physical working conditions, hours, and transportation.

Six strategies for identifying "top priority" problem areas were outlined above. According to several of these criteria, two labor standards areas appeared to command a very high priority: income and income maintenance (including pay, fringe benefits, and wage loss episodes); and physical working conditions (including health and safety hazards, unpleasant physical working conditions, and work-related illness or injury). This conclusion is based upon data presented in the present section that are pertinent to four of the suggested strategies for priority assignment.

Strategy 1: a top priority is assigned to protect the worker from that against which he most wants to be safeguarded. The seven labor standards problem areas in reference to which workers most frequently indicated that it was "very important" to them that they be protected. All concerned either income or physical working conditions (Table 4.1).

Strategy 2: a top priority is assigned to a problem area in which the greatest number of workers report problems. Of the half-dozen problem areas in which workers most frequently reported problems (Table 4.2) two concerned income (inadequate fringe benefits and inadequate income) and two concerned physical working conditions (health or safety hazards and unpleasant physical conditions).

Strategy 3: a top priority is assigned to a problem area in which problems, if and when they occur, are severe in nature. The priority status of income and physical working conditions is less clear according to this criterion of importance. Of the eight labor standards areas in

which half or more of the reported problems were judged by workers to be "sizeable" or "great" (Table 4.2), four of the areas concerned either income or physical working conditions.

Strategy 5: a top priority is assigned to problems that workers feel are the "single biggest problems" they face on their job. The priority assigned to labor standards problems as a whole would, according to this strategy, be quite low in comparison to the problems workers face in regard to the content of their work or their work-related associations with other people. Nevertheless, the two labor standards problem areas figuring most prominently on the list of workers' "biggest problems" (Table 4.6) were those of problems with pay or fringe benefits and with physical working conditions.

Later tables, which will present more specific data on the distributions and correlates of problems in each of the labor standards areas, will provide data relevant to the fourth and sixth strategies of priority assignment (i.e., assigning a top priority to a problem which is inordinately experienced by a particular subgroup of the working population or which appears to be most closely related to the psychological well-being of workers).

The final tables in this Section (Table 4.7 and 4.8) do not concern workers' experiences with labor standards problems, nor do they provide any information helpful for priority setting. Instead they deal with what a worker might do to solve a "typical" working conditions problem. When presented with a hypothetical situation concerning a health and safety problem, workers were asked whom they would go to for help in solving the problem, followed by a question of whom they would go to next for help. Their answers for the most part were about what might be expected in that workers' first recourse was generally to those who had

the greatest control over the situation. Sixty-six and two-tenths percent of workers would go first to their immediate supervisors, and 42.4 percent would go to higher management as a second resort. The only other group of notable size is those who said they "wouldn't go to anyone." Only 10.8 percent of the workers mentioned going either first or second to someone connected with a union, although a third of the workers were union members. Few mentioned a government agency as either a first or second resort. One additional question was asked of those who did not spontaneously say they would go to the government for help. When asked directly if there was a government agency to which they could go, only 18.0 percent said "yes," almost half said flatly that there was not, and another quarter did not know whether or not there was. Few workers appeared ready, therefore, to seek out government help when they confront a labor standards problem (or at least one involving health and safety). Indeed, many seemed quite unaware of the existence of government agencies as possible sources of assistance.

Table 4.1 Relative Importance to Workers of Eighteen Areas of Labor Standards Concern

Through the "card sort" technique the worker was presented with the following instructions: "I'd like to know how important it is to you that each of these problems doesn't happen to you--how important it is that the government, a union, your employer, or someone else protect you against each of these things."

<u>Area of concern</u>	<u>Percentage*</u>			
	<u>Very important</u>	<u>Somewhat important</u>	<u>Not too important</u>	<u>Not at all important</u>
Becoming ill or injured because of my job (1503)	70.9%	15.8%	5.9%	7.4%
Not being able to pay all my bills if I became sick and wasn't able to work (1491)	68.7	18.4	5.4	7.5
My employer withholding or delaying wages or other money I feel is due me (1412)	68.3	14.7	5.7	11.2
Getting inadequate wages to meet my usual monthly expenses and bills (1482)	67.7	16.7	6.4	9.2
Physical dangers or unhealthy conditions on my job (1489)	63.8	16.9	8.1	11.1
Employment that isn't steady throughout the year (1470)	58.9	17.5	8.8	14.8
Having my wages garnisheed or assigned (1448)	57.0	15.3	8.2	19.5
Incompetent, unfair, or undemocratic practices by a union (1320)	56.4	15.3	8.6	19.6
Having to work under uncomfortable or unpleasant physical working conditions (1494)	50.8	26.3	12.5	10.4
Incompetent, unfair, or dishonest practices by private employment agencies (1353)	49.8	16.8	9.6	23.8
My supervisor or the personnel office going into my personal matters (1435)	48.5	19.8	12.0	19.7



Table 4.1 Relative Importance to Workers of Eighteen Areas of Labor Standards Concern (continued)

<u>Area of concern</u>	<u>Percentage*</u>			
	<u>Very important</u>	<u>Somewhat important</u>	<u>Not too important</u>	<u>Not at all important</u>
Discrimination against me on my job because of my age (1466)	48.4	19.1	12.1	20.3
Discrimination against me on my job because of my race or national origin (1462)	47.2	16.1	11.3	25.4
Not being able to get the fringe benefits I want (1454)	43.3	29.3	14.2	13.3
Spending too much time, money, or effort in going to and from work (1482)	39.3	28.7	14.9	17.1
Working a schedule that is inconvenient for me or having to work too many hours (1492)	39.1	30.0	15.8	15.1
Discrimination on my job due to mental or physical limitations I might have (1451)	38.7	21.6	14.5	25.2
Discrimination against me on my job because of my sex (1446)	37.6	18.3	13.5	30.6

\* The number of workers is indicated in parentheses after each area of concern.

Table 4.2 Frequency and Severity of Labor Standards Problems Among All Workers

Problem area	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
Inadequate fringe benefits	1516	38.6%	579	2.41	43.2% (250)
Health and safety hazards	1531	38.3	577	2.52	50.6 (292)
Transportation problems	1526	35.3	529	2.45	39.3 (208)
Unpleasant physical conditions	1047	33.4	350	2.42	37.7 (132)
Inconvenient or excessive hours	1528	30.3	462	2.42	37.9 (175)
Inadequate income	1525	26.4	398	2.79	62.3 (248)
Work related illness or injury	1531	12.9	197	2.78	56.3 (111)
Unsteady employment	1524	10.2	156	2.26	37.2 (58)
Occupational handicaps	1532	9.1	135	2.37	38.6 (52)
Invasion of privacy	1520	7.7	111	2.13	27.9 (31)
Mistreatment by employment agencies	1530	7.4	113	2.88	68.1 (77)

Table 4.2 Frequency and Severity of Labor Standards Problems Among All Workers (continued)

Problem area	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
How democratically unions are run	1528	5.6	85	2.81	57.6% (49)
How well unions are managed	1516	5.4	82	2.85	58.5 (48)
Failure to receive wages	1521	5.1	72	2.46	43.0 (31)
Age discrimination	1529	4.8	72	2.32	34.7 (25)
Inadequate expense coverage during illness	1532	3.7	57	2.28	38.6 (22)
Race or national origin discrimination	1521	3.0	38	2.76	52.6 (20)
Sex discrimination	1531	2.8	38	2.47	42.1 (16)
Wage garnishment or assignment	1523	1.7	25	3.12	72.0 (18)

\*In computing average severity the following score weights were assigned the severity rating categories: /1= "no problems at all"; 2 "a slight problem"; 3- "a sizeable problem"; 4= "a great problem".

Table 4.3 Reports of Multiple Problems in Labor Standards Areas

<u>Number of labor standards areas in which worker reports one or more problem*</u>	<u>Percentage (N=1531)</u>
No problems in any area	11.5%
One problem area	19.5
Two problem areas	21.0
Three problem areas	18.9
Four problem areas	12.3
Five problem areas	8.6
Six problem areas	4.1
Seven problem areas	2.5
Eight problem areas	1.0
Nine problem areas	.3
Ten or more problem areas	.5

\* A worker reporting problems in all areas would have mentioned problems in 19 areas. The maximum number of areas mentioned by a worker was 14.

Table 4.4 Total Number of Labor Standards Problems among Demographic and Occupational Subgroups

	<u>Number of workers upon which percentage is based</u>	<u>Percentage of workers reporting no problem</u>	<u>Percentage of workers reporting 1-2 problems</u>	<u>Percentage of workers reporting 3 or more problems</u>
<u>a. Sex</u>				
Men	997	10.9%	42.3%	46.8%
Women	535	12.5	37.0	50.6
$\chi^2=4.065; df=2; ns$				
<u>b. Race</u>				
White	1356	11.5%	40.7%	47.7%
Black	157	10.8	38.2	50.9
$\chi^2=0.566; df=2; ns$				
<u>c. Age</u>				
20 or under	97	10.3%	31.9%	57.7%
21-29	333	6.6	33.3	60.0
30-44	489	10.4	39.9	49.7
45-54	340	12.6	45.0	42.3
55-64	212	18.4	45.2	36.4
65 and over	55	12.7	56.4	30.8
$\chi^2=53.147; df=10; p < .001$				
<u>d. Education</u>				
None	7	0.0%	42.9%	57.2%
Some grade school	112	8.9	48.2	42.9
Completed grade school	123	10.6	41.4	48.0
Some high school	269	11.2	35.7	53.2
High school diploma	555	11.5	41.8	46.8
Some college	253	12.3	34.4	53.3
College degree	111	11.7	43.2	45.0
Graduate or professional training	102	13.7	47.1	39.1
$\chi^2=14.900; df=14; ns$				

Table 4.4 Total Number of Labor Standards Problems among Demographic and Occupational Subgroups (continued)

	Number of workers upon which percentage is based	Percentage of workers reporting no problem	Percentage of workers reporting 1-2 problems	Percentage of workers, of workers 3 or more problem
<u>e. Self-employment status</u>				
Self-employed	206	17.0%	50.0%	33.0%
Wage-and-salary	1327	10.6	38.9	50.6
$\chi^2=23.068; df=2; p < .001$				
<u>f. Industry</u>				
Agriculture, forestry, and fisheries	68	19.1%	45.6%	35.3%
Mining	22	4.5	36.3	59.0
Contract construction	124	6.5	40.3	53.1
Manufacturing	379	11.3	38.8	49.9
Transportation, communication, electric, gas, and sanitary services	95	6.3	44.2	49.6
Wholesale and retail trade	278	13.3	3.49	51.8
Finance, insurance, and real estate	75	9.3	49.3	41.3
Services	398	13.1	41.7	45.2
Government	94	9.6	43.6	46.9
$\chi^2=22.756; df=16; ns$				

Table 4.4 Total Number of Labor Standards Problems among Demographic and Occupational Subgroups (continued)

	<u>Number of workers upon which percentage is based</u>	<u>Percentage of workers reporting no problem</u>	<u>Percentage of workers reporting 1-2 problems</u>	<u>Percentage of workers reporting 3 or more problems</u>
<u>g. Occupation</u>				
Professional, technical, and managerial	394	13.5%	45.7%	40.9%
Clerical and sales	334	14.4	39.0	46.8
Service	185	10.3	36.8	52.9
Farming, fisheries, and forestry	69	18.8	46.3	34.5
Processing	28	7.1	35.7	57.1
Machine trades	120	8.3	33.3	58.4
Bench work	96	10.4	40.6	48.9
Structural work	159	9.4	37.1	53.5
$\chi^2=26.282; df=14; p < .05$				
<u>h. Blue-collar versus white-collar</u>				
White-collar	754	15.0%	43.0%	42.0%
Blue-collar	711	7.2	37.1	55.6
$\chi^2=37.096; df=2; p < .001$				

Table 4.5 Outcome Measures In Relation to Total Number of Labor Standards Areas in which Worker Reports One or More Problems

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures					Co-worker Relations	Resources	"Content free"
		JobSat '70	Comfort	Challenge	Pay				
1. None	175	3.44	3.40	3.42	3.31	3.58	3.63	3.99	
2. 1	293	3.35	3.29	3.33	3.19	3.44	3.53	3.86	
3. 2	312	3.32	3.21	3.35	3.14	3.45	3.52	3.78	
4. 3	287	3.21	3.10	3.25	2.82	3.40	3.32	3.53	
5. 4	187	3.17	3.04	3.20	2.99	3.43	3.32	3.26	
6. 5	130	3.04	2.89	3.10	2.67	3.32	3.22	3.15	
7. 6	63	2.98	2.84	3.00	2.74	3.16	3.24	3.06	
8. 7	37	2.98	2.87	3.00	2.78	3.12	3.13	3.01	
9. 8	16	2.79	2.64	2.88	2.54	2.97	2.92	2.74	
10. 9	4	2.60	2.05	2.87	3.17	2.75	2.72	3.22	
11. 10 or more	5	2.20	2.08	2.04	1.86	2.80	2.46	2.22	
Eta		.32	.32	.22	.24	.17	.26	.35	
F		-0.32	-0.31	-0.21	-0.23	-0.15	-0.25	-0.35	
F		17.54	16.52	7.35	9.50	4.36	10.96	21.80	
df		(10,1498)	(10,1496)	(10,1498)	(10,1490)	(10,1459)	(10,1483)	(10,1516)	
P		.001	.001	.001	.001	.001	.001	.001	





Table 4.5 Outcome Measures In Relation to Total Number of Labor Standards Areas in which Worker Reports One or More Problems (continued) \*

Characteristic of worker or worker's job	n	Mental Health Outcome Measures					Life Satisfaction
		Job-related Tension	Somatic Complaints	Depression	Zest	Performance Debilitation	
1. None	175	1.69	1.66	1.78	2.73	2.00	3.85
2. 1	293	1.80	1.73	1.92	3.68	2.09	3.53
3. 2	312	1.98	1.86	1.99	3.66	2.12	3.39
4. 3	287	2.06	1.96	2.17	3.60	2.25	3.13
5. 4	187	2.20	1.99	2.16	3.60	2.23	3.01
6. 5	130	2.31	2.06	2.24	3.52	2.16	2.76
7. 6	63	2.33	2.15	2.24	3.35	2.21	2.75
8. 7	37	2.37	2.13	2.11	3.41	2.27	2.97
9. 8	16	2.74	2.17	2.66	2.22	2.36	2.12
10. 9	4	2.20	1.92	2.15	3.75	2.05	3.75
11. 10 or more	5	2.94	2.06	2.44	3.26	2.32	2.20
Eta		.32	.24	.28	.20	.14	.33
F		.31	.24	.27	-0.19	.11	-.31
F		16.91	9.17	13.21	6.05	2.87	18.18
df		(10,1520)	(10,1498)	(10,491)	(10,1497)	(10,1488)	(10,1520)
p		.001	.001	.001	.001	.01	.001

Number of labor standards areas in which worker reports one or more problems

Table 4.6 -- Biggest Problems on the Job

All in all, what do you feel is the single biggest problem or difficulty you encounter on your job?

Type of problem	Percentage of problems of each type* (Total number of problems reported = 1205)
Technical problems in getting the work done	18.0%
Too much work, work is too hard or too fast	14.3
Interpersonal problems (excluding problems arising from supervising or being supervised)	9.5
Worker is given inadequate resources to do his job	9.4
Problems with being supervised (e.g. supervisor is too strict, unfriendly, unhelpful, etc.)	7.8
Problems with pay or fringe benefits	7.3
Problems with supervising others (e.g. trouble getting good workers, getting employees to do a good job)	7.2
Problems with physical working conditions	5.3
Problems with the psychological rewards provided by the work (e.g. work is boring, routine)	4.9
Problems with hours or work schedule	3.3
Problems with job security (possibility of layoffs, inadequate provisions for retirement)	2.3
Problems with promotions or status (e.g. unfair or no promotions)	1.6
Problems with transportation to, from or during work.	1.2
No one thing in particular (worker "doesn't like work")	.9
Maintaining good health	.9
Worker specifies a skill he has that is not used on the job or says he is overtrained or overqualified	.2

\* These problems were reported by 1017 workers. Percentages do not add to 100% since 71 miscellaneous problems are included in the total number

Table 4.7 Agent to Whom Worker Would Go for Help with a Working Conditions Problem

Agent	Primary agent worker would go to: "Suppose there were conditions on your job you thought were dangerous or very bad for your health. Whom would you go to <u>first</u> for help if you had this problem?" Percentage (N=1523)	Secondary agent worker would go to: "Whom would you go to next if you couldn't get help from him/her/them?" Percentage (N=1235) *
A government agency	1.4%	4.2%
The person(s) creating the condition	.3	.2
Immediate superior, worker's "boss"	62.2	5.6
"Management," not otherwise specified	8.8	42.4
Company office responsible for health and safety	2.9	4.4
Medical personnel from worker's company	.6	.5
"Others" in workers company, not otherwise specified	.6	2.1
Worker's boss' wife	.0	.2
Local union representative	1.9	4.6
Higher level union people	.3	1.6
"The Union", level in union not specified	.9	3.5
A professional association	.1	.3
Doctor not affiliated with worker's company	.6	1.1
Other	.7	1.4
Wouldn't go to anyone	12.8	18.1
Don't know	5.9	9.8

\*Workers replying "wouldn't go to anyone" in response to the question about whom they would go to first were not asked about a secondary agent.

Table 4.8 Readiness to Use Government Agency for Help with a Working Conditions Problem

Twenty-one (1.4%) workers indicated spontaneously in response to the previous question that they would go to a government agency first with a working conditions problem.

Fifty-two (4.2%) workers indicated spontaneously in response to the previous question that they would go to a government agency as a second-resort with a working conditions problem.

Workers not thus specifying a government agency as either a first or second source of help with a working conditions problems were further asked: "Is there any government agency you could go to for help in this?" Their responses are as follows:

<u>Could government help?</u>	<u>Percentage (N=1436)</u>
Yes	18.0%
Maybe, possible	8.3
No	48.2
Don't know	25.6

## 5. INCOME AND INCOME-RELATED PROBLEMS

### INCOME

The distribution of the sample in terms of their annual income from their primary jobs is presented in Tables 5.1 and 5.2. The income data were obtained in one of two ways. If the worker could indicate his annual income from his primary job before deductions for taxes, this figure was recorded as his income. If the worker could not supply this figure, he was asked instead for his hourly pay rate; among those who worked regular hours throughout the year without appreciable overtime, this hourly figure was then used in conjunction with the number of hours they worked a week as an estimate of their yearly incomes. There are four limitations of the income figures that should be kept in mind when reviewing the two tables. First, the data refer only to income from the worker's primary job rather than from all the pay he received during the year; ten percent of the sample held secondary jobs from which they received additional income. Second, no attempt was made to estimate the dollar value of fringe benefits received and to include this income in the total income data. Third, the data in Table 5.1 are based on many part-time workers; many workers were therefore apparently poorly-paid by virtue of the few number of hours they worked rather than a low pay rate. This confusion of hours with wages is, however, somewhat reduced in Table 5.2 which presents income data only from full-time workers (defined as working 35 hours a week or more). Finally, there is considerable missing income information in both tables (114 cases in Table 5.1 and 75 cases in Table 5.2). Prominent among

those groups of workers for whom income estimates could not be obtained were: those who could indicate only their hourly wage but could not estimate the total number of hours they worked during the year (e.g., due to seasonality or being otherwise unsteadily employed); those who could indicate only their hourly wage but whose overtime pay complicated extrapolations from this pay rate to an annual estimate; some self-employed who may for tax reasons have been reluctant to divulge their incomes; and some self-employed who could in fact not estimate their income (workers with unsteady or seasonal employment or with irregular hours being more heavily represented among the self-employed than among wage-and-salary workers).

The associations between workers' total annual incomes from their primary jobs and the study's job satisfaction and mental health outcome measures are shown in Table 5.3. Income level was associated with both measures of overall job satisfaction and, of course, with satisfaction with pay. That income was also associated with satisfaction with Challenge probably does not reflect any direct causal relationship between the two variables but suggests only that many of the most challenging jobs are also among the best-paying as well. All four subscales of the study's mental health questionnaire (Somatic Complaints, Depression, Zest, Performance Debilitation) were significantly related to income, the better-paid workers being those who exhibited greater mental health. At the same time, however, people in better-paying jobs tended to experience greater tension on their jobs. This configuration of associations in which workers in "better" jobs are characterized by greater satisfaction and better mental health but by greater levels of tension will be observed in a number of tables in this report and will be discussed at greater length in Section 15.

Inadequate income for meeting one's usual monthly bills and expenses ranked sixth among labor standards problems in terms of its frequency of occurrence and received one of the highest severity ratings (Table 4.2). Even these figures may underestimate the extent of problems with inadequate income that were faced by workers. The "problem" question in the area of inadequate income asked the worker only about the adequacy of his family's income for meeting his family's usual monthly expenses and bills. Twenty-six and four-tenths percent of those interviewed reported inadequate income according to this criterion. But is this really the best criterion for judging income adequacy? A family may be free of debt and able to pay its bills but may nevertheless be very badly off, since it has drastically reduced its expenditures to a bare subsistence level. Such a family would be existing, but hardly living as it would like. In light of this possibility, each worker was asked the additional income inadequacy question: "Do you feel your (total family income) is enough for you and your family to live as comfortably as you would like?" By this criterion of income adequacy considerably more workers reported having inadequate incomes--56.2 percent of those interviewed (Table 5.4).

The frequency of occurrence of problems with income being inadequate to meet workers' usual expenses and bills is shown in Table 5.5 for several major demographic and occupational subgroups. The problem was significantly more frequent among blacks (Table 5.5a) and women (Table 5.5b). The latter finding probably reflects only that many women might not be working in the first place were their families' incomes adequate. Not surprisingly, workers with the least formal education (and probably confined therefore to rather unattractive jobs) were markedly more likely than the better-educated to be in families where the total income was

inadequate. In spite of there being substantial differences among industries in terms of prevailing wage rates, reports of inadequate income were not associated with industry group (Table 5.5f). The inclusion of managerial, supervisory, and other salaried personnel in the table may, however, have obscured the anticipated differences among industries. On the other hand, the occupation group was significantly related to income adequacy, with workers in service and processing occupations being those most frequently reporting income adequacy problems (Table 5.5g).

Table 5.6 shows the pervasive associations between family income adequacy and workers' scores on the job satisfaction and mental health measures. On all the measures save the Performance Debilitation Index, inadequate income was associated with unfavorable outcome scores. The pattern of relationships between the outcome measures and workers' subjective evaluations of income adequacy did not differ greatly from that between the outcome measures and the more "objective" income data in Table 5.3 in spite of differences both in the "subjectivity" of the data (and the possible response biases thereby introduced) and in the referents of the two income problems (income from the job in Table 5.3 and total family income in Table 5.6).

#### FRINGE BENEFITS

The Bureau of Labor Statistics has recorded a major change in the nature of income that has occurred over the past 30 years:

"Scarcely four decades ago, compensation for American workers consisted almost entirely of a wage for time worked or units produced . . . today, American employers pay about four-fifths of total compensation as straight-time wages . . . the remaining one-fifth is spent primarily for (1) . . . paid leave; (2) protection against economic hardship resulting from unemployment, retirement, disability, illness, or death . . . , and (3) premium pay (Bauman, 1970).



This increasing importance of fringe benefits raises basic policy questions due to government's comparative de-emphasis of fringe benefits when considering income problems. For example, if fringe benefits are an uncontrolled variable of the magnitude suggested by Tables 5.7, 5.8 and 5.10, what are the implications of fringe benefits to the minimum wage provision of the Fair Labor Standards Act? There have been frequent statements on the implications of fringe benefits for the overtime provisions of this act, but to our knowledge little concern has been expressed over the possibility that the increasing contribution of fringe benefits to total income may be seriously reducing the effectiveness of the act in setting a uniform income floor.

Wage-and-salary workers were asked specifically whether each of the 13 fringe benefits listed in Tables 5.7, 5.8 and 5.10 was made available to them by their employers. The availability of a particular benefit did not, of course, mean that the worker was exercising his option to obtain the benefit (e.g., a young, unmarried worker might not be participating in a retirement program that was available to him). The fringe benefits most generally available were paid vacation, medical insurance,\* life insurance,\* a retirement program, maternity leave with full re-employment rights, and paid sick-leave.

The percentages in the three tables substantially altered the investigators' preconceptions about the types of fringe benefits that

---

\*The rather awkward phrasing of the interview's description of these two benefits (see Table 5.7) was designed to avoid workers' confusing the type of coverage intended by the question with their employers' liability coverage. The Phase I pretest encountered a number of cases where workers confused the two types of coverage. If the percentages associated with the two types of insurance in Table 5.7 appear, therefore, to be inconsistent with other coverage statistics, the wording of the national survey question was therefore probably unsuccessful in eliminating the confusion.

were and were not available. Paid sick-leave and vacation was not as prevalent as we had anticipated. Forty-one percent of those interviewed received no sick-leave with full pay, and 26.6 percent received no paid vacation. On the other hand, benefits that we had regarded as the property of only a privileged and small minority--stock options and profit sharing--appeared to be more commonly available than we had expected. The availability of discounts on (or even free) merchandise, service, and meals also appeared quite widespread. One additional type of fringe benefit that was not only available to but was indeed used by some workers surfaced in the workers responses to the interview questions about transportation to work: 4.5 percent reported driving to work in a company car (Table 8.5).

Notably low on the list of available fringe benefits was one that is increasingly being advocated--child-care. Less than two percent of those interviewed said that their employers made this benefit available. Recent Department of Labor statistics indicate, moreover, that the number of workers actually using such employer-supported services is nearer to zero than to two percent. Tables 5.12 and 5.13 suggest, however, that a substantial percentage of workers would be the beneficiaries of such day-care services. Of the 314 workers interviewed who currently had children under six at home, 21.7 percent reported that they had to pay someone to take care of the children while they were working (Table 5.12). This percentage, however, includes both men and women workers. Among the 35 women in the sample who had children under six at home, 62.9 percent had to pay someone to take care of them (Table 5.13). About a fifth of the women with preschool children at home indicated that they would work more hours were satisfactory day-care centers available to them (Table 5.15). These figures, while suggesting that day-care centers might solve the wage-depletion and income problems of some women workers (and some

men as well), are, of course, based on very few cases and might therefore be unreliable. In any event, data relevant to the necessity of day-care centers would more appropriately be collected from women who are not even part of the labor force rather than from those who are already working.

According to Table 4.1, comparatively few workers attached a very great importance to being protected from receiving inadequate fringe benefits. Despite the relative unimportance of inadequate fringe benefits by this criterion of importance, it was the most frequent labor standards problem reported by workers (Table 4.2). Forty-four and seven-tenths of the wage-and-salary workers interviewed\* indicated that there was at least one fringe benefit that was not available to them that they would like to be receiving (Table 5.16). The benefit most often desired (Table 5.17) was health insurance, the benefit which was second only to paid vacation among the benefits most commonly available. In addition to the 26.7 percent of the workers who wanted health insurance, four percent also expressed a desire for dental care or insurance. Like medical insurance, the other two fringe benefits most desired were also among those most commonly available: sick-leave with pay and a retirement program. Conspicuously absent from the list of additional fringe benefits that workers most wanted was any

---

\*This percentage differs from that in Table 4.2 because in Table 4.2 self-employed workers were arbitrarily coded as having no fringe benefits problems. Such coding, while highly debatable in its assumptions, was unavoidable. To have asked the self-employed whether their employers made certain fringe benefits available to them would have been meaningless because (a) they had no employers and (b) since they received no "pay" in the usual way, there could be no "fringe" to their pay. An alternative strategy would have been to ask the self-employed how they secured comparable advantages by other means. For example, they could have been asked about their private insurance arrangements. But this would in turn have necessitated comparable questioning among the survey's wage-and-salary workers, carrying the interviewing far outside the intended scope of the study.

mention of child-care centers--in spite of the virtual non-existence of such centers. This again may only reflect the fact that those most in need of such centers were not even included in the sample.

Unlike inadequate income, problems with inadequate fringe benefits were shared equally by the study's major demographic and occupational subgroups (Table 5.18). The one exception was age, with both the oldest (over 55) and the youngest (under 21) subgroups of workers least frequently reporting fringe benefits problems. Two factors may have worked in generating this curvilinear relationship. First, both groups might have had fewer economic responsibilities than those workers in the 21-54 age range. Neither the very young nor the very old may have been supporting dependents. Major financial obligations (e.g., buying a house) may not yet have been undertaken by the young and may already have been discharged by the old. Second, the older workers may have achieved positions where their seniority conferred sufficient benefits.

The association between workers' reports of fringe benefits problems and the job satisfaction and outcome measures is presented in Table 5.19. Workers who felt they received adequate fringe benefits were both satisfied with their jobs in general and with their pay in particular. Similar correlations may also be observed in Tables 5.9 and 5.11 which show the relationships between the outcome measures and two specific fringe benefits: the number of paid vacation days the worker received and the number of paid sick-leave days he received.

#### WAGE LOSS

The data in Tables 5.20 through 5.26 are relevant to two major types of wage loss problems--wage garnishment or assignment and an employer's withholding or delaying of wages. A third type of wage loss problem, inadequate income following a work-related illness or injury will be

discussed in the section below on physical working conditions. Data on two types of wage erosion problems (paying for child-care while working and expenses accrued in transportation to work) are touched upon in tables in the present section and in Section 8.

Wage garnishment and assignment emerged in the survey as having some of the qualities of a rare tropical disease. The problem, according to Table 5.10, occurred to only 1.9 percent of the workers and was the least frequently occurring of all the labor standards problems investigated. In spite of its low incidence, its observed forms were quite virulent, and it received the highest severity rating of any type of labor standards problem (Table 4.2). In spite of it being very unlikely that the problem would ever occur to them, a large number of workers nevertheless felt that it was very important that they be protected against such an occurrence (Table 4.1).

Somewhat similar conclusions can be made about reported wage loss due to an employers' withholding or delaying wage payments for reasons other than garnishment or assignment. Although very concerned that they be protected against such an event (Table 4.1), the problem affected very few workers (Table 5.23). Unlike garnishment, however, the occurrence of such event was not regarded by workers as especially severe (Table 4.2). Forty-one and one-third of such wage loss problems that were reported involved only a one-time instance of a worker receiving his full pay but just receiving it late (Table 5.24).

Both types of wage loss tended to be associated with workers' reports of low overall job satisfaction (Tables 5.22 and 5.26). The demographic and occupational distributions of these problems (Tables 5.21 and 5.25)\*

---

\* In these and several subsequent tables which show the occupational distribution of labor standards problems that had occurred to workers in the last three years, workers who had changed occupations within the three-year period were excluded from the statistics.

are not very illuminating and suggest principally that the problems may be more common among younger workers. There is a tendency for garnishment to be more frequent among the poorer-educated, but there is little indication that such an association with age occurs in cases of employer-instigated wage loss. The latter type of wage loss may be more prevalent among agricultural workers than others, but the number of cases upon which such a statement is based is too small to regard the statement as any more than a hint provided by the data.

Table 5.1 Annual Personal Income from Primary Job

<u>Annual income from primary job before deductions for taxes</u>	<u>Percentage (N = 1419)*</u>
\$3,399 or less	14.9%
\$3,400-\$4,999	15.7
\$5,000-\$7,499	26.9
\$7,500-\$9,999	18.6
\$10,000 or more	23.8

\*Accurate annual income figures could not be obtained from 114 workers.

Table 5.2 Annual Personal Income from Primary Job for Full Time Workers

<u>Annual income from primary job before deductions for taxes</u>	<u>Percentage (N = 1263)*</u>
\$3,399 or less	9.8%
\$3,400-\$4,999	15.8
\$5,000-\$7,499	28.6
\$7,500-\$9,999	20.0
\$10,000 or more	25.8

\*Includes only workers working 35 hours a week or more. Accurate annual income figures could not be obtained from 75 full-time workers.

Table 5.3 Outcome Measures in Relation to Annual Personal Income from Primary Job

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures				Co-worker Relations	Resources	"Content Free"
		JobSat '70	Comfort	Challenge	Pay			
1. \$3,399 or less	208	3.09	3.19	2.99	2.40	3.42	3.46	3.31
2. \$3,400-4,999	217	3.19	3.14	3.13	2.88	3.44	3.49	3.38
3. \$5,000-7,499	375	3.27	3.21	3.24	3.10	3.38	3.44	3.57
4. \$7,500-9,999	263	3.33	3.11	3.27	3.24	3.39	3.39	3.62
5. \$10,000 or more	337	.16	3.07	3.52	3.30	3.44	3.40	3.85
Eta		.15	.09	.27	.36	.04	.06	.20
F		9.09	3.13	27.65	51.57	.45	1.32	15.50
df		(4,1395)	(4,1394)	(4,1395)	(4,1391)	(4,1363)	(4,1381)	(4,1411)
P		.001	.05	.001	.001	n.s.	n.s.	.001





Table 5.3 Outcome Measures in Relation to Annual Personal Income from Primary Job (continued)

Characteristic of worker or worker's job	n	Job-related Tension	Mental Health Outcome Measures				Performance Debilitation	Life Satisfaction
			Somatic Complaints	Depression	Zest			
Annual income								
1. \$3,399 or less	208	1.93	2.00	2.22	3.54	2.28	3.16	
2. \$3,400-4,999	217	2.03	2.04	2.16	3.56	2.27	3.18	
3. \$5,000-7,499	375	1.94	1.86	2.05	3.60	2.16	3.18	
4. \$7,500-9,999	263	2.08	1.85	2.01	3.63	2.08	3.31	
5. \$10,000 or more	337	2.12	1.79	1.95	3.72	2.06	3.41	
Eta		.11	.15	.17	.13	.14	.09	
F		.09	-.14	-.17	.12	-.13	.09	
F		4.39	8.03	9.89	5.78	6.77	3.14	
df		(4,1414)	(4,1397)	(4,1390)	(4,1396)	(4,1387)	(4,1414)	
P		.01	.001	.001	.001	.001	.05	



Table 5.4--Adequacy of Total Family Income for Letting Worker Live as "Comfortably as He Would Like to Live" and for Meeting "Usual Monthly Bills and Expenses"

Do you feel that this total (family) income is enough to meet your family's usual monthly expenses and bills?

Do you feel that this total (family) income is enough for you and your family to live as comfortably as you would like?

<u>Adequacy</u>	<u>Percentage</u>	
	<u>For meeting expenses (N=1525)</u>	<u>For living as worker would like (N=1524)</u>
Adequate	73.6%	43.8%
Inadequate	26.4	56.2

**Table 5.5 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups**

**Problem Area: Inadequate Total Family Income for Meeting Expenses**

	<u>Number of workers upon which percentage is based</u>	<u>Percentage of workers reporting one or more problems in each area</u>	<u>Number of workers upon which severity ratings are based*</u>	<u>Average severity</u>	<u>Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"</u>
<b>a. Sex</b>					
Men	993	24.4%	242	2.8	59.1% (143)
Women	531	29.9	156	2.9	67.3 (105)
	$\chi^2=5.542; df=(1); p<.05$				
<b>b. Race</b>					
White	1348	24.5%	326	2.8	62.5% (204)
Black	157	39.5	63	2.9	65.1 (41)
	$\chi^2=16.447; df=(1); p<.001$				
<b>c. Age</b>					
20 or under	93	20.4%	19	2.6	42.1% (8)
21-29	330	28.2	95	2.9	65.2 (62)
30-44	489	28.4	134	2.8	63.4 (85)
45-54	339	26.3	89	2.8	64.0 (57)
55-64	212	23.1	48	2.7	56.2 (27)
65 and over	55	18.2	11	3.2	70.0 (7)
	$\chi^2=6.379; df=(5); ns$				
	$F=1.133; df=(5,390); ns$				

Table 5.5 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups  
Problem Area: Inadequate Total Family Income for Meeting Expenses

<u>d. Education</u>	<u>Number of workers upon which percentage is based</u>	<u>Percentage of workers reporting one or more problems in each area</u>	<u>Number of workers upon which severity ratings are based *</u>	<u>Average severity</u>	<u>Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"</u>
None	7	57.1%	4	3.0	75.0% (3)
Some grade school	111	43.2	49	3.0	71.4 (35)
Completed grade school	123	35.8	44	3.1	68.2 (30)
Some high school	268	32.8	86	2.8	58.2 (50)
High school diploma	551	23.6	128	2.7	57.8 (74)
Some college	252	21.4	54	2.9	68.5 (37)
College degree	110	14.5	16	2.7	50.0 (8)
Graduate or professional training	102	16.7	17	2.8	64.7 (11)

$\chi^2 = 49.352$ ;  $df = (7)$ ;  $p < .001$        $F = 1.075$ ;  $df = (7, 390)$ ; ns

Table 5.5 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups

Problem Area:	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based*	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
<b>e. Self-employment status</b>					
Self employed	206	21.8%	44	2.6	47.7% (21)
Wage-and-salary	1319	27.0	354	2.9	64.1 (227)
					F=3.914; df=(1,396); p<.05
<b>f. Industry</b>					
Agriculture, forestry, and fisheries	68	27.9%	19	2.9	63.2% (12)
Mining	22	27.3	6	2.7	50.0 (3)
Contract construction	124	22.6	28	2.4	42.9 (12)
Manufacturing	378	24.3	93	2.9	65.6 (61)
Transportation, communication, electric, gas, sanitary services	93	21.5	21	2.5	47.6 (10)
Wholesale and retail trade	276	27.5	74	2.9	63.5 (47)
Finance, insurance, real estate	74	24.3	18	3.0	66.6 (12)
Services	396	27.8	108	2.9	67.6 (73)
Government	94	34.0	31	2.8	58.0 (18)
					F=1.562; df=(8,389); ns
					$\chi^2=6.564$ ; $df=(8)$ ; ns

Table 5.5 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups

Problem Area: Inadequate Total Family Income for Meeting Expenses

Occupation	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based*	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
Professional, technical, managerial	393	17.6%	66	2.7	59.1% (39)
Clerical and sales	331	24.8	82	2.8	59.8 (49)
Service	184	41.3	75	3.0	69.4 (52)
Farming, fisheries, and forestry	69	27.5	19	2.9	63.2 (12)
Processing	28	42.9	12	3.2	83.4 (10)
Machine trades	119	29.4	34	2.9	64.7 (22)
Bench work	96	21.9	21	2.9	71.4 (15)
Structural work	158	29.7	49	2.6	51.0 (25)
				F=1.533; df=(7, 350); ns	
h. Blue-collar versus white-collar					
White-collar	750	20.7%	152	2.7	58.5% (89)
Blue-collar	707	32.1%	227	2.9	64.3 (146)
				F=3.739; df=(1, 377); ns	

\* In rare instances in the "Frequency and Severity" tables the number of workers upon which severity ratings were based will exceed the number of workers reporting a problem by one or two workers due to coding errors. It is extremely likely that these extra cases gave a severity rating of "no problem at all."

Table 5.6 Outcome Measures in Relation to Adequacy of Total Family Income for Meeting Expenses

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures						"Content Free"
		JobSat '70	Comfort	Challenge	Pay	Co-worker Relations	Resources	
Adequacy of family income to meet expenses								
1. Adequate	1109	3.29	3.18	3.31	3.14	3.44	3.46	3.72
Eta		.17	.11	.14	.21	.08	.09	.24
F		INAP	INAP	INAP	INAP	INAP	INAP	INAP
F		46.38	17.60	30.20	69.08	10.48	11.93	94.44
df		(1,1501)	(1,1499)	(1,1501)	(1,1493)	(1,1462)	(1,1486)	(1,1519)
P		.001	.001	.001	.001	.01	.001	.001

Mental Health Outcome Measures

Characteristic of worker or worker's job	n	Mental Health Outcome Measures					
		Job-related Tension	Somatic Complaints	Depression	Zest	Performance Debilitation	Life Satisfaction
adequacy of family income to meet expenses							
Adequate	1109	2.00	1.84	2.01	3.67	2.14	3.41
Inadequate	394	2.09	2.02	2.18	3.46	2.20	2.84
Eta		.06	.13	.13	.19	.04	.24
F		INAP	INAP	INAP	INAP	INAP	INAP
F		5.10	27.80	26.86	54.90	2.38	89.45
df		(1,1523)	(1,1501)	(1,1494)	(1,1500)	(1,1491)	(1,1523)
P		.05	.001	.001	.001	n.s.	.001

Table 5.7--Fringe Benefits Received by Worker

I'll read off some fringe benefits. Just tell me whether or not your employer makes each available to you.

<u>Fringe benefit</u>	<u>Percentage*</u>
Medical, surgical, or hospital insurance that covers any illness or injury that might occur to you while <u>off</u> the job (N=1303)	71.9%
Life insurance that would cover a death occurring for reasons <u>not</u> connected with your job (N=1296)	62.2
A retirement program (N=1290)	60.7
Maternity leave with full re-employment rights (N=454)**	59.0
A training program you can take to improve your skills (N=1297)	39.1
Discounts on or free merchandise or service (N=1304)	35.9
Profit sharing (N=1288)	19.0
Stock options (N=1289)	16.9
Discounts on or free meals (N=1305)	16.7
Maternity leave with pay (N=461)**	14.3
A place for employees' children to be taken care of while their parents are working (N=1279)	1.8

\*Excludes self-employed workers

\*\*Women only were asked about this benefit



Table 5.8--Vacation Days Received by Worker

Other than holidays like Christmas and Labor Day, are you allowed to take off any working days as vacation days with full pay?  
 How many working days are you allowed to take off each year as vacation days with full pay?

<u>Paid vacation days (excluding major holidays)</u>	<u>Percentage (N=1296)*</u>
No paid vacation	26.5%
1-7 vacation days per year	14.4
8-14 vacation days per year	29.9
15-21 vacation days per year	18.6
Over 21 paid vacation days per year	6.7
Worker receives paid vacation, but does not know how many days per year	3.2
Worker does not know whether he receives paid vacation	.7

\*Excludes self-employed workers

Table 5.9 Outcome Measures in Relation to Vacation Days Received by Worker \*

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures						Resources	"Content Free"
		Jobsat '70	Comfort	Challenge	Pay	Co-worker Relations	Resources		
<u>Number of paid vacation days per year</u>									
1. None	340	3.09	3.06	3.01	2.67	3.35	3.43	2.33	
2. 1-5	121	3.18	3.17	3.06	2.99	3.44	3.47	2.38	
3. 6-10	344	3.26	3.18	3.24	3.12	3.41	3.43	2.62	
4. 11-15	228	3.33	3.21	3.34	3.29	3.46	3.43	2.62	
5. 16-20	93	3.33	3.16	3.36	3.43	3.46	3.35	2.82	
6. 21-25	46	3.38	3.29	3.35	3.34	3.62	3.56	2.73	
7. 26-30	45	3.27	3.10	3.32	3.35	3.38	3.39	2.66	
8. 31 or more	11	3.22	3.94	3.34	3.78	3.14	3.05	2.95	
9. Worker gets vacation days but does not know how many	42	3.23	3.11	3.25	2.99	3.39	3.47	2.81	
Eta		.20	.11	.21	.32	.09	.08	.18	
F		INAP	INAP	INAP	INAP	INAP	INAP	INAP	
F		6.26	2.02	7.24	18.54	1.39	1.15	5.37	
df		(8,1261)	(8,1261)	(8,1261)	(8,1259)	(8,1250)	(8,1258)	(8,1277)	
P		.001	.05	.001	.001	n.s.	n.s.	.001	

Table 5.9 Outcome Measures in Relation to Vacation Days Received by Worker (continued) \*

Characteristic of worker or worker's job	n	Mental Health Outcome Measures					
		Job-related Tension	Somatic Complaints	Depression	Zest	Performance Debilitation	Life Satisfaction
Number of paid vacation days per year							
1. None	340	1.99	1.94	2.11	3.54	2.17	2.16
2. 1-5	121	1.97	1.84	1.95	3.53	1.98	2.17
3. 6-10	344	2.06	1.88	2.10	3.66	2.18	2.28
4. 11-15	228	2.09	1.90	2.03	3.64	2.11	2.28
5. 16-20	93	2.06	1.73	1.98	3.63	2.10	2.24
6. 21-25	46	2.00	1.84	2.04	3.62	2.17	2.32
7. 26-30	45	2.02	1.81	1.88	3.70	1.96	2.27
8. 31 or more	11	2.21	1.79	2.24	3.66	2.12	2.27
9. Worker gets vacation days but does not know how many	42	1.93	1.78	2.12	3.55	2.31	2.10
Eta		.07	.10	.11	.11	.12	.06
F		INAP	INAP	INAP	INAP	INAP	INAP
df		.74	1.45	2.07	2.00	2.15	.53
p		(8,1278) n.s.	(8,1260) n.s.	(8,1253) .05	(8,1259) .05	(8,1251) .05	(8,1278) n.s.

\*Excludes self-employed workers.

Table 5.10-Sick Leave Days Received by Worker

Are you allowed to take off any sick leave days with full pay?  
 How many sick leave days are you allowed to take off with full pay each year?

<u>Sick-leave days with full pay</u>	<u>Percentage (N=1296)*</u>
No sick-leave	41.0%
1-7 sick-leave days per year	10.6
8-14 sick-leave days per year	16.5
15-21 sick-leave days per year	3.2
Specified number of sick-leave days over 21 days	5.5
No specified number, as many as needed	8.3
Worker receives sick-leave days but does not know how many days	13.3
Worker doesn't know whether he receives sick-leave or not	1.5

\*Excludes self-employed workers

Table 5.11 Outcome Measures in Relation to Sick Leave Days Received by Worker \*

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures						"Content Free"
		JobSat '70	Comfort	Challenge	Pay	Co-worker Relations	Resources	
Number of paid sick days per year								
1. None	521	3.15	3.13	3.08	2.80	3.39	3.45	3.36
2. 1-5	88	3.23	3.17	3.18	3.18	3.34	3.43	3.46
3. 6-10	141	3.24	3.10	3.29	3.17	3.40	3.36	3.69
4. 11-20	159	3.23	3.12	3.20	3.25	3.42	3.34	3.62
5. 21-30	32	3.38	3.29	3.32	3.38	3.48	3.56	3.99
6. 31-95	23	3.43	3.26	3.36	3.73	3.50	3.48	3.56
7. 96 or more	20	3.38	3.19	3.42	3.46	3.62	3.39	3.78
8. As many as needed	108	3.34	3.17	3.42	3.22	3.48	3.49	3.89
9. Worker does not know how many	168	3.29	3.19	3.31	3.18	3.40	3.45	3.70
Eta		.15	.07	.18	.28	.06	.08	.20
F		INAP	INAP	INAP	INAP	INAP	INAP	INAP
F		3.64	.76	5.42	12.92	.63	1.16	6.92
df		(8, 1251)	(8, 1250)	(8, 1251)	(8, 1249)	(8, 1239)	(8, 1248)	(8, 1266)
P		.001	n.s.	.001	.001	n.s.	n.s.	.001

Table 5.11 Outcome Measures in Relation to Sick Leave Days Received by Worker (continued) \*

Characteristic of worker or worker's job	n	Mental Health Outcome Measures					Life Satisfaction
		Job-related Tension	Somatic Complaints	Depression	Zest	Performance Debilitation	
Number of paid sick days per year							
1. None	521	1.96	1.98	2.08	3.54	2.19	3.19
2. 1-5	88	2.06	1.88	2.12	3.55	2.16	3.26
3. 6-10	141	2.12	1.81	2.09	3.64	2.19	3.30
4. 11-20	159	2.07	1.82	2.05	3.67	2.04	3.19
5. 21-30	32	1.99	1.76	1.92	3.84	2.05	3.38
6. 31-95	23	2.17	1.58	1.83	3.54	1.80	3.26
7. 96 or more	20	2.36	1.80	2.15	3.74	2.20	3.30
8. As many as needed	108	1.99	1.82	2.00	3.71	2.11	3.37
9. Worker does not know how many	168	2.05	1.78	2.01	3.64	2.08	3.28
Eta		.10	.15	.09	.15	.12	.06
r		INAP	INAP	INAP	INAP	INAP	INAP
F		1.70	3.68	1.25	3.66	2.16	.57
df		(8,1266)	(8,1249)	(8,1242)	(8,1248)	(8,1239)	(8,1266)
p		n.s.	.001	n.s.	.001	.05	n.s.

\* Excludes self-employed workers

Table 5.12--Child Care While Worker is on Job

Do you have to pay anyone to take care of them (children under six living in your home) while you're working?

<u>Necessity for child-care</u>	<u>Percentage (N=314)*</u>
Worker must pay for child care while working	21.7%
Worker does not have to pay for child care while working	78.3

\*Includes only workers who have children under six whom they support financially living in their home now.

Table 5.13--Child Care While Female Worker is on Job

Do you have to pay anyone to take care of them (children under six living in your home) while you're working?

<u>Necessity for child-care</u>	<u>Percentage (N=35)*</u>
Worker must pay for child care while working	62.9%
Worker does not have to pay for child care while working	37.1

\*Includes only female workers who have children under six whom they support financially living in their home now.

Table 5.14-Influence of Children on Worker's Hours On Job

Would you work any more hours than you do now if there were a good day-care center available to you at prices you could afford?

<u>Work hours with day-care center available</u>	<u>Percentage (N = 287)*</u>
Worker would work more hours if a good day-care center was available	7.7%
A good day-care center would not influence worker's hours	92.3

\*Includes only workers who have children under six whom they support financially and who are living in their home now.

Table 5.15-Influence of Children on Female Workers' Hours on Job

Would you work any more hours than you do now if there were a good day-care center available to you at prices you could afford?

<u>Work hours with day-care center available</u>	<u>Percentage (N = 34)*</u>
Worker would work more hours if a good day-care center was available	20.6%
A good day-care center would not influence worker's hours	79.4

\*Includes only female workers who have children under six whom they support financially and who are living in their home now.



Table 5.16-Additional Fringe Benefits Desired

Are there any other fringe benefits that you're not getting now that you'd like to be getting?

<u>Fringe benefit desired</u>	<u>Percentage (N=1309)*</u>
Worker desires one or more additional benefits	44.7%
Worker does not desire any additional benefits	55.3

\*Excludes self-employed workers

Table 5.17-Problems with Fringe Benefits - Types of Problems

Which one (fringe) benefit you're not getting now would you most like to be getting?

<u>Fringe benefit</u>	<u>Percentage of benefits mentioned* (Total number of benefits mentioned=576)</u>
Health, medical insurance (excluding specific reference to dental insurance)	26.6%
Retirement program or pension plan	24.8
Sick leave with pay	10.4
Profit sharing	5.4
Life insurance	4.2
Dental care or dental insurance	4.0
Paid vacations	3.6
Paid holidays	3.3
Stock options	2.6
Maternity leave	1.2
Bonuses (eg. annual bonus, Christmas bonus)	1.2
Discounts on or free merchandise or service	1.2
Discounts on or free meals	1.0

\*These benefits were reported by 576 workers. Percentages do not add to 100%, since 60 miscellaneous fringe benefits are included in the total number.

Table 5.18 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups \*

Problem Area: Inadequate Fringe Benefits

	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
<b>a. Sex</b>					
Men	809	46.5%	370	2.4	41.8% (155)
Women	499	41.7%	208	2.4	45.6 (95)
	$X^2 = 2.870; df = (1); ns$				
<b>b. Race</b>					
White	1149	44.6%	506	2.4	41.7% (211)
Black	143	44.8%	65	2.6	52.3 (34)
	$X^2 = .001; df = (1); ns$				
<b>c. Age</b>					
20 or under	93	29.0%	27	2.4	44.4% (12)
21-29	315	47.6%	148	2.4	41.9 (62)
30-44	419	49.4%	209	2.3	35.0 (73)
45-54	275	46.5%	124	2.5	50.8 (63)
55-64	169	36.7%	61	2.6	52.5 (32)
65 and over	32	34.4%	10	3.1	80.0 (8)
	$X^2 = 20.183; df = (5); p < .01$				
	$F = 0.226; df = (1, 576); ns$				
	$F = 2.959; df = (1, 569); ns$				
	$F = 2.119; df = (5, 573); ns$				

**Table 5.18 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups \***

Problem area: <u>Inadequate Fringe Benefits</u>	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
<u>d. Education</u>					
None	3	66.7%	2	2.5	50.0% (1)
Some grade school	98	41.8	41	3.0	65.8 (27)
Completed grade school	102	49.0	49	2.7	57.2 (28)
Some high school	220	44.1	97	2.6	51.5 (50)
High school diploma	479	44.7	213	2.3	41.3 (88)
Some College	217	44.2	94	2.3	38.3 (36)
College degree	101	46.5	46	2.1	28.2 (13)
Graduate or professional	88	43.2	37	1.9	18.9 (7)
					F=6.117; df=(7); p<.01

$\chi^2=1.951$ ;  $df=(7)$ ; ns

Table 5.18. Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups \*

Problem Area: Inadequate Fringe Benefits		Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
<u>e. Self-employment status</u>						
Self employed						
Wage-and-salary						
Comparison not relevant for these subgroups in this problem area.						
<u>f. Industry</u>						
Agriculture, forestry, fisheries	25	48.0%	12	2.6	58.3%	(7)
Mining	22	59.1	13	2.6	53.9	(7)
Contract construction	76	56.6	42	2.6	52.4	(22)
Manufacturing	366	40.4	147	2.4	42.8	(63)
Transportation, communication, electric, gas, sanitary services	86	38.4	34	2.5	38.2	(13)
Wholesale and retail trade	240	49.2	119	2.4	43.7	(52)
Finance, insurance, real estate	63	38.1	24	2.1	25.0	(6)
Services	338	43.5	145	2.4	42.1	(61)
Government	79	49.4	43	2.3	44.2	(19)

$X^2=14.318$ ;  $df=(8)$ ; ns

$F=0.789$ ;  $df=(8,570)$ ; ns

Table 5:18 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups \*

Problem Area: Inadequate Fringe Benefits

g. Occupation	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
Professional, technical, managerial	307	40.7%	123	2.0	25.2% (31)
Clerical and sales	316	44.3	138	2.2	36.2 (50)
Service	168	47.6	81	2.8	64.2 (52)
Farming fisheries, forestry	27	51.9	14	2.4	50.0 (7)
Processing	26	38.5	10	2.5	50.0 (5)
Machine trades	110	50.0	54	2.5	46.3 (25)
Bench work	86	48.8	41	2.4	43.9 (18)
Structural work	136	43.4	59	2.6	49.1 (29)
					F=5.951; df=(7,512); p<.01

h. Blue-collar versus white-collar

White-collar	615	42.3%	256	2.1	31.7% (81)
Blue-collar	669	46.6	309	2.6	51.8 (160)
					F=32.666; df=(1,563); p<.01

\* Excludes self-employed workers

Table 5.19 Outcome Measures in Relation to Adequacy of Worker's Fringe Benefits \*

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures						"Content Free"
		Jobsat '70	Comfort	Challenge	Pay	Co-worker Relations	Resources	
Whether worker wants additional fringe benefits								
1. Wants additional benefits	577	3.16	3.07	3.19	2.81	3.36	3.39	3.43
2. Does not want additional benefits	716	3.28	3.21	3.21	3.26	3.46	3.47	3.66
Eta		.12	.12	.01	.27	.07	.07	.12
I		INAP	INAP	INAP	INAP	INAP	INAP	INAP
F		20.72	18.93	.27	99.78	6.54	5.75	20.57
df		(1,1291)	(1,1290)	(1,1291)	(1,1289)	(1,1280)	(1,1288)	(1,1306)
P		.001	.001	n.s.	.001	.05	.05	.001

167

Characteristic of worker or worker's job	n	Mental Health Outcome Measures					Zest	Performance Debilitation	Life Satisfaction
		Somatic Complaints	Depression	Job-related Tension	Depression	Zest			
Whether worker wants additional fringe benefits									
1. Wants additional benefits	577	1.90	2.13	2.12	2.00	3.58	2.17	2.06	
2. Does not want additional benefits	716	1.85	2.00	1.95	.12	3.63	2.11	2.38	
Eta		.05	.12	.12	INAP	.05	.05	.14	
I		INAP	INAP	INAP	INAP	INAP	INAP	INAP	
F		2.79	18.44	19.89	18.44	3.03	3.51	28.40	
df		(1,1289)	(1,1282)	(1,1307)	(1,1282)	(1,1288)	(1,1279)	(1,1307)	
P		n.s.	.001	.001	.001	n.s.	n.s.	.001	

152

\*Excludes self-employed workers

Table 5.20 Wage Garnishment

In the last three years have your wages ever been garnisheed or assigned?

<u>Garnishment</u>	<u>Percentage (N = 1366)*</u>
Workers' wages were garnisheed or assigned	1.9%
Workers' wages were never garnisheed or assigned	98.1

\*Includes only workers who at some time in the last three years were other than self-employed.

Table 5.21 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups \*

Problem Area: Wage Garnishment or Assignment

	<u>Number of workers upon which percentage is based</u>	<u>Percentage of workers reporting one or more problems in each area</u>	<u>Number of workers upon which severity ratings are based</u>	<u>Average severity</u>	<u>Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"</u>
<u>a. Sex</u>					
Men	857	2.1%	17	2.9	64.7% (11)
Women	508	1.6	8	3.6	87.5 (7)
	$X^2 = .471$ ; $df = (1)$ ; ns				
<u>b. Race</u>					
White	1198	1.8%	20	3.1	70.0% (14)
Black	150	2.7	4	3.5	100.0 (4)
	$X^2 = .611$ ; $df = (1)$ ; ns				
<u>c. Age</u>					
20 or under	96	0.0%	0	-	(0)
21-29	326	4.0	12	3.1	66.7% (8)
30-44	440	1.6	7	2.9	71.5 (5)
45-54	289	2.1	6	3.5	83.4 (5)
55-64	175	0.0	0	-	(0)
65 and over	34	0.0	0	-	(0)
	$X^2 = 13.720$ ; $df = (5)$ ; $p < .05$				
				$F = 0.646$	$df = (2, 22)$ ; ns



Table 5.21 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups \*  
Problem Area: Wage Garnishment or Assignment

<u>d. Education</u>	<u>Number of workers upon which percentage is based</u>	<u>Percentage of workers reporting one or more problems in each area</u>	<u>Number of workers upon which severity ratings are based</u>	<u>Average severity</u>	<u>Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"</u>
None	4	0.0%	0	-	(0)
Some grade school	103	4.9	5	3.6	(4)
Completed grade school	103	1.9	2	2.5	(1)
Some high school	234	3.8	9	3.2	(8)
High school diploma	499	1.4	7	3.3	(5)
Some college	228	0.4	0	-	(0)
College degree	105	1.9	2	1.5	(0)
Graduate or professional	89	0.0	0	-	(0)

$\chi^2=14.619$ ;  $df=(7)$ ;  $p<.05$

$F=2.169$ ;  $df=(4,20)$ ; ns



Table 5.21 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups \*

Problem Area: Wage Garnishment or Assignment

	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
--	--	---	---	------------------	---

e. Self-employment status

Self employed

Wage-and-salary

Comparison not relevant for these subgroups in this problem area.

f. Industry

Agriculture, forestry, fisheries	19	5.3%	1	4.0	100.0%	(1)
Mining	15	0.0	0	-	-	(0)
Contract construction	38	5.3	1	4.0	100.0	(1)
Manufacturing	173	0.0	0	-	-	(0)
Transportation, communication, electric, gas, sanitary services	41	0.0	0	-	-	(0)
Wholesale and retail trade	102	2.0	2	2.0	50.0	(1)
Finance, insurance, real estate	29	0.0	0	-	-	(0)
Services	143	0.0	0	-	-	(0)
Government	47	2.1	1	4.0	100.0	(1)

$\chi^2=16.254$   $df=(8)$ ;  $p<.05$

F test not applicable to this comparison

Table 5.21 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups \*

Problem Area: Wage Garnishment or Assignment	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
g. Occupation **					
Professional, technical managerial	161	0.0%	0	-	(0)
Clerical and sales	136	1.5	2	2.0	(1) 50.0%
Service	65	1.5	1	4.0	(1) 100.0
Farming, fisheries, forestry	21	9.5	1	4.0	(1) 100.0
Processing	15	0.0	0	-	(0)
Machine trades	53	0.0	0	-	(0)
Bench work	35	0.0	0	-	(0)
Structural work	65	1.5	1	4.0	(1) 100.0
					F test not applicable to this comparison
h. Blue-collar versus white-collar	194	0.7%	2	2.0	(1) 50.0%
White-collar	302	0.7%	2	4.0	(2) 100.0
Blue-collar					F=4.000; df=(1,2); ns

\* Excludes workers who had been exclusively self-employed for the past three years.

\*\*Excludes workers who have changed jobs at least once in the last three years.

Table 5.22 Outcome Measures in Relation to Wage Garnishment \*

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures					Resources	Co-worker Relations	"Content Free"
		JobSat '70	Comfort	Challenge	Pay	Pay			
1. Yes	26	3.03	2.97	2.94	2.56	3.35	3.41	2.86	
2. No	1323	3.24	3.15	3.23	3.06	3.42	3.43	3.57	
Eta		.06	.04	.06	.08	.01	.05	.10	
F		INAP	INAP	INAP	INAP	INAP	INAP	INAP	
df		4.50	2.35	5.00	8.96	.27	.04	15.30	
p		(1,1347)	(1,1346)	(1,1347)	(1,1343)	(1,1326)	(1,1344)	(1,1363)	
		.05	n.s.	.05	.01	n.s.	n.s.	.001	

Characteristic of worker or worker's job	n	Mental Health Outcome Measures					Performance Debilitation	Life Satisfaction
		Somatic Complaints	Depression	Zest	Job-related Tension	Job Satisfaction		
1. Yes	26	1.98	2.28	3.33	2.23	2.42	158	
2. No	1323	1.88	2.05	3.62	2.14	3.25	158	
Eta		.02	.05	.08	.02	.11	.11	
F		INAP	INAP	INAP	INAP	INAP	INAP	
df		.87	4.01	8.26	.48	.48	15.56	
p		(1,1345)	(1,1338)	(1,1344)	(1,1335)	(1,1335)	(1,1363)	
		n.s.	.05	.01	n.s.	n.s.	.001	

\* Excludes workers who had been exclusively self-employed for the past three years

Table 5.23--Problems with Failure to Receive Wages (Excluding Garnishment)

Other than garnishment or assignment, have you at any time in the last three years had any trouble getting your wages paid in full, or on time, or regularly?

<u>Wage problem</u>	<u>Percentage (N=1364)*</u>
Worker reports a problem in getting wages	5.6%
Worker does not report a problem in getting wages	94.4

\*Includes only workers who at some time in the last three years were other than self-employed.

Table 5.24--Problems with Failure to Receive Wages - Types of Problems

What was the trouble you had in getting your wages?

<u>Type of problem</u>	<u>Percentage of problems of each type*</u> <u>(Total number of problems reported=104)</u>
Problem in getting wages on time. (Problems involving <u>one</u> instance of worker receiving his pay, but receiving it <u>late</u> .)	41.3%
Frequent problems <del>in</del> getting wages. (Problems involving recurring instances of worker receiving his pay either late, or in less than the full amount, or both.)	33.7
Problem in getting wages in full. (Problems involving <u>one</u> instance of worker receiving less than the full pay due him.)	25.0

\*These 104 problems were reported by 77 workers.

Table 5.25 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups \*

Problem Area: Failure to Receive Wages

	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
<b>a. Sex</b>					
Men	856	6.7%	52	2.3	38.5% (20)
Women	508	3.9	20	2.8	55.0 (11)
		$\chi^2=4.434$ ; $df=(1)$ ; $p<.05$		$F=2.442$ ; $df=(1,70)$ ; ns	
<b>b. Race</b>					
White	1197	5.6%	63	2.4	42.9% (27)
Black	150	6.7	9	2.8	44.4 (4)
		$\chi^2=.283$ ; $df=(1)$ ; ns		$F=1.067$ ; $df=(1,70)$ ; ns	
<b>c. Age</b>					
20 or under	96	13.5%	13	2.8	51.6% (7)
21-29	326	10.1	32	2.3	37.5 (12)
30-44	442	3.4	11	2.3	36.4 (4)
45-54	287	2.8	8	2.6	50.0 (4)
55-64	173	3.5	6	2.2	33.3 (2)
65 and over	34	5.9	2	3.0	50.0 (1)
		$\chi^2=33.517$ ; $df=(5)$ ; $p<.001$		$F=0.817$ ; $df=(5,66)$ ; ns	

Table 5.25 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups \*

Problem Area: Failure to Receive Wages

d. Education	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
None	4	0.0%	0	-	(0)
Some grade school	101	1.0	1	4.0	100.0% (1)
Completed grade school	103	5.8	6	2.0	16.7 (1)
Some high school	235	5.1	12	3.0	66.7 (8)
High school diploma	498	5.8	28	2.2	28.5 (8)
Some college	228	6.6	13	2.6	53.9 (7)
College degree	105	8.6	9	2.9	66.6 (6)
Graduate or professional	89	5.6	3	1.3	0.0 (0)

$F=3.022$ ;  $df=(5, 65)$ ;  $p<.05$

$\chi^2 = 6.569$ ;  $df=(7)$ ; ns

Table 5.25 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups \*

Problem Area: Failure to Receive Wages

e. Self-employment status	f. Industry **	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
Self employed						
Wage-and-salary						
	Agriculture, forestry, fisheries	19	15.8%	3	1.7	0.0 (0)
	Mining	14	0.0	0	-	(0)
	Contract construction	38	5.3	2	4.0	100.0% (2)
	Manufacturing	171	0.6	1	1.0	0.0 (0)
	Transportation, communication, electric, gas, sanitary services	41	4.9	2	1.5	0.0 (0)
	Wholesale and retail trade	102	0.0	0	-	(0)
	Finance, insurance, real estate	29	6.9	1	2.0	0.0 (0)
	Services	143	4.9	6	1.8	16.7 (1)
	Government	46	6.5	3	2.3	33.3 (1)

$\chi^2=21.681$ ;  $df=(8)$ ;  $p<.01$

$F=1.118$ ;  $df=(3,8)$ ; ns





Table 5.25 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups\*

Problem Area: Failure to Receive Wages

g. Occupation **	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
Professional, technical, managerial	160	1.9%	3	1.5	33.3 (1)
Clerical and sales	135	3.0	3	2.3	33.3 (1)
Service	65	6.2	4	2.0	0.0 (0)
Farming, fisheries, forestry	21	19.0	4	1.7	25.0 (1)
Processing	15	0.0	-	-	0.0 (0)
Machine trades	53	1.9	1	1.0	0.0 (0)
Bench work	35	0.0	-	-	0.0 (0)
Structural work	64	3.1	2	2.5	50.0 (1)
					F=0.526; df=(4,8); ns

h. Blue-collar versus white-collar \*\*

White-collar	292	2.1%	5	2.0	20.0% (1)
Blue-collar	300	3.3	9	2.1	22.2 (2)
					F=0.492; df=(1,10); ns

\* Excludes workers who had been exclusively self-employed for the past three years.

\*\* Excludes workers who have changed jobs at least once in the last three years.

Table 5.26 Outcome Measures in Relation to Wage Problems Other Than Garnishment\*

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures						"Content Free"
		Jobgat '70	Comfort	Challenge	Pay	Co-worker Relations	Resources	
1. Yes	77	3.12	2.93	3.17	3.01	3.31	3.36	3.34
2. No	1271	3.24	3.16	3.22	3.05	3.42	3.44	3.58
Eta		.05	.09	.02	.01	.04	.03	.06
F		INAP	INAP	INAP	INAP	INAP	INAP	INAP
df		3.93	11.04	.40	.19	1.91	1.10	4.88
P		(1,1346)	(1,1345)	(1,1346)	(1,1342)	(1,1325)	(1,1343)	(1,1361)
		.05	.001	n.s.	n.s.	n.s.	n.s.	.05

Characteristic of worker or worker's job	n	Mental Health Outcome Measures					
		Somatic Complaints	Depression	Zest	Performance Debilitation	Life Satisfaction	
1. Yes	1271	1.94	2.11	3.56	2.21	3.04	
2. No	32	1.87	2.05	3.61	2.14	3.25	
Eta		.02	.02	.03	.02	.04	
F		INAP	INAP	INAP	INAP	INAP	
df		.77	.78	1.01	.86	2.80	
P		(1,1344)	(1,1337)	(1,1343)	(1,1334)	(1,1362)	
		n.s.	n.s.	n.s.	n.s.	n.s.	

\*Excludes workers who have been exclusively self-employed for the past three years.

## 6. HEALTH AND SAFETY

Five labor standards areas investigated in the survey concerned detriments to the workers' physical well-being: occupational health and safety hazards, unpleasant physical working conditions, work-related illness or injury, inadequate expense coverage following a work-related illness or injury, and occupational handicaps. The extent to which workers wanted to be protected against 18 different labor standards problems has already been described in Table 4.1. Among all those problems against which workers were most concerned with being protected, becoming ill or injured on their job was regarded by workers as the most important, and their second most important concern was being protected against economic hardships that might result from such an illness or injury. Facing occupational hazards was workers' fifth greatest area of concern, and unpleasant working conditions was ninth.

### HEALTH AND SAFETY HAZARDS

The definitions of what constituted a health and safety hazard in the survey differed considerably from health and safety hazards as reported in current labor statistics. The survey relied upon workers' personal definitions of what constituted hazards rather than first-hand observations of those trained to inspect such conditions. Some hazards may therefore have gone unreported by workers who might have been unaware of some of the potential dangers of the machines or processes with which they worked. Workers might not have been conscious, for example, of shoddy wiring or shoring simply because such defects had not yet created any accidents on

their work-sites. It is more likely, however, that estimates obtained in the present study reflect a greater reporting of dangers than are obtained by conventional inspection methods, since workers may in many cases be less stringent than inspectors in terms of how bad a condition has to be before it can be regarded as truly dangerous. In addition, 16.6 percent of those interviewed did not even have a "workplace" in the usual sense that was suitable for inspection but instead spent much of their workday traveling. A substantial number of the hazards reported were those encountered in the course of such travel. Finally, quite a few of the hazards that were cited involved dangers from other people in otherwise innocuous settings (e.g., dangers of being mugged while tending a shop); such hazards would be difficult to document by inspection techniques.

Problems with health and safety hazards rivaled fringe benefits problems for the unfortunate distinction of being the labor standards area in which workers most frequently reported problems. Overall, 38.3 percent of workers reported facing one or more health or safety hazards on their jobs. Twelve and one-tenth percent were exposed to two such hazards, and another 6.6 percent reported three hazards (the maximum number the worker was asked to describe).

Many of the dangers or unhealthy conditions mentioned were inherent to the job itself (e.g., citations of fire by firemen or of working at great heights by window washers). Table 6.2 shows the relative frequencies of various types of hazards. Inherently dangerous materials, equipment, tools, machines, methods, or procedures of all types accounted for 40.1 percent of the hazards cited. Of the remaining hazards, 7.5 percent were attributable to dangers from other people (e.g., mugging, attacks, and other forms of violence or abuse), 6.9 percent to placement hazards, and 6.0 percent to exposure to communicable diseases.

The frequency of reporting of occupational hazards by various demographic and occupational subgroups is shown in Table 6.3. Health and safety hazards were most frequent in mining, contract construction, agriculture, fisheries, and forestry (Table 6.3f). Not unexpectedly, more men than women and more blue- than white-collar workers faced occupational hazards. What is more interesting, however, is the large absolute percentage of white-collar and women workers (25.4 and 26.4 percent respectively) who reported being exposed to hazards. Occupational hazards were far from being exclusively the problem of the blue-collar worker or of men. An examination of workers' descriptions of the specific types of hazards they faced (Table 6.2) indicates that many that were cited were respectors of neither sex nor collar color: physical violence or abuse from other people, communicable diseases, extremes of temperature or humidity, exposure to the elements, placement hazards, and dangers to which the worker was exposed while traveling as part of his job. The data suggest that increased attention should be paid to health and safety hazards occurring outside of factories or other blue-collar working environments.

The relationships between exposure to occupational hazards and the outcome measures are presented in Table 6.4. Exposure to hazards was most strongly associated with low levels of job satisfaction both in general and on the Comfort and Resources Indices, high job tension, and frequent somatic complaints.

#### UNPLEASANT PHYSICAL WORKING CONDITIONS

Some physical working conditions, while not so bad as to be dangerous or unhealthy, may nevertheless be quite unpleasant or uncomfortable. Estimating the prevalence of workers' problems with such "unpleasant" working conditions explicitly excluded workers who did not have an

identifiable workplace (Table 6.5). Making a generalization about a variety of physical locations which might vary considerably in their quality would have been difficult for many respondents. Moreover, unless one traveled in a cocoon, one was very likely to encounter unpleasant conditions at least occasionally. To have asked the "movers" or "travelers" as to whether they were exposed to any unpleasant conditions in the course of their moves would probably have inflated the percentage of workers reporting these conditions. The statistics in Table 6.6 (and Table 4.2 as well) therefore err in the opposite direction, probably under-counting the actual number of workers who had at times to work in physically unpleasant environments. A large number of workers nevertheless reported being exposed to unpleasant or uncomfortable physical working conditions (Table 6.6). Difficulties with temperature or humidity accounted for a little over a third of all such problems reported (Table 6.7). Crowded or badly arranged work areas constituted the next most frequently mentioned problem, followed by unclean conditions and inadequate, antiquated, or uncomfortable furnishings.

#### WORK-RELATED ILLNESS AND INJURY

Among the labor standards areas investigated, workers assigned the highest priority to being protected against a work-related illness or injury (Table 4.1). The probability that they would ever actually experience such a misfortune was anything but remote since, as Table 6.10 indicates, 12.9 percent of those interviewed reported that during the three-year period prior to their interview they had incurred a work-related illness or injury that was either caused or made more severe by their jobs. Five and one-half percent reported that their illness or injury kept them from working for more than two weeks. Common sprains,

broken bones, bruises, and similar injuries constituted the bulk of the reported misfortunes (Table 6.11). Diseases, including colds and flu, were reported with considerably less frequency. It is interesting to note that 2.4 percent of the problems reported were those in which workers attributed mental disorders or nervous breakdowns to their jobs.

Work-related illnesses and injuries were particularly frequent among poorly educated workers (Table 6.12d) and those in blue-collar occupations (Table 6.12h). The industry groups in which reports of health and safety hazards were most frequent (Table 6.12f) also tends to be those in which work-related illnesses and injuries were most prevalent; the differences among industry groups in terms of frequency of illness or injury were not, however, statistically significant. Curiously, although significantly more men than women reported being exposed to occupational hazards (Table 6.3a) the sexes did not differ in terms of the frequency of their reporting an illness or injury (Table 6.12a).

#### INADEQUATE EXPENSE COVERAGE FOLLOWING ILLNESS OR INJURY

A subsequent misfortune that may befall a person afflicted by a work-related illness or injury is that during the time he is away from work he may have his earnings reduced and still have to meet medical and living expenses. Table 6.14 indicates how well a worker's "insurance" (in a broad sense) covered his expenses while he was absent from work with a work-related illness or injury. Although 69.0 percent of these workers had "most or all" of their medical expenses covered by a personal, company or governmental insurance or program, only 34.6 percent reported that they had "most or all" of their living expenses covered by an insurance or a program. Nineteen percent reported no medical payment coverage at all, and 46.9 percent reported receiving no living expense assistance.

Table 6.15, derived from the data on which Table 6.14 is also based, further shows that 68.3 percent of all workers who within the past three years were kept off the job for two weeks or more due to work-related illness or injury had less than "most or all" of either medical or living expenses covered. The occupational and demographic distribution of this combined coverage problem is shown in Table 6.16. The data indicated that inadequate coverage was most likely to occur among women and among the poorly educated. The latter group appeared doubly jeopardized by work-related illness or injury and its economic sequelae. Not only were the poorly educated more likely than others to incur such an illness or injury (Table 6.12d), but when such a problem did occur they were less likely than others to be protected by insurances or other assistance programs to relieve their ensuing economic difficulties.

A further hardship that may result from being kept away from work due to a work-related illness or injury is that upon recovery a worker may not be able to return to his former job. Of those in the sample who had thus been off work for two weeks or more, 14.3 percent did not return to their old jobs upon recovery (Table 6.17). On a less gloomy note, the table further indicates that of the latter group, over half actually secured better jobs than they held before becoming ill or injured--a statement which is, however, drastically limited by the very small number of cases involved.

#### OCCUPATIONAL HANDICAPS

Nine and one-tenth percent of the workers in the sample admitted to having a physical or nervous handicap that limited the kind of work they did (Table 6.19). Many of these workers further indicated that their handicaps had been caused or made more severe by a job they had held.



Table 6.20 further shows that the most prevalent types of handicaps reported were heart conditions or high blood pressure, followed closely by various types of nervous disorders. Vague types of "back troubles" constituted the third most frequently mentioned handicap. Less frequently mentioned were limitations that more commonly come to mind when one thinks about a "handicapped" worker--visual or auditory impairment and limb damage.

The data on occupational handicaps may, however, incorrectly estimate the true frequency of such problems. There may of course be a tendency for workers not to report less socially acceptable disorders; in this light the comparatively high frequency of reports of nervous disorders is surprising. More important as a source of under-counting of handicaps is that a severely handicapped person may not even have been interviewed since he was very likely not even in the labor force or, if in the labor force, may have been unemployed. On the other hand, the phrasing of the interview's "handicap" question ("Do you have anything you regard as a physical or nervous condition that limits the amount or kind of work you do?") may have induced some over-reporting of handicaps. If every worker had taken the question very literally, nearly everyone would have reported some kind of occupational handicap. Most of us are, for example, physically inadequate to the demands of tight-rope walking or professional football playing.

Physical or nervous handicaps were most frequently reported by white workers (Table 6.21b), older workers (Table 6.21c), poorly educated workers (Table 6.21d), self-employed workers (Table 6.21e), workers in agriculture, fisheries and forestry (Table 6.21f), and blue-collar workers. More than one factor might have contributed to the observed distributions of occupational handicaps. The most obvious is that poorer nutrition and health care among the more disadvantaged workers (as identified by their race or education) may have contributed to the development of handicaps. The second contributing factor might have been the demands of the workers' jobs. Blacks,

the poorly educated, farmers, and blue-collar workers are more likely than others to be in jobs with greater physical demands. These demands might transform into an occupational "handicap" what would in a softer "desk job" only be regarded as a slight physical limitation or inconvenience. It is also possible to speculate about the selection factors that might be operating in creating the high concentration of "handicapped" workers among blacks and the self-employed. Discriminated against in the past because of their handicaps, some people may, for example, have been compelled to attempt to forge careers as self-employed workers. Black workers with occupational handicaps have two strikes against them when seeking employment. Doubly discriminated against and perhaps therefore unemployed, their chances of being selected in the study's sample of employed workers would consequently have been less than that of white handicapped workers. Hence more white workers than blacks in the sample would be likely to have occupational handicaps.

Table 6.1 Health and Safety Hazards

Does your job at any time expose you to what you feel are physical dangers or unhealthy conditions?

<u>Number of dangers or unhealthy conditions</u>	<u>Percentage of workers (N=1531)</u>
Worker mentions <u>no</u> dangers or unhealthy conditions	61.7%
Worker mentions only <u>one</u> danger or unhealthy condition	19.6
Worker mentions only <u>two</u> dangers or unhealthy conditions	12.1
Worker mentions <u>three</u> dangers or unhealthy conditions	6.6

Table 6.2 Health and Safety Hazards -- Types of Problems

What are those dangers or unhealthy conditions?

<u>Type of problem</u>	<u>Percentage of problems of each type*</u> <u>(Total number of problems reported = 917)</u>
<u>Hazardous Job Environment, Procedures or Materials:</u>	
Worker uses inherently dangerous materials (eg. fire, caustic chemicals)	19.2%
Worker uses inherently dangerous equipment, tools, or machines (eg. heavy machinery)	12.5
Worker uses inherently hazardous methods or procedures (eg. working at great heights)	8.4
Worker is exposed to placement hazards (eg. things badly piled, in danger of shifting)	6.9
Worker is exposed to communicable disease	6.0
Worker is exposed to extremes of temperature or humidity	5.8
Worker exposed to materials which are not inherently dangerous but which are hazardous due to amounts of exposure (eg. dust, lint, smog)	5.7

Table 6.2 Health and Safety Hazards -- Types of Problems (continued)

<u>Type of problem</u>	<u>Percentage of problems of each type *</u> <u>(Total number of problems reported = 917)</u>
Worker is exposed to natural hazards (eg. exposure to the elements)	4.6
Worker is exposed to transportation hazards experienced while going to, or from, or around on the job	4.4
Worker is not given enough human or machine help in performing physical activities (eg. lifting heavy materials)	3.8
Worker is exposed to slippery floors or footing (eg. grease or oil on floor)	2.5
Worker experiences poor sanitary conditions while on the job	1.7
Miscellaneous other hazards that worker is exposed to in his job environment, work procedures, or work materials	2.8
<u>Dangers From People or Animals:</u>	
Worker is exposed to violence or abuse from people who are not customers or clients	4.3%
Worker is exposed to violence or abuse from customers or clients	3.2
Worker is exposed to dangers from animals	1.4
<u>Inadequate Maintenance or Protection</u>	
Worker has inadequate training, or there is inadequate practice of safety procedures on the job	2.2
Worker uses inadequately repaired, or defective tools; machines or equipment	2.1
Worker mentions exposure to other inade- quate procedures, equipment, or protection (eg. inadequate protective clothing, shoring, labels, guards on machines)	2.6

\* These 917 problems were reported by 587 workers who mentioned experiencing at least one dangerous or unhealthy condition on their job.

Table 6.3 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups

Problem Area: Health and Safety Hazards

	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
<b>a. Sex</b>					
Men	995	44.6%	746	2.5	44.4% (331)
Women	535	26.4	202	2.5	50.5 (102)
	$\chi^2=49.166$ ; $df=(1)$ ; $p<.001$				
<b>b. Race</b>					
White	1354	38.4%	849	2.5	44.1% (374)
Black	157	36.3	86	2.9	61.7 (53)
	$\chi^2=.263$ ; $df=(1)$ ; ns				
<b>c. Age</b>					
20 or under	97	32.0%	51	2.6	54.9% (27)
21-29	332	44.0	219	2.5	44.7 (98)
30-44	489	39.3	302	2.5	41.4 (175)
45-54	339	38.9	230	2.6	50.8 (116)
55-64	212	30.7	117	2.4	43.6 (51)
65 and over	55	36.4	32	2.7	50.0 (16)
	$\chi^2=11.718$ ; $df=(5)$ ; $p<.05$				
	$F=1.320$ ; $df=(5,950)$ ; ns				

Table 6.3 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups

Problem Area: Health and Safety Hazards

Education	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"	
None	7	42.9%	5	2.6	60.0%	(3)
Some grade school	112	43.8	81	2.8	59.2	(48)
Completed grade school	123	42.3	96	2.4	41.6	(40)
Some high school	269	40.5	178	2.6	47.7	(85)
High school diploma	553	38.7	344	2.5	42.5	(146)
Some college	253	38.7	157	2.6	51.6	(81)
College degree	111	27.0	44	2.5	45.5	(20)
Graduate or professional	102	30.4	46	2.2	26.0	(12)

$X^2=11.579$ ;  $df=(7)$ ; ns

$F=1.639$ ;  $df=(7)$ ; ns

Table 6.3 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups;

Problem Area: Health and Safety Hazards

	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers-reporting the problem who describe it as "sizeable or great"
<b>e. Self-employment status</b>					
Self employed	205	42.9%	161	2.5	38.5% (62)
Wage-and-salary	1326	37.6	790	2.9	47.3 (373)
				F=1.486; df=(1,951); ns	
<b>f. Industry</b>					
Agriculture, forestry, fisheries	67	58.2%	72	2.4	41.6% (30)
Mining	22	81.8	40	2.6	52.5 (21)
Contract construction	124	60.5	133	2.4	38.3 (51)
Manufacturing	379	39.3	229	2.6	48.4 (111)
Transportation, communication, electric, gas, sanitary services	95	49.5	80	2.6	50.0 (40)
Wholesale and retail trade	277	28.2	125	2.6	43.5 (54)
Finance, insurance, real estate	75	18.7	21	2.9	76.1 (16)
Services	398	32.7	195	2.5	41.5 (81)
Government	94	38.3	56	2.6	46.4 (26)
				F 1.057; df = (8,040); ns	

$\chi^2 = 89.538$ ;  $df = (8)$ ;  $p < .001$

Table 6.3 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups

Problem Area: Health and Safety Hazards

Occupation	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
Professional, technical, managerial	393	31.3%	178	2.4	38.2% (68)
Clerical and sales	334	21.3	105	2.5	43.8 (46)
Service	185	39.5	114	2.7	54.4 (62)
Farming, fisheries, forestry	68	55.9	72	2.4	43.0 (31)
Processing	28	53.6	25	1.9	64.0 (16)
Machine trades	120	50.8	98	2.4	38.8 (38)
Bench work	96	35.4	51	2.4	51.0 (26)
Structural work	159	53.5	162	2.5	43.2 (70)

$\chi^2=83.999$ ;  $df=(7)$ ;  $p<.001$

$F=1.553$ ;  $df=(7,804)$ ; ns

h. Blue-collar versus white-collar

White-collar	753	25.4%	280	2.5	40.8% (114)
Blue-collar	711	49.9	596	2.7	48.3 (288)

$\chi^2=94.759$ ;  $df=(1)$ ;  $p<.001$

$F=1.734$ ;  $df=(1,876)$ ; ns



Table 6.4 Outcome Measures in Relation to Exposure to health and Safety Hazards

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures							"Content Free"
		Jobgat '70	Comfort	Challenge	Pay	Co-worker Relations	Resources		
1. Exposed	577	3.15	3.01	3.21	2.94	3.44	3.32	2.42	
2. Not exposed	932	3.30	3.22	3.29	3.08	3.45	3.50	2.69	
Eta		.14	.18	.06	.08	.08	.14	.14	
I		INAP	INAP	INAP	INAP	INAP	INAP	INAP	
F		32.82	48.50	5.17	10.16	8.58	31.87	31.76	
df		(1,1507)	(1,1505)	(1,1507)	(1,1499)	(1,1468)	(1,1492)	(1,1525)	
P		.001	.001	.05	.01	.01	.001	.001	

Characteristic of worker or worker's job	n	Mental Health Outcome Measures							Life Satisfaction
		Job-related Tension	Somatic Complaints	Depression	Zest	Performance Debilitation			
1. Exposed	577	2.17	2.00	2.10	3.56	2.20	2.15		
2. Not exposed	932	1.93	1.82	2.02	3.64	2.13	2.33		
Eta		.16	.15	.07	.08	.06	.08		
I		INAP	INAP	INAP	INAP	INAP	INAP		
F		42.60	33.03	6.59	8.76	4.74	10.19		
df		(1,1529)	(1,1507)	(1,1500)	(1,1506)	(1,1497)	(1,1529)		
P		.001	.001	.05	.01	.05	.01		



Table 6.5--Place Where Worker Spends Most of His Working Time

Is there any one place or building where you spend most of your working time, or do you work in several different places? Do you spend much time in the course of your work traveling around the neighborhood or the community?

<u>Place where working time is spent</u>	<u>Percentage (N = 1531)</u>
Worker spends most of his time in one place	71.8%
Worker spends most of his time in several places but does <u>not</u> spend much time traveling around the neighborhood or community	11.6
Worker spends much time traveling around the neighborhood or the community	16.6

Table 6.6--Percentage of Workers with Problems Concerning Unpleasant Physical Working Conditions

Are the physical conditions at the place where you spend most of your working time as pleasant as you would like or would you like them to be better?

	<u>Percentage of Workers (N = 1047)*</u>
Worker reports unpleasant conditions	33.2
Worker reports no unpleasant conditions	66.8

\*Includes only workers who spend most of their time working in one building or place.

**Table 6.7 -- Problems with Unpleasant Physical Working Conditions - Types of Problems**

In what way aren't they (the physical conditions at the place where you spend most of your working time) as comfortable or pleasant as you'd like?

<u>Type of problem</u>	<u>Percentage of problems of each type*</u> <u>(Total number of problems reported = 577)</u>
Too cold	17.0%
Too hot	16.6
Work areas too crowded or badly arranged	14.7
Unclean	10.2
Inadequate, antiquated, or uncomfortable furnishings	8.8
Inadequate restroom, eating, or lounging facilities	6.1
Inadequate ventilation (with no citation of noxious vapors)	4.3
Inadequate equipment for worker to do his job	3.6
Inadequate lighting	3.5
Noisy	2.9
Exposure to the weather	2.3
Noxious vapors (eg. dangerous gases, fumes)	2.1
Lack of windows; worker can't see out	1.2
Inadequate, unsafe, slippery flooring	1.0
Miscellaneous problems with temperature or humidity	2.5

\*These 577 problems were reported by 337 workers. Percentages do not add to 100% since 18 miscellaneous problems are included in the total number.

Table 6.8 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups \*

Problem Area: Unpleasant Physical Conditions

	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
<b>a. Sex</b>					
Men	573	31.6%	182	2.4	32.4% (59)
Women	473	35.1%	167	2.5	43.1 (72)
	$X^2=1.438$ ; $df=(1)$ ; ns				
<b>b. Race</b>					
White	917	32.5%	301	2.4	34.8% (105)
Black	113	36.3%	40	2.8	52.5 (21)
	$X^2=0.653$ ; $df=(1)$ ; ns				
<b>c. Age</b>					
20 or under	73	42.5%	33	2.0	15.2% (5)
21-29	234	38.9%	93	2.5	40.9 (38)
30-44	326	36.2%	115	2.4	37.4 (43)
45-54	217	26.7%	59	2.6	45.7 (27)
55-64	149	27.5%	41	2.4	36.6 (15)
65 and over	42	21.4%	9	2.3	44.4 (4)
	$X^2=16.372$ ; $df=(5)$ ; $p<.01$				
	$F=2.302$ ; $df=(5,344)$ ; $p<.05$				

Table 6.8 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups\*

Problem Area: Unpleasant Physical Conditions

	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
<u>d. Education</u>					
None	4	50.0%	2	2.5	50.0% (1)
Some grade school	72	26.4	19	2.8	42.6 (10)
Completed grade school	74	35.1	25	2.7	52.0 (13)
Some high school	172	33.1	57	2.2	28.0 (16)
High school diploma	383	34.5	132	2.4	36.4 (48)
Some college	175	28.6	53	2.4	33.9 (18)
College degree	88	39.8	35	2.5	45.7 (16)
Graduate or professional	79	34.2	27	2.3	37.0 (10)
					F=1.944; df=(7,342); ns
					X <sup>2</sup> =5.851; df=(7); ns



Table 6.8 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups \*

Problem Area: Unpleasant Physical Conditions

	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
e. Self-employment status					
Self employed	104	17.3%	18	2.3	27.8% (5)
Wage-and-salary	943	35.0%	332	2.4	38.2 (127)
				F=0.640; df=(1,348); ns	

f. Industry

Agriculture, forestry, fisheries	17	11.8%	2	1.5	0.0% (0)
Mining	7	57.1	4	2.3	25.0 (1)
Contract construction	27	22.2	6	2.7	33.3 (2)
Manufacturing	310	39.4	121	2.4	35.5 (43)
Transportation, communication, electric, gas, sanitary services	40	35.0	14	2.6	42.9 (6)
Wholesale and retail trade	211	33.2	70	2.4	30.0 (21)
Finance, insurance, real estate	56	37.5	22	2.4	40.9 (9)
Services	320	29.4	95	2.5	47.3 (45)
Government	59	25.4	16	2.4	31.3 (5)
				F=0.812; df=(8,341); ns	

X<sup>2</sup>=13.205; df=(1); p<.001

X<sup>2</sup>=16.329; df=(8); p<.05



Table 6.8 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups \*

Problem Area: Unpleasant Physical Conditions		Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
<b>g. Occupation</b>						
Professional, technical, managerial	300	31.3%	94	2.4	38.3%	(36)
Clerical and sales	261	32.6	86	2.3	32.6	(28)
Service	138	27.5	40	2.6	50.0	(20)
Farming, fisheries, and forestry	17	11.8	2	1.5	0.0	(0)
Processing	22	45.5	10	2.6	40.0	(4)
Machine trades	94	42.6	41	2.4	34.2	(14)
Bench work	86	36.0	29	2.5	48.2	(14)
Structural work	63	33.3	21	2.5	28.6	(6)
				F=1.231; df=(7,315); ns		
<b>h. Blue-collar versus white-collar</b>						
White-collar	587	30.3%	179	2.4	36.4%	(65)
Blue-collar	442	37.8	168	2.5	39.9	(67)
				F=1.460; df=(1,345); ns		

\*Includes only workers who spend most of their time working in one building or place



Table 6.9 Outcome Measures in Relation to Unpleasant Physical Working Conditions \*

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures						"Content Free"
		Jobsat '70	Comfort	Challenge	Pay	Co-worker Relations	Resources	
1. Pleasant	688	3.31	3.25	3.30	3.10	3.46	3.52	3.69
2. Not pleasant	344	3.10	2.97	3.12	2.93	3.44	3.28	3.32
Eta		.20	.22	.13	.09	.08	.19	.19
F		44.31	54.32	16.55	8.37	7.33	39.96	38.13
df		(1,1030)	(1,1027)	(1,1029)	(1,1024)	(1,1009)	(1,1024)	(1,1042)
p		.001	.001	.001	.01	.01	.001	.001

Mental Health Outcome Measures

Characteristic of worker or worker's job	n	Mental Health Outcome Measures					
		Job-related Tension	Somatic Complaints	Depression	Zest	Performance Debilitation	Life Satisfaction
1. Pleasant	688	1.93	1.84	2.01	3.64	2.14	3.44
2. Not pleasant	344	2.24	1.99	2.24	3.53	2.26	3.03
Eta		.20	.12	.18	.10	.09	.14
F		44.45	14.53	35.94	11.44	8.94	19.50
df		(1,1045)	(1,1027)	(1,1023)	(1,1027)	(1,1020)	(1,1045)
p		.001	.001	.001	.001	.01	.001

\* Includes only workers who spend most of their time working in one building or place



Table 6.10 -- Work Related Illness or Injury

Within the last three years have you had any illness or injuries you think were caused or made more severe by any job you had during this period? Did it keep you away from your job for more than two weeks?

	<u>Percentage (N= 1531)</u>
Worker reports no illness or injury severe by job	87.1%
Worker reports one or more illness or injury which was caused or made more severe by job but which did <u>not</u> keep worker from working for more than two weeks	8.7
Worker reports one or more illness or injury which was caused or made more severe by job and which kept worker from working for more than two weeks	4.2

Table 6.11 -- Work-related Illness or Injury - Types of Illnesses or Injuries

Would you tell me what these illnesses or injuries were?

<u>Type of illness or injury</u>	<u>Percentage of illness or injury (Total number of illnesses or injuries N=253)*</u>
Sprains, strains, twists, and back injuries	14.2%
Fractures, breaking of bones	11.1
A contagious or infectious disease on the job; cold; flu	10.7
Cuts, lacerations, punctures, scrapes, and other wounds	10.3
Injuries worker reports resulting from being hit by/or falling against a non-sharp object (excluding contusions, bruises, and fractures)	8.7
Organ disorders; bladder infection; hemorrhoids, ulcers, pneumonia	7.5
Hernia, rupture	3.6
Miscellaneous injuries which worker reports resulting from movement or physical strain	3.2
Heart attack and hypertension	3.2
Fatigue, exhaustion	2.8
Mental disorders, nervous breakdowns	2.4

Table 6.11--Work-related Illness or Injury - Types of Illnesses or Injuries (continued)

Type of illness or injury	Percentages of illness or injury (Total number of illnesses or injuries N=253)*
Contusions, bruises	2.4
Inflammation or irritation of joints or muscles	2.0
Dislocations	1.6
Freezing, frostbite, or other effects of exposure to low temperature	1.2
Systemic poisoning; includes chemical or drug poisoning, metal poisoning, poisoning from fumes; (excludes effects of chemicals, skin surface irritations, or infected wounds)	1.2
Burns or scalds from heat	.8
Miscellaneous and other burns not specified as to type	.8
Dermatitis: rash, skin or tissue inflammation, boils	.8
Strokes	.8
Worker's job aggravated, but did not cause an illness or injury contracted outside of job	.8
Burns from chemicals	.4
Radiation burns	.4
Brain, cerebral concussion	.4
Poisoning from breathing of toxic dusts	.4
Poisoning; causal agent not specified	.4
Asphyxia, strangulation	.4
Accidents with multiple injuries, no one injury or type of injury predominant	.4
Worker contracted a disease which he cannot attribute directly to work, but thinks it "might" be work related	.4

\*These 253 illnesses and injuries were reported by 197 workers. Percentages do not add to 100% since 19 miscellaneous problems are included in the total number.

Table 6.12 Frequency and

Problem Area: Work-rela

Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"

Average severity

Number of workers upon which severity ratings are based

Percentage of workers reporting one or more problems in each area

Number of workers upon which percentage is based

a. Sex

Men  
Women

996  
534  
 $\chi^2=0.149$ ;  $df=(1)$ ; ns

b. Race  
White  
Black

179  
15  
13.2%  
9.6  
 $\chi^2=1.690$ ;  $df=(1)$ ; ns

c. Age  
20 or under  
21-29  
30-44  
45-54  
55-64  
65 and over

97  
332  
488  
340  
212  
55  
12.4%  
13.0  
13.3  
12.9  
13.7  
7.3  
 $\chi^2=1.763$ ;  $df=(5)$ ; ns

131  
65  
13.1%  
12.4  
 $F=0.044$ ;  $df=(1,194)$ ; ns

179  
15  
2.8  
2.9  
 $F=0.171$ ;  $df=(1,192)$ ; ns

11  
43  
66  
44  
29  
4  
2.5  
2.7  
2.8  
2.9  
2.8  
3.5  
 $F=0.797$ ;  $df=(5,191)$ ; ns



Table 6.12 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups

Problem Area: Work-related Illness or Injury

d. Education	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based		Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
			workers upon which severity ratings are based	workers upon which severity ratings are based		
None	7	28.6%	2	2	3.5	100.0% (2)
Some grade school	112	13.4	15	15	2.9	60.0 (9)
Completed grade school	123	17.9	22	22	2.9	59.1 (13)
Some high school	268	16.8	45	45	2.9	55.6 (25)
High school diploma	555	11.4	62	62	2.8	62.9 (39)
Some college	253	13.8	36	36	2.4	41.7 (15)
College degree	110	8.2	9	9	2.3	33.3 (3)
Graduate or professional	102	5.9	6	6	3.3	83.3 (5)

$\chi^2 = 15.943$ ;  $df = (7)$ ;  $p < .05$        $F = 2.068$ ;  $df = (7, 189)$ ;  $n.s.$

Table 6.12 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups

Problem Area: Work-related Illness or Injury

	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
<u>e. Self-employment status *</u>					
Self employed	163	14.1%	25	2.6	52.1% (12)
Wage-and-salary	602	13.3	104	2.8	55.6 (45)
		$\chi^2=0.021$ ; $df=(1)$ ; ns			$F=1.606$ ; $df=(1,140)$ ; n.s.
<u>f. Industry*</u>					
Agriculture, forestry, fisheries	54	14.8%	8	2.7	62.5% (5)
Mining	15	26.7	4	2.8	50.0 (2)
Contract construction	69	20.3	14	2.7	57.2 (8)
Manufacturing	17	50.1	27	2.8	48.1 (13)
Transportation, communication, electric, gas, sanitary services	46	17.4	9	3.0	55.5 (5)
Wholesale and retail trade	124	8.1	10	2.5	30.0 (3)
Finance, insurance, real estate	38	15.8	6	3.0	66.6 (4)
Services	85	9.2	17	3.0	70.6 (12)
Government	47	17.0	8	2.4	50.0 (4)
		$\chi^2=12.783$ ; $df=(8)$ ; ns			$F=0.929$ ; $df=(8,131)$ ; ns

Table 6.12 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups

Problem Area: Work-related Illness or Injury

g. Occupation *	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
Professional, technical, managerial	220	9.1%	20	2.8	60.0% (12)
Clerical and sales	146	4.8	7	2.8	56.2 (4)
Service	74	12.2	9	2.8	44.4 (4)
Farming, fisheries, forestry	55	16.4	9	2.7	55.5 (5)
Processing	16	12.5	2	2.7	50.0 (1)
Machine trades	59	20.3	12	2.9	50.0 (6)
Bench work	44	18.2	8	3.3	87.5 (7)
Structural work	76	19.0	16	2.4	43.8 (7)

$X^2=19.283$ ;  $df=(7)$ ;  $p < .01$        $F=0.829$ ;  $df=(7,111)$ ; ns

h. Blue-collar versus white-collar\*

White-collar	391	79.0%	31	2.9	58.0 (18)
Blue-collar	321	19.6	64	2.7	53.1 (34)

$X^2=20.042$ ;  $df=(1)$ ;  $p < .01$        $F=.333$ ;  $df=(1,131)$ ; ns

\* Excludes workers who have changed jobs at least once in the past three years.

Table 6.13 Outcome Measures in Relation to Work-related Illness or Injury

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures						"Content Free"
		JobSat '70	Comfort	Challenge	Pay	Co-worker Relations	Resources	
Job-related illness in the last three years								
1. One or more	194	3.14	3.02	3.18	2.91	3.35	3.29	2.31
2. None	1315	3.26	3.16	3.27	3.05	3.42	3.45	2.62
Eta		.08	.08	.05	.06	.04	.09	.11
F		INAP	INAP	INAP	INAP	INAP	INAP	INAP
F		10.57	8.60	3.35	5.02	1.96	12.85	19.85
df		(1,1507)	(1,1505)	(1,1507)	(1,1499)	(1,1468)	(1,1492)	(1,1525)
p		.01	.05	n.s.	.05	n.s.	.001	.001

Mental Health Outcome Measures

Characteristic of worker or worker's job	n	Mental Health Outcome Measures						Life Satisfaction
		Job-related Tension	Somatic Complaints	Depression	Zest	Performance Debilitation		
Job related illness in the last three years								
1. One or more	194	2.24	2.11	2.17	3.56	2.15	2.96	
2. None	1315	1.99	1.86	2.04	3.62	2.16	3.31	
Eta		.12	.14	.08	.04	.00	.11	
F		INAP	INAP	INAP	INAP	INAP	INAP	
F		22.04	30.57	8.85	3.15	.04	17.80	
df		(1,1529)	(1,1507)	(1,1500)	(1,1506)	(1,1497)	(1,1529)	
p		.001	.001	.01	n.s.	n.s.	.001	

Table 6.14--Total Expenses Covered by Personal, Company, or Governmental Insurance Programs Following a Work-related Illness or Injury

While you were ill, how much of your medical, surgical, or hospital expenses were covered by any personal, company, or governmental insurances or programs--most or all, some, only a little, or none? While you were ill, how much of your living expenses were covered by any personal, company, or governmental insurances or programs--most or all, some, only a little, or none?

<u>Expenses covered by assistance</u>	<u>Percentage</u>	
	<u>Medical Payment Assistance (N = 84)*</u>	<u>Living Expenses Assistance (N = 81)*</u>
Most or all	69.0%	34.6%
Some	8.3	16.0
Only a little	3.6	2.5
None	19.0	46.9

\*Includes only workers who in the last three years had a work-related illness or injury which kept them off the job for more than two weeks.

Table 6.15--Percentage of Workers with Problems Concerning Inadequate Expense Coverage During a Work-related Illness or Injury

	<u>Percentage of workers (N=82)*</u>
Worker reports a problem**	68.3%
Worker reports no problem	31.7

\*Includes only workers who in the last three years had a work-related illness or injury which kept them off the job for more than two weeks.

\*\*A "problem" is defined as a case where a worker receives less than "most or all" coverage of either medical expenses or living expenses during a work-related illness or injury which: a) occurred in the last three years and b) kept the worker off the job for more than two weeks.



Table 6.16 Labor Standards Problems Among Major Demographic and Occupational Subgroups\*

Problem area: Inadequate expense coverage during illness		Percentage of workers reporting one or more problems in each area	Number of workers upon which percentage is based	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who "describes it as "sizeable or great"
<b>a. Sex</b>						
Men	57	57.9%	34	2.5	47.1%	(16)
Women	24	91.7	22	2.0	27.3	(6)
	$\chi^2=8.838; df=1; p < .01$			F=1.933; df=(1,54); ns		
<b>b. Race</b>						
White	74	67.6%	51	2.3	41.2%	(21)
Black	5	60.0	3	2.0	0.0	(0)
	$\chi^2=0.121; df=1, ns$			F=0.210; df=(1,52); ns		
<b>c. Age</b>						
20 or under	3	100.0%	3	2.3	33.0%	(1)
21-29	15	80.0	12	2.0	25.0	(3)
30-44	25	52.0	14	2.6	42.9	(6)
45-54	20	55.0	11	2.2	45.5	(5)
55-64	17	88.2	15	2.1	33.0	(5)
65 and over	2	100.0	2	3.0	100.0	(2)
	$\chi^2=11.090; df=5; p < .05$			F=0.646; df=(5,51); ns		

Table 6.16 Labor Standards Problems Among Major Demographic and Occupational Subgroups (continued)\*

Problem area: Inadequate expense coverage during illness

d. Education	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based		Average severity	Percentage (and number of) workers reporting the problem who describes it as "sizeable or great"
			workers upon which severity ratings are based	workers upon which severity ratings are based		
None	2	100.0%	2	2.5	50.0%	(1)
Some grade school	8	75.0	6	2.5	50.0	(3)
Completed grade school	12	91.7	11	2.3	45.5	(5)
Some high school	18	88.9	15	2.6	43.8	(7)
High school diploma	27	55.6	5	1.9	26.7	(4)
Some college	13	30.8	1	2.0	20.0	(1)
College degree	1	100.0	1	2.0	0.0	(0)
Graduate or professional training	1	100.0	1	3.0	100.0	(1)
$\chi^2=19.053; df=7; p < .01$						
<u>e. Self-employment status**</u>						
Self-employed	8	75.0%	6	1.7	33.3%	(2)
Wage-and-salary	37	59.5	22	2.2	47.5	(9)
$\chi^2=0.676; df=1; ns$						
$F=0.564; df=(5,49); ns$						
$F=1.160; df=(1,26); ns$						

224

Table 6.16 Labor Standards Problems Among Major Demographic and Occupational Subgroups (continued)\*

f. Industry**	Problem area: Inadequate expense coverage during illness		Percentage of workers reporting one or more problems in each area	Number of workers upon which percentage is based	Number of workers upon which severity ratings are based,	Average severity	Percentage (and number of) workers reporting the problem who describes it as "sizeable or great"
	Number of workers reporting one or more problems in each area	Percentage of workers reporting one or more problems in each area					
Agriculture, forestry, and fisheries	4	100.0%	4	1.8	25.0%	(1)	
Mining	2	100.0	2	1.0	0.0	(0)	
Contract construction	5	60.0	3	2.0	33.3	(1)	
Manufacturing	12	58.3	7	2.7	57.2	(4)	
Transportation, communication, electric, gas, and sanitary services	3	33.3	1	3.0	100.0	(1)	
Wholesale and retail trade	1	100.0	1	1.0	0.0	(0)	
Finance, insurance, and real estate	3	100.0	3	1.7	33.3	(1)	
Services	9	55.6	5	2.6	60.0	(3)	
Government	6	33.3	2	1.5	0.0	(0)	

 $\chi^2=9.525$ ;  $df=8$ ; ns

 $F=1.046$ ;  $df=(6,19)$ ; ns

Table 6.16 Labor Standards Problems Among Major Demographic and Occupational Subgroups (continued)\*

Problem area: Inadequate expense coverage during illness		Percentage of workers reporting one or more problems in each area	Number of workers upon which percentage is based	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describes it as "sizeable or great"
<b>g. Occupation**</b>						
Professional, technical, and managerial	7	85.7%	6	2.2	50.0%	(3)
Clerical and sales	2	50.0	1	1.0	0.0	(0)
Service	5	40.0	2	1.5	0.0	(0)
Farming, fisheries, and forestry	4	100.0	4	1.8	25.0	(1)
Processing	2	0.0	0			
Machine trades	7	57.1	4	2.5	50.0	(2)
Bench work	3	100.0	3	2.3	33.3	(1)
Structural work	7	42.9	3	3.0	66.7	(2)
					F=0.554; df=(5,16); ns	
$\chi^2=11.551, df=7; ns$						
<b>h. Blue-collar versus white collar**</b>						
White-collar	12	58.3%	7	2.0	42.9%	(3)
Blue-collar	29	58.6	17	2.2	41.1	(7)
					F=0.223; df=(1,22); ns	

\*Excludes workers who within the last three years had no work related illness or injury which kept them from working two weeks more.

\*\*Excludes workers who have changed jobs at least once in the last three years.

Table 6.17--Effects of Work-related Illness or Injury on Subsequent Re-employment

Did you go back to the same job after you recovered? Was the job you finally went back to better than, about the same as, or worse than the job you had before you were laid up?

<u>Job upon recovery</u>	<u>Percentage (N = 84)*</u>
Worker returned to the same job upon recovery	85.7%
Worker returned to a different job upon recovery and it was better than the job he had before illness or injury	8.3
Worker returned to a different job upon recovery and it was about the same as the job he had before illness or injury	3.6
Worker returned to a different job upon recovery and it was worse than the job he had before illness or injury	2.4

\*Includes only workers who in the last three years had a work-related illness or injury which kept them off the job for more than two weeks.

Table 6.18 Outcome Measures in Relation to Inadequate Expense Coverage Following Work-related Illness or Injury \*

Job Satisfaction Outcome Measures

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures							"Content Free"
		JobSat '70	Comfort	Challenge	Pay	Co-worker Relations	Resources		
1. Adequate	55	3.11	3.06	3.14	2.78	3.27	3.31	3.36	
2. Inadequate	26	3.20	2.96	3.30	3.26	3.42	3.23	3.50	
Eta		.07	.07	.10	.23	.10	.05	.07	
F		INAP	INAP	INAP	INAP	INAP	INAP	INAP	
F		.39	.39	.88	4.61	.72	.20	.42	
df		(1,79)	(1,78)	(1,79)	(1,79)	(1,78)	(1,78)	(1,80)	
p		n.s.	n.s.	n.s.	.05	n.s.	n.s.	n.s.	

Mental Health Outcome Measures

Characteristic of worker or worker's job	n	Mental Health Outcome Measures						
		Job-related Tension	Somatic Complaints	Depression	Zest	Performance Debilitation	Life Satisfaction	
1. Adequate	55	2.10	2.16	2.13	3.55	2.23	3.04	
2. Inadequate	26	2.17	2.12	2.04	3.69	2.00	3.23	
Eta		.04	.03	.07	.12	.17	.09	
F		INAP	INAP	INAP	INAP	INAP	INAP	
F		.15	.07	.41	1.17	2.47	.60	
df		(1,80)	(1,79)	(1,79)	(1,79)	(1,79)	(1,80)	
p		n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	

Includes only workers who in the last three years had a work-related illness or injury which kept them off the job for more than two weeks



Table 6.19--Possession of Physical or Nervous Handicap Limiting Work

Do you have anything you regard as a physical or nervous condition that limits the amount or kind of work you do? Was this condition either caused by, or has it been made more severe by any job you've ever had?

<u>Possession of handicap</u>	<u>Percentage (N = 1532)</u>
Worker reports a physical or nervous handicap that was caused or made more severe by a job he has had	3.6%
Worker reports a physical or nervous handicap that was <u>not</u> caused or made more severe by a job he has had	5.1
Worker reports a physical or nervous handicap but does not know whether it was caused or made more severe by a job he has had	.4
No physical or nervous handicap	90.9

Table 6.20--Physical or Nervous Handicaps - Types or Conditions

<u>Type of condition</u>	<u>Percentage of problems of each type* (Total number of problems reported = 133)</u>
Heart condition, high blood pressure	21.0%
Nervous disorders	17.3
Back trouble	12.0
Partial blindness, vision problems	7.5
Ulcers, hernia, bladder trouble, and other non-circulatory organ disorders	5.3
Partial deafness, hearing problems	4.5
Arthritis or rheumatism	3.8
Limitations due to physical size or strength	3.8
Permanent damage to limbs or joints	3.8
Old age	3.8
Vein disorders and circulatory problems (excluding high blood pressure)	3.0
Temporary limitations (eg. broken bones)	2.3
Major surgery, not specified whether effects are temporary or permanent	2.3

\*These 133 problems were reported by 133 workers. Percentages do not add to 100% since 13 miscellaneous problems are included in the total number.

Table 6.21 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups

Problem Area: Occupational Handicaps

	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
<b>a. Sex</b>					
Men	996	9.1%	90	2.3	37.7% (34)
Women	535	9.0	45	2.4	40.0 (18)
		$X^2=0.011$ ; $df=(1)$ ; ns		$F=0.202$ ; $df=(1,133)$ ; ns	
<b>b. Race</b>					
White	1355	9.7%	127	2.4	38.5% (49)
Black	157	3.8	6	2.5	33.4 (2)
		$X^2=5.836$ ; $df=(1)$ ; $p<.05$		$F=0.120$ ; $df=(1,131)$ ; ns	
<b>c. Age</b>					
20 or under	97	9.3%	8		25.0% (2)
21-29	333	7.2	25	2.6	48.0 (12)
30-44	489	4.7	22	2.4	36.3 (8)
45-54	339	10.3	34	2.5	50.0 (17)
55-64	212	15.1	30	2.1	26.7 (8)
65 and over	55	29.1	16	2.4	31.3 (5)
		$X^2=49.196$ ; $df=5$ ; $p<.001$		$F=0.979$ ; $df=(5,129)$ ; ns	



Table 6.21 Frequency and Severity of Labor Struggles Towards Problems among Major Demographic and Occupational Subgroups

Problem Area: Occupational Handicaps		Number of workers upon which percentage is based		Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based		Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
<u>d. Education</u>		7		42.9%	3		3.0	66.6% (2)
None		112		13.4	14		2.4	42.9 (6)
Some grade school		123		12.2	15		2.3	26.6 (4)
Completed grade school		269		14.1	36		2.4	41.7 (15)
Some high school		555		6.5	35		2.5	42.9 (15)
High School diploma		253		8.3	21		2.4	33.3 (7)
Some college		110		7.3	8		2.1	25.0 (2)
College degree		102		2.9	3		2.0	33.3 (1)
Graduate or professional								

$\chi^2 = 31.744$ ;  $df = (7)$ ;  $p < .001$

$F = 0.390$ ;  $df = (7, 127)$ ; ns

Table 6.21 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups

Problem Area: Occupational Handicaps

	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
<b>e. Self-employment status</b>					
Self employed	205	14.1%	29	2.4	37.9% (11)
Wage-and-salary	1327	8.3	106	2.4	38.7 (41)
					F=0.003; df=(1,133); ns
<b>f. Industry</b>					
Agriculture, forestry, fisheries	68	19.1%	13	2.5	46.2% (6)
Mining	22	4.5	1	3.0	100.0 (1)
Contract construction	123	7.3	8	2.0	25.0 (2)
Manufacturing	379	9.5	36	2.3	38.9 (14)
Transportation, communication, electric, gas, sanitary services	95	8.4	8	2.3	50.0 (4)
Wholesale and retail trade	278	10.4	28	2.5	39.2 (11)
Finance, insurance, real estate	75	8.0	6	2.2	16.7 (1)
Services	398	7.8	29	2.3	34.5 (10)
Government	94	6.4	6	2.7	50.0 (3)
					F=0.533; df=(7,126); ns
					X <sup>2</sup> =7.384; df=(1); p<.01
					X <sup>2</sup> =11.801; df=(8); ns

Table 6.21 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups  
 Problem Area: Occupational Handicaps

g. Occupation	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
Professional, technical, managerial	393				
Clerical and sales	334	5.1%	19	2.2	26.3% (5)
Service	185	6.3	21	2.1	23.8 (5)
Farming, fisheries, forestry	69	15.1	26	2.5	46.2 (12)
Processing	28	18.8	13	2.5	46.2 (6)
Machine trades	120	10.7	3	2.0	33.0 (1)
Bench work	96	10.0	12	2.7	58.4 (7)
Structural work	159	15.6	14	2.1	28.5 (4)
	159	7.5	12	2.2	25.0 (3)
h. Blue-collar versus white-collar					
$X^2 = 32.933$ ; $df = (7)$ ; $p < .001$					
White-collar	753				
Blue-collar	711	6.6%	49	2.1	24.5% (12)
		10.7	73	2.5	46.6 (34)
$X^2 = 7.622$ ; $df = (1)$ ; $p < .01$					
F=0.920; $df = (7, 112)$ ; ns					
F=5.885; $df = (1, 120)$ ; $p < .05$					

Table 6.22 Outcome Measures in Relation to Possession of an Occupational Handicap

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures						"Content Free"
		JobSat '70	Comfort	Challenge	Pay	Co-worker Relations	Resources	
Possession of an occupational handicap								
1. Handicapped	135	3.19	3.08	3.24	2.80	3.44	3.42	3.39
2. Not handicapped	1375	3.24	3.15	3.26	3.05	3.41	3.43	3.60
Eta		.03	.03	.01	.08	.01	.01	.07
F		INAP	INAP	INAP	INAP	INAP	INAP	INAP
df		1.78	1.71	.15	11.10	.17	.11	6.85
p		(1,1508) n.s.	(1,1506) n.s.	(1,1508) n.s.	(1,1500) n.s.	(1,1469) n.s.	(1,1493) n.s.	(1,1526) n.s.

Mental Health Outcome Measures

Characteristic of worker or worker's job	n	Mental Health Outcome Measures				Performance Debilitation	Life Satisfaction
		Somatic Complaints	Depression	Zest	Life Satisfaction		
Possession of an occupational handicap							
1. Handicapped	135	2.34	2.30	3.54	2.43	3.03	
2. Not handicapped	1375	1.85	2.03	3.62	2.13	3.29	
Eta		.23	.13	.04	.14	.07	
F		INAP	INAP	INAP	INAP	INAP	
df		87.61	26.97	2.84	28.37	7.42	
p		(1,1530) n.s.	(1,1501) .001	(1,1507) n.s.	(1,1498) .001	(1,1530) .01	206

## 7. HOURS AND OTHER TIME-RELATED PROBLEMS

### IRREGULARITY OF HOURS

Two aspects of the problem of irregular hours were investigated: unsteady employment wherein the worker was not employed throughout the year; and, irregular work-schedules wherein a person worked different days and/or hours each week regardless of whether he was steadily or unsteadily employed throughout the year.

Workers' ratings of the importance they attached to being protected against unsteady employment (Table 4.1) indicated that such protection was of moderate importance to them. It ranked at the bottom of the top third of the 19 labor standards areas rated, with 58.9 percent of the workers indicating that they felt it was "very important" that they be safeguarded against unsteady employment.

A worker was regarded in the study as having a problem with unsteady employment if he described his job as seasonal, characterized it as, one with frequent lay-offs, or reported that it involved other types of instability. Workers who worked throughout the year but whose hours varied somewhat from week to week were not coded as having a problem with steady employment; school-teachers who were in a sense "laid-off" during the summer were also excluded from the group of workers coded as having problems with unsteady employment. About ten percent of those interviewed reported a problem with some form of unsteady employment as just defined,

the most common form of such irregularity being seasonality (Table 7.1).\*

The problem of employment regularity was of moderate frequency when compared to other labor standards areas, since seven other labor standards problems were more pervasive (Table 4.2).

Tables 7.2a and 7.2b indicate that there were no significant differences between men and women or between blacks and whites in the frequency with which they reported experiencing unsteady employment. The frequency of the problem was disproportionately high among the youngest workers, the oldest workers (Table 7.2c), the poorly educated (Table 7.2d), the self-employed (Table 7.2e), and those in blue-collar occupations (Table 7.2h). Since seasonality was the major form of unsteady employment reported, it is reasonable to expect that the industry groups most affected by the unsteady employment problem would be those most sensitive to the vicissitudes of the weather and seasonal changes. That this was indeed the case is indicated in Table 7.2f which shows that the problem was most prevalent among those in contract construction, agriculture, forestry, and fisheries.

The relationships between employment regularity and the study's outcome measures are shown in Table 7.3. Most of the relationships were not statistically significant. Although those with steady employment reported higher satisfaction with pay than did those experiencing various forms of unsteady employment, this is not very surprising. Other factors being equal, the more steady the employment, the more constant will be the flow of income, and, ultimately, the workers' total annual income will be

---

\* Interviewing was conducted during the weeks immediately preceding the Christmas holidays. The seasonality statistics therefore run the risk of overcounting those workers who are "seasonal" by virtue of their working only during the pre-holiday period.

larger. But such factors are not always equal: Employment is unsteady in contract construction, for example, but the prevailing wage is high. The wage advantage may thereby offset the seasonality disadvantage. Wages and similar offsetting factors may have therefore obscured some possible associations between unsteady employment and workers' job satisfaction or mental health.

Data relevant to the second area of regularity of hours that was investigated--regularity of work schedule--is presented in Tables 7.4 and 7.5. Seventy-eight percent of those interviewed had invariant schedules, with no changes in either the hours or the days they worked. Varying work schedules were, however, quite frequent. Eleven and four-tenths percent of workers, while always working the same days of the week, indicated that they had to report to work different hours on some of these days. Prototypical of such irregularity would be a person who worked a rotating shift or a shop-clerk who worked from nine to five on three days of the week but worked instead from noon to eight p.m. on the two nights when the store remained open in the evening. Six and six-tenths of the workers reported considerable work-schedule irregularity, with both the days they worked and their hours varying. The pattern of associations between the outcome measures and irregularity of work-schedule was similar to that of the associations between the outcome measures and reports of irregular employment. Regular work schedules were associated only with higher satisfaction with pay. In terms of their impact upon workers' job satisfaction and the limited aspects of their mental health that were measured in the study, working irregular schedules or having unsteady employment seemed to be of little consequence.

HOURS

A plurality, but not a majority, of workers still worked the "forty hour week" on their main jobs (Table 7.6). However, about as many people worked more than forty hours. Furthermore, roughly ten percent of those interviewed worked 60 hours or more per week on their main job. These figures raise serious questions about discussions concerning "reducing the forty hour week" to the "thirty-five hour week" or some other such short week figure. Such discussions presuppose that since the forty hour week is "official" (e.g., as embodied in labor contracts and various labor standards practices) it is therefore general. The data indicate that this is not true, since as many workers worked the "more than a forty hour week" as worked the stereotypic forty hours. The forty hour week characterized only a minority (albeit sizeable) of workers, and to regard it as in some way "typical" is misleading. If reducing the work-load of Americans, increasing their leisure time, and providing more job openings (to fill in the reduced hours) is a goal of governmental programs, there appears to be a greatly ignored leverage that might help to implement such programs--reducing the hours worked by the sizeable group of people who currently work more, and often considerably more, than the "typical" forty hours.

The working hours reported in Table 7.6 were only those of the worker's primary job (defined as the one on which he spent the greatest amount of time). An appreciable minority (9.3 percent) of workers also spent time on secondary jobs (Table 7.7). Although half of those holding down second jobs did not spend more than ten hours a week on those jobs, a few hardy individuals claimed to work more than 40 hours on their second jobs.



## OVERTIME

In indicating what they meant by "working overtime" as applied to their own jobs, most workers provided a definition involving one of the elements of more "legalistic" definitions--that is, working more than so many hours per week or per day (Table 7.10). For many workers, however, this definition was not equivalent to working more than 40 hours a week or eight hours a day since many workers had a "normal" work week which differed considerably from 40 hours or a "normal" day which was not the eight-hour one. For those workers, for example, who normally worked 25 hours a week even forty hours of work would be defined as "overtime work." In addition, many workers felt that the concept of overtime could not be applied to their work. Many of these workers felt that their principal commitment to their employers was to accomplish particular types of work regardless of the time consumed rather than to work a specified number of hours.

Those workers who were able to provide a definition of overtime were further asked to indicate the compensation which their employers might provide them for overtime work. The majority indicated that they would receive some form of premium pay for overtime (Table 7.11). Although 20.3 percent indicated that they would receive no financial compensation whatever (not even their regular pay rate), their situation was not as bad as it first might seem, since many of these same people received compensatory time off--the major type of non-financial overtime compensation reported by workers (Table 7.11).

Among those workers who could define overtime, 86.7 percent reported working overtime at least "once in a while." The associations between frequency of overtime work and the study's outcome measures are presented

in Table 7.13 and form a quite plausible cluster of relationships. It might be inferred from the table that a principal reason for working overtime is that the worker is provided with inadequate resources to accomplish his work within "normal" hours; those who frequently worked overtime were therefore significantly more dissatisfied with the resources provided them than were others. Two possible results of frequent overtime work are also suggested by Table 7.13--high levels of job related tension and dissatisfaction with the Comfort aspects of the job.

The topics of involuntary overtime and the control of overtime work are touched upon by the data in Tables 7.14 and 7.15. Although decisions as to whether workers would have to work overtime were generally up to their employers, in the majority of such cases the worker was free to reject overtime work without penalty. However, a sizeable minority (17.6 percent) indicated that they were in the unfortunate situation of not being able to refuse overtime work without penalty. That the latter situation was associated with low levels of job satisfaction is demonstrated by Table 7.15.

#### PROBLEMS WITH HOURS

Although much of what has just been discussed may be regarded as touching upon various problems workers had with their hours or work schedules, a more general "problems" question was also included in the interview: "Could you tell me what problems or difficulties you run into concerning the hours you work, your work schedule, or overtime?" Overall 30.3 percent of those interviewed reported one or more problems with their hours (Table 4.2), making problems with hours and time schedules the fifth most frequently encountered type of labor standards problem (Table 4.2).\*

\* Note that in Table 4.2 unsteady employment is an entry separate from inconvenient or excessive hours.

A classification of the most frequently cited problems with inconvenient or excessive hours appears in Table 7.18. Most frequently mentioned were problems with: the number of hours or days worked; overtime or overtime compensation; "time slot" (e.g., starting work too early or ending too late); and regularity or predictability of hours. That such problems with hours had rather pervasive effects upon workers' mental health and job satisfaction is suggested by Table 7.19 in which problems with hours are shown to have been significantly related to all except two (Zest and Satisfaction with Challenge) of the 13 outcome measures. On each of the eleven other measures workers reporting a problem had the least favorable outcome scores.

Table 7.20 provides the distribution of problems with hours among several demographic and occupational subgroups. The data indicated that problems with hours were unique among labor standards problems in terms of their distribution. Where many of the other labor standards problems were found to be more prevalent among the more "disadvantaged" subgroups of workers, this was not the case with problems with hours. Those who most frequently reported problems with hours tended to be white (Table 7.20b), well-educated (Table 7.20d), self-employed (Table 7.20e), and in white-collar occupations (Table 7.20h).

Table 7.1--Unsteady Employment

Do you think of your job as one where you have regular, steady work throughout the year, is it seasonal, are there frequent lay-offs, or what?

<u>Regularity</u>	<u>Percentage (N = 1524)</u>
Steady employment	89.7%
Seasonal employment	7.3
Frequent lay-offs	2.3
Other forms or combinations of irregular employment.	.7

Table 7.2 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups

Problem Area: Unsteady Employment

	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number-of) workers reporting the problem who describe it as "sizeable or great"
<b>a. Sex</b>					
Men	990	10.9%	121	2.1	30.6% (37)
Women	553	9.2	52	2.5	44.2 (23)
	$\chi^2=1.103; df=1; ns$				
<b>b. Race</b>					
White	1348	10.1%	150	2.1	32.7% (49)
Black	156	12.8	21	2.7	47.6 (10)
	$\chi^2=1.122; df=1; ns$				
<b>c. Age</b>					
20 or under	96	14.6%	17	2.2	35.3% (6)
21-29	331	10.0	35	2.5	42.9 (15)
30-44	486	7.4	44	2.1	29.5 (13)
45-54	339	10.6	37	2.3	40.5 (15)
55-64	211	12.8	28	2.1	35.8 (10)
65 and over	54	18.5	11	1.5	9.1 (1)
	$\chi^2=11.771; df=5; p<.05$				
	$F=1.729; df=(5,166); ns$				

215

Table 7.2 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups  
 Problem Area: Unsteady Employment

	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
d. <u>Education</u>					
None	7	28.6%	2	1.0	0.0% (0)
Some grade school	111	18.0	21	2.6	52.4 (11)
Completed grade school	122	17.2	22	2.0	27.3 (6)
Some high school	266	15.4	45	2.2	37.7 (17)
High school diploma	554	8.8	52	2.2	30.7 (16)
Some college	253	5.9	19	2.1	31.6 (6)
College degree	110	4.5	6	2.0	33.4 (2)
Graduate or professional training	100	4.0	6	2.2	33.4 (2)

$\chi^2=38.237$ ;  $df=(7)$ ;  $p<.001$

$F=0.897$ ;  $df=(7,165)$ , ns

(continuu

Table 7.2 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups

Problem Area: Unsteady Employment

	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
Self employed	204	22.5%	50	1.8	24.0% (12)
Wage-and-salary	1320	8.4	123	2.3	39.0 (48)

$\chi^2=38.231$ ;  $df=(1)$ ;  $p<.001$

$F=7.825$ ;  $df=(1,171)$ ;  $p<.01$

f. Industry

Agriculture, forestry, and fisheries	67	20.9%	15	2.0	33.4% (5)
Mining	22	4.5	2	1.5	0.0 (0)
Contract construction	122	45.1	59	2.1	25.4 (15)
Manufacturing	378	8.5	33	2.7	57.6 (19)
Transportation, communication, electric, gas, sanitary services	95	8.4	8	1.8	25.0 (2)
Wholesale and retail trade	275	7.3	24	2.0	29.2 (7)
Finance, insurance, real estate	75	0.0	1	1.0	0.0 (0)
Services	396	6.3	29	2.2	37.9 (11)
Government	94	2.1	2	2.5	50.0 (1)

$\chi^2=195.335$ ;  $df=(8)$ ;  $p<.001$

$F=1.645$ ;  $df=(7,164)$ ; ns

(continued)  
 Table 7.2 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups

Problem Area: Unsteady Employment

g. Occupation	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
Professional, technical, managerial	391	5.4	24	2.1	29.2% (7)
Clerical and sales	334	4.8	20	1.8	20.0 (4)
Service	184	9.2	18	2.4	44.5 (8)
Farming, fisheries, and forestry	68	22.1	16	2.1	37.5 (6)
Processing	28	25.0	8	3.3	75.0 (6)
Machine trades	119	5.9	8	1.8	12.5 (1)
Bench work	96	12.5	12	2.5	50.0 (6)
Structural work	158	27.2	46	2.2	30.5 (14)
$\chi^2=92.304; df=(7); p < .001$					$F=1.960; df=(7,144); ns$
<u>h. Blue-collar versus white-collar</u>					
White-collar	751	5.3%	48	1.9	25.0% (12)
Blue-collar	706	14.4	109	2.3	38.5 (42)
$\chi^2=34.420; df=(1); p < .001$					$F=4.657; df=(1,155); p < .05$



Table 7.1 Outcome Measures in Relation to Unsteady Employment

Characteristic of worker or worker's job	n	JobSat '70	Job Satisfaction Outcome Measures					"Content Free"
			Comfort	Challenge	Pay	Co-worker Relations	Resources	
1. Steady	1348	3.24	3.14	3.26	3.07	3.41	3.42	3.60
2. Seasonal	108	3.21	3.12	3.25	2.72	3.34	3.53	3.60
3. Frequent lay-offs	35	3.19	3.14	3.15	2.73	3.53	3.49	3.21
4. Other forms of irregularity	11	3.12	3.04	3.12	2.71	3.50	3.23	3.27
Eta		.03	.01	.03	.13	.04	.06	.07
F		INAP	INAP	INAP	INAP	INAP	INAP	INAP
F		0.569	0.089	0.549	8.197	0.702	1.557	2.426
df		(3,1498)	(3,1496)	(3,1498)	(3,1490)	(3,1459)	(3,1483)	(3,1516)
p		n.s.	n.s.	n.s.	.001	n.s.	n.s.	n.s.

Table 7.3 Outcome Measures in Relation to Unsteady Employment (continued)

Characteristic of worker or worker's job	n	Mental Health Outcome Measures					
		Job-related Tension	Somatic Complaints	Depression	Zest	Performance Debilitation	Life Satisfaction
1. Steady	1348	2.04	1.88	2.05	3.62	2.16	3.28
2. Seasonal	108	1.82	1.96	2.05	3.58	2.09	3.22
3. Frequent lay-offs	35	1.98	1.82	2.15	3.60	2.27	3.17
4. Other forms of irregularity	11	2.20	2.09	2.31	3.66	2.33	2.82
Eta		.08	.05	.05	.02	.04	.04
F		INAP	INAP	INAP	INAP	INAP	INAP
df		3,366	1,219	1,158	0,253	1,012	0,833
P		(3,1520)	(3,1498)	(3,1491)	(3,1497)	(3,1488)	(3,1520)
		.05	n.s.	n.s.	n.s.	n.s.	n.s.

Table 7.4--Regularity of Work Schedule

Do you generally work the same days each week? Do you generally work the same hours each day?

<u>Work schedule</u>	<u>Percentage (N = 1530)</u>
Work same days and hours all the time	78.1%
Work different days but same hours each day	3.9
Work same days but different hours each day	11.4
Both days and hours vary	6.6

Table 7.5 Outcome Measures in Relation to Regularity of Work Schedule

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures						"Content Free"
		Jobsat '70	Comfort	Challenge	Pay	Co-worker Relations	Resources	
regularity of work schedule								
1. Same days and hours all of the time.	1176	3.25	3.16	3.26	3.06	3.41	3.42	3.59
2. Different days, but same hours each day.	60	3.19	3.06	3.20	2.90	3.52	3.49	3.73
3. Same days, but different hours each day	172	3.21	3.07	3.27	2.93	3.33	3.43	3.53
4. Both days and hours vary	100	3.22	3.07	3.29	2.89	3.52	3.48	3.46
Eta		.04	.06	.02	.07	.06	.03	.05
F		INAP	INAP	INAP	INAP	INAP	INAP	INAP
F		0.685	2.067	0.263	2.797	1.922	0.472	1.322
df		(3,1504)	(3,1502)	(3,1504)	(3,1496)	(3,1465)	(3,1489)	(3,1522)
p		n.s.	n.s.	n.s.	.05	n.s.	n.s.	n.s.

Table 7.5 Outcome Measures in Relation to Regularity of Work Schedule (continued)

Characteristic of worker or worker's job schedule	n	Mental Health Outcome Measures				Life Satisfaction	
		Job-related Tension	Somatic Complaints	Depression	Zest		
1. Same days and hours all of the time.	1176	2.03	1.88	2.06	3.62	2.16	3.29
2. Different days, but same hours each day.	60	1.88	1.95	2.07	3.64	2.15	3.13
3. Same days, but different hours each day.	172	2.08	1.90	2.05	3.58	2.12	3.13
4. Both days and hours vary	100	1.91	1.96	2.06	3.57	2.16	3.22
		.06 INAP 2.016 (3,1526) n.s.	.04 INAP 0.801 (3,1504) n.s.	.01 INAP 0.064 (3,1497) n.s.	.04 INAP 0.620 (3,1503) n.s.	.02 INAP 0.178 (3,1494) n.s.	.05 INAP 1.477 (3,1526) n.s.

Ita  
F  
df  
p



Table 7.6--Hours Worked Per Week on Main Job

During the average week, how many hours do you work, not counting time you take off for meals?

<u>Hours</u>	<u>Percentage (N = 1515)*</u>
20-24 1/2 hours	4.2
25-29 1/2 hours	2.4
30-34 1/2 hours	4.2
35-39 1/2 hours	11.5
40 hours	39.1
40 1/2-44 1/2 hours	6.2
45-49 1/2 hours	11.0
50-54 1/2 hours	7.8
55-59 1/2 hours	4.0
60-64 1/2 hours	5.3
65 hours or more	4.8

\*Workers working less than 20 hours were not included in the sample.

Table 7.7--Hours Worked Per Week on Secondary Job

Do you presently have any other jobs or do any other work for pay? About how many hours a week on the average do you work for pay outside of your main job?

<u>Hours</u>	<u>Percentage (N = 1513)</u>
No secondary job	90.7%
1 to 9 1/2 hours	5.0
10 to 19 1/2 hours	2.3
20 to 29 1/2 hours	1.2
30 to 39 1/2 hours	.3
40 hours or more	.5

Table 7.8' --Normal Time of Arrival on Job

When do you usually arrive at work?

<u>Time</u>	Percentage (N = 1240)*
Morning (Arrive 6-11:59 AM)	
Breakdown of morning arrival time:	
6-6:59 AM	9.9%
7-7:59 AM	30.8
8-8:59 AM	35.6
9-9:59 AM	9.1
10-10:59 AM	1.9
11-11:59 AM	.3
Afternoon (Arrive 12-5:59 PM)	6.3
Evening (Arrive 6-11:59 PM)	3.1
Night (Arrive 12-5:59 AM)	3.0

\*Excludes workers who do not generally work the same hours each day.

Table 7.9 Outcome Measures in Relation to Normal Time of Arrival on Job\*

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures						"Content Free"
		JobSat '70	Comfort	Challenge	Pay	Co-worker Relations	Resources	
1. 6-6:59 a.m.	120	3.26	3.20	3.21	3.09	3.50	3.41	3.58
2. 7-7:59 a.m.	374	3.25	3.16	3.26	3.07	3.46	3.42	3.58
3. 8-8:59 a.m.	434	3.27	2.14	3.32	3.13	3.37	3.42	3.69
4. 9-9:59 a.m.	113	3.28	3.18	3.37	2.97	3.36	3.46	3.62
5. 10-10:59 a.m.	23	3.39	3.52	3.38	2.68	3.48	3.72	3.64
6. 11-11:59 a.m.	4	2.68	2.25	2.90	2.08	3.12	3.15	2.55
7. Afternoon (12-5:59 p.m.)	78	3.10	3.07	2.94	2.90	3.39	3.40	3.39
8. Evening (6-11:59 p.m.)	38	3.20	3.17	3.13	3.05	3.29	3.44	3.41
9. Night (12-5:59 a.m.)	37	3.20	3.08	3.16	2.97	3.54	3.55	3.57
Eta		.12	.13	.16	.12	.09	.08	.11
I		INAP	INAP	INAP	INAP	INAP	INAP	INAP
F		2.101	2.806	3.802	2.298	1.181	1.076	1.957
df		(8, 1212)	(8, 1211)	(8, 1211)	(8, 1205)	(8, 1194)	(8, 1206)	(8, 1228)
p		.05	.01	.001	.05	n.s.	n.s.	n.s.



Table 7.9 Outcome Measures in Relation to Normal Time of Arrival on Job (continued)\*

Characteristic of worker or worker's job	n	Mental Health Outcome Measures					
		Job-related Tension	Somatic Complaints	Depression	Zest	Performance Debilitation	Life Satisfaction
1. 6-6:59 a.m.	120	1.83	1.97	2.08	3.52	2.23	3.14
2. 7-7:59 a.m.	374	2.06	1.89	2.03	3.64	2.14	3.32
3. 8-8:59 a.m.	434	2.09	1.81	2.03	3.65	2.13	3.33
4. 9-9:59 a.m.	113	2.04	1.85	2.10	3.71	2.20	3.29
5. 10-10:59 a.m.	23	1.55	1.80	1.97	3.77	2.11	3.48
6. 11-11:59 a.m.	4	2.15	2.40	2.18	3.75	1.68	3.00
7. Afternoon (12-5:59 p.m.)	78	2.02	1.97	2.17	3.41	2.24	3.01
8. Evening (6-11:59 p.m.)	38	1.83	1.98	2.12	3.62	2.18	3.33
9. Night (12-5:59 a.m.)	37	2.03	2.01	2.00	3.55	2.16	3.30
			Eta				
		.15	.12	.07	.15	.08	.09
		INAP	INAP	INAP	INAP	INAP	INAP
		3.405	2.142	0.849	3.346	0.899	1.231
		(8,1231)	(8,1214)	(8,1209)	(8,1213)	(8,1207)	(8,1231)
		.01	.05	n.s.	.01	n.s.	n.s.

\*Exclude workers who do not generally work same hours each day.



Table 7.10--Definition of Overtime

People differ in what they mean by the words "working overtime." In terms of your own job what do you regard as working overtime?

<u>What the worker means by working "overtime"</u>	<u>Percentage (N = 1525)*</u>
Working more than so many hours per week	42.5%
Working more than so many hours per day	31.1
Working on particular days when worker does not normally work	16.3
Working before or after certain hours	12.9
Other	2.2
Respondent has nothing he considers overtime	24.4

\*Percentages add to more than 100% since workers could give more than one definition of overtime.

Table 7.11--Compensation Worker Receives for Overtime

How much would your employer pay you for any overtime you might work? Outside of the pay, what else would your employer do to "make up to you" the overtime hours you might work?

<u>Financial compensation</u>	<u>Percentage (N = 1052)*</u>
No financial compensation	20.3%
Some pay but less than regular	1.1
Regular pay rate	11.5
Time and a half	54.8
Double time	2.7
Some combinations of the above four forms of payment	7.7
Other forms of pay	1.9
<u>Other compensation</u>	<u>Percentage (N = 1056)*</u>
No non-financial compensation	67.0%
Compensatory time off	16.3
Meal allowance, free meals	6.7
Recognition by employer	8.1
Other	1.9

\*Excludes self-employed workers and workers having nothing they consider overtime.

Table 7.12--How Often Worker Puts in Overtime

How often do you work overtime?

	<u>Percentage (N = 1155)*</u>
Often	33.5%
Once in a while	53.2
Never	13.2

\*Excludes workers who have nothing they consider overtime.

Table 7.13 Outcome Measures in Relation to How Often Worker Puts in Overtime\*

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures						
		Jobsat '70	Comfort	Challenge	Pay	Co-worker Relations	Resources	"Content Free"
Frequency of working overtime								
1. Never	151	3.24	3.23	3.15	2.92	3.48	3.55	3.38
2. Once in a while	604	3.26	3.20	3.21	3.10	3.41	3.45	3.52
3. Often	384	3.18	3.01	3.26	3.05	3.38	3.31	3.57
Eta		.07	.15	.05	.07	.04	.14	.06
F		-.06	-.14	.05	.03	-.04	-.14	.06
df		2.710	13.938	1.630	2.811	1.042	11.048	2.355
P		(2,1136) n.s.	(2,1135) .001	(2,1136) n.s.	(2,1131) n.s.	(2,1118) n.s.	(2,1131) .001	(2,1152) n.s.

Mental Health Outcome Measures

Characteristic of worker or worker's job	n	Mental Health Outcome Measures						
		Job-related Tension	Somatic Complaints	Depression	Zest	Performance Debilitation	Life Satisfaction	
Frequency of working overtime								
1. Never	151	1.90	1.90	2.08	3.60	2.20	3.33	
2. Once in a while	604	2.02	1.92	2.08	3.58	2.20	3.24	
3. Often	384	2.20	1.89	2.04	3.60	2.08	3.14	
Eta		.15	.02	.04	.01	.09	.06	
F		.15	-.01	-.03	.00	-.08	-.06	
df		12.748	0.268	0.705	0.087	4.645	2.009	
P		(2,1152) n.s.	(2,1136) n.s.	(2,1129) n.s.	(2,1135) n.s.	(2,1126) .05	(2,1152) n.s.	

\*Excludes workers who have nothing they consider overtime

Table 7.14--Worker's Control Over Whether He Will Work Overtime

Who determines whether you're going to put in overtime hours? Is it mostly up to you or mostly up to your employer? Could you refuse to work overtime when your employer asks you to without being penalized in any way?

<u>Extent of worker's control over his overtime work</u>	<u>Percentage (N = 1038*)</u>
Mostly up to worker whether he works overtime	35.2%
Both worker and employer determine but worker can refuse without penalty	1.3
Mostly up to employer, but worker can refuse without penalty	45.6
Both worker and employer determine and worker can <u>not</u> refuse without penalty	0.4
Mostly up to employer, and worker can <u>not</u> refuse without penalty	17.6

\*Excludes self-employed workers and workers who have nothing they consider overtime.

Table 7.15 Outcome Measures in Relation to Worker's Freedom to Refuse Overtime Work\*

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures					"Content Free"
		JobSat '70	Comfort	Challenge	Pay	Co-worker Relations	
Extent of worker's control over his overtime work							
1. Mostly up to worker	363	3.28	3.18	3.33	3.09	3.40	3.43
2. Both worker and employer determine; worker can refuse without penalty	13	3.24	3.00	3.20	3.41	3.69	3.40
3. Mostly up to employer; worker can refuse without penalty	467	3.24	3.18	3.15	3.12	3.46	3.46
4. Both worker and employer determine; worker cannot refuse without penalty	4	3.20	2.82	3.38	3.00	3.38	3.55
5. Mostly up to employer; worker cannot refuse without penalty	178	3.06	3.02	2.97	2.92	3.26	3.28
Eta		.15	.11	.20	.10	.11	.14
F		INAP	INAP	INAP	INAP	INAP	INAP
F		5.840	3.096	10.190	2.499	3.257	3.139
df		(4, 1020)	(4, 1019)	(4, 1020)	(4, 1019)	(4, 1010)	(4, 1019)
p		.001	.05	.001	.05	.05	.001

Table 7.15 Outcome Measures in Relation to Worker's Freedom to Refuse Overtime Work (continued)\*

Characteristic of worker or worker's job	n	Mental Health Outcome Measures					Life Satisfaction
		Job-related Tension	Somatic Complaints	Depression	Zest	Performance Debilitation	
Extent of worker's control over his overtime work							
1. Mostly up to worker	178	2.19	1.97	2.10	3.42	2.22	3.07
2. Both worker and employer determine; worker can refuse without penalty	4	1.88	1.75	1.95	3.50	1.88	3.75
3. Mostly up to employer; worker can refuse without penalty	467	2.01	1.92	2.06	3.60	2.17	3.25
4. Both worker and employer determine; worker cannot refuse without penalty	13	1.90	1.95	2.18	3.64	2.09	2.85
5. Mostly up to employer; worker cannot refuse without penalty	363	2.05	1.83	2.06	3.66	2.10	3.25
Eta		.09	.09	.04	.16	.07	.08
F		INAP	INAP	INAP	INAP	INAP	INAP
df		2,134	2,273	0,391	6,604	1,411	1,757
P		(4,1033)	(4,1019)	(4,1012)	(4,1018)	(4,1009)	(4,1033)
		n.s.	n.s.	n.s.	.001	n.s.	n.s.

Table 7.16--Worker's Preference Concerning Amount of Overtime He Would Like to Work

	<u>Percentage (N = 997)*</u>	
	<u>Yes</u>	<u>No</u>
Would you like to work <u>less</u> overtime hours than you presently do?	30.1%	69.9%
	<u>Percentage (N = 859)**</u>	
	<u>Yes</u>	<u>No</u>
Would you like to work <u>more</u> overtime hours than you presently do?	34.7%	65.3%

\*Excludes workers having nothing they consider overtime work and workers who do not work overtime.

\*\*Excludes workers having nothing they consider overtime work and workers who said they would prefer to work less overtime.

Table 7.17--Percentage of Workers with Problems Concerning Inconvenient or Excessive Hours

Could you tell me what problems or difficulties you run into concerning the hours you work, your work schedule, or overtime?

	<u>Percentage of workers (N = 1520)</u>
Worker reports a problem	29.5
Worker reports no problem	70.5



Table 7.18--Problems with Hours, Work Schedule, and Overtime - Types of Problems

Type of Problem	Percentage of problems of each type* (Total number of problems reported = 519)
Excessive number of hours or days worked	19.8%
Problems with overtime or overtime compensation	19.3
Workers' "time slot" is inconvenient (eg. worker must start work too early or end work too late)	19.1
Problems with the regularity or predictability of hours	11.8
Worker simply cites "the hours" or the "the days" but does not elaborate further	6.6
Difficulties in aligning required output with the hours worker is paid for or the maximum hours worker can work	6.0
Worker has inadequate control over his regular work hours	3.7
Worker would like to work more hours but is unable to do so	2.3
Problems with meal hours, relief periods, wash up periods or breaks	1.7
Lack of steady employment	1.5
Worker cites "shift work" but does not elaborate further	1.2
Inequities in assignment of hours (eg. unfairness in who gets or does not get the best hours)	1.0

\*These problems were reported by 462 workers. Percentages do not add to 100% since 32 miscellaneous problems are included in the total number.

Table 7.19 Outcome Measures in Relation to Problems with Inconvenient or Excessive Hours

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures					"Content Free"
		JobSat '70	Comfort	Challenge	Pay	Co-worker Relations	
1. Problem with hours	445	3.14	2.96	3.24	2.94	3.34	3.39
2. No problems with hours	1054	3.28	3.22	3.27	3.08	3.44	3.67
Eta		.13	.20	.02	.07	.06	.14
I		INAP	INAP	INAP	INAP	INAP	INAP
F		26.994	62.587	.773	7.840	6.181	31.527
df		(1,1497)	(1,1495)	(1,1497)	(1,1489)	(1,1459)	(1,1514)
P		.001	.001	n.s.	.01	.05	.001

251

Characteristic of worker or worker's job	n	Mental Health Outcome Measures					Life Satisfaction
		Job-related Tension	Somatic Complaints	Depression	Zest	Performance Debilitation	
1. Problem with hours	445	2.29	1.99	2.19	3.59	2.24	3.03
2. No problems with hours	1054	1.91	1.85	2.00	3.62	2.12	3.36
Eta		.24	.10	.15	.03	.09	.14
I		INAP	INAP	INAP	INAP	INAP	INAP
F		96.554	16.725	35.159	1.425	11.158	31.710
df		(1,1518)	(1,1497)	(1,1490)	(1,1496)	(1,1487)	(1,1518)
P		.001	.001	.001	n.s.	.01	.001

236

Table 7.20 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups

Problem Area: Inconvenient or Excessive Hours

	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
<u>a. Sex</u>					
Men	989	28.2%	289	2.4	36.4% (105)
Women	530	32.1	173	2.5	40.4 (70)
	$X^2=2.476$ ; $df=(1)$ ; ns			$F=1.038$ ; $df=(1,460)$ ; ns	
<u>b. Race</u>					
White	1345	30.6%	422	2.4	37.0% (156)
Black	155	22.6	37	2.8	48.6 (18)
	$X^2=4.233$ ; $df=(1)$ ; $p<.05$			$F=7.548$ ; $df=(1,457)$ ; $p<.01$	
<u>c. Age</u>					
Under 20	96	38.5%	38	2.5	36.9% (14)
21-29	329	33.1	113	2.4	38.0 (43)
30-44	485	35.7	176	2.4	32.4 (57)
45-54	339	25.1	87	2.5	46.0 (40)
55-64	210	15.7	36	2.3	38.9 (14)
65 and over	54	22.2	12	2.6	58.3 (7)
	$X^2=38.340$ ; $df=(5)$ ; $p<.001$			$F=0.586$ ; $df=(5,456)$ ; ns	

(contin)

Table 7.20 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups

Problem Area: Inconvenient or Excessive Hours		Number of workers upon which percentage is based		Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
d. Education	None	7	0.0%	0	-	-	-
	Some grade school	111	13.5	13	2.1	7.7%	(1)
	Completed grade school	123	19.5	26	2.8	61.6	(16)
	Some high school	266	26.7	75	2.4	36.0	(27)
	High school diploma	550	31.5	177	2.4	36.7	(65)
	Some college	251	37.1	95	2.5	45.3	(43)
	College degree	109	28.4	34	2.4	29.4	(10)
	Graduate or professional training	102	41.2	41	2.2	31.7	(13)

 $\chi^2 = 38.069$ ;  $df = (7)$ ;  $p < .001$ 
 $F = 2.225$ ;  $df = (6, 454)$ ;  $p < .05$

Table 7.20 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups  
 Problem Area: Inconvenient or Excessive Hours (continuation)

	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
e. Self-employment status					
Self employed	204	36.8%	77	2.3	36.4% (28)
Wage-and-salary	1316	28.4	385	2.4	38.1 (147)
f. Industry					
Agriculture, forestry, and fisheries					
Mining	68	20.6%	13	2.2	30.8% (4)
Contract construction	22	13.6	3	2.7	33.3 (1)
Manufacturing	121	25.6	33	2.2	28.2 (9)
Transportation, communication, electric, gas, sanitary services	378	21.2	84	2.3	30.6 (26)
Wholesale and retail trade	95	33.7	32	2.7	48.4 (15)
Finance, insurance, realestate	275	36.4	106	2.6	46.7 (50)
Services	74	36.5	26	2.4	38.5 (10)
Government	394	34.3	134	2.4	37.0 (50)
	93	29.0	31	2.4	34.8 (10)
$\chi^2=5.901$ ; $df=(1)$ ; $p<.05$					
$\chi^2=31.813$ ; $df=(8)$ ; $p<.001$					
$F=1.744$ ; $df=(1,460)$ ; ns					
$F=1.944$ ; $df=(8,453)$ ; ns					

(continues)

Table 7.20 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups

Problem Area: Inconvenient or Excessive Hours

Occupation	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
Professional, technical, managerial	388	37.1%	149	2.3	35.6% (53)
Clerical and sales	333	29.4	104	2.4	38.4 (40)
Service	183	35.0	61	2.6	47.6 (29)
Farming, fisheries, and forestry	69	21.7	14	2.1	28.6 (4)
Processing	28	25.0	7	2.6	42.9 (3)
Machine trades	120	25.0	32	2.3	28.2 (9)
Bench work	96	19.8	20	2.4	35.0 (7)
Structural work	158	21.5	35	2.6	45.7 (16)

$\chi^2=28.781$ ;  $df=(7)$ ;  $p<.001$

$F=1.546$ ;  $df=(7,414)$ ; ns

h. Blue-collar versus white collar

White-collar	747	33.7%	260	2.4	37.1% (95)
Blue-collar	705	25.7	187	2.5	41.3 (76)

$\chi^2=11.262$ ;  $df=(1)$ ;  $p<.001$

$F=4.108$ ;  $df=(1,445)$ ,  $p<.05$

## 8. TRANSPORTATION TO AND FROM WORK

In terms of the various strategies described in Section 4 for determining the importance to workers of a particular labor standards area, a rather complicated pattern of results emerged with regard to transportation problems associated with work:

Transportation problems were first of all very frequent, outranked only by reports of problems with inadequate fringe benefits and health and safety problems (Table 4.2). In terms of the severity of such transportation problems, however, transportation was of only moderate importance, outranked in severity by many other labor standards areas (Table 4.2). Transportation problems did also not figure very appreciably among the "single biggest" problems reported by workers since they constituted only 1.2 percent of the "single biggest" problems reported (Table 4.6). This suggests that transportation problems were regarded by most workers as "big nuisances" rather than major problems, since the problems occurred very frequently but in not very distressing forms. This conclusion is further substantiated by Table 4.1 which reports workers' ratings of labor standards areas in terms of how much workers wanted to be protected against problems in the various areas. Transportation ranked quite low on workers' lists of protection priorities, outranking only problems of discrimination because of occupational handicaps and sex. In terms of the aspects of the job workers felt were most important to them, the rating of adequate transportation was also comparatively low (Table 3.2).

For about a third of those interviewed transportation would not reasonably be expected to constitute much of a problem since, according to Table 8.1, these workers lived at or adjacent to their worksites (8.6 percent) or within two miles of it (25.8 percent). Thirty-nine percent reported being able to reach work each day within eleven minutes of leaving home. In spite of these statistics, a few workers had travel arrangements which would on the surface seem to constitute something of a problem in terms of the distances, time, and costs involved. For example, twelve percent lived over 15 miles from work (Table 8.2), 5.6 percent had to spend in excess of an hour in getting to work and presumably a comparable amount of time getting home (Table 8.3), and twelve percent felt that the costs of their transportation to and from work were excessive in relation to what they were making on their jobs (Table 8.6).

The associations between the study's outcome measures and the time and money workers spent going to and from were not very extensive. Workers spending a long time going to work were more dissatisfied with the Comfort aspects of their job. Since the Comfort Index contained a transportation question, the observed relationship might well be expected. More provocative were the Zest and Performance Debilitation scores of those who spent an hour a day going to work (and probably an hour in the return trip as well). Those people who traveled for excessive amounts of time appeared sufficiently worn out by their journey that their enjoyment of life (as reflected in the Zest Index) and their performance capabilities (as reflected in the Performance Debilitation Index) might have been adversely affected (Table 8.4). Having to pay travel costs that the worker felt were excessive was also related to a few of the study's outcome measures. Workers who felt that their travel costs were too high reported less



overall satisfaction with their jobs, less satisfaction with the Comfort aspect of their jobs (the Comfort aspect, it should be remembered, containing a specific question about transportation to work) and, not unexpectedly, less satisfaction with the financial aspects of their working arrangements (Table 8.7).

Among workers who did not live at their work-sites, 37.7 percent reported a "problem" in getting to and from work (Table 8.8). The majority of these problems involved annoying, congested, or dangerous traffic (Table 8.9). Since the vast majority of workers went to work by private or shared cars (Table 8.5), the preponderance of automobile-related transportation problems appears quite plausible. There is one conclusion, however, that should definitely not be drawn from the statistics in Table 8.9: because comparatively few problems involving public transportation were mentioned, existing public transportation facilities should not be regarded as serving workers adequately. For the most part, workers reported only problems with the mode of transportation they actually used to get to work. They did not think of a hopelessly inadequate public transportation system as a "problem" for them because it was sometimes so bad they never even used it.

Table 8.1 --Work Place Reported to by Worker

When you report for work each day, do you usually go to the same place?

<u>Place</u>	<u>Percentage (N = 1532)</u>
Worker reports to same place each day	91.4%
Worker does not report to the same place each day	8.6

Table 8.2 --Miles Traveled by Worker from Home to Work Site

Roughly how many miles is it from your home to the place where you report for work each day?

<u>Miles traveled</u>	<u>Percentage (N = 1385)*</u>
Worker lives at, or adjacent to, work site	8.5%
Two miles or less (but not at, or adjacent to work site)	25.8
2.1 miles - 5.0 miles	21.7
5.1 miles - 10.0 miles	20.6
10.1 miles - 15.0 miles	11.3
15.1 miles or more	12.0

\*Excludes workers not reporting to the same place each day.

Table 8.3--Time Spent in Transportation to Work Each Day

On the average day about how long does it take you to get from your home to the place where you report for work each day?

<u>Time spent</u>	<u>Percentage (N = 1407)*</u>
Worker lives at, or adjacent to work site	8.4%
1-11 minutes	30.6
12-17 minutes	20.2
18-29 minutes	18.7
30-59 minutes	16.6
One hour - one hour, 59 minutes	5.2
More than two hours	.4

\*Excludes workers not reporting to the same place each day.

Table 8.4 Outcome Measures in Relation to Time Worker Spends in Going to Work\*

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures					Co-worker Relations	Resources	"Content Free"
		JobSat.'70	Comfort	Challenge	Pay				
1. 15 minutes or less	707	3.26	3.20	3.24	3.04	3.46	3.46	3.60	
2. 16-29 minutes	258	3.23	3.14	3.22	3.08	3.40	3.38	3.49	
3. 30-59 minutes	230	3.23	3.06	3.22	3.18	3.38	3.44	62	
4. 60 minutes or more	78	3.13	2.90	3.23	3.12	3.24	3.30	3.47	
Eta		.07	.14	.01	.06	.08	.08	.06	
F		-.06	-.14	-.01	.05	-.08	-.06	-.02	
F		2.044	8.515	.066	1.552	3.086	2.644	1.507	
df		(3,1269)	(3,1268)	(3,1269)	(3,1261)	(3,1253)	(3,1263)	(3,1284)	
p		n.s.	.001	n.s.	n.s.	.05	.05	n.s.	

Table 8.4 Outcome Measures in Relation to Time Worker Spends in Going to Work (continued)\*  
 Mental Health Outcome Measures

Characteristic of worker or worker's job	n	Mental Health Outcome Measures				Zest	Performance Debilitation	Life Satisfaction
		Job-related Tension	Somatic Complaints	Depression	Zest			
1. 15 minutes or less	707	2.00	1.88	2.08	3.63			
2. 16-29 minutes	258	2.09	1.91	2.08	3.62	2.17	3.30	
3. 30-59 minutes	230	2.04	1.89	2.01	3.62	2.18	3.16	
4. 60 minutes or more	78	2.06	1.87	1.96	3.44	2.08	3.25	
Eta		.05	.02	.07				
F		.03	.01	-.06	.09			
df		1.072	0.170	1.884	-.06	.08	.05	
p		(3,1285)	(3,1266)	(3,1259)	3.304	2.984	1.226	
		n.s.	n.s.	n.s.	(3,1265)	(3,1257)	(3,1285)	
					.05	.05	n.s.	

\* Excludes workers not reporting to the same place each day and workers who lived at, or adjacent to their work sites.

Table 8.5--Means of Transportation to Work

How do you usually go to and from work--in your own car, in someone else's car, on public transportation, walk, or what?

<u>Means</u>	<u>Percentage (N = 1429)*</u>
Ride in own car, motorcycle	69.9%
Ride in someone else's car	10.7
Drive company car	4.5
Public transportation	7.8
Walk, bicycle	4.4
Other	2.7

\*Excludes workers living at or adjacent to their work sites.

Table 8.6--Estimation of Travel Expenses in Relation to Earnings

Considering how much you earn from your job, do you think the cost of traveling to and from work is too much or just about right?

	<u>Percentage (N = 1403)*</u>
Worker thinks travel costs are too much	12.0%
Worker thinks travel costs are just about right	88.0

\*Excludes workers living at or adjacent to their work sites.

Table 8.7 Outcome Measures in Relation to Cost of Travel to Work\*

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures					Resources	"Content Free"
		Jobsat '70	Comfort	Challenge	Pay	Co-worker Relations		
Reasonableness of transportation costs in relation to workers' wages								
1. Travel costs are too much	168	3.13	3.00	3.18	2.81			
2. Travel costs are just about right	1216	3.26	3.16	3.26	3.10	3.43	3.25	
Eta		.09	.09	.04	.12	3.42	3.62	
F		INAP	INAP	INAP	INAP	.00	.13	
df		10,316	11,486	2,582	19,597	INAP	INAP	
P		(1,1382)	(1,1381)	(1,1362)	(1,1374)	(1,1363)	23,905	
		.01	.001	n.s.	.001	n.s.	(1,1400)	
							.001	



Table 8.7 Outcome Measures in Relation to Cost of Travel to Work (continued)\*

Characteristic of worker or worker's job	n	Mental Health Outcome Measures				Performance Debilitation	Life Satisfaction
		Job-related Tension	Somatic Complaints	Depression	Zest		
1. Reasonableness of transportation costs in relation to workers' wages							
Travel costs are too much	168	2.09	1.95				
Travel costs are just about right	1216	2.02	1.87	2.09	3.53	2.17	2.91
Ets				2.05	3.62	2.14	3.30
F		.03	.04	.02	.06	.02	.12
df		INAP 1.593	INAP 2.589	INAP 0.825	INAP 5.377	INAP .0353	INAP 20.303
P		(1,1401) n.s.	(1,1381) n.s.	(1,1374) n.s.	(1,1380) .05	(1,1372) n.s.	(1,1401) .001

\* Excludes workers living at or adjacent to their work sites.



Table 8.8--Percentage of Workers with Problems Concerning Travel to and from Work

	<u>Percentage of workers (N = 1429)*</u>
Worker reports a problem	37.7
Worker reports no problem	62.3

\*Excludes workers living at or adjacent to their work sites

Table 8.9 -- Problems with Travel to and from Work - Types of Problems

<u>Type of problem</u>	<u>Percentage of problems of each type*</u> <u>(Total number of problems reported = 596)</u>
Traffic nuisances, inconveniences, or congestion	47.3%
Traffic dangers	12.1
Inconvenient public transportation schedules	7.0
Transportation too expensive	6.0
Bad public transportation (not further elaborated)	4.5
Worker is exposed to the elements while in transit	4.4
Transportation takes too long	4.4
Public transportation facilities are crowded or uncomfortable	3.7
Possibility of personal attack during travel	1.3
Public transportation is too far from worker's home or place of work	1.2
Too many transfers required	1.0

\*These problems were reported by 509 workers. Percentages do not add to 100% since 42 miscellaneous problems are included in the total number.



Table 8.10 Labor Standards Problems Among Major Demographic and Occupational Subgroups \*

Problem Area:	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
<b>a. Sex</b>					
Men	928	36.9%	336	2.4	37.5% (126)
Women	499	39.1	192	2.5	42.2 (81)
					F=1.107; df=(1,526); ns
					$\chi^2 = .684$ ; df=(1); ns
<b>b. Race</b>					
White	1262	37.3%	463	2.4	38.0% (176)
Black	148	39.9	58	2.7	48.3 (28)
					F=5.437; df=(1,519); p<.05
					$\chi^2 = .365$ ; df=(1); ns
<b>c. Age</b>					
20 or under	95	34.7%	32	2.6	43.7% (14)
21-29	326	42.0	136	2.4	36.8 (50)
30-44	459	39.7	178	2.4	35.4 (63)
45-54	315	39.0	119	2.5	42.8 (51)
55-64	188	26.1	50	2.5	46.0 (23)
65 and over	39	28.2	11	2.5	45.5 (5)
					F=0.863; df=(5,520); ns

$\chi^2 = 16.283$ ; df=(5); p<.01

Table 8.10 Labor Standards Problems Among Major Demographic and Occupational Subgroups (continued)\*

Problem Area: Transportation problems

	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
<u>d. Education</u>					
None	5	20.0%	1	3.0	100.0% (1)
Some grade school	100	32.0	33	2.7	51.5 (17)
Completed grade school	109	35.8	39	2.8	59.0 (23)
Some high school	241	35.3	83	2.5	42.2 (35)
High school diploma	522	37.9	192	2.4	37.0 (71)
Some college	245	40.8	98	2.4	36.7 (35)
College degree	109	44.0	48	2.3	27.1 (13)
Graduate or professional training	96	36.5	35	2.4	37.1 (13)

$\chi^2 = 9.903$ ;  $df = (7)$ ; ns

$F = 2.744$ ;  $df = (6, 521)$ ;  $p < .05$

Table 8.10 Labor Standards Problems Among Major Demographic and Occupational Subgroups (continued)\*

Problem Area: Transportation problems

	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
<u>e: Self-employment status</u>					
Self-employed	137	24.8%	32	2.4	37.5% (12)
Wage-and-salary	1291	39.0	497	2.5	39.5 (196)
$\chi^2=10.669; df=(1); p<.001$					
<u>f. Industry</u>					
Agriculture, forestry, and fisheries	30	16.7%	4	2.8	75.0% (3)
Mining	22	45.5	9	2.8	55.5 (5)
Contract construction	121	40.5	48	2.5	41.7 (20)
Manufacturing	377	38.5	142	2.5	40.0 (58)
Transportation, communication, electric, gas and sanitary services	91	38.5	35	2.4	32.3 (11)
Wholesale and retail trade	259	38.2	102	2.4	34.0 (34)
Finance, insurance, real estate	68	38.2	26	2.3	34.6 (9)
Services	366	37.4	134	2.5	40.6 (54)
Government	79	34.2	29	2.6	40.0 (14)

$\chi^2=7.198; df=(8); ns$

$F=3.537; df=(8, 520); ns$

Table 8.10 Labor Standards Problems Among Major Demographic and Occupational Subgroups (continued)\*

Problem Area: Transportation problems

Occupation	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
Professional, technical, and managerial	372	39.0%	144	2.4	36.1% (52)
Clerical and sales	324	38.6	123	2.4	33.4 (41)
Service	167	37.7	61	2.7	52.5 (32)
Farming, fisheries, and forestry	31	19.4	5	2.8	80.0 (4)
Processing	25	32.0	8	2.4	25.0 (2)
Machine trades	116	42.2	48	2.4	33.3 (16)
Bench work	93	35.5	33	2.6	42.4 (14)
Structural work	157	36.9	57	2.5	42.1 (24)

$\chi^2 = 6.370$ ;  $df = (7)$ ; ns

F = 1.969;  $df = (7, 471)$ ; ns

h. Blue-collar versus white-collar

White-collar	711	38.3%	270	2.4	34.7% (94)
Blue-collar	689	37.6	253	2.5	43.7 (110)

$\chi^2 = .066$ ;  $df = (1)$ ; ns

F = 6.126;  $df = (1, 521)$ ;  $p < .05$

Table 8.11 Outcome Measures in Relation to Transportation Problems\*

Characteristic of worker or workers' job	n	Job Satisfaction Outcome Measures						"Content Free"
		JobSat '70	Comfort	Challenge	Pay	Co-worker Relations	Resources	
1. Problem with transportation	533	3.19	3.02	3.24	3.04	3.40	3.36	3.50
2. No problem with transportation	876	3.28	3.22	3.26	3.09	3.43	3.48	3.63
Eta		.10	.16	.01	.03	.02	.09	.07
F		INAP	INAP	INAP	INAP.	INAP	INAP	INAP
F		12.877	37.637	.299	1.222	.925	12.121	6.984
df		(1,1407)	(1,1406)	(1,1407)	(1,1399)	(1,1386)	(1,1400)	(1,1425)
p		.001	.001	n.s.	n.s.	n.s.	.001	.01

Mental Health Outcome Measures

Characteristic of worker or workers' job	n	Mental Health Outcome Measures					
		Job-related Tension	Somatic Complaints	Depression	Zest	Performance Debilitation	Life Satisfaction
1. Problem with transportation	533	2.14	1.92	2.10	3.59	2.16	3.15
2. No problem with transportation	876	1.96	1.85	2.02	3.63	2.13	3.33
Eta		.12	.05	.06	.04	.03	.08
F		INAP	INAP	INAP	INAP	INAP	INAP
F		22.761	3.386	4.966	2.049	1.059	8.788
df		(1,1426)	(1,1406)	(1,1399)	(1,1405)	(1,1397)	(1,1426)
p		.001	n.s.	.05	n.s.	n.s.	.01

\* Excludes workers living at or adjacent to their work sites

## 9. UNION MANAGEMENT

For the reader concerned with what unions may do to improve the conditions of American workers, the data in this section will be of little interest. The working conditions problems of union members do not differ very substantially from those of non-union members, and the pertinent data on these problems may be found in all the other sections of the present report. The data in this section is relevant only to two very limited aspects of union management: how democratically union members felt their unions were run; and how efficiently they felt their unions were managed.

The basic descriptive statistics on the union affiliations of the workers in the sample is presented in Table 9.1. Among workers as a whole union members were a distinct minority. A little over three-quarters of the white-collar workers interviewed were not union members, and even among blue-collar workers slightly less than half reported a union affiliation. Although not union members themselves, an additional 6.5 percent of both blue- and white-collar workers reported working under a union or employees association contract. Most workers who belonged to unions were members of unions with some kind of national or international affiliation, predominantly the AFL-CIO.

Union members were asked two "problem" questions about the management of their unions:

1. "Could you tell me about any problems you feel there are with your union regarding how democratically it's run?" Twelve and seven-tenths percent of the blue-collar union members reported such a problem. (Table 9.3).

Reports of these problems appeared to be completely unrelated to any of the study's major demographic or occupational classifications (Table 9.4). Union members reporting such problems were more likely than others to manifest lower levels of overall job satisfaction and satisfaction with the Pay and Resources aspects of their jobs and to experience greater levels of job-related tension (Table 9.5).

2. "Could you tell me about any problems you feel there are with your union regarding how well it is managed?" About 17 percent of both blue- and white-collar union members reported such a problem (Table 9.6). The frequency of the reports of these problems was not associated with the study's major demographic and occupational variables (Table 9.7). Problems with how well the workers' union was managed was, however, associated with all of the study's job satisfaction measures (Table 9.8). On each of the job satisfaction measures those union members who were least satisfied were those who reported problems with the management of their unions. The competence of union management was therefore more closely associated with workers' job satisfaction than were workers' reports of how democratically their unions were run.

In conclusion, reports of problems with union direction that was less than completely democratic or competent were obtained from a significant minority of union members. But these reports seemed quite independent of a workers' demographic or occupational characteristics. Moreover, these qualities of union management appeared to have only limited impact on workers' mental health and job satisfaction. That so many other tables in this report indicate that working conditions problems are associated with workers' demographic and occupational characteristics and are sizeably related to both workers' job satisfaction and their mental health, makes the union data in the present section somewhat suspect. Workers appeared

to be more concerned with what actually happens to them on their jobs than with the "behind the scenes" activities that determine the quality of their working conditions. They appeared less affected by unions in terms of the unions' internal administration and procedures than in terms of what the unions actually achieve for them.

The implications of this for future studies of working conditions are clear. If a study is principally concerned with the identification of working conditions problems, their distribution among the working population, and their effects upon workers' well-being, attention would be more profitably focused upon the problems themselves than upon characteristics of the administrative apparatuses that have either created the problems (i.e., aspects of the workers' organization) or have failed to stop them from occurring (e.g., unions). In such a study of working conditions workers' feelings about the administration of their unions appears no more relevant than their feelings about the quality of administration of the companies' personnel offices or other administrative units of their employers' organizations. Although the worker is the best reporter of the working conditions that he experiences, he is not necessarily the best informed reporter and interpreter of the circumstances creating his working conditions.



Table 9.1 Union Affiliation

As part of your present job do you belong to a union or employee's association?  
 Is that union affiliated with the AFL-CIO?  
 Is that union affiliated with any national or international union?  
 Even though you aren't a member of a union or employee's association, do you work  
 under a union or employee's association contract?

Affiliation	Percentage*	
	White-collar (N = 687)	Blue-collar (N = 655)
Worker belongs to a union affiliated with AFL-CIO	9.3%	33.6%
Worker belongs to a union affiliated with a national or international union other than AFL-CIO	6.8	8.9
Worker belongs to a union not affiliated with any national or international union	5.1	3.2
Worker does not belong to a union but works under a union or employees' association contract	6.7	6.3
Worker neither belongs to a union nor works under a union or employees' association contract	72.1	48.1

\* Excludes farmers, workers in farm-related occupations, and workers whose blue-collar versus white-collar status could not be determined.

Table 9.2 Outcome Measures in Relation to Union Membership

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures						"Content Free"
		JobSat '70	Comfort	Challenge	Pay	Co-worker Relations	Resources	
Union membership (Blue-collar workers only)								
1. Worker belongs to union affiliated with AFL	58	3.22	3.11	3.10	3.18	3.44	3.44	3.44
2. Worker belongs to national or international union, not affiliated with AFL-CIO	58	3.17	3.06	3.04	3.42	3.34	3.27	3.54
3. Worker belongs to union not affiliated with any national or international	20	2.96	2.83	2.94	2.89	3.10	3.18	3.19
4. Worker does not belong to union, but works under union or employees' association contract	41	3.34	3.38	3.21	3.07	3.63	3.56	3.38
5. Worker does not belong to union and does not work under a contract	308	3.18	3.15	3.17	2.78	3.38	3.47	3.44
Eta		.11	.14	.08	.27	.12	.13	.0
F		INAP	INAP	INAP	INAP	INAP	INAP	INAP
df		2,079	3,281	1,164	12,312	2,374	2,762	.599
P		(4,635)	(4,636)	(4,636)	(4,633)	(4,625)	(4,633)	(4,619)
		n.s.	.05	n.s.	.001	.05	.05	n.s.
								260

Table 9.2 Outcome Measures in Relation to Union Membership (continued)\*

Characteristic of worker or worker's job	n	Mental Health-Outcome Measures					Life Satisfaction
		Job-related Tension	Somatic Complaints	Depression	Zest	Performance Debilitation	
Union membership (Blue-collar workers only)							
1. Worker belongs to union affiliated with AFL-CIO	213	1.95	1.99	2.03	3.54	2.15	3.25
2. Worker belongs to National or international union not affiliated with AFL-CIO	58	2.07	1.81	1.88	3.45	2.06	3.28
3. Worker belongs to union not affiliated with any national or international	20	2.22	2.01	2.07	3.47	2.03	3.29
4. Worker does not belong to union, but works under union or employees' association contract	41	1.92	1.80	1.99	3.65	2.21	3.17
5. Worker does not belong to union and does not work under a contract	308	1.98	1.95	2.09	3.59	2.14	3.13
Eta		.08	.10	.10	.09	.05	.06
F		INAP	INAP	INAP	INAP	INAP	INAP
F		0.980	1.528	1.648	1.386	0.467	0.586
df		(4,650)	(4,641)	(4,636)	(4,640)	(4,636)	(4,650)
p		n.s.	n.s.	n.s.	n.s.	n.s.	n.s.

\*Excludes farmers, workers in farm-related occupations, white-collar workers, and workers whose blue-collar versus white-collar status could not be determined

Table 9.3 Percentage of Union Members Reporting Problems with How Democratically their Unions were Run

Could you tell me about any problems you feel there are with your union regarding how democratically it's run?

	Percentage*	
	White-collar (N = 158)	Blue-collar (N = 314)
Worker reports a problem	12.7%	19.7%
Worker reports no problem	87.3	80.3

\* Excludes workers who do not belong to a union, farmers, workers in farm-related occupations, and workers whose blue-collar versus white-collar status could not be determined.

Table 9.4 Labor Standards Problems Among Major Demographic and Occupational Subgroups \*

Problem area: How democratically unions are run		Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
<b>a. Sex</b>						
Men	344	18.6%	18	2.7	53.8%	(36)
Women	129	14.0	18	3.2	71.3	(13)
	$\chi^2=1.416$ ; $df=(1)$ ; ns			$F=3.935$ ; $df=(1,83)$ ; ns		
<b>b. Race</b>						
White	397	17.9%	74	2.8	54.7%	(42)
Black	69	14.5	10	2.8	70.0	(7)
	$\chi^2=.471$ ; $df=(1)$ ; ns			$F=0.005$ ; $df=(1,82)$ ; ns		
<b>c. Age</b>						
20 or under	14	21.4%	3	3.0	66.6%	(2)
21-29	17	19.7	25	2.8	56.0	(14)
30-44	149	20.8	29	2.8	58.6	(17)
45-54	117	12.0	17	2.8	53.0	(9)
55-64	68	14.7	11	2.8	63.7	(7)
65 and over	9	11.1	0	-	-	-
	$\chi^2=4.789$ ; $df=(5)$ ; ns			$F=0.043$ ; $df=(4,80)$ ; ns		

Table 9.4 Labor Standards Problems Among Major Demographic and Occupational Subgroups (continued)\*

Problem area: How democratically unions are run

	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
d. Education					
None	0	0.0%	0	-	-
Some grade school	42	23.8	10	2.7	60.0% (6)
Completed grade school	49	8.2	3	3.7	100.0 (3)
Some high school	78	20.5	17	2.6	47.0 (8)
High school diploma	168	20.8	35	2.9	62.8 (22)
Some college	66	18.2	15	2.7	46.6 (7)
College degree	33	9.1	3	3.3	100.0 (3)
Graduate or professional training	38	5.3	2	1.5	0.0 (0)

$\chi^2=11.570$ ;  $df=(7)$ ; ns

$F=1.373$ ;  $df=(6, 78)$ ; ns

Table 9.4 Labor Standards Problems Among Major Demographic and Occupational Subgroups (continued)\*  
 Problem area: How democratically unions are run

	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
<b>e. Self-employment status</b>					
Self employed	23	8.7%	4	3.5	100.0% (4)
Wage-and-salary	451	17.7	81	2.8	55.6 (45)
	$X^2=1.251$ ; $df=(1)$ ; ns				
<b>f. Industry</b>					
Agriculture, forestry, and fisheries					$F=1.988$ ; $df=(1,83)$ ; ns
Mining	3	0.0%	0		
Contract construction	10	40.0	4	3.3	75.0% (3)
Manufacturing	47	17.0	9	3.0	66.6 (6)
Transportation, communication, electric, gas and sanitary services	170	18.8	31	3.0	71.0 (22)
Wholesale and retail trade	53	18.9	12	2.5	41.7 (5)
Finance, insurance, real estate Services	42	28.5	12	2.3	25.0 (3)
Government	3	0.0	0		
	103	9.7	11	3.0	63.7 (7)
	39	15.4	6	2.5	50.0 (3)
	$X^2=13.110$ ; $df=(8)$ ; ns				
	$F=1.449$ ; $df=(6,78)$ ; ns				

Table 9.4 Labor Standards Problems Among Major Demographic and Occupational Subgroups (continued)

Problem area: How democratically unions are run

E. Occupation	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
Professional, technical, and managerial	95	10.1%	11	2.5	54.6% (6)
Clerical and sales	60	18.3	10	3.1	70.0 (7)
Service	51	19.6	11	2.5	45.5 (5)
Farming, fisheries, and forestry	2	0.0	0	-	-
Processing	17	23.5	4	3.2	75.0 (7)
Machine trades	47	23.4	12	2.8	50.0 (6)
Bench work	46	19.6	8	3.5	100.0 (8)
Structural work	82	15.9	14	2.5	35.7 (5)

$\chi^2=6.283$ ;  $df=(7)$ ; ns

$F=1.506$ ;  $df=(6,63)$ ; ns

h. Blue-collar versus white-collar

White-collar	158	12.7%	22	2.9	61.9% (14)
Blue-collar	314	19.7	62	2.8	56.3 (35)

$\chi^2=3.678$ ;  $df=(1)$ ; ns

$F=0.052$ ;  $df=(1,82)$ ; ns

\* Includes union members only



Table 9.5 Outcome Measures in Relation to Problems Concerning How Democratically Workers Feel their Unions are Run \*

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures						"Content Free"
		JobSat '70	Comfort	Challenge	Pay	Co-worker Relations	Resources	
1. Workers reporting a problem	79	3.11	3.02	3.04	3.06	3.27	3.25	3.28
2. Workers reporting no problem	387	3.24	3.12	3.18	3.26	3.43	3.42	3.60
Eta		.10	.06	.08	.10	.09	.10	.13
F		INAP	INAP	INAP	INAP	INAP	INAP	INAP
F		4.962	1.475	3.068	4.442	3.746	4.802	8.603
df		(1,464)	(1,465)	(1,465)	(1,464)	(1,458)	(1,464)	(1,472)
p		.05	n.s.	n.s.	.05	n.s.	.05	.01

Mental Health Outcome Measures

Characteristic of worker or worker's job	n	Job-related Tension	Somatic Complaints	Depression	Zest	Performance Debilitation	Life Satisfaction
2. Workers reporting no problem	387	1.98	1.88	2.00	3.56	2.08	3.34
Eta		.11	.13	.08	.05	.06	.09
F		INAP	INAP	INAP	INAP	INAP	INAP
F		5.787	7.943	3.217	1.089	1.620	3.779
df		(1,472)	(1,462)	(1,458)	(1,462)	(1,457)	(1,472)
p		.05	.01	n.s.	n.s.	n.s.	n.s.

\* Excludes workers who do not belong to a union

Table 9.6 Percentage of Union Members Reporting Problems with how Well their Unions were Managed

Could you tell me about any problems you feel there are with your union regarding how well it is managed?

	Percentage*	
	White-collar (N = 154)	Blue-collar (N = 309)
Worker reports a problem	16.9%	16.8%
Worker reports no problem	83.1	83.2

\*Excludes workers who do not belong to a union, farmers, workers in farm-related occupations, and workers whose blue-collar versus white-collar status could not be determined.

Table 9.7 Labor Standards Problems Among Demographic and Occupational Subgroups \*  
 Problem area: How well unions are managed

a. Sex	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
Men	337	15.4%	58	2.9	59.5% (35)
Women	127	19.7	24	2.8	54.2 (13)
	$\chi^2=1.206$ ; $df=(1)$ ; ns				$F=0.016$ ; $df=(1,80)$ ; ns
b. Race					
White	390	15.4%	65	2.8	56.9% (37)
Black	68	25.0	17	3.1	64.7 (11)
	$\chi^2=3.828$ ; $df=(1)$ ; ns				$F=1.041$ ; $df=(1,80)$ ; ns
c. Age					
20 or under	15	6.7%	1	2.0	0.0% (0)
21-29	117	23.9	29	2.9	58.6 (17)
30-44	144	18.1	29	3.0	65.5 (19)
45-54	117	15.4	17	2.6	71.0 (8)
55-64	63	7.9	6	2.8	66.7 (4)
65 and over	9	0.0	0		
	$\chi^2=11.061$ ; $df=(5)$ ; ns				$F=0.426$ ; $df=(3,77)$ ; ns

269

Table 9.7 Labor Standards Problems Among Demographic and Occupational Subgroups (continued)\*  
 Problem area: How well unions are managed

d. Education	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
None	0	0.0%	0		
Some grade school	39	15.4	6	3.3	83.3% (5)
Completed grade school	48	12.5	6	2.8	66.7 (4)
Some high school	77	10.3	12	2.8	58.4 (7)
High school diploma	167	20.4	34	3.0	61.8 (21)
Some college	66	18.2	11	2.9	66.7 (8)
College degree	33	24.2	8	2.5	37.5 (3)
Graduate or professional training	34	11.8	4	1.8	0.0 (0)
	$\chi^2=6.616$ ; $df=(7)$ ; ns				$F=1.555$ ; $df=(6,75)$ ; ns

285

270

Table 9.7 Labor Standards Problems Among Demographic and Occupational Subgroups (continued)\*

Problem area: How well unions are managed

	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
<b>e. Self-employment status</b>					
Self employed	23	8.7%	1	4.0	100.0% (1)
Wage-and-salary	442	17.2	81	2.8	58.1 (47)
$\chi^2=1.131$ ; $df=(1)$ ; ns					
<b>f. Industry</b>					
Agriculture, forestry and fisheries	3	0.0%	0	-	-
Mining	10	20.0	1	4.0	100.0% (1)
Contract construction	47	12.8	6	2.8	65.7 (4)
Manufacturing	164	18.9	32	3.2	75.0 (24)
Transportation, communication, electric, gas and sanitary services	54	24.1	14	2.7	61.6 (8)
Wholesale and retail trade	41	4.9	5	2.4	40.0 (2)
Finance, insurance, real estate	4	0.0	0	-	-
Services	98	19.4	20	2.5	40.0 (8)
Government	40	10.0	4	2.5	25.0 (1)

$\chi^2=10.605$ ;  $df=(8)$ ; ns

F=2.126;  $df=(5,75)$ ; ns



Table 9.7: Labor Standards Problems Among Major Demographic and Occupational Subgroups (continued)\*

Problem area: How well unions are managed

Occupation	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
Professional, technical, and managerial	94	17.0%	17	2.5	36.2% (6)
Clerical and sales	61	16.4	10	2.4	40.0 (4)
Service	49	16.3	9	3.0	66.7 (6)
Farming, fisheries and forestry	2	0.0	0	-	-
Processing	16	18.8	3 <sup>a</sup>	3.7	100.0 (3)
Machine trades	46	15.2	9	3.2	66.7 (6)
Bench work	44	20.5	7	3.4	71.4 (5)
Structural work	83	14.5	12	2.6	50.0 (6)

$\chi^2=1.282$ ;  $df=(7)$ ; ns

F=2.314;  $df=(6,60)$ ; p .05

h. Blue-collar versus white-collar

White-collar	154	16.9%	26	2.5	37.0% (10)
Blue-collar	309	16.8	56	3.0	69.1 (38)

$\chi^2=0.000$ ;  $df=(1)$ ; ns

F=5.818;  $df=(1,80)$ ; p < .05

\* Includes union members only

Table 9.8 Outcome Measures in Relation to Problems Concerning How Well Workers Feel their Unions are Managed \*

Characteristic of worker or worker's job	Job Satisfaction Outcome Measures							"Content Free"
	n	JobSat '70	Comfort	Challenge	Pay	Co-worker Relations	Resources	
Problems with how well unions are managed								
1. Workers reporting a problem	78	3.01	2.87	3.00	3.00	3.26	3.17	3.31
2. Workers reporting no problem	379	3.26	3.15	3.19	3.26	3.45	3.43	3.61
Eta squared	.19	.17	.11	.14	.10	.10	.16	.12
F	INAP	INAP	INAP	INAP	INAP	INAP	INAP	INAP
df	17,794	14,306	5,721	8,597	4,961	12,256	(1,455)	7,360
p	(1,455)	(1,456)	(1,456)	(1,455)	(1,449)	(1,455)	(1,455)	(1,463)
	.001	.001	.05	.01	.05	.05	.001	.01

Mental Health Outcome Measures

Characteristic of worker or worker's job	n	Job-related Tension	Somatic Complaints	Depression	Zest	Performance Debilitation	Life Satisfaction
Problems with how well unions are managed							
1. Workers reporting a problem	78	2.25	1.95	2.11	3.50	2.17	3.01
2. Workers reporting no problem	379	1.96	1.90	2.01	3.56	2.09	3.35
Eta squared	.15	.03	.06	.04	.06	.06	.12
F	INAP	INAP	INAP	INAP	INAP	INAP	INAP
df	10,776	0.493	1.694	0.933	1,124	1,124	7,073
p	(1,463)	(1,454)	(1,450)	(1,454)	(1,449)	(1,449)	(1,463)
	.01	n.s.	n.s.	n.s.	n.s.	n.s.	.01

\* Excludes workers who do not belong to a union

Table 9.9 --Problems Concerning Unions --Types of Problems

Type of problem	Percentage of problems of each type* (Total number of problems reported=208)
Union should be more responsive to its members, be more democratic, tolerate dissenters, be more open to the views of its members, be less controlled by a few	17.3%
Union personnel are not sufficiently qualified, experienced, competent (with no implication of dishonesty)	15.9
Unprompt or inefficient handling of employee grievances and complaints.	10.6
Worker mentions particular benefit or arrangement union should work for (eg. night bonuses)	7.2
Graft or corruption among union leaders	7.2
Union dues are too high	5.8
Union officials are too closely tied to the company	4.8
Worker suggests specific structural changes in the union but does not specify the problem the change is intended to remedy.	3.8
Worker believes there are minority groups not adequately represented by the union	3.8
Union membership should be kept better informed	3.8
Other problems with incompetent union management	5.8
Other problems with undemocratic union management	2.9

\*These problems were reported by 85 workers who had problems with the democratic running of the union and 82 workers who had problems with the competence of union management. Percentages do not add to 100%, since 19 miscellaneous problems are included in the total number.

## 10. DISCRIMINATION

Although there is much public attention currently focused upon problems of discrimination both in general and in employment settings, reports by workers of on-the-job discrimination on the basis of race or national origin, sex, and age were among the labor standards problems least frequently reported by workers (Table 4.2), and reports of discrimination as constituting the "single biggest problems" faced by workers on their jobs were negligible (Table 4.6). Data to be presented later will further show that only age discrimination played an appreciable role among the study's major determinants of job satisfaction.

At least two factors may have contributed to the possible under-reporting of discrimination problems. First, the survey measured only on-the-job discrimination. Discrimination may in fact be most acutely experienced by persons outside of the scope of the survey-- either potential workers who were at the time not even in the labor force (e.g., older workers) or labor force members who were unemployed. The "hard-core-unemployed," many of whom are members of minority groups were obviously under-represented in the sample. Equally under-represented were those women who had withdrawn from the labor force because of previous frustrations in securing employment or trying to achieve positions commensurate with their abilities. Any group of workers who were part of the labor force but whose minority status had impeded their access to employment was under-represented. The second factor possibly con-



tributing to the rather low estimate of the frequency of discrimination was the very restrictive wording of the discrimination question: "Do you feel in any way discriminated on your job because of your (race or national origin/ sex/ age)?" The emphasis was upon discrimination on your job rather than the conditions which had led to the worker's being assigned to his job. Thus a worker might have been assigned to the poorest paid and most menial job in a company because of his race. However, once having been assigned to the job, he might not have been treated any worse than anyone else assigned to the same job. Interpreting the discrimination question very literally, he might therefore quite justifiably have not reported any discrimination. Discrimination on the part of his employer which led to the worker being assigned to the bad job in the first place was beyond the scope of the discrimination question.

In each of the three areas of discrimination that were investigated, the form of discrimination most commonly reported was the same--complaints by the worker that he or she was given fewer opportunities for promotion due to his or her minority status (Tables 10.2, 10.6, and 10.10). Complaints of sex discrimination were, however, twice as likely to assume this form than were complaints of discrimination on the basis of race or age. The three types of discrimination also differed somewhat in terms of workers' reports of the severity of the discrimination problems they faced, the greatest percentage of "sizeable" or "great" discrimination problems reported being those involving discrimination on the basis of race or national origin.

Race and national origin discrimination. Table 4.2 indicates that three percent of all workers interviewed reported discrimination based on race or national origin. The percentage is somewhat misleading,

however, because it combines the responses of both whites and blacks. More meaningful statistics can be obtained in Table 10.1 which shows the answers to the discrimination question for blacks and whites separately. Seventeen and four-tenths percent of the blacks in the sample felt that they were discriminated against, the most prevalent form of such discrimination being their not receiving sufficient opportunities for advancement. Of the very few whites reporting race or national origin discrimination, the most frequently cited type of discrimination was one of "backlash," in which white workers complained about employers' favoritism toward blacks. Reports of race or national origin discrimination\* were unrelated to a worker's industry group (Table 10.3f), occupation group (Table 10.3g), collar color (Table 10.3h), employment status (10.3e), or sex (Table 10.3a). Complaints of this type of discrimination were significantly more frequent among younger workers (Table 10.3c). Reports of race and national origin discrimination were also significantly related to education, but the form of the relationship was rather unusual. Complaints of discrimination were most common among workers who had attained a college degree (Table 10.3d). However, among those who had attained a level of education in excess of a college degree, complaints about discrimination dropped off sharply.

Data in earlier tables have already shown that blacks differed from whites on a number of the study's job satisfaction measures. Not only were blacks significantly less satisfied than whites with their

---

\*Although this discussion persists in adding the qualification "or national origin" in order to be consistent with the tables, so few whites reported discrimination that the text, for all practical purposes, refers to racial discrimination only.

jobs in general, but they were also less satisfied with the Comfort, Challenge, and Co-worker Relationships aspects of their work. Racial differences in terms of workers' experiences with labor standards problems were few. Most conspicuously, more blacks than whites reported having family incomes that were inadequate to meet their usual expenses.

Age discrimination. The principal target group of age discrimination turned out to be far different from that which had been anticipated at the onset of the study. Originally, no plans had been made to ask workers under 55 years old about age discrimination. However, pretests hinted that the survey's age discrimination question ("Do you feel in any way discriminated against because of your age?") might elicit substantial numbers of reports of age discrimination from younger workers. This unexpected situation persisted in the national survey. Although four percent of workers age 45 & older felt discriminated against because of their age, 13 percent of the "under 30's" made this complaint. The age group in which complaints of age discrimination were most prominent was that of workers age 20 and under, 23.7 percent of whom reported some form of age discrimination (Table 10.5).

Data from other sections in this report provide further substantiation for regarding younger workers as a particularly dissatisfied and problem-burdened group. On both of the study's measures of overall job satisfaction measures younger workers were considerably less satisfied than older ones. Comparable age differences were also observed on the Comfort, Challenge, and Resources subscales of the Jobsat. '70 measure. Younger workers also had more than their fair share of a number of labor standards problems: wage garnishment,

employers' withholding or delaying their wages, unpleasant physical working conditions, and inconvenient or excessive hours. Two labor standards problems were especially frequent among both the youngest and the oldest workers: unsteady employment and inadequate income following a work-related illness or injury.

These data should not, however, be viewed as indicating that older workers are never victims of age discrimination. The older worker, may encounter discrimination principally when he is seeking employment rather than when he is working. The results of the study do not indicate that less attention should be paid to the older worker but only that more attention should be directed toward alleviating the work-related problems of the young.

Sex discrimination--Earlier tables have indicated that women were significantly less satisfied with their jobs in general than were men. They were particularly dissatisfied with the challenge their jobs provided and the pay that they received. The latter source of dissatisfaction is hardly surprising since women more frequently than men reported two types of wage problems--inadequate income for meeting bills and inadequate income following work-related illnesses or injuries. A separate paper prepared by Malcolm Cohen employing data from the present study has determined that the average wage differential between men and women working full-time was \$5,000 a year. After applying various adjustments to this figure to take account of education, unionization, seniority, number of hours worked, age, self-employment status, professional status, and regularity of employment, this differential was somewhat reduced but nevertheless remained a quite substantial \$2,500.

In spite of all this, comparatively few of the women interviewed, only 8.1 percent, reported sex discrimination on their jobs (Table 10.9). The demographic and occupational distribution of these women was particularly interesting. Complaints of sex discrimination were most prevalent among women who held white-collar jobs, were white, better-educated, and had higher incomes. The obvious irony in this is that the women who most frequently felt discriminated against were precisely those who were, in other ways among the least disadvantaged. Probably not coincidentally, women from these same demographic and occupational groups are heavily represented in today's women's liberation movement. There are at least two possible explanations for the observed distribution of discrimination problems among subgroups of women. First, it may rarely have occurred to secretaries, clerical workers, and others in traditionally "female" occupations that their being in such occupations in the first place represented a form of discrimination. Perhaps it is only when a woman finds herself in a position where she is more conspicuously competing with men that she becomes acutely conscious of discrimination against her. Second, it may indeed be that sex discrimination is more prevalent in higher status occupations. A businessman who may be indifferent to having a "lady" sweep his floors or a "girl" type his letters may feel quite different about a woman who is his organizational equal or even his boss. Women in the world of work may find themselves forced into the same position as are Jews--regarded by employers as acceptable as workers at certain levels or in certain occupations but less acceptable as candidates for more "sensitive" positions.

The data on discrimination against women further suggests that decreased reliance should be placed on identifying on-the-job discrimination through the reports of workers themselves. Such de-emphasis of

workers" reports applies equally well to surveys such as the present one and to more "official" media of information collection as union grievances and complaints of discrimination made to government agencies. Some of the objectively most disadvantaged workers, such as poorly-educated women in low-paying jobs, may in fact be those least conscious of on-the-job discrimination--especially where discrimination involves such insidiously subtle and difficult-to-prove abuses as obstructing the upward mobility of minorities. Correcting this under-reporting problem through "consciousness raising" activities is today a major target of women's liberation and certain other minority-oriented movements. If their efforts in this regard are successful, the survey's discrimination data might look substantially different were the study to be repeated at a later date.

Table 10.1 -- Discrimination on Basis of Race or National Origin

Do you feel in any way discriminated against on your job because of your race or national origin?

<u>Race of worker</u>	<u>Percentage of workers of each race reporting discrimination</u>
White workers (N = 1348)	1.3 %
Black workers (N = 155)	17.4

Table 10.2 -- Forms of Work-related Discrimination Based on Race or National Origin

In what ways have you been discriminated against?

<u>Form of discrimination</u>	<u>Percentage of incidents of each type* (Total number of incidents reported = 53)</u>
Worker believes he will be given fewer promotions than others	30.2 %
"Backlash" (A white worker complains about favoritism toward blacks)**	13.2
Worker feels he has been given a "bad" job (e.g. harder, dirtier)	9.4
Worker feels discriminated against in performance evaluation (e.g. his supervisor watches his work more closely than the others)	9.4
Worker feels he has been mistreated, harassed but does not elaborate further	7.5
Worker feels he has been treated unsociably (e.g. others won't mix with you)	5.7
Worker feels discriminated against in hiring (e.g. it's hard to get hired if you belong to worker's race)	5.7

\* Incidents were reported by 45 workers. Percentages do not add to 100% since 10 miscellaneous incidents are included in the total number.

\*\* "Backlash" represents 41.8% of the discrimination problems reported by whites; however, of all whites interviewed only 0.5% reported "backlash."

Table 10.3 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups

Problem Area: Race or National Origin Discrimination

	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable" or "great"
<b>a. Sex</b>					
Men	991	3.0%	24	2.9	54.2% (13)
Women	529	2.8	14	2.6	50.0 (7)
					F=0.814; df=(1,36); ns
<b>b. Race</b>					
White	1348	1.3%	12	2.3	33.4% (4)
Black	155	17.4	25	3.0	64.0 (16)
					F=3.861; df=(1,35); ns
<b>c. Age</b>					
Under 20	97	3.1%	3	3.3	100.0% (3)
21-29	333	5.1	15	2.7	46.6 (7)
30-44	484	3.7	14	2.9	64.3 (9)
45-54	337	0.9	2	3.0	50.0 (1)
55-64	210	1.4	3	1.7	0.0 (0)
65 and over	53	0.0	0	0.0	-
					F=1.301; df=(4,32); ns

283





Table 10.3 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups (continued)

Problem Area: Race or National Origin Discrimination

	Number of workers upon which based	Percentage of workers reporting on one or more prob- severity based each area	Number of workers upon which severity based	Average severity	Percentage (and number of) problem who describe it as "sizeable" or "great"
d. Education					
None	7	0.0%	0		
Some grade school	109	2.8	2	4.0	100.0% (2)
Completed grade school	122	3.3	4	1.8	0.0 (0)
Some high school	267	1.1	3	2.0	0.0 (0)
High school diploma	551	2.5	11	3.1	81.8 (9)
Some college	251	4.0	8	3.1	75.0 (6)
College degree	111	9.0	10	2.5	30.0 (3)
Graduate or professional training	102	1.0	0		

$\chi^2 = 20.189$ ;  $df = (7)$ ;  $p < .01$

$F = 3.025$ ;  $df = (5, 32)$ ;  $p < .05$



(continued)

Table 10.3 Frequency of Reporting Problems among Major Demographic and Occupational Subgroups

Problem Area: Race of

	Number of workers upon which percentage is based	Percentage of workers reporting more problem in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable" or "great"
<u>e. Self-employment status</u>					
Self employed	202	2.0	4	2.3	25.0% (1)
Wage-and-salar,	1319	5.1	34	2.8	55.9 (19)
					$X^2=0.777$ ; $df=(1)$ ; ns
<u>f. Industry</u>					
Agriculture, forestry, and fisheries	64	3.1	2	3.0	50.0% (1)
Mining	22	4.5	1	3.0	100.0 (1)
Contract construction	123	1.6	2	2.0	0.0 (0)
Manufacturing	378	1.9	6	2.8	50.0 (3)
Transportation, communication, electric, gas, sanitary services	95	5.3	3	3.0	66.7 (2)
Wholesale and retail trade	277	2.9	6	2.8	66.7 (4)
Finance, insurance, real estate	74	4.1	3	2.3	33.3 (1)
Services	395	3.3	11	2.7	45.4 (5)
Government	93	4.3	4	3.0	75.0 (3)
					$X^2=5.380$ ; $df=(8)$ ; ns
					$F=1.187$ ; $df=(1,36)$ ; ns
					$F=0.275$ ; $df=(7,29)$ ; ns

285



(continued)

Table 10.3 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups

Problem Area: Race or National Origin Discrimination

Occupation	Number of workers upon which percentage is based	Percentage of reporting workers upon one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as a "sizeable or great"
Professional, technical, and managerial	392	3.1%	11	2.7	36.4% (4)
Clerical and sales	331	2.4	8	3.1	75.0 (6)
Service	183	4.9	6	3.2	83.3 (5)
Farming, fisheries, and forestry	65	3.1	2	3.0	50.0 (1)
Processing	28	0.0	0	0.0	-
Machine trades	119	0.0	0	0.0	-
Bench work	96	3.1	3	2.0	33.3 (1)
Structural work	159	3.1	3	2.7	33.3 (1)

$X^2=7.539$ ;  $df=(7)$ ; ns

$F=0.697$ ;  $df=(1,34)$ ; ns

h. Blue-collar versus white-collar

White-collar	749	2.8%	20	2.8	50.0% (10)
Blue-collar	708	3.1	16	2.7	56.3 (9)

$X^2=0.117$ ;  $df=(1)$ ; ns

$F=0.110$ ;  $df=(1,34)$ ; ns

Table 10.4 Outcome Measures in Relation to Race or National Origin Discrimination

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures						"Content Free"
		JobSat '70	Comfort	Challenge	Pay	Relations	Resources	
<b>Race or national origin discrimination</b>								
1. Workers reporting discrimination	44	2.84	2.66	2.82	2.98	2.97	3.01	2.74
2. Workers not reporting discrimination	1455	3.25	3.15	3.27	3.03	3.42	3.44	3.61
Eta <sup>2</sup>		.14	.14	.12	.01	.11	.12	.16
F		INAP	INAP	INAP	INAP	INAP	INAP	INAP
F		31.229	30.266	21.112	0.190	18.966	22.889	39.839
df		(1,1497)	(1,1495)	(1,1497)	(1,1490)	(1,1459)	(1,1482)	(1,1515)
p		.001	.001	.001	n.s.	.001	.001	.001

**Mental Health Outcome Measures**

Characteristic of worker or worker's job	n	Mental Health Outcome Measures						Life Satisfaction
		Job-related Tension	Somatic Complaints	Depression	Zest	Performance Debilitation	Life Satisfaction	
<b>Race or national origin discrimination</b>								
1. Workers reporting discrimination	44	2.50	1.91	2.22	3.39	2.02	2.69	
2. Workers not reporting discrimination	1455	2.01	1.89	2.05	3.62	2.16	3.28	
Eta <sup>2</sup>		.12	.01	.05	.08	.04	.09	
F		INAP	INAP	INAP	INAP	INAP	INAP	
F		21.538	0.098	3.748	8.884	2.159	13.506	
df		(1,1519)	(1,1498)	(1,1491)	(1,1497)	(1,1489)	(1,1519)	
p		.001	n.s.	n.s.	.01	n.s.	.001	



Table 10.5--Discrimination on Basis of Age

Do you feel in any way discriminated against on your job because of your age?

<u>Age of worker</u>	<u>Percentage of workers of each age group reporting discrimination</u>
Under 20 years old (N=97)	23.7 %
21-29 years old (N=333)	6.6
30-44 years old (N=486)	.6
45-54 years old (N=339)	3.2
55-64 years old (N=212)	4.7
65 years old and over (N=55)	5.5

Table 10.6--Forms of Work-Related Discrimination Based on Age

In what ways do you feel you have been discriminated against?

<u>Form of discrimination</u>	<u>Percentage of incidents of each type* (Total number of incidents reported = 78)</u>
Worker believes he will be given fewer promotions than others	20.5 %
Worker feels discriminated against in performance evaluation (e.g. his supervisor watches his work more closely than the others)	17.9
Worker feels he is treated unsocially (e.g. others won't mix with you).	14.1
Worker feels discriminated against in hiring (e.g. it's hard to get hired if you belong to worker's age group)	11.5
Worker feels he has been given a "bad job" (e.g. dirtier, harder)	6.4
Worker feels he has been mistreated, harassed, but does not elaborate further	2.6
Worker is first fired, last rehired after lay-off	2.6

\*Problems were reported by 54 workers. Percentages do not add to 100 % since 19 miscellaneous problems are included in the total number.

Table 10.7 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups

Problem Area: Age Discrimination

	Number of workers upon which percentage is based	Percentage of workers reporting more problem in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable" or "great"
<b>a. Sex</b>					
Men	994	3.8%	37	2.4	40.5% (15)
Women	534	6.6	35	2.2	28.6 (10)
					F=1.758; df=(1,70); ns
<b>b. Race</b>					
White	1352	4.7%	63	2.3	31.7% (20)
Black	157	5.1	8	2.6	50.0 (4)
					F=1.613; df=(1,69); ns
<b>c. Age</b>					
Under 20	97	23.7%	23	2.3	26.1% (6)
21-29	333	6.6	22	2.2	31.8 (7)
30-44	486	0.6	3	3.0	66.6 (2)
45-54	339	3.2	10	2.4	50.0 (5)
55-64	212	4.7	10	2.4	40.0 (4)
65 and over	55	5.5	3	2.0	0.0 (0)
					F=0.788; df=(5,65); ns

289



Table 10.7 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups  
 Problem Area: Age Discrimination (continued)

d. Education	Number of workers upon which percentage based	Percentage of workers reporting one or more problem in each area	Number of workers upon which severity ratings are based	Average severity	Percentage of workers reporting the problem who describe it as "sizeable" or "great"
None	7	14.3%	1	2.0	0.0% (0)
Some grade school	111	2.7	3	2.0	33.3 (1)
Completed grade school	123	0.8	1	2.0	0.0 (0)
Some high school	267	4.5	12	2.8	50.0 (6)
High school diploma	554	4.3	23	2.2	30.4 (7)
Some college	253	7.1	18	2.2	27.8 (5)
College degree	111	9.0	10	2.2	30.0 (3)
Graduate or professional training	102	3.9	4	2.8	75.0 (3)

$\chi^2 = 14.550$ ;  $df = (7)$ ;  $p < .05$

$F = 1.863$ ;  $df = (5, 64)$ ; ns

Table 10.7 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups

Problem Area: Age Discrimination

	Number of workers upon which percentage is based	Percentage of workers reporting one or more problem in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable" or "great"
e. Self-employment status					
Self employed	204	4.9%	9	2.1	22.0% (2)
Wage-and-salary	1325	4.8	63	2.3	36.5 (23)

$\chi^2=0.008$ ;  $df=(1)$ ; ns

F=0.797;  $df=(1,70)$ ; ns

f. Industry

Agriculture, forestry, and fisheries	64	7.8%	4	2.0	0.0% (0)
Mining	22	4.5	1	2.0	0.0 (0)
Contract construction	124	4.0	5	2.4	40.0 (2)
Manufacturing	379	3.4	13	2.5	53.9 (7)
Transportation, communication, electric, gas, sanitary services	95	1.1	1	3.0	100.0 (1)
Wholesale and retail trade	278	7.2	20	2.3	35.5 (7)
Finance, insurance, real estate	75	6.7	5	2.4	40.0 (2)
Services	398	4.5	18	2.3	27.8 (5)
Government	94	5.3	5	2.0	20.0 (1)

$\chi^2=10.141$ ;  $df=(8)$ ; ns

F=0.461;  $df=(6,63)$ ; ns



(continued)

Table 10.7 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups

Problem Area: Age Discrimination

g. Occupation	Percentage of workers reporting		Number of workers upon which percentage is based	Number of workers upon which severity ratings are based		Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable" or "great"
	upon one or more men in each area	of reporting workers upon which severity ratings are based		workers upon which severity ratings are based	workers upon which severity ratings are based		
Professional, technical, and managerial	5.1%	20	394	2.3	30.0%	(6)	
Clerical and sales	6.3	21	334	2.4	42.9	(9)	
Service	4.9	9	185	1.9	11.1	(1)	
Farming, fisheries, and forestry	7.7	4	65	2.0	0.0	(0)	
Processing	0.0	0	28	0.0	0.0	-	
Machine trades	2.5	3	120	3.0	66.7	(2)	
Bench work	1.0	1	96	2.0	0.0	(0)	
Structural work	4.4	7	159	2.3	28.6	(2)	
			$X^2=8.733$ ; $df=(7)$ ; ns	$F=1.296$ ; $df=(5,58)$ ; ns			

h. Blue-collar versus white-collar

White-collar

Blue-collar

5.4%	41	2.3	36.6%	(15)
3.8	27	2.4	37.0	(10)
$X^2=2.224$ ; $df=(1)$ ; ns		$F=0.078$ ; $df=(1,66)$ ; ns		

Table 10.8 Outcome Measures in Relation to Age Discrimination  
 Job Satisfaction Outcome Measures

Characteristic of worker or workers' job	n	Job Satisfaction Outcome Measures				Co-worker Relations	Resources	"Content Free"
		Age discrimination	JobSat '70	Comfort	Challenge			
1. Workers reporting discrimination	72	2.90	2.75	3-04	2.70	3.11	2.95	3.02
2. Workers not reporting discrimination	1435	3.26	3.16	3.27	3.05	3.43	3.46	3.61
Eta		.16	.15	.08	.09	.10	.18	.13
F		INAP	INAP	INAP	INAP	INAP	INAP	INAP
df		37.610	33.396	8.914	11.663	14.339	50.865	28.135
p		(1,1505)	(1,1503)	(1,1505)	(1,1497)	(1,1467)	(1,1490)	(1,1523)
		.001	.001	.01	.001	.001	.001	.001

Characteristic of worker or workers' job

Characteristic of worker or workers' job	n	Mental Health Outcome Measures				Performance Debilitation	Life Satisfaction
		Age discrimination	Job-related Tension	Somatic Complaints	Depression		
1. Workers reporting discrimination	72	2.53	2.07	2.38	3.36	2.23	2.66
2. Workers not reporting discrimination	1435	2.00	1.88	2.04	3.63	2.15	3.29
Eta		.16	.07	.13	.11	.03	.13
F		INAP	INAP	INAP	INAP	INAP	INAP
df		40.513	6.657	24.533	18.723	1.142	24.904
p		(1,1527)	(1,1505)	(1,1498)	(1,1504)	(1,1495)	(1,1527)
		.001	.01	.001	.001	n.s.	.001

Table 10.9--Percentage of Women Workers with Problems Concerning Sex Discrimination

Do you feel in any way discriminated against on your job because you are a woman?

	<u>Percentage of Workers (N = 534)*</u>
Worker reports a problem	8.1 %
Worker reports no problem	91.9

\*Includes only women workers.

Table 10.10--Forms of Work-Related Discrimination Based on Sex

In what ways do you feel you have been discriminated against?

<u>Form of Discrimination</u>	<u>Percentage of incidents of each type*</u> <u>(Total number of incidents reported = 43)</u>
Worker believes she will be given fewer promotions than others	62.8 %
Worker feels she has been mistreated, harassed, but does not elaborate further	7.0
Worker feels discriminated against in performance evaluation (e.g. her supervisor watches her work more closely than the others)	7.0
Worker feels she has been given a "bad job" (e.g. dirtier, harder)	4.7

\*Problems were reported by 43 female workers. Percentages do not add to 100 %, since 8 miscellaneous problems are included in the total number.

Table 10.11 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups \*

Problem Area: Sex Discrimination

	Percentage of workers reporting one or more prob-lem in each area	Number of workers upon which per-centage is based	Number of workers reporting workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable" or "great"
--	---	---	---	------------------	---

a. Sex

Men

Women

Comparison not relevant for these subgroups in this problem area.

b. Race

White

Black

$\chi^2=4.755$ ;  $df=(1)$ ;  $p<.05$

$F=0.682$ ;  $df=(1,36)$ ; ns

c. Age

20 or under

21-29

30-44

45-54

55-64

65 and over

$\chi^2=5.465$ ;  $df=(5)$ ; ns.

$F=0.165$ ;  $df=(4,33)$ ; ns



(continued)  
 Table 10.11 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups \*

Problem Area. Sex Discrimination

	Number of workers upon which percentage is based	Percentage of workers reporting one or more problem in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable" or "great"
<u>d. Education</u>					
None	1	0.0%	-	-	-
Some grade school	29	3.4	1	2.0	0.0% (0)
Completed grade school	30	0.0	0	-	-
Some high school	90	4.4	3	3.0	100.0% (3)
High school diploma	234	6.8	14	2.5	28.5 (4)
Some college	88	15.9	14	2.4	42.8 (6)
College degree	32	15.6	4	2.5	50.0 (2)
Graduate or professional training	30	10.0	2	2.5	50.0 (1)

$\chi^2 = 15.563$ ;  $df = (7)$ ;  $p < .05$        $F = 0.340$ ;  $df = (4, 32)$ ; ns

(continued)

Table 10.11 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups\*

Problem Area: Sex Discrimination

	Number of workers upon whom which percentage is based	Percentage of workers reporting more problem in each area	Number of workers upon whom severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable" or "great"
<u>e. Self-employed status</u>					
Self employed	30	10.0%	3	2.3	33.3% (1)
Wage-and-salary	504	7.9	35	2.5	42.9 (15)
					F=0.091; df=(1,36); ns
<u>f. Industry</u>					
Agriculture, forestry, and fisheries	4	0.0%	0	-	-
Mining	0	0.0	0	-	-
Contract construction	3	0.0	0	-	-
Manufacturing	114	8.8	8	2.1	12.5% (1)
Transportation, communication, electric, gas, and sanitary services	15	6.7	1	1.0	0.0 (1)
Wholesale and retail trade	124	10.5	12	2.5	50.0 (6)
Finance, insurance, real estate	39	23.1	8	3.1	62.5 (5)
Services	213	3.8	6	2.5	50.0 (3)
Government	17	5.9	3	2.0	33.3 (1)

$\chi^2 = 19.269$ ;  $df(8)$ ;  $p < .05$        $F = 2.189$ ;  $df(4,32)$ ; ns



Table 10.11 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups\*  
 Problem Area: Sex Discrimination (continued)

Occupation	Number of workers upon which percentage is based	Percentage of workers reporting one or more problem in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
Professional, technical and managerial	122	12.3%	13	2.7	53.9% (7)
Clerical and sales	203	10.8	22	2.3	31.8 (7)
Service	111	3.6	2	2.5	50.0 (1)
Farming, fisheries, and forestry	4	0.0	0	-	-
Processing	7	0.0	0	-	-
Machine trades	11	0.0	0	-	-
Bench work	49	4.1	1	3.0	100.0 (1)
Structural work	7	0.0	0	-	-

$\chi^2=11.179$ ;  $df=(7)$ ; ns

h. Blue-collar versus white-collar

White-collar	334	11.1%	35	2.5	40.0% (14)
Blue-collar	197	3.0	3	2.7	66.7 (2)

$\chi^2=10.742$ ;  $df=(1)$ ;  $p<.01$

\*Includes only women workers

F=0.811;  $df=(2,34)$ ; ns

F=0.172;  $df=(1,36)$ ; ns



Effects of Sex Discrimination on Worker Characteristics and Health Outcomes: A Study of Workers in Retail Stores

Characteristics of worker or worker's job	n	Mental Health Outcome Measures				Co-worker Relations	Resources	"Content Free"
		JobSat '70	Comfort	Challenges	Pay			
<u>Sex discrimination</u>								
1. Workers reporting discrimination	483	3.05	3.02	3.02	2.91	3.22	3.14	3.55
2. Workers not reporting discrimination	483	3.20	3.18	3.13	2.92	3.40	3.47	3.52
Eta		.08	.08	.05	.00	.07	.15	.10
F		INAP	INAP	INAP	INAP	INAP	INAP	INAP
df		3,778	3,232	1,125	1,003	2,641	12,787	5,960
p		(1,524)	(1,522)	(1,523)	(1,520)	(1,513)	(1,520)	(1,529)
		n.s.	n.s.	n.s.	n.s.	n.s.	.001	.55

Characteristics of worker or worker's job

Characteristics of worker or worker's job	n	Mental Health Outcome Measures				Performance Debilitation	Life Satisfaction
		Job-related Tension	Somatic Complaints	Depression	Zest		
<u>Sex discrimination</u>							
1. Workers reporting discrimination	43	2.40	1.89	2.43	3.50	2.26	2.67
2. Workers not reporting discrimination	483	2.00	1.98	2.18	3.60	2.25	3.20
Eta		.15	.04	.12	.05	.00	.13
F		INAP	INAP	INAP	INAP	INAP	INAP
df		12,190	0,713	1,543	1,425	0,013	8,701
p		(1,532)	(1,521)	(1,520)	(1,522)	(1,517)	(1,532)
		.001	n.s.	.01	n.s.	n.s.	.01

\*Includes only women



## 11. PROBLEMS WITH EMPLOYMENT AGENCIES

Knowing the extent of the use of employment agencies and problems met by workers in using these agencies is indirectly important to a study of working conditions and their effects, because employment agencies offer the worker one means of escape from unpleasant, dissatisfying jobs. To the extent that employment agencies are successful in their task, they may offer viable alternatives to the dissatisfied worker.

Workers' use of employment agencies was estimated by asking each worker whether he had tried to find a job through such agencies at any time in the past three years. Follow-up questions concerned the success of the agency in placing the worker and any problems that may have arisen as part of his experience with the agency. These questions were asked with reference to the experience of a worker with either a private or a state employment agency depending upon which experience was his more recent.

It is possible that use of employment agencies in general was underestimated because of the nature of the sample--currently employed workers. If frequently unemployed people are more likely than others to use employment agencies, the number of people using agencies is underestimated here since the frequently unemployed were less likely than other workers to be included in the sample.

Within the past three years 15.3 percent of the employed labor forces had tried to find a job through either a private or state employment agency. Both types of agencies were used by about the same percentage of the workers interviewed. Five and one-tenth percent of workers had sought jobs through a private agency only, 6.7 percent had used a state service only, and 3.5 percent had used both types of agencies during the past three years (Table 11.1).

A significantly higher percentage of women and younger workers (less than 29 years old) used employment agencies as a whole compared to men and "older" workers (Table 11.2). There were no significant differences between the percentages of whites versus blacks, white-collar versus blue-collar workers, and low status versus higher status workers in their use of employment agencies. Table 11.3 shows, furthermore, that among those workers using employment agencies there was a significantly higher percentage of white-collar workers and workers in jobs with high occupational prestige who used private employment agencies than who used public ones. Conversely, blue-collar workers and those in lower-prestige occupations were more likely to go to a public rather than a private agency. There were no significant differences in the percentage of male versus female workers, black workers versus white workers, or younger versus older workers in their choice of private as opposed to state employment agencies. There was, however, a non-significant tendency for whites and older workers to choose private agencies.

The "successes" of private versus state employment agencies in finding jobs for workers who had used such agencies in the past three years are compared in Table 11.4. Neither type of agency was more

successful than the other in finding jobs for workers. Forty-five and one-tenth percent of those whose most recent experience was with a private agency were placed, while 39.5 percent of those whose most recent experience was with a state agency were placed. The two percentages were not significantly different. About equal percentages of workers who had used agencies were at the time of the study still trying to find jobs through private and state employment agencies, 4.9 percent and 5.6 percent respectively. Among those workers who had been placed on a job by an employment agency in the past three years, neither type of agency was more successful than the other in finding the worker the kind of job he had hoped he would get (Table 11.5). Although 59.1 percent of the workers placed by a private agency reported that they had obtained the kind of job they hoped they would get, and 51.2 percent of the workers placed by a state agency reported that they had secured the kind of job they had wanted, the difference between the percentages was not statistically significant.

Of those workers whose most recent experience was with a private employment agency, 52.0 percent reported at least one problem with the agency, while among workers whose most recent experience was with a state agency, 43.5 percent reported a problem (Table 11.6). Since this difference in percentages was not statistically significant, neither type of agency appeared to be worse than the other in terms of the number of problems it created for workers. Tables 11.8 and 11.9 indicate that there were no significant differences in the percentages of various demographic subpopulations who reported problems with either private or state employment agencies.

The two kinds of agencies did differ, however, in the types of problems they created for workers who used their services (Table 11.7). Reports of the agencies' failure to find a job for a worker accounted for only 14.5 percent of the problems reported about private employment agencies, while such complaints constituted 31.4 percent of those made about public agencies. This difference in percentages was significant beyond the .05 level. Problems concerning the financial dealings the worker had with the agency also showed a statistically significant difference beyond the .01 level when comparing private with state agencies: 18.4 percent of the problems reported by workers whose most recent experience had been with a private agency concerned financial matters, while only 1.4 percent of the problems reported by those whose most recent experience was with a state agency were financial ones. The financial problems mentioned by workers using state agencies did not involve financial dealings pertaining to securing a job but instead resulted from problems in receiving unemployment compensation after a worker had secured a job through a state agency and had quit the job after a short time. The differences between the two types of agencies for the other two major categories of problems mentioned about employment agencies ("bad" or unsuitable jobs and neglect or incompetence of the agency) were not statistically significant.

Table 11.10 indicates the relationship between problems with employment agencies and the surveys' outcome measures. There was only one significant relationship; workers who reported experiencing a problem with employment agencies also experienced lower life satisfaction. That workers' experiences with employment agencies were unrelated to their satisfaction with their present jobs is an encouraging indication

of the construct validity of the study's job satisfaction measures since there was no reason whatsoever why job satisfaction and the quality of experiences with employment agencies should have been related.

In summary, although private and state agencies differed in terms of their clientele, there were almost no significant differences between private and state agencies on the other comparisons made. Private and state agencies differed only in that workers were more likely to report problems in financial matters with private agencies and more likely to report problems in success of job placement with state agencies. Overall, workers would not improve their chances of a successful job placement or of a problem-free experience with an agency by using one type of agency over another. But saying that there are few differences between the experiences of workers using private and state agencies is not, however, saying that their experiences were good. When one considers that (a) almost half the workers who dealt with any employment agency reported one or more problems in dealing with the agency, (b) less than half the workers were successful in securing a job through any employment agency, and (c) only a little over half of those placed secured the kind of job they wanted, employment agencies generally appeared to have a very poor batting average.

Table 11.1 Worker's Use of Employment Agencies

Within the past three years have you tried to find a job through a private employment agency?

Within the past three years have you tried to find a job through the state employment service?

<u>Use of employment agencies</u>	<u>Percentage (N = 1530)</u>
Worker sought job through private agency only	5.1%
Worker sought job through state agency only	6.7
Worker sought job through both private and state agencies	3.5
Worker did not seek job through any employment agency	84.7

Table 11.2 Use of Employment Agencies in the Past Three Years in Relation to Demographic Variables

	<u>Percentage Using an Employment Agency</u>
<u>Sex</u>	
Male (N=997)	12.4%
Female (N=535)	19.3
	(chi-square=12.3, df=1, p < .001)
<u>Race</u>	
Black (N=157)	17.8%
White (N=1356)	14.6
	(chi-square = 3.8, df=1, ns)
<u>Age</u>	
16-29 years old (N=430)	31.2%
30-54 years old (N=829)	8.9
55 years and older (N=267)	4.1
	(chi-square=130.3, df=2, p < .001)
<u>White-collar vs. Blue-collar</u>	
White Collar (N=756)	15.7%
Blue Collar (N=710)	14.4
	(chi-square = 3.8, df=1, ns)
<u>Occupational Prestige</u>	
Low status (N=413)	11.9%
Medium status (N=345)	16.5
High status (N=773)	15.7
	(chi-square = 6.0, df=2, p < .05)

Table 11.3 Use of Private versus State Employment Agencies in the Past Three Years in Relation to Demographic Variables\*

	Percentage of Workers using an employment agency in the past three years whose most recent experience was with a <u>Private</u> agency	Percentage of Workers using an employment agency in the past three years whose most recent experience was with a <u>State</u> agency
<u>Sex</u>		
Male (N=124)	44.4%	55.6%
Female (N=103)	45.6	54.4
	(chi-square = 3.8, df=1, ns)	
<u>Race</u>		
Black (N=28)	35.7%	64.3%
White (N=198)	46.5	53.5
	(chi-square = 3.8, df=1, ns)	
<u>Age</u>		
16-29 years old (N=134)	44.0%	56.0%
30-54 years old (N=82)	43.9	56.1
55 years and older (N=11)	63.6	36.4
	(chi-square = 6.0, df=2, p < .05)	
<u>White-collar vs. Blue-collar</u>		
White Collar (N=119)	59.7%	40.3%
Blue Collar (N=102)	30.4	69.6
	(chi-square=18.9, df=1, p < .001)	
<u>Occupational Prestige</u>		
Low status (N=49)	16.3%	83.7%
Medium status (N=57)	46.8	63.2
High status (N=121)	60.3	39.7
	(chi-square=29.3, df=2, p < .001)	

\*Excludes workers who have had no dealings with an employment agency within the past three years.

Table 11.4 Success of Employment Agency in Finding Worker a Job

Was the agency successful in finding you a job? Is the agency still trying to find you a job?

<u>Success of agency</u>	<u>Percentage of workers whose most recent experience was with a private agency (N = 102)*</u>	<u>Percentage of workers whose most recent experience was with a state agency (N = 124)*</u>
Agency found worker a job	45.1%	39.5%
Agency did not find worker a job and is no longer trying to do so	4.9	5.6
Agency did not find worker a job and is no longer trying to do so	45.1	54.0
Agency did not find worker a job, and worker does not know whether or not agency is still trying	4.9	.8

\* Excludes workers who have had no dealings with an employment agency within the past three years.

Table 11.5 Success of Employment Agency in Finding Worker the Kind of Job He Wanted

Was the job they found you the kind of job you'd hoped to get?

<u>Success of agency</u>	<u>Percentage of workers whose most recent experience was with a private agency (N = 44)*</u>	<u>Percentage of workers whose most recent experience was with a state agency (N = 43)*</u>
Job which the agency found worker was the kind which the worker hoped he would get	59.1%	51.2%
Job which the agency found worker was not the kind which the worker hoped he would get	40.9	48.2

\* Includes only workers who were successfully placed by an employment agency in the last three years.



Table 11.6 Percentage of Workers with Problems Concerning Employment Agencies\*

Could you tell me what problems or difficulties you ran into in dealing with the agency?

	Percentage of workers whose recent experience was with a private agency (N = 102)	Percentage of workers whose recent experience was with a state agency (N = 124)
Worker reports a problem	52.0%	43.5%
Worker reports no problem	48.0	56.5

\*Excludes workers who have had no dealings with an employment agency within the past three years.

Table 11.7 Problems with Employment Agencies--Types of Problems

Type of Problem	Percentage of problems reported by workers whose most recent experience was with a private agency (Number of problems=76)*	Percentage of problems reported by workers whose most recent experience was with a state agency (Number of problems=70)
Agency failed to find a job for worker	14.5%	31.4%
Worker was referred to jobs that were bad jobs, jobs unsuited to his skills, or jobs that were too far away	27.6	22.9
Agency was unreasonable or deceitful in its financial dealings with the worker	18.4	1.4
Other agency problems including discrimination, lack of personal consideration, rudeness, or other forms of neglect or incompetence	34.2	38.6

\* These problems were reported by 56 workers. Percentages do not add up to 100% since four miscellaneous problems are included in the total number.

\*\*These problems were reported by 57 workers. Percentages do not add up to 100% since four miscellaneous problems are included in the total number.

Table 11.8 Labor Standards Problems among Major Demographic and Occupational Subgroups\*

Problem area: <u>Mistreatment by State Employment Agencies</u>		Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
<b>a. Sex</b>						
Men	67	44.8%	31	31	2.7	64.5% (20)
Women	57	42.1	26	26	2.9	69.2 (18)
						F=.433; df=(1,55); ns
<b>b. Race</b>						
White	105	44.8%	47	47	2.7	66.0% (31)
Black	18	50.0%	9	9	3.1	66.7 (6)
						F=1.529; df=(1,54); ns
<b>c. Age</b>						
20 or under	24	54.2%	13	13	2.7	61.5% (8)
21-29	50	48%	24	24	2.9	75.0 (18)
30-44	27	44.4	13	13	3.0	61.5 (8)
45-54	19	31.6	7	7	2.4	57.1 (4)
55-64	4	0%	0	0	-	-
65 and over	0	-	0	0	-	-
						F=.890; df=(3,53); ns

Table 11.8 Labor Standards Problems among Major Demographic and Occupational Subgroups (continued)\*\*

Problem area: Mistreatment by State Employment Agencies

d. Education	Number of workers upon which percentage is based		Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based		Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area		Number of workers upon which severity ratings are based	Average severity		
None	0	-	-	0	-	-	-
Some grade school	8	50.0%	-	4	3.8	100.0%	(4)
Completed grade school	10	30.0	-	2	2.0	50.0	(1)
Some high school	25	44.0	-	13	2.8	69.2	(9)
High school diploma	53	56.6	-	31	2.7	61.3	(19)
Some college	20	25.0	-	5	3.0	80.0	(4)
College degree	4	25.0	-	1	2.0	0.0	(0)
Graduate or professional training	4	25.0	-	1	3.0	100.0	(1)

$\chi^2=8.461$ ;  $df=7$ ; ns

F=2.170;  $df=(4,50)$ ; ns

e. Self-employment status \*\*

Self-employed	0	-	-	0	-	-	-
Wage-and-salary	8	37.5%	-	2	3.0	100.0%	(2)

$\chi^2=0.0$ ;  $df=1$ ; ns

F--not calculated

Table 11.8 Labor Standards Problems among Major Demographic and Occupational Subgroups (continued)\*

Problem area: Mistreatment by State Employment Agencies		Percentage of workers reporting one or more problems in each area	Number of workers upon which percentage is based	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
<b>f. Industry **</b>						
Agriculture, forestry, and fisheries	1	0%	0	-	-	-
Mining	0	-	0	-	-	-
Contract construction	1	0%	0	-	-	-
Manufacturing	3	66.7%	1	3.0	100.0%	(1)
Transportation, communication, electric, gas and sanitary services	0	-	0	-	-	-
Wholesale and retail trade	2	50.0	1	3.0	100.0	(1)
Finance, insurance, and real estate	0	-	0	-	-	-
Services	1	0.0	0	-	-	-
Government	0	-	0	-	-	-

$\chi^2=3.022$ ;  $df=8$ ; ns

F Test Not Calculated



Table 11.8 Labor Standards Problems among Major Demographic and Occupational Subgroups (continued)\*  
 Problem area: Mistreatment by State Employment Agencies

g. Occupation **	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
Clerical and sales	0	-	0	-	(0)
Service	2	50.0	1	3.0	100.0% (1)
Farming, fisheries, and forestry	1	0.0	0	-	(0)
Processing	1	0.0	0	-	(0)
Machine trades	0	-	0	-	(0)
Bench work	2	50.0	0	-	-
Structural work	1	100.0	1	3.0	100.0 (1)
	1	0.0	0	-	(0)
X <sup>2</sup> =3.733; df=7; ns					
h. Blue-collar versus white-collar **				F Test Not Calculated	
White-collar	2	50.0%	1	3.0	100.0% (1)
Blue-collar	5	40.0	1	3.0	100.0 (1)
X <sup>2</sup> =.058; df=7; ns					

\* Includes only workers who within the past three years have used an employment agency and whose most recent experience was with a state employment agency.  
 \*\* Excludes workers who have changed jobs at least once in the last three years.



Table 11.9 Labor Standards Problems Among Major Demographic and Occupational Subgroups \*

Problem area: Mistreatment by Private Employment Agencies

a. Sex	Percentage		Number of workers upon which percentage is based	Number of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
	of workers reporting one or more problems in each area	of workers reporting which severity ratings are based					
Men	54	51.9%	29	29	3.0	69.0%	(20)
Women	48	52.1	24	24	2.9	66.7	(16)
	$X^2=.031$ ; $df=1$ ; ns						
b. Race							
White	92	53.3%	49	49	2.9	67.3%	(33)
Black	10	40.0	4	4	3.3	75.0	(3)
	$X^2=.215$ ; $df=1$ ; ns						
c. Age							
20 or under	16	37.5%	6	6	2.7	50.0%	(3)
21-29	43	58.1	25	25	2.8	64.0	(16)
30-44	27	48.1	13	13	2.9	69.2	(9)
45-54	9	55.6	5	5	3.4	80.0	(4)
55-64	6	50.0	3	3	3.3	100.0	(3)
65 and over	1	100.0	1	1	4.0	100.0	(1)
	$X^2=3.136$ ; $df=5$ ; ns						
d. Education							
None	1	0.0%	0	0	—	—	—
Some grade school	4	50.0	2	2	4.0	100.0%	(2)
Completed grade school	1	100.0	1	1	2.0	5.0	(0)
Some high school	6	83.3	5	5	3.0	80.0	(4)
	$F=.468$ ; $df=(4,47)$ ; ns						

313

Table 11.9 Labor Standards Problems Among Major Demographic and Occupational Subgroups (continued) \*

Problem area: Mistreatment by Private Employment Agencies

d. Education	Percentage		Number of workers upon which severity ratings are based	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describes it as "sizeable or great"	
	of workers reporting one or more problems in each area	of workers reporting which severity ratings are based					
High school diploma	39	41.0	15	15	3.4	86.7	(13)
Some college	26	57.7	16	16	2.5	50.0	(8)
College degree	17	58.8	10	10	3.0	70.0	(7)
Graduate or professional training	8	50.0	4	4	2.5	50.0	(2)
	$X^2=6.922$ ; $df=7$ ; ns						
e. Self-employment status **							
Self-employed	2	100.0%	2	2	3.5	100.0%	(2)
Wage-and-salary	12	33.3	4	4	1.75	25.0	(1)
	$X^2=3.111$ ; $df=1$ ; ns						
f. Industry **							
Agriculture, forestry, and fisheries	0	—	0	0	—	—	(0)
Mining	1	0.0%	0	0	—	—	(0)
Contract construction	0	—	0	0	—	—	(0)
Manufacturing	3	33.3	1	1	4.0	100.0%	(1)
Transportation, communication, electric, gas, and sanitary services	0	—	0	0	—	—	(0)
Wholesale and retail trade	2	0.0	0	0	—	—	(0)
Finance, insurance, and real estate	2	100.0	2	2	1.0	0.0	(0)
	$F=2.253$ ; $df=(1,4)$ ; ns						

 $X^2$  Tests not calculated

F Tests not calculated.

314

Table 11.9 Labor Standards Problems Among Major Demographic and Occupational Subgroups (continued)\*

Problem area: Mistreatment by Private Employment Agencies						
f. Industry **	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"	
Services	5	40.0	2	2.5	50.0	(1)
Government	1	100.0	1	3.0	100.0	(1)
				F=1.000; df=(1,2); ns		
g. Occupation **						
Professional, technical and managerial	4	25.0%	1	4.0	100.0%	(1)
Clerical and sales	9	55.6	5	2.0	40.0	(2)
Service	0	—	0	—	—	(0)
Farming, fisheries, and forestry	0	—	0	—	—	(0)
Processing	0	—	0	—	—	(0)
Machine trades	1	0.0	0	—	—	(0)
Bench work	0	—	0	—	—	(0)
Structural work	0	—	0	—	—	(0)
				F-Test not calculated		
h. Blue-collar versus ** white-collar						
White-collar	12	41.7%	5	2.2	40.0%	(2)
Blue-collar	2	50.0	1	3.0	100.0	(1)
				F Test not calculated		

\*Includes only workers who within the past three years have used an employment agency and whose most recent experience was with a private employment agency.

\*\*Excludes workers who have changed jobs at least once in the past three years.

Table 11.10 Outcome Measures in Relation to the Problems of Mistreatment by Employment Agencies\*  
 Characteristic of worker or worker's job — n — Jobsat '70 — Job Satisfaction Outcome Measures

Characteristic of worker or worker's job	n	Jobsat '70	Job Satisfaction Outcome Measures					
			Comfort	Challenge	Pay	Co-worker Relations	Resources	"Content Free"
1. Workers reporting a problem	110	3.07	3.02	2.98	2.78	3.38	3.33	3.14
2. Workers reporting no problem	120	3.14	3.08	3.10	2.88	3.31	3.39	3.38
		.07	.05	.08	.06	.06	.04	.12
		INAP	INAP	INAP	INAP	INAP	INAP	INAP
		1.254	0.614	1.558	0.859	0.730	0.475	3.441
		(1,228)	(1,227)	(1,228)	(1,227)	(1,225)	(1,228)	(1,228)
		n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.

331



Table 11.10 Outcome Measures in Relation to the Problems of Mistreatment by Employment Agencies (continued) \*

Characteristic of worker or workers' job	n	Mental Health Outcome Measures					Performance Debilitation	Life Satisfaction
		Job-related Tension	Somatic Complaints	Depression	Zest			
1. Workers reporting a problem	110	2.18	1.95	2.24	3.47	2.20	2.80	
2. Workers reporting no problem	120	2.09	1.84	2.09	3.58	2.22	3.29	
Eta		.06	.10	.13	.10	.02	.20	
F		0.773	2.422	3.770	2.450	0.092	9.998	
F		(1,228)	(1,226)	(1,225)	(1,226)	(1,224)	(1,228)	
df		n.s.	n.s.	n.s.	n.s.	n.s.	.01	
P								

\*Includes only those currently employed workers who have used either a private or state employment agency within the past three years.

## 12. INTERPERSONAL RELATIONS

Data from both the national sample and the Phase I survey (Campbell, in press) indicated that among wage-and-salary workers who were supervised by others, the quality of a worker's relations with his supervisor had a substantial impact both upon his job satisfaction and mental health.

Each worker in the Phase I survey was presented a series of statements that might describe his supervisor and was asked to rate each statement in terms of how true it was of his supervisor. A subsequent factor analysis of these ratings produced four identifiable factors. Each factor was represented in the national survey by the two questions which had the highest loadings on the factor. These four factors and the questions representing each in the national survey were as follows:

### Index I: Nurturance of Subordinates

Takes a personal interest in those he supervises

Encourages those he supervises to develop new ways of doing things

### Index II: Closeness of Supervision I

Insists that those he supervises follow the rules

Insists that those under him work hard

### Index III: Closeness of Supervision II

(Does not) let those he supervises alone unless they want help

(Does not) let those he supervises set their own work pace

Index IV: Competence

Knows his own job well

Maintains high standards of performance  
in his own work

The responses of wage-and-salary workers to the above eight questions are presented in Table 12.1.

Table 12.2 indicates the relationships between the Nurturance of Subordinates Index and the outcome measures. The type of supervisory behavior subsumed by the index was strongly associated with the job satisfaction measures. The greater the supervisor's nurturant behavior toward his subordinate (as perceived by the latter), the higher was the subordinate's overall job satisfaction, his satisfaction with the Comfort aspects of his job, Challenge, Pay, Co-workers, and Resources. A worker's job tension was also significantly lower when he felt that his supervisor acted nurturantly toward him. Although Closeness of Supervision I was significantly associated with few of the outcome measures (Table 12.3), Closeness of Supervision II was significantly related to all the job satisfaction and mental health measures (Table 12.4), unfavorable outcomes being related to close supervision. In Table 12.5 the associations between the outcome measures and the workers' perception of his supervisors' level of competence are shown. Generally, workers who felt that their supervisors were competent were more satisfied with their jobs than others and exhibited less Job-related Tension, Somatic Complaints, and Depression.

Among the wage-and-salary workers interviewed, 35.2 percent indicated that they faced one or more problems with their immediate superiors (Table 12.6). The types of problems that they faced are

further described in Table 12.7. Most frequent were those complaints concerning a supervisor being technically incompetent or lazy, accounting for 14.0 percent of the problems reported. Twelve and six-tenths percent of the problems that were mentioned involved supervisors making excessive demands of their subordinates. The relationships between the outcome measures and workers' reports of problems with their supervisors are described in Table 12.8. Workers reporting such problems were significantly more likely than others to exhibit high levels of job-related tension and low levels of satisfaction with Resources. The latter association is, however, hardly surprising inasmuch as competent supervision was one of the components of the Resources job satisfaction index.

Eight and nine-tenths percent of wage-and-salary workers reported that their supervisors or the personnel office where they worked in some way invaded their privacy (Table 12.9). The most frequent type of such difficulty involved workers' employers looking into his home life, politics or police record (Table 12.10). Reporting a problem with invasion of privacy was associated significantly with all the outcome measures except Performance Debilitation and satisfaction with Pay. The strongest relationships were between invasion of privacy and overall job satisfaction, job-related tension and life satisfaction (Table 12.12).

In addition to the worker's relations with his supervisor, a few questions were also asked concerning two other groups of people with whom the worker might deal: those whom he supervised and those outside the worker's place of employment with whom the worker might have to communicate in the course of his work.

Almost half (45.8 percent) of workers reported supervising someone as part of their jobs (Table 12.13). This does not necessarily mean that a great many workers were "supervisory personnel" in the conventional use of the term. Even a fairly low-status employee with one assistant

could, given the question asked, have legitimately regarded himself as being in a sense a "supervisor". Or, for another example, a nurse who gave advice to newer nurses on her service may have felt that she was supervising them, although both the more experienced nurse and the less experienced ones may have indeed been organizational equals. Being a "supervisor" in the rather loose sense just described appeared to have both advantages and disadvantages in terms of the survey's measures of workers' psychological well-being (Table 12.14). While the "supervisors" were more satisfied than others with many aspects of their jobs and had higher scores on most of the mental health indices, they also reported experiencing greater levels of Job-related Tension.

Frequent dealings with people not officially connected with the worker's place of employment (e.g., customers) were reported by 47.9 percent of the workers (Table 12.15). Of these, 49.2 percent said that they faced one or more problems with these "outsiders" (Table 12.17). The experience of such problems was, in addition, associated with increased levels of Job-related Tension (Table 12.19). The most frequently reported problem encountered with outsiders (Table 12.18) was that outsiders made excessive, unreasonable, or unclear demands of the worker. Two other types of problems mentioned with considerable frequency were outsiders' failures to perform their own jobs adequately in ways that affected the worker (e.g., supplying inadequate materials) or blaming the worker for things about his company that were beyond his control (e.g., a customer complaining to a salesman because an advertised item was out of stock).

The rather sizeable impact on workers of inadequate interpersonal relations is further suggested by two additional tables in other sections of this report. First, a quarter of the "single biggest problems"

mentioned by workers (Table 4.6) involved inadequate interpersonal relations of one type or another: 7.2 percent concerned supervising others, 7.5 percent concerned being supervised, and 9.5 percent involved problems with outsiders. Data to be presented in the conclusion of this report further show that among the many types of working conditions measured in the study, the quality of relations with one's supervisors was among the variables most highly correlated with workers' job satisfaction.

Table 12.1 Worker's Description of His Immediate Superior

I'll read some things that may or may not be true of your immediate superior. Tell me how true you think each is of him or her. First. . .

	<u>Percentage*</u>			
	<u>Very True</u>	<u>Somewhat True</u>	<u>Not Too True</u>	<u>Not At All True</u>
<u>Nurturance of Subordinates</u>				
Takes a personal interest in those he supervises (1262)	56.3%	26.5%	11.3%	5.9%
Encourages those he supervises to develop new ways of doing things (1257)	44.1	25.0	17.2	13.8
<u>Closeness of Supervision I</u>				
Insists that those he supervises follow the rules (1262)	54.4	33.4	8.6	3.6
Insists that those under him work hard (1260)	35.4	39.0	17.6	8.0
<u>Closeness of Supervision II</u>				
Lets those he supervises alone unless they want help (1263)**	61.8	25.9	8.5	3.8
Lets those he supervises set their own work pace (1264)**	43.8	37.1	11.6	7.4
<u>Competence of Supervisor</u>				
Knows his own job well (1256)	72.5	18.1	5.9	3.5
Maintains high standards of performance in his work (1243)	64.2	24.2	8.0	3.5

\* Excludes self-employed workers and workers who did not have an identifiable immediate superior. The number of workers is indicated in the parentheses after each statement. Statements are organized into the four supervision factors and rank-ordered under each factor according to the percentage of workers who said "very true."

\*\*In subsequent tables scores on this statement have been reversed and hence reflect closeness of supervision rather than lack of closeness as implied by the wording of the statement.

Table 12.2 Outcome Measures in Relation to First Supervision Index: Nurturance of Subordinates \*

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures							Resources	"Content Free"
		JobSat '70	Comfort	Challenge	Pay	Co-worker Relations	Resources	"Content Free"		
1. Lowest	47	2.78	2.81	2.64	2.60	3.01	3.00	2.65		
2. .	145	2.91	2.87	2.83	2.90	3.04	3.06	3.06		
3. .	369	3.14	3.08	3.06	2.92	3.38	3.36	3.33		
4. Highest	676	3.38	3.27	3.39	3.19	3.54	3.59	3.85		
Eta		.37	.26	.35	.19	.26	.33	.38		
F		.38	.26	.35	.18	.25	.34	.40		
df		65.718	28.840	56.394	16.063	29.680	51.396	71.523		
P		(3,1233)	(3,1232)	(3,1233)	(3,1231)	(3,1221)	(3,1231)	(3,1247)		
		.001	.001	.001	.001	.001	.001	.001		

330



Table 12.2 Outcome Measures in Relation to First Supervision Index: Nurturance of Subordinates (continued)\*

Characteristic of worker or worker's job	n	Mental Health Outcome Measures				Zest	Performance Debilitation	Life Satisfaction
		Supervisor Index: Nurturance of subordinates	Job-related Tension	Somatic Complaints	Depression			
1. Lowest	47		2.28	2.05	2.20	3.51	2.03	2.79
2. .	145		2.37	1.96	2.17	3.49	2.16	3.03
3. .	369		2.14	1.92	2.10	3.54	2.16	3.12
4. Highest	676		1.87	1.83	2.01	3.68	2.13	3.39
Eta			.26	.10			.04	.16
F			29.770	-.11	.11		.00	.16
df			(3,1248)	4.364	-.12		.660	10.840
p			.001	(3,1232)	4.771		(3,1223)	(3,1248)
				.01	.01		n.s.	.001

\* Excludes self-employed workers and workers who did not have an identifiable immediate superior

Table 12.3 Outcome Measures in Relation to Second Supervision Index: Closeness of Supervision I\*

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures				Resources	"Content Free"
		JobBat '70	Comfort	Challenge	Pay		
Supervisor Index: Closeness of supervision I							
1. Lowest	16	3.26	3.35	3.23	3.56	3.58	3.51
2.	92	3.20	3.11	3.23	3.00	3.35	3.34
3.	481	3.19	3.11	3.16	3.04	3.38	3.34
4. Highest	651	3.26	3.18	3.22	3.08	3.45	3.50
Eta		.07	.07	.04	.06	.06	.11
F		.05	.03	.00	.272	.03	.10
df		2,225	2,292	.822	(3,1234)	1,568	5,255
p		(3,1236)	(3,1235)	n.s.	n.s.	(3,1223)	(3,1234)
		n.s.	n.s.			n.s.	n.s.

341

Table 12.3 Outcome Measures in Relation to Second Supervision Index: Closeness of Supervision I (continued)

Characteristic of worker or workers job	n	Mental Health Outcome Measures				Performance Debilitation	Life Satisfaction
		Job-related Tension	Somatic Complaints	Depression	Test		
Supervisor Index: Closeness of supervision I							
1. Lowest	16	1.69	2.07	2.26	3.50	1.99	2.62
2. .	92	1.88	1.84	2.06	3.68	2.13	3.46
3. .	481	2.04	1.87	2.07	3.58	2.16	3.21
4. Highest	651	2.05	1.89	2.05	3.62	2.13	3.24
Eta		.08	.04	.04	.06	.03	.09
F		.07	.03	-.02	.00	.00	.00
df		2.622 (3,1252)	.777 (3,1236)	.743 (3,1230)	1.375 (3,1235)	.474 (3,1227)	3.304 (3,1252)
p		.05	n.s.	n.s.	n.s.	n.s.	.05

\* Excludes self-employed workers and workers who did not have an identifiable immediate superior



Table 12.4 Outcome Measures in Relation to Third Supervision Index: Closeness of Supervision II\*

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures							"Content Free"
		JobSat '70	Comfort	Challenge	Pay	Co-worker Relations	Resources		
1. Lowest	764	3.33	3.25	3.34	3.10	3.50	3.53	3.70	
2. .	378	3.11	3.05	3.02	3.00	3.32	3.35	3.42	
3. .	87	2.92	2.81	2.81	2.91	3.14	3.11	3.02	
4. Highest	17	2.66	2.55	2.51	2.71	3.06	2.80	2.71	
Eta		.30	.26	.30	.09	.18	.24	.24	
F		39.824	29.348	40.648	3.281	13.694	25.707	25.775	
df		(3,1242)	(3,1241)	(3,1242)	(3,1240)	(3,1229)	(3,1240)	(3,1255)	
P		.001	.001	.001	.05	.001	.001	.001	

345

Table 12.4 Outcome Measures in Relation to Third Supervision Index: Closeness of Supervision II (continued) \*

Characteristic of worker or worker's job	n	Mental Health Outcome Measures					
		Job-related Tension	Somatic Complaints	Depression	Zest	Performance Debilitation	Life Satisfaction
1. Lowest	764	1.87	1.82	2.02	3.67	2.10	3.34
2. .	378	2.17	1.91	2.07	3.54	2.18	3.16
3. .	87	2.61	2.19	2.34	3.41	2.29	2.72
4. Highest	17	2.78	2.06	2.24	3.53	1.94	2.88
Eta		.32	.17	.15	.16	.09	.16
F		.33	.17	.15	.15	.07	.16
df		49.336	11.912	9.395	10.763	3.681	10.925
P		(3,1256)	(3,1241)	(3,1235)	(3,1240)	(3,1232)	(3,1256)
		.001	.001	.001	.001	.05	.001

\* Excludes self-employed workers and workers who did not have an identifiable immediate superior

Table 12.5 Outcome Measures in Relation to Fourth Supervision Index: Competence of Supervisor \*

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures						
		Jobsat '70	Comfort	Challenge	Pay	Co-worker Relations	Resources	"Content Free"
1. Lowest	20	2.97	2.91	2.93	3.20	3.12	2.94	2.94
2. .	63	2.99	2.89	3.12	2.92	3.14	2.84	3.14
3. .	233	2.99	2.96	2.97	2.88	3.17	3.08	3.18
4. Highest	909	3.31	3.22	3.27	3.11	3.52	3.58	3.70
Eta		.29	.21	.19	.12	.23	.42	.26
F		.29	.22	.19	.11	.21	.43	.28
F		36.273	18.558	15.470	5.762	22.740	86.703	30.070
df		(3,1221)	(3,1220)	(3,1221)	(3,1219)	(3,1210)	(3,1219)	(3,1234)
P		.001	.001	.001	.001	.001	.001	.001

Table 12.5 Outcome Measures in Relation to Fourth Supervision Index: Competence of Supervisor (continued) \*

Characteristic of worker or worker's job	n	Mental Health Outcome Measures					
		Job-related Tension	Somatic Complaints	Depression	Zest	Performance Debilitation	Life Satisfaction
Supervisor Index: Competence of supervisor							
1. Lowest	20	2.33	1.96	2.16	3.56	2.03	3.25
2. .	63	2.59	1.85	2.08	3.59	2.01	2.88
3. .	233	2.37	1.98	2.16	3.54	2.16	2.91
4. Highest	909	1.90	1.85	2.03	3.64	2.14	3.35
Eta		.32	.09	.10	.08	.05	.18
I		-.34	-.07	-.10	.09	.03	.17
F		47.809	3.168	3.780	2.741	1.221	13.552
df		(3,1235)	(3,1221)	(3,1216)	(3,1220)	(3,1213)	(3,1235)
p		.001	.05	.01	.05	n.s.	.001

\*Excludes workers who are self-employed or who have no identifiable immediate supervisor.

Table 12.6 Percentage of Workers with Problems Concerning Their Immediate Supervisor\*

Could you tell me what problems or difficulties you run into with your immediate supervisor?

	<u>Percentage of workers (N=1264)</u>
Worker reports a problem	35.2%
Worker reports no problem	64.8

\* Excludes self-employed workers and workers who did not have an identifiable immediate superior.

Table 12.7 Problem with Immediate Superior--Types of Problems

<u>Type of Problem</u>	<u>Percentage of problems of each type* (Total number of problems reported=594)</u>
Supervisor is technically incompetent or lazy	14.0%
Supervisor makes excessive demands	12.6
Supervisor is bull-headed, stubborn	7.2
Supervisor is inaccessible or physically absent	7.2
Supervisor and workers disagree on policies or priorities	6.7
Supervisor and workers "communicate poorly"	6.1
Supervisor interferes with and bothers subordinates, supervises too closely	5.7
Supervisor is unclear, vague	5.7
Supervisor is guilty of discrimination, favoritism	4.7
Supervisor is too critical, never compliments subordinates	3.9
Supervisor has offensive habits (eg. uses bad language, smokes smelly cigars)	3.4
Supervisor does not check up on subordinates, supervises too loosely	2.7
Supervisor is not aggressive enough, does not stand up for his subordinates	2.6
Supervisor handles people poorly, not further elaborated	2.4
Supervisor does not seek adequate wages or wage increases for his subordinates	2.2
Supervisor is too new at his job	1.7
Supervisor is not sufficiently work oriented in relations with subordinates	.8
Problems for which worker blames himself or which arise because worker is too new to his job	.8

\*These problems were reported by 445 workers. Percentages do not add to 100% since 29 miscellaneous problems are included in the total number



Table 12.8 Outcome Measures in Relation to Problems with Worker's Immediate Superior \*

Characteristic of worker or worker's job	n	Jobsat '70	Job Satisfaction Outcome Measures				"Content Free"	
			Comfort	Challenge	Pay	Co-worker Relations		Resources
<b>Problems with immediate superior</b>								
1. Problem with immediate superior	442	3.12	3.02	3.17	2.96	3.34	3.20	3.32
2. No problem with immediate superior	806	3.28	3.22	3.21	3.10	3.46	3.56	3.68
		.15	.16	.03	.08	.08	.29	.18
		INAP	INAP	INAP	INAP	INAP	INAP	INAP
		29.936	30.983	.902	7.753	8.098	118.143	44.662
		(1,1246)	(1,1245)	(1,1246)	(1,1244)	(1,1233)	(1,1261)	(1,1262)
		.001	.001	n.s.	.01	.01	.001	.001
		Eta						
		F						
		df						
		p						

Table 12.8 Outcome Measures in Relation to Problems with Worker's Immediate Superior (continued) \*

Characteristic of worker or worker's job	n	Mental Health Outcome Measures					
		Job-related Tension	Somatic Complaints	Depression	Zest	Performance Debilitation	Life Satisfaction
1. Problem with immediate superior	442	2.44	1.97	2.19	3.56	2.18	3.03
2. No problem with immediate superior	806	1.79	1.83	1.99	3.64	2.12	3.35
Eta		.43	.12	.16	.07	.04	.14
F		INAP	INAP	INAP	INAP	INAP	INAP
F		293.052	16.787	34.932	5.903	2.477	25.903
df		(1,1262)	(1,1245)	(1,1239)	(1,1244)	(1,1236)	(1,1262)
p		.001	.001	.001	.05	n.s.	.001

\*Excludes self-employed workers and workers who did not have an identifiable immediate superior

Table 12.9 Percentage of Workers with Problems Concerning Invasion of Privacy

Do you feel that your supervisor or the personnel office where you work ever go into your personal matters that you think are none of their business?

	<u>Percentage of workers (N = 1313)*</u>
Worker reports a problem	8.9%
Worker reports no problem	91.1

\* Excludes self-employed workers

Table 12.10 Problems with Invasion of Privacy--Types of Problems

In what ways are they going into your personal problems?

<u>Type of problem</u>	<u>Percentage of problems of each type* (Total number of problems reported = 114)</u>
Employer looks into employee's home life, politics, or police record	50.9%
Employer pressures employee into thinking a certain way	12.3
Employer collects financial or credit information on employee	7.0
Employer divulges personal information about employee to unspecified other people	5.3
Employer demands that his employees engage in particular social or other activities when they are officially off the job	4.4
Employer divulges personal information about employees to others within the company	4.4
Employer collects medical information on employees	4.4
Employer collects "ratings" on subordinates by supervisor or others in the company	1.8
Employer pressures employees into voting a certain way	1.8
Employer requires employees to take "personality tests" or fill out forms the content of which may be embarrassing or incriminating	.9

\* These problems were reported by 106 workers. Percentages do not add to 100% since 8 miscellaneous problems are included in the total number

Table 12.11 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups \*

Problem Area: Invasion of Privacy

	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
<b>a. Sex</b>					
Men	813	7.5%	58	2.1	27.6% (16)
Women	499	11.2	53	2.1	28.3 (15)
		$\chi^2=5.266$ ; $df=1$ ; $p < .05$		$F=0.004$ ; $df=(1,109)$ ; ns	
<b>b. Race</b>					
White	1148	8.4%	90	2.0	23.3% (21)
Black	148	14.2	21	2.5	47.6 (10)
		$\chi^2=5.420$ ; $df=1$ ; $p < .05$		$F=4.549$ ; $df=(1,109)$ ; $p < .05$	
<b>c. Age</b>					
20 or under	93	9.7%	9	2.0	22.0% (2)
21-29	318	11.9	36	2.0	25.0 (9)
30-44	423	9.2	35	2.3	34.3 (12)
45-54	274	6.2	18	2.1	22.3 (4)
55-64	168	7.7	12	2.1	25.0 (3)
65 and over	31	3.2	1	3.0	100.0 (1)
		$\chi^2=7.692$ ; $df=5$ ; ns		$F=0.730$ ; $df=(4,105)$ ; ns	



Table 12.11 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups \*  
(con. .ued)

Problem Area: Invasion of Privacy

	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
<u>d. Education</u>					
None	4	0.0%	0	-	-
Some grade school	99	6.1	.6	3.0	66.7% (4)
Completed grade school	101	7.9	7	2.1	28.6 (2)
Some high school	221	12.7	26	2.0	23.0 (6)
High school diploma	481	8.1	37	2.0	24.3 (9)
Some college	216	10.2	21	2.3	33.3 (7)
College degree	102	8.8	9	2.2	33.3 (3)
Graduate or professional training	88	5.7	5	1.4	0.0 (0)

$\chi^2=7.291$ ;  $df=7$ ; ns

F=1.669;  $df=(6,104)$ ; ns

Table 12.11 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups \*  
(continued)

Problem Area: Invasion of Privacy

	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
<u>e. Self-employment status</u>					
Self employed					
Wage-and-salary					
<u>f. Industry</u>					
Agriculture, forestry and fisheries	26	11.5%	3	2.7	33.3% ( 1)
Mining	22	9.1	2	3.0	50.0 ( 1)
Contract construction	78	5.1	3	2.0	0.0 ( 0)
Manufacturing	368	8.2	29	2.1	31.0 ( 9)
Transportation, communication, electric, gas, and sanitary services	86	12.8	9	1.8	22.2 ( 2)
Wholesale and retail trade	240	10.8	25	2.0	28.0 ( 7)
Finance, insurance, and real estate	63	12.7	8	1.9	12.5 ( 1)
Services	338	7.1	23	2.2	30.4 ( 7)
Government	79	8.9	9	2.6	33.3 ( 3)

Comparison not relevant for these subgroups in this problem area

$\chi^2 = 7.064$ ;  $df = 8$ ; ns

F = 0.789;  $df = (8, 102)$ ; ns

(continued)

Table 12.11 Frequency and Severity of Labor Standards Problems among Major Demographic and Occupational Subgroups \*

Problem Area: Invasion of Privacy

g. Occupation	Number of workers upon which percentage is based	Percentage of workers reporting one or more problems in each area	Number of workers upon which severity ratings are based	Average severity	Percentage (and number of) workers reporting the problem who describe it as "sizeable or great"
Professional, technical, and managerial	305	7.2%	22	2.1	27.2% (6)
Clerical and sales	315	8.9	27	2.2	33.3 (9)
Service	168	11.9	19	2.2	26.3 (5)
Farming, fisheries, and forestry	28	10.7	3	2.7	33.3 (1)
Processing	27	7.4	2	2.5	50.0 (1)
Machine trades	111	6.3	6	2.2	16.7 (1)
Bench work	86	11.6	10	1.9	20.0 (2)
Structural work	138	6.5	9	2.1	33.3 (3)

$X^2=5.841$ ;  $df=(7)$ ; ns

h. Blue-collar versus white-collar

White-collar	613	8.5%	49	2.2	30.6% (15)
Blue-collar	674	9.2	59	2.1	25.5 (15)

$X^2=0.204$ ;  $df=(1)$ ; ns

\* Excludes self-employed workers

Table 12.12 Outcome Measures in Relation to Invasion of Privacy\*

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures						
		JobSat '70	Comfort	Challenge	Pay	Co-worker Relations	Resources	"Content Free"
<u>Problems with invasion of privacy</u>								
1. Problem with invasion of privacy	116	2.99	2.94	2.89	2.95	3.20	3.14	2.98
2. No problem with invasion of privacy	1180	3.25	3.17	3.23	3.06	3.43	3.46	3.61
Eta		.15	.11	.15	.04	.10	.15	.20
F		INAP	INAP	INAP	INAP	INAP	INAP	INAP
df		29.263	15.649	29.577	1.931	12.379	31.705	52.304
P		(1, 1294)	(1, 1293)	(1, 1294)	(1, 1291)	(1, 1281)	(1, 1292)	(1, 1310)
		.001	.001	.001	n.s.	.001	.001	.001

Characteristic of worker or worker's job	n	Mental Health Outcome Measures					
		Job-related Tension	Somatic Complaints	Depression	Zest	Performance Debilitation	Life Satisfaction
<u>Problems with invasion of privacy</u>							
1. Problem with invasion of privacy	116	2.44	2.14	2.30	1.43	2.25	2.73
2. No problem with invasion of privacy	1180	1.98	1.85	2.03	1.62	2.13	3.28
Eta		.18	.14	.13	.11	.05	.15
F		INAP	INAP	INAP	INAP	INAP	INAP
df		44.729	24.511	22.939	14.718	3.808	29.558
P		(1, 1311)	(1, 1293)	(1, 1286)	(1, 1292)	(1, 1283)	(1, 1311)
		.001	.001	.001	.001	n.s.	.001

\*Excludes self-employed workers





Table 12.13 Percentage of Workers Who Supervise Others

Do you supervise anybody as part of your job?

	<u>Percentage of workers (N=1532)</u>
Worker supervises somebody	45.8%
Worker does not supervise anyone	54.2

Table 12.14 Outcome Measures in Relation to Whether Worker Supervises Anyone

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures						"Content Free"
		JobSat '70	Comfort	Challenge	Pay	Relations	Resources	
1. Worker supervises someone	696	3.31	3.12	3.45	3.15	3.46	3.43	3.74
2. Worker does not supervises anyone	814	3.18	3.16	3.10	2.93	3.37	3.44	3.45
Eta		.13	.03	.27	.13	.06	.01	.16
I		INAP	INAP	INAP	INAP	INAP	INAP	INAP
F		27.114	1.662	120.163	24.782	6.374	.113	39.172
df		(1,1508)	(1,1506)	(1,1508)	(1,1500)	(1,1469)	(1,1493)	(1,1526)
p		.001	n.s.	.001	.001	.05	n.s.	.001

Mental Health Outcome Measures

Characteristic of worker or worker's job	n	Mental Health Outcome Measures					Performance Debilitation	Life Satisfaction
		Somatic Complaints	Depression	Zest	Performance Debilitation	Life Satisfaction		
1. Worker supervises someone	696	2.09	2.85	2.01	3.67	2.10	3.34	
2. Worker does not supervise anyone	814	1.96	2.92	2.09	3.57	2.20	3.20	
Eta		.09	.06	.07	.10	.08	.06	
I		INAP	INAP	INAP	INAP	INAP	INAP	
F		13.599	6.008	8.336	15.212	10.021	6.610	
df		(1,1530)	(1,1508)	(1,1501)	(1,1507)	(1,1498)	(1,1530)	
p		.001	.05	.01	.001	.01	.05	



Table 12.15 Frequency with which Worker Deals with Outsiders

How often during working hours do you have to deal with outsiders who have business dealings with your company--like customers of distributors?

	<u>Percentage of workers (N=1531)</u>
Nearly all the time	31.0%
Frequently	16.9
Sometimes	19.3
Never	32.8

Table 12.16 Outcome Measures in Relation to Frequency of Dealing with Outsiders

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures						
		JobSat '70	Comfort	Challenge	Pay	Co-worker Relations	Resources	"Content Free"
Frequency of dealing with outsiders								
1. Never	491	3.21	3.19	3.08	3.06	3.36	3.49	3.46
2. Sometimes	294	3.23	3.15	3.32	2.99	3.31	3.36	3.60
3. Frequently	255	3.33	3.13	3.50	3.13	3.47	3.45	3.83
4. Nearly all of the time	469	3.23	3.09	3.38	2.98	3.49	3.41	3.57
Eta		.09	.06	.22	.07	.10	.08	.14
F		.03	-.07	.14	-.03	.09	-.04	.07
F		3.895	2.146	26.100	2.354	5.550	3.147	9.552
df		(3,1505)	(3,1503)	(3,1506)	(3,1497)	(3,1466)	(3,1490)	(3,1523)
p		.01	n.s.	.001	n.s.	.001	.05	.001

Table 12.16 Outcome Measures in Relation to Frequency of Dealing with Outsiders (continued)

Characteristic of worker or worker's job	n	Mental Health Outcome Measures				Zest	Performance Debilitation	Life Satisfaction
		Job-related Tension	Somatic Complaints	Depression	Zest			
Frequency of dealing with outsiders								
1. Never	491	1.88	1.91	2.07	3.52	2.16	3.20	
2. Sometimes	294	2.09	1.91	2.10	3.64	2.23	3.25	
3. Frequently	255	2.09	1.85	2.03	3.69	2.17	3.34	
4. Nearly all of the time	469	2.09	1.87	2.02	3.66	2.09	3.29	
Eta		.14	.04	.05	.14	.08	.05	
F		.12	-.03	-.04	-.12	-.05	.04	
df		10.663	.862	1.397	9.712	3.192	1.261	
p		(3,1527) .001	(3,1505) n.s.	(3,1498) n.s.	(3,1504) .001	(3,1495) .05	(3,1527) n.s.	



Table 12.17 Percentage of Workers with Problems Concerning Outsiders Who have Business Dealings with Worker's Company

Could you tell me what problems or difficulties you run into in dealing with outsiders (like customers or distributors who have business dealings with your company)?

	<u>Percentage of workers (N=1021)*</u>
Worker reports a problem	49.2%
Worker reports no problem	50.8

\* Excludes workers who have no business dealings with outsiders.

Table 12.18 Problems with Outsiders who have Business Dealings with Worker's Company

<u>Type of problem</u>	<u>Percentage of problems of each type* (Total number of problems reported = 671)</u>
Outsiders make excessive, unreasonable or unclear demands of the worker	30.7%
Outsiders perform inadequately in their work role (eg. are too slow or are unreliable)	16.4
Outsiders complain to or blame worker for what he feels is not his fault	12.2
Outsiders display bad manners, rude or irritating behavior	9.2
Outsiders communicate poorly with workers	7.0
Outsiders do not understand worker's job or his relationship to them	5.5
Outsiders are "uncooperative," not further elaborated	4.6
Outsiders cheat (eg. give wrong information, try to get too much)	3.7
Outsiders put the worker in a conflictual or compromising position (excludes blaming worker for what he feels is not his fault)	1.6
Outsiders are stubborn, resistant to change, uncompromising, inflexible, old-fashioned	1.2
Outsiders demand special favors from worker	.9

\*Problems were reported by 502 workers. Percentages do not add to 100% since 46 miscellaneous problems are included in the total number.

Table 12.19 Outcome Measures in Relation to Problems in Dealing with Outsiders \*

Characteristic of worker or workers' job	n	Job Satisfaction Outcome Measures						
		JobSat '70	Comfort	Challenge	Pay	Co-worker Relations	Resources	"Content Free"
<u>Problems with outsiders</u>								
1. Problem with outsiders	495	3.22	3.05	3.34	3.00	3.42	3.37	3.60
2. No problem with outsiders	515	3.29	3.18	3.35	3.04	3.46	3.45	3.68
Eta		.06	.11	.00	.02	.03	.06	.05
F		INAP	INAP	INAP	INAP	INAP	INAP	INAP
F		4.240	12.505	.003	.627	.910	4.289	2.365
df		(1,1008)	(1,1007)	(1,1009)	(1,1002)	(1,980)	(1,996)	(1,1017)
p		.05	.001	n.s.	n.s.	n.s.	.05	n.s.
<u>Mental Health Outcome Measures</u>								
Characteristic of worker or workers' job	n	Mental Health Outcome Measures						
		Job-related Tension	Somatic Complaints	Depression	Zest	Performance Debilitation	Life Satisfaction	
<u>Problems with outsiders</u>								
Problem with outsiders	495	2.20	1.92	2.08	3.66	2.16	3.20	
No problem with outsiders	515	1.98	1.85	2.01	3.66	2.14	3.37	
Eta		.16	.06	.06	.00	.02	.08	
F		INAP	INAP	INAP	INAP	INAP	INAP	
F		28.388	3.669	3.723	.017	.300	6.988	
df		(1,1019)	(1,1007)	(1,1005)	(1,1007)	(1,1003)	(1,1019)	
p		.001	n.s.	n.s.	n.s.	n.s.	.01	

Excludes workers who do not deal with outsiders as part of their job



### 13. PROMOTIONS

As part of the card sorts that produced the data for the Jobsat '70 Indices and their companion importance indices (see Section 3) workers were also asked to rate the statement "the chances for promotion are good" both in terms of how true it was about their jobs and how important it was to them that it be true. Since this promotion question was not included in the Jobsat '70 measures, its distributions were not shown in the earlier tables of workers' ratings obtained from the importance (Table 3.2) and satisfaction (Table 3.3) card sorts. Instead, these distributions are presented in Tables 13.1 and 13.2 below. In terms of its importance to them in a job, workers assigned having good promotional opportunities a moderate rating in comparison to other importance items in the card sort (Tables 3.2 and 13.1). At the same time, the quality of their promotional opportunities was one aspect of their jobs with which workers reported being most dissatisfied (Tables 3.3 and 13.2). The tables in the present section cover two aspects of promotions and their implications for workers' well-being: promotional fairness and promotional opportunities.

Workers' feelings about how fairly promotions were handled where they worked are presented in Table 13.3. Despite the fact that only a quarter of the wage-and-salary workers interviewed felt that their chances for promotion were very good, more than two-thirds said that promotions where they worked were at least handled somewhat fairly.

This may possibly indicate that many workers recognized that some of the reasons for their poor chances for promotion might have been inherent in themselves (e.g., limited education or skills). A worker sensing that he had reached the limits of his promotability potential might be dissatisfied with his promotional prospects but might not necessarily think that he was being treated unfairly. Still other workers might have recognized that although their employers' handled promotions fairly, the size of their "companies" severely limited the number of available openings. A quarter of the sample's wage-and-salary workers worked in "companies" where there were less than ten employees.

The associations between the survey's outcome measures and how fairly workers felt their employers handled promotions appear in Table 13.4. As may be clearly seen, all the correlations in the table are quite sizeable and most are statistically significant beyond the .001 level. The observed correlations were the highest for the two overall job satisfaction measures (Jobsat '70 and Content Free) and Job Tension. In each case the greater the promotional fairness reported by workers, the more favorable were workers' outcome scores. In comparison with the large number of working conditions measures investigated in the study, promotional fairness was among those most highly correlated with the job satisfaction and work-related tension measures.

Table 13.5 indicates both the time when each worker wanted to be promoted and the time he actually expected to be promoted. A more concise description of the various types of congruence between desired and expected promotion is presented in Table 13.6. Among those workers answering both the desired and expected promotion questions (and many

could not estimate when they thought they would be promoted), 42.5 percent indicated that they neither expected to be promoted nor wanted to be. This seemingly high percentage may merely have indicated the adjustment of workers' hopes to what they felt to be the realities of their promotional situations. On the other hand, it may have been that many workers simply did not want the extra duties and responsibilities that a promotion might entail or felt that they had reached the highest level at which they could perform successfully. Only three percent felt that they would be promoted sooner than they would like. An additional 19.3 percent were in the frustrating position of wanting a promotion immediately but suspecting that they would never receive it.

The next table shows the relationship between the outcome measures and the various general categories of congruence between times of desired and expected promotions. In each of the statistically significant relationships that may be observed in the table wanting a promotion before it would be offered was associated with unfavorable outcome scores.

Although a comparatively modest number of workers said that promotional opportunities were important to them, such statements--perhaps motivated by a desire not to seem too self-aggrandizing--might have underestimated the significance to workers of promotions. The quality of their promotional opportunities was among the working conditions with which workers were least satisfied. In addition, if the importance of an aspect of working conditions is judged by the magnitude of its correlations with the study's job satisfaction and mental health outcome measures, promotional opportunities and promotional fairness appeared to be among the most important areas investigated in the survey.

Finally, problems with promotions were shown to be highly relevant to a labor standards area of considerable social significance--discrimination on the basis of race, sex, or age. Data in an earlier section has already indicated that the form of discrimination most frequently reported by workers was discrimination in promotional policies or practices.

Table 13.1 Importance of Chances for Promotion

As part of the value card sort the following question was asked: How important to you is it that the chances for promotion are good?

<u>Importance</u>	<u>Percentage (N = 1288)*</u>
Very important	54.8%
Somewhat important	25.9
A little important	10.5
Not at all important	8.8

\*Excludes self-employed workers

Table 13.2 Satisfaction with Chances for Promotion

As part of the job satisfaction card sort the following question was asked: How true is it that in your job the chances for promotion are good?

<u>How true</u>	<u>Percentage (N = 1297)*</u>
Very true	24.3%
Somewhat true	24.1
A little true	21.7
Not at all true	30.0

\*Excludes self-employed workers

Table 13.3 Worker's Perception of How Fairly his Employer Handles Promotions

How fairly are promotions handled where you work? Would you say completely fairly, somewhat fairly, or not too fairly?

<u>Fairness</u>	<u>Percentage (N = 1278)*</u>
Promotions handled completely fairly	35.7%
Promotions handled somewhat fairly	33.0
Promotions handled not too fairly	15.8
No promotions have been given	15.5

\* Excludes self-employed workers.

Table 13.4 Outcome Measures in Relation to Worker's Perception of How Fairly His Employer Handles Promotions\*

Characteristics of worker or worker's job	n	Job Satisfaction Outcome Measures					"Content Free"
		Comfort	Challenge	Pay	Co-worker Relations	Resources	
1. Not too fairly	200	3.01	2.96	2.86	3.29	3.14	3.07
2. Somewhat fairly	412	3.19	3.08	3.10	3.37	3.39	3.50
3. Completely fairly	454	3/41	3.30	3.40	3.55	3.57	3.92
Eta		.31	.23	.23	.16	.26	.34
F		58.008	30.417	29.927	14.294	39.316	71.798
df		(2,1063)	(2,1062)	(2,1063)	(2,1057)	(2,1063)	(2,1077)
p		.001	.001	.001	.001	.001	.001



Table 13.4. Outcome Measures in Relation to Worker's Perception of How Fairly His Employer Handles Promotions (continued)

Characteristic of worker or worker's job	n	Mental Health Outcome Measures					Life Satisfaction
		Job-related Tension	Somatic Complaints	Depression	Zest	Performance Debilitation	
1. Not too fairly	200	2.48	2.04	2.23	3.51	2.22	3.00
2. Somewhat fairly	412	2.12	1.87	2.10	3.60	2.15	3.14
3. Completely fairly	454	1.80	1.78	1.91	3.68	2.04	3.49
Eta		.34	.16	.22	.12	.11	.19
F		72.585	13.214	26.505	8.514	6.765	20.966
df		(2,1077)	(2,1066)	(2,1059)	(2,1065)	(2,1057)	(2,1077)
p		.001	.001	.001	.001	.01	.001

\*Excludes self-employed workers and workers who reported that their employers had not given any promotions.



Table 13.5 Worker's Expected Promotion Time as Compared to His Desired Promotion Time (N=929)\*

Of course the future is uncertain, but approximately how many years or months do you think it will be before you are given a chance to take on a job at a higher level where you now work? Approximately when would you like to take on a job at a higher level?

Desired time until next promotion	Expected time until next promotion						Never or more than 20 years
	1-3 months	3-12 months	1-3 years	3-5 years	5-10 years	10-20 years	
Less than 1 month	2.0%	7.2%	4.8%	2.6%	.6%	.3%	19.3%
1-3 months	.4	.2	.1	.0	.0	.0	.3
3-12 months	.0	3.8	1.2	.4	.1	.1	1.7
1-3 years	.0	.3	4.8	.4	.0	.1	1.0
3-5 years	.0	.1	.0	1.2	.2	.0	.4
5-10 years	.0	.0	.2	.0	.1	.0	.3
10-20 years	.0	.1	.0	.0	.0	.1	.0
Never or more than 20 years	.1	.9	.4	.2	.3	.2	42.5

\*Excludes workers who were self-employed and workers who were in the process of being promoted at the time of the interview and workers for whom answers were not obtained on either of the two questions asked



Table 13.6 Summary Table on Worker's Expected Promotion Time as Compared to his Desired Promotion Time

<u>Comparison of Times</u>	<u>Percentage (N = 929)*</u>
Worker wants to be promoted; the time when he wants to be promoted and when he expects to be promoted are the same (excludes category immediately following)	10.7%
Worker never wants to be promoted and never expects to be**	42.5
Worker expects to be promoted at a time sooner than he would like	3.0
Worker expects to be promoted at a time <u>later than</u> he would like (excludes category immediately following)	24.0
Worker wants promotion immediately but thinks it will never be offered	19.3

\*Excludes self-employed workers and workers who were in the process of being promoted at the time of the interview, and workers for whom answers were not obtained on either of the two questions asked.

\*\*Workers who wanted to and expected to be promoted more than 20 years from now are included in this category.

Table 13.7 Outcome Measures in Relation to Discrepancy between Expected and Desired Promotion Time\*

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures					"Content Free"
		Jobsat '70	Comfort	Challenge	Pay	Co-worker Relations	
Discrepancy between expected and desired time of promotion							
1. Perfect fit between when worker wants promotion and when he thinks it will be offered**	697	3.28	3.22	3.24	3.10	3.44	3.71
2. Promotion offered before worker wants it	29	3.33	3.26	3.34	3.40	3.36	3.76
3. Worker wants promotion before it will be offered (Excluding alternative # 4.)	223	3.15	3.00	3.18	3.03	3.37	3.51
4. Worker wants promotion immediately but thinks it will never be offered***	178	3.07	3.02	3.00	2.77	3.29	2.99
Eta		.17	.17	.13	.16	.08	.28
F		INAP	INAP	INAP	INAP	INAP	INAP
F		11.187	0.999	6.689	9.693	2.504	33.089
df		(3,1123)	(1123)	(3,1123)	(3,1120)	(3,1112)	(3,1138)
P		.001	.001	.001	.001	n.s.	.001

Table 13.7 Outcome Measures in Relation to Discrepancy between Expected and Desired Promotion Time (continued)\*

Characteristic of worker or worker's job	n	Mental Health Outcome Measures				Zest	Performance Debilitation	Life Satisfaction
		Job-related Tension	Somatic Complaints	Depression	Zest			
Discrepancy between expected and desired time of promotion								
1. Perfect fit between when worker wants promotion and when he thinks he will be offered**	697	1.93	1.85	1.99	3.63	2.11	3.38	
2. Promotion offered before worker wants it	29	2.00	1.65	1.86	3.68	2.07	3.24	
3. Worker wants promotion before it will be offered (Excluding alter-native #4.)	223	2.16	1.85	2.14	3.60	2.11	3.06	
4. Worker wants promotion immediately but thinks it will never be offered***	178	2.26	2.06	2.29	3.48	2.21	2.83	
Eta		.18	.14	.20	.10	.06	.20	
F		13.493	7.735	16.353	4.098	1.445	15.052	
df		(3,1139)	(3,1125)	(3,1118)	(3,1123)	(3,1115)	(3,1139)	
p		.001	.001	.001	.01	n.s.	.001	

359

\*Excludes self-employed workers

\*\*Among those included in this category are workers who simultaneously never wanted or expected to be promoted and workers who expected to be promoted within the next 30 days.

\*\*\*A worker who reported that he would not be promoted until 20 years from the present was coded as never expecting to be promoted.

#### 14. JOB SECURITY

Workers' assessments of the extent to which automation might alter their work lives are presented in Tables 14.1 and 14.2. Most workers apparently felt it was highly unlikely that their jobs would be automated in the next few years. On the other hand, 15 percent of workers felt that it was at least "somewhat likely" that their jobs would be automated. Among workers who thought it was at least "a little likely" their jobs would be automated, 14.2 percent said that if their jobs were automated, they would simply be out of a job, rather than having their employers finding something else for them to do or adapting their jobs to the machines or computers (Table 14.2).

Table 14.3 indicates that 40.2 percent of workers felt it would be very easy for them to find a similar job with another employer; however, an additional 30.4 percent felt it would not be easy at all for them to find a job comparable to their current ones. It appears, therefore, that while many of the workers in the sample expressed little concern over losing their jobs through automation, there was still an identifiable portion who felt uneasy about losing their jobs and/or finding new ones if they had to.

In order to identify the subgroups of workers who were most worried about job security, chi-square analyses were run to test the association between various demographic or occupational variables and the answers to the three questions concerning job security. The first variable so

analyzed was sex. Women were somewhat more likely than men (chi-square = 12.837;  $df = 3$ ;  $p < .01$ ) to feel their jobs would be automated. They also were more likely to feel that they would get a worse deal (i.e., they would simply be out of a job) if their jobs were automated (chi-square = 8.583;  $df = 2$ ;  $p < .05$ ). However, there was no association between the sex of the worker and his or her feelings concerning ease of finding a new job. There was no association between race and the answers to the three job security questions. Annual income from the job and job security showed quite significant associations for the first two job security questions (chi-square = 32.318;  $df = 12$ ;  $p < .005$  for the question in Table 14.1, and chi-square = 42.594;  $df = 8$ ;  $p < .001$  for the question in Table 14.2) but no significant association for the job security question in Table 14.3. Very low income workers (earning less than \$3,400 per year) were least likely of all to feel their jobs would be automated, but were most likely to feel that they would surely be out of a job if those jobs were automated. The next lowest income group (\$3,400-\$4,999) were the most likely of all income groups to feel their jobs might be automated and were also quite concerned that they would be out of a job in that case. At the other end of the income spectrum, workers in the highest income subgroup (\$10,000 or more) were not very concerned either that their jobs would be automated or that they would be out of a job if that happened. As might be expected, blue-collar workers were more likely than white-collar workers to feel they would be out of a job if their job were automated (chi-square = 13.573;  $df = 2$ ;  $p < .005$ ) and also less confident about being able to find a new job (chi-square = 13.251;  $df = 2$ ;  $p < .005$ ). Associations between job security and various industry groupings were rather complicated. The associations between industry and job security were significant for the three job

security items at the .001, .01, and .001 levels, respectively.\* Workers in manufacturing, services, and finance, insurance, or real estate were most likely to think their jobs would be automated. Workers in agriculture and wholesale and retail trade were most likely to feel they would simply be out of a job if their jobs were automated. Finally, workers in the mining industry were least confident about being able to find a similar job, while contract construction workers were the most confident.

There was a very strong linear association (chi-square = 87.910;  $df = 10$ ;  $p < .001$ ) between age and feelings about the difficulty of finding a new job. Although only 16 percent of the youngest workers felt it would not be easy to find a new job, 62.5 percent of the oldest workers felt that way. Education was also strongly associated with job security; workers with more education generally felt more confident about their jobs not being automated (chi-square = 40.127;  $df = 21$ ;  $p < .01$ ), not losing jobs in the event of automation (chi-square = 39.783;  $df = 14$ ;  $p < .001$ ), and being able to find a new job (chi-square = 35.306;  $df = 14$ ;  $p < .005$ ).

The relationships between the study's 13 outcome measures and workers' feelings that their jobs might be automated (the question in Table 14.1) appear in Table 14.4. The most sizeable relationship (and the only one for which the F value was significant at the .001 level) was that between likelihood of automation and Job Tension. The relationship was, however, not linear, since the lowest job tension mean was obtained by workers who said automation was "not at all likely" but the highest tension was reported by those in the next category ("a little likely"). But were the bottom three categories in the table combined, it could be concluded that greater

---

\*The associated chi-squares and degrees of freedom for the likelihood of automation, effect of automation, and ease of finding a new job were, respectively: chi-square = 87.671,  $df = 24$ ; chi-square = 33.769,  $df = 16$ ; chi-square = 90.050,  $df = 16$ .

tension was experienced by those who felt there was any probability that their jobs would be automated than by those who felt safeguarded against automation.

Somewhat less highly associated with the outcome measures were workers' perceptions of what might happen to them were their jobs automated (Table 14.5). Workers who felt that their jobs would be most endangered by automation reported significantly less job satisfaction than others as measured both by the two overall job satisfaction indices and less satisfaction with the Challenge and Pay aspects of their jobs. Those who felt that automation would put them out of a job also expressed greater feelings of depression than others.

Table 14.1--Probability of Automation

How likely is it that in the next few years machines or computers will be doing a lot of the things you now do on your job? Is it very likely, somewhat likely, a little likely, or not at all likely?

<u>Worker's assessment of likelihood of machine taking over his job</u>	<u>Percentage (N=1510)</u>
Very likely	7.3 %
Somewhat likely	7.7
A little likely	9.7
Not at all likely	75.0
Don't know	.3

Table 14.2-- Job Security in Face of Automation

If this (automation of your job) happens, would you be out of a job, or would your employer find something else for you to do, or would your job just be adapted to the machine or computer, or what?

<u>What worker thinks would happen to him were his job automated</u>	<u>Percentage (N=373)*</u>
Worker would be out of a job	14.2 %
Employer would give worker another job	32.2
Worker's job would be adapted to machine or computer	47.2
Other	3.2
Don't know	3.2

\*Excludes workers who felt it was "not at all likely" that machines or computers would replace them.

Table 14.3--Ease of Getting Comparable Job

About how easy would it be for you to find a job with another employer with approximately the same income and fringe benefits you now have? Would you say very easy, somewhat easy, or not easy at all?

<u>Ease</u>	<u>Percentage (N=1301)*</u>
Very easy to find a similar job	40.2 %
Somewhat easy to find a similar job	29.4
Not easy at all to find a similar job	30.4

\*Excludes self-employed workers



Table 14.4 Outcome Measures in Relation to Probability of Automation

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures				Pay	Resources	"Content Free"
		Job Sat. '70	Comfort	Challenge	Co-worker Relations			
1. Not at all likely	1131	3.26	3.16	3.29	3.00			
2. A little likely	147	3.21	3.09	3.22	3.09	3.36	3.46	3.61
3. Somewhat likely	116	3.26	3.14	3.24	3.22	3.3	3.39	3.58
4. Very likely	111	3.12	3.01	3.07	3.05	3.47	3.40	3.54
Eta		.08	.07	.09	.07	.04	.08	.06
F		2.855	2.433	4.274	.05	.00	.08	.06
df		(3, 1501)	(3, 1495)	(3, 1501)	(3, 1493)	.650	3.073	1.799
P		.05	n.s.	.01	.05	(3, 1463)	(3, 1486)	(3, 1519)
						n.s.	.05	n.s.

280



Table 14.4 Outcome Measures in Relation to Probability of Automation (continued)

Characteristic of worker or worker's job	n	Mental Health Outcome Measures					Performance Debilitation	Life Satisfaction
		Job-related Tension	Somatic Complaints	Depression	Zest			
1. Not at all likely	1131	1.95	1.88	2.02	3.62	2.12	3.31	
2. A little likely	147	2.29	1.89	2.15	3.60	2.28	3.11	
3. Somewhat likely	116	2.10	1.97	2.11	3.62	2.22	3.17	
4. Very likely	111	2.27	1.94	2.19	3.51	2.24	3.09	
Eta		.18	.05	.10	.06	.09	.08	
F		.14	.05	.09	.05	.07	.07	
F		16.044	1.268	4.952	1.791	4.207	2.996	
df		(3,1522)	(3,1500)	(3,1493)	(3,1499)	(3,1490)	(3,1522)	
p		.001	n.s.	.01	n.s.	.01	.05	

Table 14.5 Outcome Measures in Relation to Job Security in Face of Automation \*

Characteristic of worker or worker's job	n	JobSat '70	Job Satisfaction Outcome Measures					"Content Free"
			Comfort	Challenge	Pay	Co-worker Relations	Resources	
<u>Effects of automation on worker's job</u>								
1. Worker would be out of a job	52	2.96	3.01	2.84	2.60	3.22	3.21	3.04
2. Employer would give worker another job	118	3.24	3.12	3.17	3.29	3.47	3.38	3.50
3. Worker's job would be adapted to machine or computer	175	3.23	3.06	3.27	3.16	3.39	3.39	3.66
Other results:	12	3.25	3.09	3.38	2.82	3.68	3.30	3.79
Eta		.20	.06	.24	.29	.14	.10	.25
F		INAP 4.816	INAP .471	INAP 6.902	INAP 10.523	INAP 2.495	INAP 1.297	INAP 7.744
df		(3,353)	(3,353)	(3,353)	(3,351)	(3,348)	(3,350)	(3,357)
p		.01	n.s.	.001	.001	n.s.	n.s.	.001

302

Table 14.5 Outcome Measures in Relation to Job Security in Face of Automation (continued)

Characteristic of worker or worker's job	n	Mental Health Outcome Measures				Performance Debitation	Life Satisfaction
		Job-related Tension	Somatic Complaints	Depression	Zest		
1. Worker would be out of a job	52	2.21	2.02	2.21	3.49	2.31	2.96
2. Employer would give worker another job	118	2.15	1.91	2.08	3.53	2.21	3.19
3. Worker's job would be adapted to machine or computer	175	2.29	1.93	2.17	3.63	2.28	3.14
4. Other results	12	1.98	1.57	1.76	3.52	1.78	3.00
Eta		.10	.13	.15	.12*	.15	.08
F		INAP	INAP	INAP	INAP	INAP	INAP
df		1,293	2,066	2,727	1,618	2,690	0,719
p		(3,357) n.s.	(3,355) n.s.	(3,355) .05	(3,354) n.s.	(3,354) .05	(3,357) n.s.

\*Excluded workers who felt it was "not at all likely" that machines or computers would replace them.



Table 14.6 Outcome Measures in Relation to Ease of Getting Comparable Job \*

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures					Resources	"Content Free"
		JobSat '70	Comfort	Challenge	Pay	Co-worker Relations		
1. Not easy at all	391	3.28	3.20	3.20	3.22	3.46	3.46	3.61
2. Somewhat easy	376	3.20	3.14	3.18	3.04	3.37	3.38	3.48
3. Very easy	519	3.21	3.13	3.21	2.94	3.44	3.46	3.55
Ease with which worker could secure a comparable job								
Eta		.06	.06	.02	.15	.05	.06	.05
F		2.573	1.988	0.159	14.091	1.822	2.543	1.935
df		(2,1283)	(2,1282)	(2,1283)	(2,1281)	(2,1270)	(2,1280)	(2,1297)
P		n.s.	n.s.	n.s.	.001	n.s.	n.s.	n.s.

Table 14.6 Outcome Measures in Relation to Ease of Getting Comparable Job (continued) \*

Characteristic of worker or worker's job	n	Mental Health Outcome Measures			Zest	Performance Debilitation	Life Satisfaction
		Job-related Tension	Somatic Complaints	Depression			
Ease with which worker could secure a comparable job							
1. Not easy at all	391	1.98	1.89	2.07	3.57	2.13	3.19
2. Somewhat easy	376	2.12	1.88	2.05	3.60	2.18	3.23
3. Very easy	519	1.99	1.87	2.06	3.64	2.12	3.28
Eta		.08	.01	.01	.06	.04	.03
F		.00	-.01	-.01	.06	-.01	0.682
df		4,614	0.112	0.058	2,459	1,156	(2,1298)
p		(2,1298)	(2,1282)	(2,1276)	(2,1281)	(2,1273)	n.s.

\*Excludes self-employed workers



## 15. CONTENT OF WORK

Almost half (46.6 percent) of the "single biggest problems" that workers reported facing on their jobs (Table 4.6) concerned the "content" of their work--what the workers did on their jobs rather than the working conditions surrounding these activities. Foremost among these problems were technical problems associated with a workers' task performance, problems in securing resources necessary for adequate task performance, and demands that the worker perform excessive amounts of work or work too fast. In addition to causing problems for workers, however, the content of their jobs also provided them with some of their greatest sources of job satisfaction. As further evidence of the importance to workers of the content of their jobs, it may be also remembered that the four aspects of the job rated by workers as most important to them all concerned the content of their work: "the work is interesting," "I receive enough help and equipment to get the job done," "I have enough information to get the job done," "I have enough authority to do my job" (Table 3.2).

When a worker is dissatisfied with the work he is doing one possible remedy for his situation is securing a change in job assignments from his employer. For many, however, this remedy is not readily available, since a large number of workers appeared to be "locked into" their present jobs. A little over half of all the wage-and-salary workers interviewed reported that it would be "very" or "somewhat" hard for them to get their employers to change their job assignments. That

thus being "locked into" a job assignment was substantially related to job satisfaction, job-related tension, and life satisfaction is demonstrated by Table 15.2. On all of the study's job satisfaction measures those workers who were least satisfied were those who felt that securing a change in job assignments would be most difficult.

#### DEMANDS

Workers' descriptions of some demands that were part of their jobs are presented in Table 15.3. Consistent with the report by many workers that one of the "single biggest problems" they faced on their jobs was that their work was too hard or their work-pace too fast (Table 4.6), Table 15.3 shows that 70.9 percent had to work very fast either "a lot" or "somewhat" and that 75.5 percent had to work very hard either "a lot" or "somewhat." Tables 15.4 through 15.9 show the relationships between the demands listed in Table 15.3 and the job satisfaction and mental health outcome measures. Workers with jobs that required them to work very fast, very hard, or exert a lot of physical effort were less satisfied than others with the Comfort aspects of their jobs and reported greater job-related tension. Requirements that a worker never make a mistake were associated with high levels of job-related tension, and having to perform activities that were repetitious was significantly related to low satisfaction with the Challenge aspects of work.

The six questionnaire items in Table 15.3 were part of a longer series of items concerning the demand characteristics of worker's jobs which also included the five items in Table 15.10 and the two in Table 15.13. A correlational analysis was made of all 15 items on a random half-sample of workers. The correlations among the items indicated that five of them might be combined into a reliable index. The five



items constituting this index are those in Table 15.10 and their inter-correlations are shown in Table 15.11. The resulting Index of Enriching Job Demands was an arithmetic mean of the five items, high score on the index indicating that the workers' job provided him with a variety of job tasks and demanded high levels of skill and creativity. The reliability of the index, as determined by coefficient alpha, was .79.

That the index of Enriching Job Demands was strongly related to many of the study's outcome measures is demonstrated by Table 15.12. The index was prominent among the study's measures that were most highly associated with overall job satisfaction. Not unexpectedly, the index was also highly correlated with satisfaction with Challenge. The relationship between the Index and satisfaction with Pay is probably artifactual, reflecting the possibility that many of those jobs which were in some ways personally enriching were at the same time also well paying. Life satisfaction was also highly related to scores on the index, with those workers most satisfied with their lives being those who were also in the most personally enriching jobs. Note, however, that workers in these jobs also reported more job related tension than others. This pattern of relationships in which a working condition was associated with high levels of job satisfaction and mental health but at the same time with considerable job-related tension occurs in a number of tables in this report. In each such table the working condition is in one way or another related to occupational status. A similar pattern of relationships has previously been reported by Gurin et al. (1960) and Kahn et al. (1964) and suggests that although high occupational status may confer on the worker a number of positive

psychological benefits, the price he must pay for these benefits is a considerable amount of worry about his job. Gurin and his associates explained this in terms of the greater ego-involvement of persons in higher-ranking occupations. This heightened ego involvement, according to them, "creates the high aspiration within which problems are experienced." In terms of the present data, an "enriching" job also appeared to be a highly challenging one in which the personal stakes of workers were high. The rewards incumbent upon successful performance in such jobs seemed to be considerable. But little of great importance is attained without paying a price. Technical problems and other such problems, delays, or difficulties can more easily be dismissed as tolerable nuisances and as only marginally relevant to one's self image when a worker does not have a very great psychological investment in his work. But where ego-involvement in the job is great and where "success" becomes a measure of personal worth, even technical problems and other such difficulties may take on a tension-producing self-relevance which they might not otherwise possess.

The autonomy that the worker reported was provided him on his job was estimated by two questions that were included among the set of those listed in Tables 15.3 and 15.10. These two questions assessed the extent to which the worker felt his job allowed him "a lot of freedom" as to how he did his work and let him "make a lot of decisions" on his own. The reliability of this two-item index, estimated by coefficient alpha, was .57. Workers' responses to the two items constituting the index are presented in Table 15.13. The percentages in the table suggest that a surprisingly high proportion of those interviewed felt that they were afforded some autonomy on their jobs.

These percentages may, however, overstate the actual extent to which autonomy was granted workers by their employers or supervisors. In one of the pretest interviews, for example, a drug-packer indicated that what she liked best about her job was the freedom and autonomy it allowed her. A closer examination of her interview indicated that (a) her job consisted of putting various assortments of pre-packaged and pre-shelved drugs into cartons according to a set of packing orders she received each day and that (b) her autonomy was confined to the steps through which she would assemble the drugs and the sequence in which she would fill the orders supplied to her. Her job was therefore "autonomous" only within the very limited confines defined by her employer. She was not very closely supervised and worked somewhat physically apart from others in her company, and these conditions may have even further enhanced her belief that she had a great deal of autonomy. However, her job would scarcely correspond to the common image of what constitutes an "autonomous" job. Many of the large number of workers reporting that their jobs were autonomous may likewise have been commenting simply upon the autonomy granted them by their employer within highly circumscribed boundaries.

In spite of the possibility that many workers' reports of their having considerable autonomy might have ignored the real extent of the constraints under which they worked, such reports were significantly related to every one of the study's outcome measures. The autonomy provided the worker was among the half-dozen working conditions measured in the study which appeared to have the greatest impact on workers' overall job satisfaction. The relationship between autonomy and satisfaction with Challenge was especially high, contributing thereby

some indication of the construct validity of both the Autonomy Index and the Challenge subscale of the job satisfaction measure. On all of the mental health indices workers who felt that they had little autonomy on their jobs had poorer mental health scores.

#### RESOURCES

Few would probably dispute the premise that, other things being equal, a good job is one that can be characterized by such phrases as "challenging," "ego-involving," and "stimulating," and in recent years the creation of such jobs has been a major effort of those interested in organizational development. But the creation of jobs with these characteristics does not necessarily mean that workers will be happy in them. Those advocating the creation of such jobs generally base their advocacy on the unspoken assumption that those holding the jobs will be performing adequately. Greater attention seems to be paid to the demands of and opportunities afforded by the job than in the more mundane considerations of supplying the worker with the resources necessary for meeting such demands and making full use of the opportunities afforded him. While there is considerable discussion as to how the responsibilities of workers may be "enlarged," much less attention is focused upon how workers in such "enlarged" jobs may be adequately equipped to meet their extended job demands. If the worker finds himself unable to meet the demands of an "enlarged" job, the job-enlargement process will probably have been in vain. The worker will not only have failed in his job but he will have failed in a job in which he has become quite ego-involved. Without adequate provision for facilitating task accomplishment job enlargement can accomplish little more than increase the personal damage that may result from poor job performance.

The present study investigated two types of resources for task accomplishment available to workers--those provided by their employers and those brought to the job by the workers themselves. Lack of the former "externally provided" resources constituted the fourth "biggest problem" that workers faced on their job (Table 4.6). Table 15.15 indicates the extent to which workers were provided with five specific types of resources--assistance, authority, time, information, and equipment. Each of these five resources was insufficiently provided to about a fifth of the workers interviewed. The degree to which each worker was provided with the five resources taken as a whole was estimated by a Resource Adequacy Index based on the worker's mean score on the five questions in Table 15.15. The associations between this index and the outcome measures (Table 15.16) indicated that level of resources adequacy was strongly associated with overall job satisfaction, job-related tension, and satisfaction with both the Comfort and (not surprisingly) Resources aspects of the job.

A worker's skills and education constitute additional resources upon which he can draw in order to meet the demands of his job. This does not necessarily mean, however, that the more skills a worker has the better off he will be. It is possible that the worker can be too skilled or too well-educated for his job and hence be "under-utilized" or "underemployed." Table 15.17 shows that 26.6 percent of workers felt that they were "under-utilized" in the sense that they felt that they had skills that they would like to be using but could not use on their jobs. The sizeable negative implications of skill under-utilization for job satisfaction and mental health are further suggested by the data in Table 15.18.

The extent of congruence between the levels of workers' educations and the amount of education they reported that was needed by their jobs is presented in Table 15.19 and, in more abbreviated form, in 15.20. Overall 35.5 percent reported that their educations were being under-utilized by their present jobs or, put another way, that they were educationally over-qualified. In some cases, such as those in which college graduates were performing work needing a grade school education, the degree of under-utilization appeared to be quite extreme (Table 15.19). Table 15.21 further indicates significant associations between several of the job satisfaction measures and the congruence between a worker's education and the level of education required by his work. Those least satisfied were in each case those who were educationally over-qualified. The most satisfied workers were, interestingly, those who were educationally under-qualified. Apparently the skills and other personal resources of the latter had allowed them to advance to positions that would not otherwise have been attainable by virtue of their education alone. Such educationally "under-qualified" workers were even more satisfied with their jobs than were workers whose educational levels were better matched to the education required by their work.

Table 15.1--Ease of Changing Job Assignment

How hard or easy do you think it would be for you to get your employer to change your job assignment if you didn't like it? Would you say very hard, somewhat hard, somewhat easy, or very easy?

<u>Degree of difficulty</u>	<u>Percentage* (N = 1281)*</u>
Very hard	31.0%
Somewhat hard	24.9
Somewhat easy	23.6-
Very easy	20.5

\*Excludes self-employed workers.

Table 15.2 Outcome Measures in Relation to the Ease With Which Worker Could Secure a New Job Assignment

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures						"Content Free"
		Jobsat '70	Comfort	Challenge	Pay	Co-worker Relations	Resources	
1. Very Hard	392	3.11	3.05	3.07	2.92	3.29	3.36	3.36
2. Somewhat Hard	311	3.20	3.11	3.13	3.11	3.37	3.40	3.41
3. Somewhat Easy	301	3.27	3.19	3.26	3.11	3.48	3.44	3.66
4. Very Easy	262	3.38	3.30	3.39	3.16	3.58	3.55	3.90
Eta		.20	.16	.19	.12	.16	.11	.22
F		.20	.15	.18	.11	.16	.11	.22
df		16,996	10,378	15,141	5,938	11,184	5,501	22,883
p		(3,1262)	(3,1261)	(3,1262)	(3,1260)	(3,1250)	(3,1259)	(3,1277)
		.001	.001	.001	.001	.001	.001	.001

395



Table 15.2 Outcome Measures to the Ease With Which Worker Could Secure a New Job Assignment (continued)

Characteristic of worker or worker's job	n	Mental Health Outcome Measures				Zest	Performance Deblitiation	Life Satisfaction
		Job-related Tension	Somatic Complaints	Depression	Life Satisfaction			
1. Very Hard	392	2.10	1.93	2.10	3.56	2.17	3.15	
2. Somewhat Hard	311	2.13	1.85	2.05	3.58	2.13	3.20	
3. Somewhat Easy	301	2.01	1.87	2.04	3.64	2.18	3.23	
4. Very Easy	262	1.83	1.83	2.01	3.66	2.05	3.45	
Eta		.15	.06	.06	.08	.08	.10	
F		10.091	1.744	1.623	3.051	2.447	4.650	
df		(3,1277)	(3,1261)	(3,1254)	(3,1260)	(3,1252)	(3,1277)	
p		.001	n.s.	n.s.	.05	n.s.	.01	



Table 15.3 Selected Demand Characteristics of Worker's Job

I'll read a list of things that might describe a person's job. For each thing I read I'd like you to tell me how much this is like your job. A job that...Would you say this is a lot like your job, somewhat like your job, a little like your job, or not at all like your job?

<u>Demand characteristic</u>	<u>Percentage</u>			
	<u>A lot</u>	<u>Some what</u>	<u>A little</u>	<u>Not at all</u>
Requires that you work very fast (N=1527)	34.9%	36.0%	15.8%	13.2%
Requires that you work very hard (N=1524)	39.9	35.6	15.6	8.9
Requires that you exert a lot of physical effort (N=1523)	29.9	22.9	23.8	23.4
Requires that you almost never make a mistake (N=1529)	36.8	29.5	20.1	13.6
Requires that you do things that are very repetitious (N=1527)	47.9	26.9	15.9	9.3
Requires that you be skilled in using your hands (N=1529)	54.3	15.9	12.5	17.3

Table 15.4 Outcome Measures in Relation to Worker's Job Requiring that He Work Very Fast

Characteristic of worker or worker's job	n	JobSat '70	Job Satisfaction Outcome Measures					"Content Free"
			Comfort	Challenge	Pay	Co-worker Relations	Resources	
1. Not at all	198	3.32	3.34	3.26	3.02	3.48	3.51	3.61
2. A little	239	3.26	3.20	3.29	3.10	3.38	3.37	3.60
3. Somewhat	539	3.27	3.16	3.32	3.07	3.42	3.43	3.70
4. A lot	530	3.17	3.02	3.18	2.96	3.39	3.43	3.45
Eta		.11	.18	.09	.06	.04	.06	.12
F		(.10)	17	-.05	-.04	-.03	-.02	-.06
F		6.497	16.379	4.324	2.071	.965	1.761	6.902
df		(3,1502)	(3,1500)	(3,1502)	(3,1494)	(3,1463)	(3,1487)	(3,1519)
P		.001	.001	.01	n.s.	n.s.	n.s.	.001

Table 15.4 Outcome Measures in Relation to Worker's Job Requiring that He Work Very Fast (continued)

Characteristic of worker or worker's job	n	Mental Health Outcome Measures				Zest	Performance Debitation	Life Satisfaction
		Job-related Tension	Somatic Complaints	Depression	Zest			
Extent to which worker's job requires he work very fast								
1. Not at all	198	1.70	1.80	1.96	3.61	2.08	3.35	
2. A little	239	1.99	1.87	2.01	3.58	2.12	3.28	
3. Somewhat	539	2.07	1.84	2.05	3.64	2.23	3.28	
4. A lot	530	2.10	1.98	2.12	3.60	2.12	3.20	
Eta		.18	.11	.09	.05	.09	.05	
F		.16	.09	.09	.00	.02	.04	
df		17.214	6.653	4.478	1.219	4.511	1.148	
P		(3,1523)	(3,1502)	(3,1495)	(3,1501)	(3,1492)	(3,1523)	
		.001	.001	.01	n.s.	.01	n.s.	

Table 15.5 Outcome Measures in Relation to Worker's Job Requiring that He Work Very Hard

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures				Resources	"Content Free"
		JobSat '70	Comfort	Challenge	Pay		
Extent to which worker's job requires he work very hard							
1. Not at all	133	3.39	3.44	3.23	3.18	3.57	3.56
2. A little	237	3.23	3.24	3.12	3.08	3.44	3.48
3. Somewhat	534	3.23	3.15	3.25	3.03	3.38	3.62
4. A lot	598	3.21	3.02	3.33	2.95	3.40	3.59
Eta		.10	.21	.11	.07	.07	.05
F		-.08	-.21	.09	-.07	-.06	.03
df		5.195	22.481	5.771	2.555	2.709	1.328
p		(3, 1498)	(3, 1496)	(3, 1498)	(3, 1490)	(3, 1483)	(3, 1516)
		.01	.001	.001	n.s.	.05	n.s.



Table 15.5 Outcome Measures in Relation to Worker's Job Requiring that He Work Very Hard (continued)

Characteristic of worker or worker's job	n	Mental Health Outcome Measures				Zest	Performance Debilitation	Life Satisfaction
		Job-related Tension	Somatic Complaints	Depression	Zest			
Extent to which worker's job requires he work very hard								
1. Not at all	133	1.62	1.83	1.92	3.54	2.04	3.38	
2. A little	237	1.95	1.84	2.02	3.57	2.18	3.32	
3. Somewhat	534	2.04	1.85	2.07	3.62	2.18	3.23	
4. A lot	598	2.12	1.96	2.09	3.64	2.15	3.24	
Eta		.19	.10	.09	.06	.06	.04	
F	19.903	.18	.08	.08	.06	.03	1.027	
df	(3,1520)	4.593	3.765	3.765	2.162	1.906	(3,1520)	
P	.001	(3,1499)	(3,1492)	(3,1492)	(3,1498)	(3,1489)	n.s.	



Table 15.6 Outcome Measures in Relation to Worker's Job Requiring that He Exert Physical Effort

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures						"Content Free"
		JobSat '70	Comfort	Challenge	Pay	Co-worker Relations	Resources	
1. None	356	3.34	3.27	3.32	3.18	3.49	3.50	3.68
2. A little	356	3.24	3.16	3.25	3.05	3.42	3.38	3.64
3. Some	343	3.20	3.09	3.22	3.04	3.37	3.39	3.60
4. A lot	446	3.19	3.06	3.26	2.88	3.38	3.45	3.45
Eta		.12	.14	.05	.13	.07	.08	.10
F		7.06	9.77	1.47	8.63	2.26	2.83	5.25
df		(3, 1497)	(3, 1495)	(3, 1497)	(3, 1489)	(3, 1458)	(3, 1482)	(3, 1515)
P		.001	.001	n.s.	.001	n.s.	.05	.01

Table 15.6 Outcome Measures in Relation to Worker's Job Requiring that He Exert Physical Effort (continued)

Characteristic of worker or worker's job	n	Mental Health Outcome Measures				Zest	Performance Debilitation	Life Satisfaction
		Job-related Tension	Somatic Complaints	Depression	Zest			
Amount of physical effort required by job								
1. None	356	1.89	1.74	1.98	3.70	2.11	3.39	
2. A little	356	2.09	1.84	2.06	3.62	2.20	3.26	
3. Some	343	2.08	1.89	2.07	3.59	2.13	3.24	
4. A lot	446	2.03	2.06	2.10	3.56	2.17	3.18	
Eta		.11	.20	.08	.10	.05	.07	
F		.06	.20	.08	.10	.02	.07	
df		6.04	21.04	3.27	5.07	1.49	2.72	
P		(3,1519)	(3,1498)	(3,1492)	(3,1497)	(3,1489)	(3,1519)	
		.001	.001	.05	.01	n.s.	.05	

403



Table 15.7 Outcome Measures in Relation to Worker's Job Requiring that He Not Make Mistakes

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures					Resources	"Content Free"
		Jobsat '70	Comfort	Challenge	Pay	Co-worker Relations		
Extent to which worker's job requires he never make a mistake								
1. Not at all	204	2.28	3.21	3.30	2.95	3.46	3.51	3.53
2. A little	302	2.20	3.11	3.20	3.02	3.38	3.40	3.50
3. Somewhat	443	2.25	3.15	3.27	3.03	3.46	3.40	3.61
4. A lot	558	3.24	3.13	3.27	3.06	3.38	3.44	3.62
Eta		.05	.05	.05	.04	.06	.06	.06
F		-.01	-.03	.01	.04	-.03	-.02	-.05
F		1.161	1.355	1.112	.929	1.736	1.648	1.694
df		(3,1503)	(3,1501)	(3,1503)	(3,1495)	(3,1464)	(3,1488)	(3,1521)
p		n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.

**Table 15.7 Outcome Measures in Relation to Worker's Job Requiring that He Not Make Mistakes (continued)**

Characteristic of worker or worker's job	n	Mental Health Outcome Measures				Zest	Performance Debilitation	Life Satisfaction
		Job-related Tension	Somatic Complaints	Depression	Zest			
1. Not at all	204	1.82	1.87	2.05	3.60	2.19	2.21	
2. A little	302	2.04	1.92	2.08	3.60	2.16	3.24	
3. Somewhat	443	2.08	1.87	2.04	3.60	2.16	3.25	
4. A lot	558	2.04	1.90	2.06	3.64	2.14	3.31	
Eta		.11	.03	.02	.04	.02	.03	
F		.07	.00	.00	.03	-.02	.03	
df		6.537	.559	.264	.646	.274	.584	
P		(3,1525)	(3,1504)	(3,1497)	(3,1503)	(3,1494)	(3,1525)	
		.001	n.s.	n.s.	n.s.	n.s.	n.s.	



Table 15.8 Outcome Measures in Relation to the Repetitiveness of Worker's Job

Characteristic of worker or worker's job	n	Job Satisfaction-Outcome Measures						
		JobSat '70	Comfort	Challenge	Pay	Co-worker Relations	Resources	"Content Free"
1. Not at all	140	3.37	3.23	3.42	3.20	3.50	3.52	3.78
2. A little	241	3.26	3.11	3.37	3.11	3.38	3.37	3.73
3. Somewhat	404	3.26	3.16	3.33	3.04	3.40	3.41	3.69
4. A lot	722	3.19	3.12	3.15	2.96	3.41	3.45	3.44
Eta		.11	.06	.17	.10	.04	.07	.15
F		.11	.04	.16	.10	.02	.01	.14
df		6,278	1,713	14,878	4,660	.858	2,354	12,462
p		(3,1503)	(3,1501)	(3,1503)	(3,1495)	(3,1464)	(3,1488)	(3,1519)
		.001	n.s.	.001	.01	n.s.	n.s.	.001

Extent to which worker's  
job require he do work  
which is repetitious

Table 15.8 Outcome Measures in Relation to the Repetitiveness of Worker's Job (continued)

Characteristic of worker or worker's job	n	Mental Health Outcome Measures					
		Job-related Tension	Somatic Complaints	Depression	Zest	Performance Debilitation	Life Satisfaction
1. Not at all	140	1.87	1.68	1.87	3.70	1.93	3.48
2. A little	241	2.05	1.85	1.98	3.62	2.11	3.32
3. Somewhat	404	2.08	1.87	2.05	3.64	2.16	3.32
4. A lot	722	2.00	1.95	2.11	3.58	2.20	3.17
Eta		.08	.13	.13	.07	.10	.09
F		.02	.12	.13	.07	.09	.09
df		3.632	8.800	8.547	2.752	4.939	4.556
p		(3,1523)	(3,1503)	(3,1496)	(3,1502)	(3,1493)	(3,1523)
		.05	.001	.001	.05	.01	.01

407

Table 15.9 Outcome Measures in Relation to Worker's Job Requiring that He Use his Hands

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures					"Content Free"
		Comfort	Challenge	Pay	Co-worker Relations	Resources	
1. Not at all	263	3.07	3.28	3.08	3.37	3.37	3.62
2. A little	185	3.06	3.12	2.97	3.31	3.35	3.46
3. Somewhat	238	3.11	3.16	2.96	3.32	3.42	3.57
4. A lot	821	3.19	3.31	3.05	3.48	3.47	3.60
Eta		.10	.12	.05	.11	.08	.05
F		.09	.05	.00	.08	.08	.01
df		4.617	6.771	1.212	5.552	3.531	1.517
P		(3,1501) .01	(3,1503) .001	(3,1495) n.s.	(3,1464) .001	(3,1488) .05	(3,1521) n.s.

Table 15.9 Outcome Measures in Relation to Worker's Job Requiring that He Use his Hands (continued)

Characteristic of worker or worker's job	n	Mental Health Outcome Measures					
		Job-related Tension	Somatic Complaints	Depression	Zest	Performance Debilitation	Life Satisfaction
Extent to which worker's job requires he be skilled in using his hands							
1. Not at all	263	2.00	1.73	2.03	3.69	2.06	3.26
2. A little	185	2.11	1.84	2.05	3.57	2.12	3.09
3. Somewhat	238	2.02	1.96	2.11	3.60	2.22	3.27
4. A lot	821	2.00	1.93	2.05	3.60	2.17	3.30
Eta		.05	.13	.05	.07	.08	.06
F		-.02	.12	.01	-.04	.07	.03
df		1.283	8.813	1.075	2.449	3.259	1.308
P		(3,1525)	(3,1504)	(3,1497)	(3,1503)	(3,1494)	(3,1525)
		n.s.	.001	n.s.	n.s.	.05	n.s.

ACB

Table 15.10 Items in Index of Enriching Job Demands

The following items comprising the Index of Enriching Job Demands were presented to the worker as part of the list of "demands" included in the question described in Table 15.3.

Demand Characteristic	Percentage			
	A lot	Some what	A little	Not at all
Requires that you keep having to learn new things (N=1530)	47.1%	25.8%	13.5%	13.5%
Allows you to do a variety of different things (N=1529)	54.2	21.0	10.9	13.9
Requires a high level of skill (N=1528)	40.1	32.9	15.3	11.8
Requires that you be creative (N=1523)	29.0	22.8	14.9	33.3
Requires that you do a lot of planning ahead (N=1531)	42.0	20.5	14.6	22.9

Table 15.11 Correlations Among Items in Index of Enriching Job Demands

	Requires that you keep having to learn new things	Requires that you do a lot of planning ahead	Requires that you be creative	Requires a high level of skill
Allows you to do a variety of different things	.46	.36	.40	.32
Requires a high level of skill	.44	.42	.44	
Requires that you be creative	.39	.53		
Requires that you do a lot of planning ahead	.50			

Table 15.12 Outcome Measures in Relation to Amount of Enriching Job Demands Experienced by Worker on His Job

Characteristic of worker or worker's job	n	JobSat '70	Job Satisfaction Outcome Measures				Co-worker Relations	Resources	"Content Free"
			Comfort	Challenge	Pay				
1. Lowest	26	2.94	3.00	2.57	2.62	2.30	2.45	2.89	
2. .	270	3.05	3.10	2.80	2.81	3.27	3.47	3.53	
3. .	480	3.18	3.14	3.13	2.92	3.37	3.41	3.41	
4. Highest	733	3.36	3.16	3.54	3.20	3.50	3.43	3.91	
Eta		.26	.05	.46	.20	.13	.03	.37	
F		.28	.05	.49	.20	.12	-.01	.38	
F		37.113	1.294	134.885	21.165	8.344	.477	78.710	
df		(3,1505)	(3,1503)	(3,1505)	(3,1497)	(3,1466)	(3,1490)	(3,1523)	
p		.001	n.s.	.001	.001	.001	n.s.	.001	



Table 15.12 Outcome Measures in Relation to Amount of Enriching Job Demands Experienced by Worker on His Job (continued)

Characteristic of worker or worker's job	n	Mental Health Outcome Measures					Life Satisfaction
		Job-related Tension	Somatic Complaints	Depression	Zest	Performance Debilitation	
1. Lowest	26	1.66	2.03	2.14	3.38	2.00	3.07
2. .	270	1.86	1.98	2.09	3.54	2.13	3.10
3. .	480	1.99	1.91	2.09	3.54	2.16	3.14
4. Highest	733	2.11	1.84	2.02	3.70	2.16	3.41
Eta		.15	.09	.07	.17	.04	.14
F		.15	.10	.08	.16	.01	.13
df		11,605	4,190	2,327	15,181	.675	9,590
p		(3,1527) .001	(3,1506) .01	(3,1499) n.s.	(3,1505) .001	(3,1496) n.s.	(3,1527) .001

Table 15.13 Autonomy Provided Worker on His Job

When presented the set of "demands" described in table 15.3 the worker was also presented in the same multi-part question, two items intended to assess the autonomy provided him by his job. The two items and the percentage of workers indicating that each was a lot, somewhat, a little, or not at all like their jobs, follows.

	Percentage			
	<u>A lot</u>	<u>Somewhat</u>	<u>A little</u>	<u>Not at all</u>
Allows you a lot of freedom * as to how you do your work (N = 1528)	46.6%	27.6%	13.3%	12.5%
Allows you to make a lot of * decisions on your own (N = 1528)	48.7	25.1	13.2	13.0

\*These two items were combined to form an index score of "autonomy provided to the worker on his job." Each worker's score on the index is the average of his responses to the two questions. Scores ranged from 1.0 (lowest autonomy) to 4.0 (highest autonomy).

Table 15.14 Outcome Measures in Relation to Autonomy Provided Worker on His Job

Characteristic of worker or worker's job	n	JobSat '70	Job Satisfaction Outcome Measures				Resources	"Content Free"
			Comfort	Challenge	Pay	Co-worker Relations		
Autonomy provided worker on the job								
1. Lowest	79	2.92	2.99	2.58	2.72	3.24	3.02	
2. .	192	3.04	3.02	2.81	2.93	3.34	3.25	
3. .	456	3.18	3.10	3.15	3.01	3.38	3.48	
4. Highest	781	3.36	3.21	3.50	3.10	3.47	3.78	
Eta		.28	.13	.45	.11	.09	.26	
F		.30	.14	.48	.12	.10	.28	
df		44.067	8.592	126.697	6.506	4.161	35.390	
P		(3,1504)	(3,1502)	(3,1504)	(3,1496)	(3,1465)	(3,1522)	
		.001	.001	.001	.001	.01	.001	



Table 15.14 Outcome Measures in Relation to Autonomy Provided Worker on His Job (continued)

Characteristic of worker or worker's job	N	Mental Health Outcome Measures				
		Job-related Tension	Somatic Complaints	Depression	Zest	Performance Debilitation
1. Lowest	79	2.07	2.00	2.10	3.42	2.06
2. .	192	2.07	1.96	2.15	3.48	2.27
3. .	456	2.08	1.93	2.09	3.61	2.18
4. Highest	781	1.97	1.83	2.00	3.67	2.12
Eta		.08	.10	.10	.15	.08
F		-.08	-.09	-.11	.15	-.05
df		3.305	5.007	5.347	11.807	3.503
P		(3,1526)	(3,1505)	(3,1498)	(3,1495)	(3,1495)
		.05	.01	.01	.001	.05
						7.135
						(3,1526)
						.001

Table 15.15 Amount of Resources Available to the Worker for Doing His Job.

Next I'll read off some things that you might get from your employer or those people you work with that could help you work your best. For each, tell me whether you feel you are being given enough or not enough for you to work your best.

<u>Resource</u>	<u>Percentage</u>	
	<u>Enough</u>	<u>Not enough</u>
Help or assistance from those you work with (N = 1507)*	80.9%	19.1%
The authority to tell certain people what to do (N = 1476)*	78.4	21.6
Time in which to do what others expect of you (N = 1500)*	76.8	23.2
The facts and information you need (N = 1510)*	83.0	17.0
The machinery, tools, or other equipment you need (N = 1511)*	82.9	17.1

\* These five items were combined to form an index score of "adequacy of resources available to worker". Each worker's score on the index is the average of his response to the five questions. Scores ranged from 1.0 (most inadequate) to 5.0 (most adequate).

Table 15.16 Outcome Measure in Relation to the Adequacy of Resources Available to the Worker for Doing His Job

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures					Resources	"Content Free"
		JobSat '70	Comfort	Challenge	Pay	Co-worker Relations		
Adequacy of resources for task accomplishment provided worker								
1. Inadequate	22	2.83	2.68	3.02	2.73	3.25	2.58	2.92
2. .	51	2.96	2.77	3.12	3.08	3.24	2.74	3.18
3. .	122	2.90	2.74	2.04	2.86	3.15	2.94	3.13
4. .	221	3.08	2.94	3.15	2.89	3.32	3.22	3.32
5. Adequate	1078	3.33	3.25	3.33	3.09	3.48	3.58	3.72
Eta		.32	.32	.19	.11	.15	.44	.26
F		.34	.34	.20	.09	.15	.46	.27
df		43.827	42.017	13.909	4.914	8.868	88.333	26.290
P		(4,1489)	(4,1487)	(4,1489)	(4,1481)	(4,1454)	(4,1474)	(4,1507)
		.001	.001	.001	.001	.001	.001	.001

4.13

Table 15.16 Outcome Measures in Relation to the Adequacy of Resources Available to the Worker for Doing His Job (continued)

Characteristic of worker or worker's job	n	Mental Health Outcome Measures				Zest	Performance Debilitation	Life Satisfaction
		Job-related Tension	Somatic Complaints	Depression				
1. Inadequate	22	2.97	2.14	2.29	3.46	2.12	2.91	
2. .	51	2.99	2.22	2.30	3.50	2.33	3.04	
3. .	122	2.59	1.98	2.18	3.54	2.16	2.81	
4. .	221	2.31	1.95	2.18	3.55	2.19	2.97	
5. Adequate	1078	1.84	1.85	2.00	3.64	2.14	3.39	
Eta		.47	.14	.17	.10	.06	.20	
F		-.50	-.13	-.17	.11	-.05	.19	
F		105.150	7.730	10.730	3.678	1.495	15.623	
df		(4, 1510)	(4, 1489)	(4, 1482)	(4, 1488)	(4, 1479)	(4, 1510)	
P		.001	.001	.001	.05	n.s.	.001	

Table 15.17 Utilization of Worker Skills, by the Job

Through your previous experience and training, do you have some skills that you would like to be using in your work but can't use on your present job?

<u>Under-utilization</u>	<u>Percentage (N = 1528)</u>
Worker has skills he cannot use	26.6%
Worker can use all the skills he has	73.4



Table 15.18 Outcome Measures in Relation to Utilization of Worker's Skills by His Job

Characteristic of worker or worker's job	n	Job Satisfaction Outcome Measures						
		Jobsat '70	Comfort	Challenge	Pay	Co-worker Relations	Resources	"Content Free"
Utilization of worker's skills by his job								
1. Worker has skills he cannot use	405	3.09	3.04	3.05	2.84	3.32	3.32	3.20
2. Worker can use all the skills he has	1101	3.29	3.18	3.34	3.10	3.45	3.47	3.72
Eta		.18	.11	.20	.14	.08	.12	.25
F		INAP	INAP	INAP	INAP	INAP	INAP	INAP
df		53.522	17.855	59.889	29.339	10.331	20.659	104.520
P		(1,1504)	(1,1502)	(1,1504)	(1,1496)	(1,1465)	(1,1489)	(1,1522)
		.001	.001	.001	.001	.01	.001	.001
Mental Health Outcome Measures								
Characteristic of worker or worker's job	n	Mental Health Outcome Measures						
		Somatic Complaints	Depression	Zest	Performance Debilitation	Life Satisfaction		
Utilization of worker's skills by his job								
1. Worker has skills he cannot use	405	2.19	1.91	3.58	2.17	3.01	3.35	
2. Worker can use all the skills he has	1101	1.96	1.88	3.63	2.15	3.35	3.35	
Eta		.14	.02	.04	.01	.14	.14	
F		INAP	INAP	INAP	INAP	INAP	INAP	
df		31.038	17.950	2.717	2.208	31.220	31.220	
P		(1,1526)	(1,1504)	(1,1503)	(1,1494)	(1,1526)	(1,1526)	
		.001	n.s.	n.s.	n.s.	n.s.	.001	



Table 15, 19--Worker's Education as Compared to Education Level Needed on the Job (N=1528)

What was the highest grade of school you completed? What level of formal education do you feel is needed by a person in your job?

Level of formal education needed by job*	Grade of school completed				Graduate or professional training	
	None	Some grade school	Completed grade school	High school diploma		Some college
No special level of education, vocational training or technical training	.3%	2.9%	1.0%	1.9%	.7%	.1%
Some grade school	.0	1.9	1.8	1.2	.3	.0
Completion of grade school	.0	.9	2.1	2.5	.1	.2
Some high school	.1	.5	1.1	4.8	1.2	.1
High school diploma	.1	1.0	1.9	22.4	7.3	.7
Some college	.0	.0	.1	2.3	4.9	.7
College degree	.0	.1	.0	1.0	1.8	4.8
Graduate or professional education in excess of college degree	.0	.0	.0	.1	.2	.9
						4.0

\*Requirements for technical or vocational training in excess of formal education are ignored in this table.



Table 15.20 Utilization of Worker's Education by His Job

<u>Utilization</u>	<u>Percentage (N = 1528)</u>
Worker's educational level is <u>less than</u> that needed by his job ("underqualified")	19.0
Worker's educational level and that needed by his job are the same ("perfect fit")	45.1
Worker's educational level is <u>greater than</u> that needed by his job ("overqualified")	35.9

Table 15.21 Outcome Measures in Relation to Utilization of Worker's Education by His Job

Characteristic of worker or worker's job	Job Satisfaction Outcome Measures						"Content Free"
	n	JobSat '70	Comfort	Challenge	Pay	Co-worker Relations	
Correspondence between worker's education and the education needed for his job							
1. Worker is educationally under qualified	289	3.36	3.23	3.49	3.14	3.54	3.44
2. Perfect fit between worker's education and that needed for his job	675	3.27	3.15	3.31	3.10	3.44	3.45
3. Worker is educationally over qualified	542	3.13	3.08	3.07	2.88	3.31	3.40
Eta <sup>2</sup>		.18	.09	.24	.13	.12	.04
F		INAP	INAP	INAP	INAP	INAP	INAP
df		26.072	5.940	44.863	13.508	11.211	1.198
p		(2,1503)	(2,1501)	(2,1503)	(2,1495)	(2,1464)	(2,1488)
		.001	.01	.001	.001	.001	n.s.

Table 15.21 Outcome Measures in Relation to Utilization of Worker's Education by His Job (continued)

Characteristic of worker or workers job	n	Mental Health Outcome Measures				Z-test	Performance Debilitation	Life Satisfaction
		Job-related Tension	Somatic Complaints	Depression	Test			
Correspondence between worker's education and the education needed for his job								
1. Worker is educationally under-qualified	289	2.02	1.85	2.03	3.66	2.23	3.33	
2. Perfect fit between worker's education and that needed for his job	675	2.04	1.86	2.04	3.64	2.13	3.31	
3. Worker is educationally over-qualified	542	2.00	1.95	2.09	3.56	2.15	3.16	
Eta		.02	.07	.04	.08	.06	.07	
F		INAP	INAP	INAP	INAP	INAP	INAP	
df		.309	4.150	1.431	5.273	2.648	3.562	
P		(2,1525)	(2,1503)	(2,1496)	(2,1502)	(2,1493)	(2,1525)	
		n.s.	n.s.	n.s.	n.s.	n.s.	.05	



## 16. CONCLUSION

While imprisoned a few months ago in a New York City taxi-cab during a traffic jam one of the authors of this report was compelled to make extended small talk with the particularly inquisitive driver. Explaining that we were concluding a study of the working conditions that were experienced by American workers, the driver challenged us to tell him in a single sentence the results of the study. We replied something to the effect that the majority of workers appeared to be satisfied with their jobs, that the vast majority faced problems with their work, many of these problems quite severe, and that even highly satisfied workers were not without their share of problems. His reply to our hurried, but not inaccurate, generalization was that everybody "knew that already" without "you psychologists having to make a survey," that he couldn't see how anybody facing a lot of problems could possibly like his job, and that no such survey could possibly comprehend the very special problems faced by Manhattan cab drivers. We asked him to tell us about these problems, which he did most eagerly, describing the working conditions of those in his occupation as only slightly better than those of the slaves who built the pyramids. The problems were, incidentally, exclusively problems with health and safety, fringe benefits, union management, and supervision. When we asked him after his discourse why he did not get another job, he immediately switched gears (intellectually, not on the taxi--since the traffic jam remained undiminished) and began to tell us what a well-paying, independent, and otherwise personally rewarding life he had as a cab driver, concluding with the statement

Characteristic of worker or worker's job demands	Index of enrichment	1. Lowest	2.	3.	4. Highest	Eta			
						F	df	p	

that unless he could obtain a ridiculously high-paying managerial job he "wouldn't trade doing this for the world."

This little bit of history was instructive to us for three reasons. First, it made us aware that one-sentence summaries of the data such as that provided to the cab-driver could at best sound banal, and even paragraph-long or page-long summaries would seem only slightly less so. That the majority of workers in the study were satisfied with most aspects of their jobs is evident in several tables in earlier pages. That most workers faced problems on their job was also evident in the tables. For example, only about a tenth of all workers were free of problems in labor standards areas, and even these areas failed to encompass all the areas in which problems were encountered by workers.

Second, it drove home the point that there need not necessarily be a high correlation between the presence of work-related problems and job satisfaction. The data indicated that there was, for example, a correlation of  $-.31$  between workers' reports of problems in labor standards areas and their overall job satisfaction scores. No comparable correlation was obtained between overall job satisfaction and the total number of problems that workers reported facing on their jobs (including both labor standards problems and other problems outside labor standards areas) because the construction of such a summary index was not attempted during the study. In any event, the data did not indicate that those highest in job satisfaction were free of working conditions problems. A major paradox of the study was that workers in higher status occupations were more satisfied than others with their jobs, were more mentally healthy, but at the same time experienced greater emotional tension concerning the events occurring

on their jobs. Conversely, workers totally free of labor standards problems were not always among those most satisfied, since many of their jobs lacked the quality of self-developing challenge that appeared to be a major determinant of high job satisfaction.

Third, the conversation with the cab driver suggested that a far more interesting topic of conversation is what is wrong with jobs than what is good about them. The present study shared the driver's bias in "accentuating the negative." Far greater attention was paid in the survey to the problems faced by workers than to the conditions that made their jobs not just trouble-free but instead genuinely satisfying. This overemphasis upon problems was in part due to the survey's sponsorship by the Workplace Standards Administration, whose principal task it is to correct the more blatant abuses inflicted upon workers and to create tolerable working conditions as defined by available legislation or related labor standards.

The following summary pages are, therefore, highly problem-oriented in their emphases. Moreover, the paragraphs below in no way attempt to summarize all the findings of earlier pages that are relevant to the problems confronting American workers. The summary discussions in each of the preceding sections were intended for this purpose. Instead, the pages below present only what the authors, given their obvious biases as organizational psychologists, feel are among the most interesting conclusions that can be drawn from the above mass of tables and their accompanying discussions.



Characteristic worker or work	Autonomy provi worker on the	1. Lowest	2.	3.	4. Highest	Eta	F	df	P
----------------------------------	---------------------------------	-----------	----	----	------------	-----	---	----	---

### RELATIVE RANKINGS OF LABOR STANDARDS AREAS

A major purpose of the study was to provide data indicating the relative importance to workers of 19 labor standards areas. Several criteria were proposed for evaluating the importance of these areas and data were provided relevant to each of these criteria. The three principal criteria involved ranking the labor standards areas in terms of (a) the frequency with which problems occurred in each area, (b) the severity of the problems which occurred, and (c) the extent to which workers wanted to be protected by the government, their employers, their union, or some other source against the occurrence of such problems.

According to these three criteria the labor standards problems that were most important to workers were those relating principally to the general areas of health and safety (including health and safety hazards, unpleasant working conditions, work-related illness or injury, and wage loss following a work-related illness or injury) and, secondarily, to the general area of income (including inadequate income, inadequate fringe benefits, and wage loss through either garnishment or an employer's withholding of wages). Looked at individually, however, the importance of each of the 19 specific labor standards areas investigated depended considerably upon the criterion of importance that is employed. For example:

--although problems with inadequate fringe benefits were very frequent, relatively few workers considered protection from such problems as "very important" when such problems were compared to other labor standards problems

--transportation difficulties and problems with inconvenient or excessive hours, although occurring frequently, were of comparatively low severity, and relatively few workers felt it very important that the government or someone else protect them against such problems

--the occurrence that workers most wanted to be protected against-- a work-related illness or injury was neither the most frequent nor the most severe type of labor standards problem reported --mistreatment by employment agencies and problems with unions were among the most severe types of problems encountered; yet their incidences were comparatively modest

--the withholding or delaying of wages by employers occurred infrequently, and when it did was not generally reported by workers as having been very severe; however, a large percentage of workers regarded protection against such incidences of wage loss or delay as very important to them

--the least frequently occurring labor standards problem that was investigated, wage garnishment or assignment, was nevertheless the most severe problem.

The data appeared, therefore, to have offered a very complicated answer to a very complicated question. Had the most frequently occurring problems also been the most severe ones, and had workers been most concerned about being protected against only these problems, very clear-cut conclusions could have been drawn concerning the legislative or programmatic priorities that might be assigned to such problems. The data appeared to justify only the two rather modest conclusions that by each of the importance criteria employed the

general areas of health and safety and of income seemed to be tied for the unfortunate distinction of constituting the labor standards areas of greatest concern to workers. Even these two conclusions must, moreover, be qualified by the fact that what might be true of a general area (e.g. income) may not be equally true for every more specific matter included in that area (e.g. wage garnishment).

Throughout the study's planning and analysis stages there existed the temptation to "simplify" somehow such anticipated complexities by developing some type of summary "importance" score that could be affixed to each labor standards problem. Such a score could conceivably have assigned to a problem area a single number that would have embodied all the data concerning its frequency, its severity, its "protection value" to workers and possibly other importance criteria as well (e.g. the extent to which it was associated with workers' job satisfaction or mental health). The arithmetic involved in creating such a score would, however, require assumptions that would make a particular frequency of occurrence of a problem numerically equivalent to a particular severity rating. Both these values in turn would have to be equivalent to a particular rating that workers assigned to the problem indicating the extent to which they wanted to be protected against it. The difficulty in creating such a summary index would not, however, have been one principally of arithmetic, scaling, or statistics. It would have been one of values. There existed no justifiable grounds upon which it could be determined that such-and-such a percentage of workers reporting the problem could be regarded as equivalent to a severity rating of a given value. To have done so would have been like determining how many

occurrences of head-colds should be regarded as "equivalent" to one case of fatal lung cancer. The establishment of such equivalences is a question of personal values and social priorities. It is not a question that can be answered by statistical analysis. One may, for example, argue that even though reports of on-the-job discrimination were few, issues of social injustice entailed in such discrimination are so important to our society that the solving of discrimination problems should be assigned a priority in excess of even the most frequently encountered problems that workers face on their jobs. In summary, the study has provided data for the ranking of labor standards problems (and other working conditions problems as well) on each of a number of criteria. It has not, and was not intended to, indicate which of these criteria should be regarded as the most important.

#### LABOR STANDARDS AREAS--SELECTED FINDINGS AND SUGGESTIONS FOR ACTION

##### Health and safety

The labor standards problems against which most workers wanted protection were, first, work-related illness or injury and, second, inadequate expense coverage resulting from such illness or injury. The need for improved protection against the latter problem was suggested by the fact that, among the workers who reported an occupational disability of two weeks or more, 68 percent had problems in making ends meet during their disability.

It has been estimated that in the neighborhood of 20 percent of American workers fall outside the scope of workmen's compensation laws and--of those who are covered--few receive payments which are as high

in proportion to income as were those received by their fathers and grandfathers. This problem is compounded by changes in our consumer credit structure which have made it increasingly difficult for workers to reduce their living expenses on short notice. Because disabled workers--due to their temporarily and geographically scattered nature--cannot effectively represent their own interests, our workmen's compensation system (or lack of it) has been an easy problem to "sweep under the rug." Perhaps the time has come to clean house.

In light of the considerable concern expressed by workers with regard to problems of occupational health and safety and with work-related disability and its sequelae, it is encouraging that there is now pending a Federal Occupational Safety and Health Bill. The data further suggested, however, that two matters should not be overlooked in the formulation of programs to improve the physical conditions under which people work. The first is what, for lack of a better term, might be called the problem of "white-collar health and safety hazards." If health and safety programs are heavily "machine oriented" and are aimed principally at protecting blue-collar workers from dangerous or faulty processes, machinery, or equipment a considerable number of health and safety problems are likely to be overlooked. The data indicated that a quarter of all the white-collar workers in the sample reported facing one or more occupational hazards, conspicuous among them being physical violence or abuse from other people, communicable diseases, and dangers to which the worker was exposed while traveling as part of his job. Secondly, a third of those who worked at one identifiable location reported that they worked in physical surroundings which, while not necessarily dangerous, were

nevertheless unpleasant or uncomfortable. Working under such conditions was the fourth most frequently mentioned labor standards problem. Moreover, as will be shown later, this particular problem was among the labor standards problems most substantially related to workers' overall job satisfaction. It may, of course, seem somewhat frivolous to talk about improving crowded, noisy, dirty conditions while people are still dying in mines. But the elimination of such "merely unpleasant" physical conditions should at least be given consideration in long-range planning in the health and safety area. Assuming that governmental responsibility stops when working environments are rendered non-injurious is like assuming that governmental programs in the area of income will be completely successful when every worker is earning a subsistence level wage. Securing for people working conditions that are tolerable is not the same as securing good working conditions for them.

#### Fringe benefits

Inadequate fringe benefits ranked with health and safety hazards as the most frequently mentioned labor standards problem. In spite of the surprising availability of such more esoteric benefits as stock options, discounts, and use of company cars, many workers were without benefits that most take for granted--for example, paid vacations and sick-leave. Such popularly advocated benefits as company-sponsored day-care centers were next to nonexistent. Overall, 44.7 percent of the wage-and-salary workers indicated that there was at least one fringe benefit that was not available to them that they would like to have been receiving.

The importance that workers attach to fringe benefits, in conjunction with Bureau of Labor Statistics data concerning the extent to which fringe benefits increasingly constitute real income, suggest that increased attention be paid to the implications of this change in the nature of income. For example, the importance to workers of their benefits should be considered in evaluating the confounding effect which non-uniform fringe benefits have on income differentials. It is also important that the changing nature of income be considered in establishing benefit levels under wage-loss replacement programs such as Unemployment Insurance and Workmen's Compensation.

In light of the fact that substantial numbers of workers do not receive certain fringe benefits they feel are important, it would also appear that increased effort should be directed to the provision of such benefits as adequate and vested pension plans, medical, surgical, hospital insurance and paid sick-leave. While in countries such as France the four-week vacation is a matter of national policy and law, in the United States little has been done by the government to guarantee that workers enjoy adequate vacation benefits.

#### Discrimination

Two types of work-related discrimination may be distinguished: access discrimination and on-the-job discrimination. In the access discrimination situation a worker is denied employment because of his membership in a minority group or because of what Quinn, Tabor, and Gordon (1968) have defined as a "nonability characteristic" (e.g., marital status, place of residence, physical appearance). On-the-job discrimination occurs at a later point--after the minority group worker has secured a position. The present study dealt only with

on-the-job discrimination. The data indicated that the most prevalent form of on-the-job discrimination reported by workers involved the worker finding it difficult to secure a promotion or better job with his employer because of his minority status. The denial of equal opportunity characterizing the access discrimination situation thus persisted into the on-the-job discrimination situation.

Reports of work-related discrimination were surprisingly infrequent in light of the amount of publicity currently being given to discrimination problems. Part of this may, of course, have been due to survey's discrimination questions focusing exclusively upon on-the-job discrimination. Those suffering from discrimination in such extreme forms that they were at the time of the study unemployed or those who had left the work force were not even interviewed. Moreover, what most people would probably regard as on-the-job discrimination was not perceived as such by many workers. As was suggested earlier, a worker might have been assigned to the poorest paid and most menial job in a shop because of his race. However, once assigned to the job, he might not have been treated any worse than anyone else assigned to the same job. Had he interpreted the discrimination question quite literally, he might not therefore have reported any on-the-job discrimination. The data on sex discrimination further hinted that reports of on-the-job discrimination may have been greatly influenced by consciousness of discrimination, since complaints of sex discrimination were most frequently made by those women who on the surface would seem the least disadvantaged: white, better-educated women in higher-paying white-collar jobs. Generally, the discrimination data suggested that, unless substantiated by other evidence, workers'



reports of on-the-job discrimination may be a poor means of assessing the frequency of such discrimination. The worker may be an accurate reporter of how he is treated by his employer or co-workers, but to ask him whether such treatment has been discriminatory requires him to make a psychological inference about why others treat him a particular way.

The most surprising aspects of the discrimination data occurred with respect to the age distribution of workers who reported age discrimination. Although it had originally been anticipated that on-the-job age discrimination would be most prevalent among older workers, the opposite was true. The younger workers were those most likely to report being discriminated against because of their age. On the basis of the preceding paragraph, it would be tempting to dismiss this finding. However, there were other indications in the data that the young were among the most disadvantaged of minorities. They were significantly less satisfied than older workers both with their jobs in general and with several selected aspects of their jobs (Comfort, Challenge, and Resources). Moreover, significantly more younger workers than older workers were likely to report problems in labor standards areas. These findings are open to at least two interpretations--which are not mutually exclusive. First, since seniority clearly has its advantages, the young may have indeed had poorer jobs than those who are older. The occupational distributions of workers in various age classifications further bears this out. On the other hand, as vividly pointed out by Gooding's (1969) impressionistic study of the auto industry, today's young may be less willing than their elders to tolerate poor working conditions.

THE UTILITY OF DEMOGRAPHIC AND OCCUPATIONAL CLASSIFICATIONS

Dozens of tables in this report assess the relationship between a job satisfaction or working conditions measure on one hand and a demographic or occupational classification on the other hand. Included among the latter were the workers' sex, race, age, education, employment status, industry group, occupation group, and collar color. Although a sizeable number of significant relationships appeared in such tables, the relationships were not very compelling in their magnitude. In other words, used singly\* none of these variables was a spectacularly successful predictor of workers' job satisfaction, mental health, or the conditions under which they worked. The most successful appears to have been age. Perhaps the occupation and industry group were not given a fair test since only one-digit classifications were used, the size of the sample not permitting any finer distinctions.

No demographic or occupational subgroup, even those stereotypically "best off," was not without its share of work-related problems. For example, workers in higher status occupations exhibited greater job satisfaction and mental health than others, but they also experienced greater job-related tension and reported more problems with hours. The observed differences among subgroups of workers should not obscure the more considerable extent to which all subgroups were found to share many similar problems. The latter generalization has some intriguing implications for the extent to which governmental programs can profitably

---

\* No multivariate analyses have been undertaken with these variables at this time.

be oriented toward the solution of problems of minorities. It implies, for example, that solving many problems of black workers can scarcely help but solve the same problems for whites, and helping the "disadvantaged" may at the same time help the less disadvantaged "middle mass." Conversely, a program intended to remedy a situation confronting workers as a whole should not be regarded as irrelevant to a particular minority simply because the problem is not unique to, or even predominant among, members of the minority. Minorities can often be helped by the solutions to more generally experienced problems, and the solution of a problem especially prevalent among a particular minority can frequently be equally beneficial to workers in general who confront the same problem.

#### MEASURING JOB SATISFACTION

A major purpose of the study was the development of a job satisfaction measure suitable for use in surveys of workers in heterogeneous occupations. Section 3 described in detail the construction of two such measures; (1) Jobsat '70, a 23-item measure which provides both an overall job satisfaction score and scores on five separate dimensions of job satisfaction--Comfort, Challenge, Pay, Relations with Co-workers, and Resources, and (2) Content Free Job Satisfaction, an eight item measure all the questions of which were variations on the general question, "All in all how satisfied are you with your job?"

Which of these two measures is likely to prove the more useful in future studies as a measure of overall job satisfaction? The split-half reliabilities of the two measures and their freedom from social desirability response set do not differ enough to make one clearly

superior to the other. Only one type of validity information was collected in the present study--that bearing on the construct validity of the measures. A measure is said to have construct validity to the extent that its use produces findings that are consistent with accepted theories, previous research findings, and common sense. The several dozen tables in the preceding pages which demonstrated the relationship between Jobsat '70 and Content Free to working conditions and to the demographic or occupational characteristics of workers, provide the information necessary for evaluating the construct validity of the two measures. Again, the competition appears to end in a dead heat with neither measure having a clear-cut superiority over the other in terms of its construct validity. A year from now, additional predictive validity information will be available based on job change data to be collected shortly from workers who participated in the Phase I pretest. But at present nothing can be said about the predictive validity of either measure.

In terms of its efficiency, defined as the amount of information collected for a given unit of cost, Content Free would appear to be the superior measure. It yields an overall job satisfaction score with only eight items while Jobsat '70 requires 23 items to produce the same type of score. A measure's length translates directly into the amount of interview time it requires, which in turn translates into dollars. But the brevity of Content Free may be illusory. Although we had always thought of Jobsat '70 as our "long" measure and Content Free as our "short" one, this stereotype dates back to the early days of the study when Jobsat '70 contained 43 items rather than its present 23. At present, Content Free contains eight rather lengthy items, and some

of these items are rather complicated. Moreover, the eight items use different response categories. Jobsat '70 contains 23 simple items all of which use the same response categories. Were Jobsat '70 changed from its present "card sort" format into a pencil-and-paper checklist or into a series of items read by an interviewer, its administration time might indeed not be much different from that of Content Free.

The obvious advantage of Jobsat '70 over Content Free is that the former provides the investigator with considerably more information. With Content Free one can assess only a worker's overall level of satisfaction; no clue is provided in the instrument as to the particular aspects of his job that he finds most or least satisfying. In Jobsat '70, however, this information is provided in the measure's five subscales. One could conceivably even look at the 23 items individually, each of which provides information on a different aspect of the job. Receiving a low score on Content Free is like being told by a physician that one is in poor health, whereas Jobsat '70 provides a more detailed and illuminating diagnosis.

The other advantage of Jobsat '70 is at the present stage only a potential one. Jobsat '70, it may be recalled, has a companion set of 23 "importance" ratings. Further analysis of data from the present survey will examine the utility of various methods of combining the importance and satisfaction ratings from Jobsat '70 in order to create a satisfaction measure that takes into account individual differences among workers in terms of what they want out of their jobs. It is possible that such a future "weighted" measure may be superior to either Content Free or Jobsat '70 in its present unweighted form.

WORKING CONDITIONS AND JOB SATISFACTION

The development of job satisfaction and mental health measures in the present study was not an end in itself. A major purpose of the study was to determine the extent of the relationships between working conditions and workers' psychological well being. These relationships were presented in the many "outcome" tables in each of the preceding sections, using various working conditions as independent variables and the study's 13 job satisfaction and mental health measures as dependent variables.

The creation of these bivariate tables represents the first stage in the process of developing a series of empirically determined multivariate models of job satisfaction. The planned development will employ a computerized technique for such model building developed by Sonquist and Morgan (Sonquist and Morgan, 1964; Sonquist, 1970). An attempt will be made to develop a model for the full sample as well as special subgroups of workers (e.g. as defined by race or sex). An additional type of major analysis that is planned involves the examination of "trade-off" as determinants of job satisfaction. For example, an extremely satisfied worker is likely to have high satisfaction scores on all the five dimensions of Jobsat '70, and likewise, the worker with lowest overall job satisfaction would score low on all five. Most workers will instead have more "mixed" profiles over these five areas. Under these more mixed conditions a provocative question emerges: to what extent are satisfaction levels in the various areas compensatory, with deficiencies in one area capable of being compensated by high levels of satisfaction in another? For example, as a

worker receives less and less "Challenge" in his job, how much additional pay must he receive to maintain his level of job satisfaction? Or what is the trade-off between "Comfort" and "Pay," or between "Challenge" and "Comfort?" Similar questions can be asked of any juxtaposition of job satisfaction measures or working conditions that were investigated.

Up until now the relational analysis of the survey data has been limited to the bivariate outcome tables. We suspect, however, that many of the relationships observed in these tables are redundant. For example, working condition A may show a high correlation with a particular outcome measure and working condition B may also show a high correlation with the same outcome measure. The latter relationship may have occurred, however, principally because working condition B is itself highly correlated with working condition A. At present we have no information about the inter-relationships among the many working conditions measured in the study, their redundancies, or the extent to which many of them may simply reflect different aspects of some other variable, such as occupational status.

An example of what might happen to some of the observed relationships once secondary controls and other multivariate techniques are introduced is provided in a recently completed doctoral dissertation, employing data from the present study (Fine, 1970). Fine's analysis focused upon differences between organizational "members" and "non-members," a distinction very comparable (but not identical) to that in the present report between wage-and-salary workers and self-employed workers. One of his major analyses employed a multiple classification analysis (MCA) in order to determine the manner in which demographic variables and job setting characteristics moderated the effects of

organizational membership upon job satisfaction. He regarded a number of demographic variables and job characteristics as potential "confounders" in the sense that they might be related both to membership and to job satisfaction. According to Fine:

"A potential confounder can have one of three types of influence on the relationship between membership and each outcome variable. It can increase the relationship, in which case holding it constant would reduce the difference between members and nonmembers in their mean scores on the outcome. Such a confounder partially "explains" the relationship between membership and the outcome. A second possibility is that the confounder is related to membership and the outcome in such a way that it "suppresses" the relationship, in which case holding the confounder constant would increase the difference between members and nonmembers on the outcome. The third possibility is that the third variable does not confound membership and the outcome variable at all, and holding it constant has no effect on the mean difference.

"Every entry in Table ... (16.1) ... is a difference obtained by subtracting a nonmember mean from a member mean. Thus, the entry  $-.20$ , the unadjusted mean difference for job satisfaction, is the difference between  $3.61$  and  $3.81$ , the mean job satisfaction of members and nonmembers, respectively, that was shown ... (earlier). The two columns under each outcome variable list the adjusted differences that result from holding constant the row variables. If the adjustment results in an "improvement" in the outcome for members relative to nonmembers, the adjusted difference is listed under column A. If the adjustment results in a relatively less favorable outcome for members it is entered in column B. For example, the first entry in column A under job satisfaction indicates that when age is held constant the adjusted mean difference between members and nonmembers in job satisfaction is  $-.11$ . Since the difference when no variable is held constant is  $-.20$ , their lower age partially "explains" members' lower satisfaction, and controlling it results in a relatively higher adjusted mean for members. Similarly, all the entries in column A are for confounders that explain the lower job satisfaction of members. These are variables that constrain member satisfaction.

"The first entry in column B indicates that when the index of hard work is held constant, members' satisfaction declines relative to nonmember satisfaction, so that



Table 16.1 Unadjusted and Adjusted Mean Differences Between Members and Nonmembers in Psychological Outcomes Holding Constant Confounding Demographic Variables and Job Characteristics Singly and in Combination (after Fine, 1970)

Variable(s) controlled	Job satisfaction <sup>a</sup>	
	A	B
None	-.20 <sup>b</sup>	
Age	-.11	
Sex	-.17	
Education		
Steady job		
Collar status	-.12	
Income	-.14	
Resources adequate	-.13	
Job autonomy	-.07	
Enriching job requirements	-.03	
Hard work		-.23
Hours of work	-.10	
Supervisory role	-.14	
Co-workers friendly		
Boundary contacts	-.14	
Skill utilization		
Physical conditions comfortable	-.14	
Hours good		-.28
Hours convenient		-.22
Travel problem		
Job security		-.23
Multiple-adjusted difference	.21	-.29

<sup>a</sup> A larger signed value means relatively higher satisfaction, health, or zest for members.

<sup>b</sup> Unadjusted mean difference, i.e., the difference between members' and nonmembers' means on the outcome variable when no confounder is held constant.

instead of averaging .20 points below the nonmembers, they now average .23 lower. Thus, hard work suppresses the relationship between membership and satisfaction. Were it not for their relatively easier jobs, members would have scored even lower than they did. Similarly, entries in any column B of Table ... (16.1)... signify confounders favorable to members. Empty rows indicate that holding constant the row variable did not influence the effect of membership upon the dependent variable listed at the top of the column.

"Unlike the other adjusted differences in Table ... (16.1)... the last entry in each column shows the "multiple-adjusted difference" taking into account more than one confounder at a time. To compute the multiple-adjusted difference, all the confounders that had enough influence on the relationship to result in an adjustment of a particular outcome in a given direction were entered in an MCA run and held constant simultaneously. For example, the multiple-adjusted difference in column A under job satisfaction is the adjusted difference that resulted when the eleven confounders for which entries were made above were controlled simultaneously. This difference is +.21, and indicates that when those eleven confounders are simultaneously held constant members of organizations exceed the nonmembers in mean job satisfaction by .21 points. This is a relative "gain" of .41 points from their unadjusted scores, and is evidence that, when these confounders are controlled, organizational membership has a positive effect on job satisfaction. The multiple-adjusted difference in column B shows that, even in combination, the suppressors have relatively little influence. Controlling the four suppressors simultaneously produces a multiple-adjusted difference of -.29. The gap between members and nonmembers in job satisfaction would widen from -.20 to -.29 were it not for members' easier work, better hours, more convenient hours, and greater job security. However, the multiple-adjustment alters the mean difference by only .09 points."

Recognizing, therefore, that the application of appropriate controls can alter not only the magnitude of a relationship or a difference but, as in Fine's illustration, even the direction of a difference, Table 16.2 summarizes data from several earlier tables. The table indicates the 19 working conditions variables from previous "outcome" tables that had the highest first-order associations with

workers' overall job satisfaction as measured by Jobsat '70. The table is intended to provide data relevant for judging the importance to workers of various working conditions according to a criterion of importance that has been touched upon only lightly in the preceding pages--that is, by judging the relative importance of an area by the magnitude of its correlation with job satisfaction. As Likert (1961) has noted, this criterion of importance can at times lead to rankings quite different than those produced by other methods:

When the reaction of employees to such factors as promotional opportunities, level of pay, and kind of supervision are compared with overall job satisfaction, the order of the items as shown by the correlations is often different from the ranking made by the employees. The factors which they place highest in a list are not necessarily the ones which correlations reveal are most important in influencing how they feel about the job (p. 195).

Table 16.2 serves somewhat the same function as did Table 4.6 which described the "single biggest problems" that workers faced on their jobs. Both tables present data attempting to assess the importance to workers of labor standards problems within the broader range of problems that workers might face on their jobs. The data indicated that most of the survey's major measures touching upon job content and supervision appeared to be among the most prominent correlates of job satisfaction. Workers' experiences with problems in labor standards areas had somewhat less impact upon their job satisfaction. Naturally, there was a high correlation between job satisfaction and the total number of labor standards areas in which workers reported problems. Considering the diversity of content subsumed by this index, however, the observed correlation was not

Table 16.2 Characteristics of workers or their jobs most highly correlated with overall job satisfaction

Characteristic <sup>1</sup>	Correlation with overall job satisfaction (Jobsat '70) <sup>2</sup>
Having a "nurturant" supervisor (e.g., one who takes a personal interest in those he supervises and goes out of his way to praise good work) (N=1237) <sup>3</sup> - - - - -	.37
Receiving adequate help, assistance, authority, time, information, machinery, tools and equipment to do the job (N=1494) - - - - -	.32
Having problems in few labor standards areas (N=1511) - - - - -	.32
Feeling that one's employer handles promotions fairly (N=1066) <sup>4</sup> - - - - -	.31
Having a supervisor who does not supervise too closely (N=1246) <sup>3</sup> - - - - -	.30
Having a technically competent supervisor (N=1225) <sup>3</sup> - - - - -	.29
Having autonomy in deciding matters that affect one's work (N=1508) - - - - -	.28
Having a job with "enriching" demands (e.g., a job that demands that one learn new things, have a high level of skill, be creative, and do a variety of different things) (N=1509) - - - - -	.26
Receiving greater paid vacation (N=1270) <sup>5</sup> - -	.20
Feeling secure against job loss in the possible event that one's job may be automated (N=357) <sup>6</sup> - - - - -	.20
Feeling that it would be easy to secure a new job assignment with one's employer (N=1266) <sup>5</sup> - - - - -	.20
Working under pleasant physical conditions (N=1032) <sup>7</sup> - - - - -	.20

Table 16.2 Characteristics of workers or their jobs most highly correlated with overall job satisfaction (continued)

Characteristic <sup>1</sup>	Correlation with overall job satisfaction (Jobsat '70) <sup>2</sup>
Feeling that one's union is competently managed (N=457) <sup>8</sup> - - - - -	.19
Having one's skills fully utilized by the job (N=1506) - - - - -	.18
Having one's education fully utilized by the job (N=1506) - - - - -	.18
Anticipating that one will be promoted at that time in the future when one <u>wants</u> to be promoted (N=1127) <sup>5</sup> - - - - -	.17
Receiving adequate income to pay usual monthly expenses and bills (N=1503) - - - -	.17
Not feeling discriminated against because of one's age (N=1507) - - - - -	.16
Having a high total annual income from one's job (N=1400) - - - - -	.16

<sup>1</sup>Each variable is described in terms of the classification or scale point that is characterized by the greatest job satisfaction.

<sup>2</sup>This column summarizes 19 one-way-analyses of variances that were run using Jobsat '70 as a dependent variable. In all cases, save one, the F-ratios were significant beyond the .001 level; for the "effects of automation" variable, the F-ratio was only significant beyond the .01 level. Since the F-ratio does not measure degree of association, the data in the table are correlation ratios (etas).

<sup>3</sup>Excludes self-employed workers and workers who had no supervisors.

<sup>4</sup>Excludes self-employed workers and workers whose employers had given no promotions that the worker could observe.

<sup>5</sup>Excludes self-employed workers.

<sup>6</sup>Excludes workers who did not feel it is likely that their jobs would be automated in the next few years.

<sup>7</sup>Excludes workers who did not work in one identifiable location.

<sup>8</sup>Excludes workers not belonging to unions.

surprising. Further down on the list of "best" predictors were more specific labor standards problems, three of which concerned income or fringe benefits (i.e., paid vacations, income adequacy, and annual income) and one of which concerned health and safety issues (i.e., unpleasant physical working conditions). Both the areas of income (including fringe benefits) and health and safety were shown above by other importance criteria to be the two general labor standards areas which appeared to be of greatest concern to workers. Two additional variables relevant to labor standards also entered into the Table 16.2's list of the most prominent correlates of overall job satisfaction: whether the worker felt he was discriminated against on the job because of his age and whether (providing that he was a union member) he felt that his union was handling matters as competently as he would like.

In conclusion, the data indicated that the domain of traditional labor standards areas accurately encompassed many of the problems of major concern to workers. But there appeared to be problems of even greater concern to workers well beyond the domain of labor standards as traditionally conceived: problems involving the content of workers jobs and their relations with others with whom they work, especially their supervisors. No long-term planning designed to improve the conditions under which people work can avoid such problems without being justifiably accused of constituting only a partial assault on the problems of the American worker. Government programs have too long avoided grappling with the less tangible aspects of working conditions which nevertheless have a significant impact upon workers' job satisfaction, mental health, and self-development. The difficulties entailed in the solution of such problems are, of course, immense.

At least one precedent for their solution has, however, already been set in recent efforts to hire, train, and upgrade the jobs of the disadvantaged through the joint efforts of government, business, labor and social action groups. A comparable collaborative effort could also be mounted to attack those problems in worker's lives not presently encompassed by labor standards. The content of workers' jobs and its impact upon their development and well-being is an area too important to be ignored by government simply because there are too few mechanisms presently available for dealing with it.

If one believes that our economic system exists to serve the people rather than that the people exist to serve the system, increased extension must thereby be directed toward two basic human problems in the workplace: 1. satisfaction of people with the economic and tangible returns from their efforts, and 2. self-fulfillment of individuals through their work. Although considerable progress has been made in solving the first problem, the importance of the second has barely begun to be recognized. The health of the economy is still measured solely in terms of the efficiency with which it can produce large quantities of consumer goods. A second measure--and concern--is needed: one which considers the contribution work is making to the quality of life and to the growth and happiness of the worker.

APPENDIX

The following appendix contains the cover sheets, the national survey interview and the self-report form used in the national survey.





1. Check reason for nonresponse below and explain more fully as necessary.

- HV-----House Vacant, not being lived in. Indicate below if seasonal DU.
- AND-----Address Not a Dwelling. Describe below (commercial, house burned, etc.)
- NAH-----Not At Home; DU being lived in but no one at home after required no. of calls.
- Ref-----Refusal. Describe below.
- RA-----R Absent; someone at DU but selected R never available. Describe below.
- NER-----No Eligible Respondent.
- Other---No interview obtained for reason other than above. Explain fully below.

COMMENTS:

2. For each nonresponse supply as much of the information below as possible, without asking neighbors. (For HV or AND supply only a)

a. Type of Structure:

- Trailer  Apartment House (5 or more units; free access to DU)
- Detached Single-Family House  Apartment House (5 or more units; locked entry or guarded by doorman or both)
- Two to Four Family House
- Row House (3 or more units in attached row)  Apartment in a partially commercial structure
- Other \_\_\_\_\_

b. Race:

White

Negro

Other

Supply if listing box not completed:

c. 1) Estimated number of persons 16 years or older in DU \_\_\_\_\_

2) Estimated number of eligible respondents \_\_\_\_\_

d. Estimated Family Income:

Under \$7000

\$7000-\$12,000

Over \$12,000





1. Listing Box (copy columns a through e from page 4 of the white cover sheet for this dwelling)

(a) List Household Members 16 years or older, by relationship to Head	(b) Family Unit Number	(c) Sex	(d) Age	(e) Reported Eligibility of each Person	(f) Check (✓) R for this Blue cover sheet
HEAD					

NONRESPONSE FORM

2. Check one

RA ---- Respondent Absent. Someone at DU, but respondent absent. Describe below.  
 Ref. --- Refusal. Give detailed description below.  
 Other - No interview obtained for reason other than the above. Explain fully below.


3. Space for COMMENTS on this noninterview situation:

Project 45369  
Winter, 1969

441

The Budget Bureau  
Number is 44-S69023  
and approval expires  
December 31, 1970

WORKING CONDITIONS SURVEY--PHASE II

	SURVEY RESEARCH CENTER INSTITUTE FOR SOCIAL RESEARCH THE UNIVERSITY OF MICHIGAN ANN ARBOR, MICHIGAN 48106	A. Interviewer's label
---	--	------------------------

B. Your interview number

C. PSU

D. Segment

E. Line

F. Family unit

G. INTERVIEWER: Indicate below the relationship of R to head of household.

- 1 R is HEAD
- 2 R is wife of head
- 3 R is child of head
- Other (SPECIFY) \_\_\_\_\_

SUGGESTED INTRODUCTION

The Survey Research Center of The University of Michigan is studying the working conditions of the American labor force. They are interested in all aspects of people's work: the type of work they do, the pay they get, the problems they face, their satisfaction with their work, and the effect of their work on their well-being. The aim of this study is to get information that will help improve the conditions people work under.

Only people like yourself can give the information we need. Answers to all questions are voluntary and they will be kept completely confidential. Information that might identify you will never be seen by anyone outside The University of Michigan research staff.

1. Before we talk about your present job, I'd like to get some idea of the kind of job you'd most like to have. If you were free to go into any type of job you wanted, what would your choice be?

- 1 Same as R has now
- 3 R would want to retire or not work
- 5 R specifies some job other than present one
- SPECIFY JOB: \_\_\_\_\_
- 8 Don't know

2. (VALUE SORT--RED CARDS)

The next question involves things a person may or may not look for in a job. Some of these things are on this set of cards. (HOLD UP RED STRIPE CARDS.)

People differ a lot in terms of which of these things are more important to them. We'd like to know how important to you each of these things is. (LAY ALTERNATIVE CARDS DOWN WITH "VERY IMPORTANT" ON R'S LEFT.)

Please sort each card into one of the four groupings I have here, according to how important each thing is to you (HAND CARDS TO R. COLLECT CARDS WITH ALTERNATIVE CARDS AT BOTTOM OF EACH PILE. KEEP UNSORTED CARDS ASIDE.)

QUESTION CARDS IN THE ORDER IN WHICH THEY ARE GIVEN ARE:

I am given a lot of chances to make friends  
 the chances for promotion are good  
 my co-workers are friendly and helpful  
 I have an opportunity to develop my own special abilities  
 travel to and from work is convenient  
 I receive enough help and equipment to get the job done  
 I am not asked to do excessive amounts of work  
 the work is interesting  
 I have enough information to get the job done  
 the pay is good  
 I am given a lot of freedom to decide how I do my own work  
 I am given a chance to do the things I do best  
 the job security is good  
 the problems I am expected to solve are hard enough  
 my supervisor is competent in doing his job  
 my responsibilities are clearly defined  
 I have enough authority to do my job  
 my fringe benefits are good  
 the physical surroundings are pleasant  
 I can see the results of my work  
 I can forget about my personal problems  
 I have enough time to get the job done  
 my supervisor is very concerned about the welfare of those under him  
 I am free from the conflicting demands that other people make of me  
 the hours are good

3. Now let's talk more specifically about your present job. What is your main job?

Occupation: \_\_\_\_\_

4. What kind of business is that in? \_\_\_\_\_

5. What do you do on this job? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

6. Most of the time on this job do you work for yourself or for someone else?

- 1 Work for self  
 5 Work for someone else

ASK Qs 7 THROUGH 10 ONLY IF R IS SELF-EMPLOYED.  
IF R IS NOT SELF-EMPLOYED, SKIP TO Q11, PAGE 4

7. Are there any people who work for you and are paid by you?

- 1 Yes  
 5 No (SKIP TO Q9)

8. How many people work for you and are paid by you?

Number: \_\_\_\_\_

9. For how many years and months have you had the job you have now?

\_\_\_\_\_ years and \_\_\_\_\_ months

10. In general how well would you say that your job measures up to the sort of job you wanted when you took it? Would you say it is very much like the job you wanted, somewhat like the job you wanted, or not very much like the job you wanted?

- 1 Very much like  
 3 Somewhat like  
 5 Not very much like

(SKIP TO Q20, PAGE 5)



IF R IS SELF-EMPLOYED, SKIP TO Q20, PAGE 5

11. About how many people work for your employer at the location where you work--I mean all types of workers in all areas and departments?

- |                                    |  |
|------------------------------------|--|
| <input type="checkbox"/> 1 1-9     | <input type="checkbox"/> 5 500-999       |
| <input type="checkbox"/> 2 10-49   | <input type="checkbox"/> 6 1000-1999     |
| <input type="checkbox"/> 3 50-99   | <input type="checkbox"/> 7 2000 and over |
| <input type="checkbox"/> 4 100-499 | <input type="checkbox"/> 8 Don't know    |

12. For how many years and months have you worked for your employer?

\_\_\_\_\_ years and \_\_\_\_\_ months

13. In general how well would you say that your job measures up to the sort of job you wanted when you took it--by job I mean working in the same type of occupation for your present employer? Would you say it is very much like, somewhat like, or not very much like the job you wanted when you took it?

- 1 Very much like  
3 Somewhat like  
5 Not very much like

14. When you first came to work for your present employer, was it roughly in the job you now have, doing about what you do now, or was it in a different job?

- 1 Same or about the same (SKIP TO Q16)  
5 Different

15. For about how long have you had the job you have now, doing what you do now?

\_\_\_\_\_ years and \_\_\_\_\_ months

16. Of course the future is uncertain, but approximately how many years or months do you think it will be before you are given a chance to take on a job at a higher level where you now work?

- 1 R has already been given a chance  
(SKIP TO Q18, PAGE 5)

- 8 Never  
\_\_\_\_\_ years and \_\_\_\_\_ months

17. Approximately when would you like to take on a job at a higher level?

- 1 Immediately

- 8 Never

\_\_\_\_\_ years and \_\_\_\_\_ months

18. How fairly are promotions handled where you work? Would you say completely fairly, somewhat fairly, or not too fairly?

- 1 Completely fairly
- 3 Somewhat fairly
- 5 Not too fairly
- 7 No promotions have been given

19. How hard or easy do you think it would be for you to get your employer to change your job assignment if you didn't like it? Would you say very hard, somewhat hard, somewhat easy, or very easy?

- 1 Very hard
- 2 Somewhat hard
- 3 Somewhat easy
- 4 Very easy

20. Do you presently have any other jobs or do any other work for pay?

- 1 Yes
- 5 No (SKIP TO Q22, PAGE 6)

21. About how many hours a week on the average do you work for pay outside of your main job?

\_\_\_\_\_ hours

READ TO R IF R HAS SECOND JOB:

For the rest of the interview I'd like you to tell me about your main job rather than your other job(s). And when I ask you about your employer, I'd like you to tell me about your employer on your main job only.

22. Through your previous experience and training do you have some skills that you would like to be using in your work but can't use on your present job?

1 Yes

5 No (SKIP TO Q24)

23. What skills are those?

---

---

24. What level of formal education do you feel is needed by a person in your job?

00 No special level of education, vocational training, or technical training

10 Some grade school (grades 1-7)

11 Some grade school plus vocational or technical training

20 Completion of grade school (grade 8)

21 Completion of grade school plus vocational or technical training

30 Some high school (grades 9-11)

31 Some high school plus vocational or technical training

40 High school diploma (grade 12)

41 High school diploma plus vocational or technical training

50 Some college (grades 13-15)

51 Some college plus vocational or technical training

60 College degree

61 College degree plus vocational or technical training

70 Graduate or professional education in excess of college degree

25. I'll read a list of things that might describe a person's job. For each thing I read I'd like you to tell me how much this is like your job.

(SHOW CARD 1)

A job that (READ "a" BELOW). Would you say this is a lot like your job, somewhat like your job, a little like your job, or not at all like your job?

	(1) A <u>lot</u>	(2) Some- <u>what</u>	(3) A <u>little</u>	(4) Not <u>at all</u>
REPEAT FOR "b" THROUGH "m"				
a. requires that you keep having to learn new things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. requires that you do a lot of planning ahead	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. requires that you work very fast	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. allows you a lot of freedom as to how you do your work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. requires a high level of skill	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. requires that you work very hard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. requires that you exert a lot of physical effort	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. requires that you almost never make a mistake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. allows you to make a lot of decisions on your own	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. requires that you be creative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. allows you to do a variety of different things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l. requires that you do things that are very repetitious	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m. requires that you be skilled in using your hands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

26. Next I'll read off some things that you might get from your employer or those people you work with that could help you work your best.. For each, tell me whether you feel you are being given enough or not enough for you to work your best. First . . .

READ "a" BELOW. Do you feel you are being given enough or not enough?

REPEAT FOR "b" THROUGH "e".

	(1) <u>Enough</u>	(5) <u>Not enough</u>
a. help or assistance from those you work with	<input type="checkbox"/>	<input type="checkbox"/>
b. the authority to tell certain people what to do	<input type="checkbox"/>	<input type="checkbox"/>
c. time in which to do what others expect of you	<input type="checkbox"/>	<input type="checkbox"/>
d. the facts and information you need	<input type="checkbox"/>	<input type="checkbox"/>
e. the machinery, tools, or other equipment you need	<input type="checkbox"/>	<input type="checkbox"/>

IF R IS SELF-EMPLOYED, SKIP TO Q33, PAGE 11

27. Is there one person you think of as your immediate superior or boss-- someone who is directly over you?

1 Yes

5 No (SKIP TO Q30, PAGE 10)

28. I'll read some things that may or may not be true of your immediate superior. Tell me how true you think each is of him or her. First.

(SHOW CARD 2)

(READ "a" BELOW) Would you say this was very true of him/her, somewhat true, not too true, or not at all true?

REPEAT FOR "b" THROUGH "i"

	(1) Very true	(2) Some- what true	(3) Not too true	(4) Not at all true
a. insists that those he supervises follow the rules	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. lets those he supervises set their own work pace	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. takes a personal interest in those he supervises	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. knows his own job well	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. encourages those he supervises to develop new ways of doing things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. insists that those under him work hard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. maintains high standards of performance in his own work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. lets those he supervises alone unless they want help	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. goes out of his way to praise good work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

29. Could you tell me what problems or difficulties you run into with your immediate superior?

No problems

---

---

---

---

---

30. Do you feel that your supervisor or the personnel office where you work ever go into your personal matters that you think are none of their business?

1 Yes

5 No (SKIP TO Q33, PAGE 11)

31. In what ways do they go into your personal matters?

---

---

---

---

---

---

32. How much of a problem do you feel this is? (SHOW CARD 3)

1 No problem at all

2 A slight problem

3 A sizeable problem

4 A great problem

33. Do you supervise anybody as part of your job?

1 Yes

5 No

34. How often during working hours do you have to deal with outsiders who have business dealings with your company--like customers or distributors? Would you say nearly all the time, frequently, sometimes, or never?

1 Nearly all the time

2 Frequently

3 Sometimes

4 Never (SKIP TO Q36, PAGE 12)

35. Could you tell me what problems or difficulties you run into in dealing with these people?

No problems

---

---

---

---

---



36. All of us occasionally feel bothered by certain kinds of things in our work. I'll read a list of things that sometimes bother people, and I would like you to tell me how frequently you feel bothered by each of them. (SHOW CARD 4)

	(1)	(2)	(3)	(4)	(5)
	Nearly all the <u>time</u>	Rather <u>often</u>	Some- <u>times</u>	<u>Rarely</u>	<u>Never</u>
a. the fact that you can't get information needed to carry out your job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. not knowing just what the people you work with expect of you.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. thinking that the <u>amount</u> of work you have to do may interfere with how <u>well</u> it gets done.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. feeling that you have to do things that are against your better judgment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. being unclear on just what the scope and responsibilities of your job are.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

IF R IS SELF-EMPLOYED, SKIP TO Q37, PAGE 13

f. <i>feeling unable to influence your immediate supervisor's decisions and his actions that affect you.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. <i>feeling that you have too little authority to carry out the responsibilities assigned to you.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. <i>not knowing what your supervisor thinks of you, how he evaluates your performance.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

37. (LABOR STANDARDS IMPORTANCE SORT--BLUE CARDS)

The next set of cards I have describes problems that working people may at one time or another be faced with. (HOLD UP BLUE STRIPE CARDS.)

I'd like to know how important it is to you that each of these problems doesn't happen to you--how important it is that the government, a union, your employer, or someone else protect you against each of these things. (LAY ALTERNATIVE CARDS DOWN WITH "VERY IMPORTANT THAT I BE PROTECTED AGAINST THIS" ON R'S LEFT.)

Please sort each card into one of the four groupings I have here, according to how important it is to you that you be protected from its happening to you. (HAND CARDS TO R. COLLECT CARDS WITH ALTERNATIVE CARDS AT BOTTOM OF EACH PILE. KEEP UNSORTED CARDS ASIDE.)

QUESTION CARDS IN THE ORDER IN WHICH THEY ARE GIVEN ARE:

my employer withholding or delaying wages or other money I feel is due me  
incompetent, unfair, or undemocratic practices by a union  
incompetent, unfair, or dishonest practices by private employment agencies  
becoming ill or injured because of my job  
working a schedule that is inconvenient for me or having to work too many hours  
having to work under uncomfortable or unpleasant physical working conditions  
spending too much time, money, or effort in going to and from work  
not being able to get the fringe benefits I want  
discrimination on my job due to mental or physical limitations I might have  
discrimination against me on my job because of my race or national origin  
discrimination against me on my job because of my sex  
discrimination against me on my job because of my age  
getting inadequate wages to meet my usual monthly expenses and bills  
my supervisor or the personnel office going into my personal matters  
not being able to pay all my bills if I became sick and wasn't able to work  
having my wages garnisheed or assigned  
employment that isn't steady throughout the year  
physical dangers or unhealthy conditions on my job

38. Do you think of your job as one where you have regular, steady work throughout the year, is it seasonal, are there frequent lay-offs, or what?

- 1 Steady employment (SKIP TO Q40)
- 3 Seasonal
- 5 Frequent lay-offs
- 7 Other (SPECIFY): \_\_\_\_\_

39. How much of a problem for you is this lack of steady employment?  
(SHOW CARD 3)

- 1 No problem at all
- 2 A slight problem
- 3 A sizeable problem
- 4 A great problem

40. The forty-hour week is a very common term. When people give the hours, they work a second thought, however, and start counting the hours up, they sometimes find that they work somewhat more or somewhat less than forty hours. During the average week how many hours do you work, not counting the time you take off for meals.

\_\_\_\_\_ hours per week

41. Do you generally work the same days each week?

- 1 Yes
- 5 No

42. Do you generally work the same hours each day?

- 1 Yes
- 5 No (SKIP TO Q44, PAGE 15)

43. When do you usually arrive at work?

Time (SPECIFY AM OR PM) \_\_\_\_\_ AM   
PM

IF R IS SELF-EMPLOYED, SKIP TO Q48

44. Other than holidays like Christmas and Labor Day, are you allowed to take off any working days as vacation days with full pay?

- 1 Yes  
 5 No (SKIP TO Q46)

45. How many working days are you allowed to take off each year as vacation days with full pay?

- Don't know

\_\_\_\_\_ working days

46. Are you allowed to take off any sickleave days with full pay?

- 1 Yes  
 5 No (SKIP TO Q48)

47. How many sickleave days are you allowed to take off with full pay each year?

- Don't know

\_\_\_\_\_ working days

48. People differ in what they mean by the words "working overtime." In terms of your own job, what do you regard as working overtime?

- Working more than \_\_\_\_\_ hours a week (SPECIFY NUMBER OF HOURS)  
 Working more than \_\_\_\_\_ hours a day (SPECIFY NUMBER OF HOURS)  
 Working before or after certain hours (WITH NO SPECIFICATION THAT TOTAL # OF HOURS IS EXCEEDED). SPECIFY BEFORE OR AFTER WHAT HOUR(S)

- Working on particular days when R does not normally work SPECIFY DAY(S)

- Other (SPECIFY) \_\_\_\_\_

- Don't have anything I consider overtime (SKIP TO Q56, PAGE 17)

IF R IS SELF-EMPLOYED, SKIP TO Q53, PAGE 17

49. How much would your employer pay you for any overtime you might work?

- 1 Nothing at all
- 2 Some pay, but less than regular
- 3 Regular pay rate
- 4 1 1/2 regular pay rate, "time and a half"
- 5 Twice regular pay rate, "double time"
- 6 Some combination of the above (SPECIFY) \_\_\_\_\_  
\_\_\_\_\_
- 7 Other forms of pay (SPECIFY) \_\_\_\_\_  
\_\_\_\_\_

50. Outside of the pay, what else would your employer do to "make up" to you the overtime hours you might work? (CHECK FIRST MENTION ONLY)

- 1 Nothing else
- 2 Compensatory time off
- 3 Meal allowance, free meals
- 4 Thanks, gratitude, recognition by employer
- 7 Other (SPECIFY): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

51. Who determines whether you're going to put in overtime hours? Is it mostly up to you or mostly up to your employer?

- 1 Mostly up to R (SKIP TO Q53, PAGE 17)
- 5 Mostly up to employer

52. Could you refuse to work overtime when your employer asks you to without being penalized in any way?

- 1 Yes
- 5 No

53. How often do you work overtime--often, once in a while, or never?

- 1 Often
- 3 Once in a while
- 5 Never (SKIP TO Q55)

54. Would you like to work less overtime hours than you presently do?

- 1 Yes (SKIP TO Q56)
- 5 No

55. Would you like to work more overtime hours than you presently do?

- 1 Yes
- 5 No

56. Could you tell me what problems or difficulties you run into concerning the hours you work, your work schedule, or overtime?

- No problems (SKIP TO Q58, PAGE 18)

---

---

---

---

---

---

---

---

57. How much of a problem for you (is this/are these things)? (SHOW CARD 3)

- 1 No problem at all
- 2 A slight problem
- 3 A sizeable problem
- 4 A great problem

58. Does your job at any time expose you to what you feel are physical dangers or unhealthy conditions?

- 1 Yes  
 5 No (SKIP TO Q63, PAGE 19)

59. What are those dangers or unhealthy conditions?

LIST ON THIS AND THE FOLLOWING PAGE THE FIRST THREE MENTIONS UNDER Q60, Q61, AND Q62.

60. DANGEROUS OR UNHEALTHY CONDITION #1 \_\_\_\_\_  
\_\_\_\_\_

(REPEAT CONDITION TO R)

How severe a problem for you is this condition? (SHOW CARD 3)

- 1 No problem at all  
 2 A slight problem  
 3 A sizeable problem  
 4 A great problem

61. DANGEROUS OR UNHEALTHY CONDITION #2 \_\_\_\_\_  
\_\_\_\_\_

(REPEAT CONDITION TO R. IF BLANK, SKIP TO Q63, PAGE 19)

How severe a problem for you is this condition? (SHOW CARD 3)

- 1 No problem at all  
 2 A slight problem  
 3 A sizeable problem  
 4 A great problem

62. DANGEROUS OR UNHEALTHY CONDITION #3 \_\_\_\_\_  
\_\_\_\_\_

(REPEAT CONDITION TO R. IF BLANK, SKIP TO Q63, PAGE 19)

How severe a problem for you is this condition? (SHOW CARD 3)

- 1 No problem at all  
 2 A slight problem  
 3 A sizeable problem  
 4 A great problem

63. Suppose there were conditions on your job you thought were dangerous or very bad for your health. Whom would you go to first for help if you had this problem?

Don't know (SKIP TO Q67)

Wouldn't go to anyone (SKIP TO Q67)

---

---

64. (IF PERSON NAMED) What is his relationship to you?

---

65. Whom would you go to next if you couldn't get help from (him/her/them)?

Don't know (SKIP TO Q67)

Wouldn't go to anyone else (SKIP TO Q67)

---

---

66. (IF PERSON NAMED) What is his relationship to you?

---

67. (IF GOVERNMENT AGENCY NOT MENTIONED IN Qs. 63 OR 65) Is there any government agency you could go to for help in this?

1 Yes

3 Possibly, maybe

5 No

8 Don't know.



60. Within the last three years have you had any illnesses or injuries you think were caused or made more severe by any job you had during this period?

1 Yes

5 No (SKIP TO Q80, PAGE 23)

61. Could you tell me what these illnesses or injuries were?

LIST BELOW UNDER ILLNESS OR INJURY, WITH MOST RECENT ONE FIRST.

<u>Illness or injury</u>	(Q70) <u>Was illness or injury associated with R's present job?</u>	(Q71) <u>Was R kept from working for more than two weeks?</u>
MOST RECENT _____	<input type="checkbox"/> 1 Yes <input type="checkbox"/> 5 No	<input type="checkbox"/> 1 Yes <input type="checkbox"/> 5 No
_____		
_____		
SECOND MOST RECENT _____	<input type="checkbox"/> 1 Yes <input type="checkbox"/> 5 No	<input type="checkbox"/> 1 Yes <input type="checkbox"/> 5 No
_____		
_____		
THIRD MOST RECENT _____	<input type="checkbox"/> 1 Yes <input type="checkbox"/> 5 No	<input type="checkbox"/> 1 Yes <input type="checkbox"/> 5 No
_____		
_____		

70. (ASK FOR EACH ILLNESS OR INJURY LISTED ABOVE) When you had (NAME OF ILLNESS OR INJURY), were you working at your present job?

ENTER RESPONSE IN CENTER COLUMN ABOVE. FOR EACH, CHECK BOX INDICATING WHETHER ILLNESS OR INJURY OCCURRED ON R'S PRESENT JOB

71. (ASK FOR EACH ILLNESS OR INJURY LISTED ABOVE) When you had (NAME OF ILLNESS OR INJURY), did it keep you away from your job for more than two weeks?

ENTER RESPONSE IN RIGHT COLUMN ABOVE.

72. In general how much of a problem did (NAME OF MOST RECENT ILLNESS OR INJURY) create for you? (SHOW CARD 3)

- 1 No problem at all
- 2 A slight problem
- 3 A sizeable problem
- 4 A great problem

73. INTERVIEWER:

IF R REPORTS NO ILLNESS OR INJURY WHICH KEPT HIM FROM WORKING FOR MORE THAN TWO WEEKS, CHECK HERE  AND SKIP TO Q80, PAGE 23)

74. ASK Q74 THROUGH Q79 WITH REFERENCE TO MOST RECENT ILLNESS OR INJURY WHERE R WAS KEPT FROM WORKING FOR MORE THAN TWO WEEKS.

Did you go back to the same job after you recovered?

- 1 Yes (SKIP TO Q/6, PAGE 22)
- 5 No

75. Was the job you finally went back to better than, about the same as, or worse than the job you had before you were laid off?

- 1 Better
- 3 About the same
- 5 Worse

477

76. While you were ill, how much of your medical, surgical, or hospital expenses were covered by any personal, company, or governmental insurances or programs--most or all, some, only a little, or none?

- 1 Most or all (SKIP TO Q78)
- 2 Some
- 3 Only a little
- 4 None

(IF SOME, ONLY A LITTLE, OR NONE TO Q76)

77. While you were ill, how much of your living expenses were covered by any personal, company, or governmental insurances or programs--most or all, some, only a little, or none?

- 1 Most or all
- 2 Some
- 3 Only a little
- 4 None

(SKIP TO Q79)

(IF MOST OR ALL TO Q76)

78. While you were ill, how much of your living expenses were covered by any personal, company, or governmental insurances or programs--most or all, some, only a little, or none?

- 1 Most or all (SKIP TO Q80, PAGE 23)
- 2 Some
- 3 Only a little
- 4 None

79. How much of a problem for you was meeting all your expenses during this time? (SHOW CARD 3)

- 1 No problem at all
- 2 A slight problem
- 3 A sizeable problem
- 4 A great problem

80. Is there any one place or building where you spend most of your working time, or do you work in several different places?

- 1 One place (SKIP TO Q82)
- 5 Several places

81. Do you spend much time in the course of your work traveling around the neighborhood or the community?

- 1 Yes (SKIP TO Q85, PAGE 24)
- 5 No (SKIP TO Q85, PAGE 24)

82. Are the physical conditions at the place where you spend most of your working time as comfortable and pleasant as you would like or would you like them to be better?

- 1 As comfortable as R likes (SKIP TO Q85, PAGE 24)
- 5 Like it to be better

83. In what ways aren't they as comfortable or pleasant as you'd like?

---

---

---

---

---

---

---

84. How much of a problem (does this condition/do these conditions) create for you? (SHOW CARD 3)

- 1 No problem at all
- 2 A slight problem
- 3 A sizeable problem
- 4 A great problem

85. When you report for work each day, do you usually go to the same place?

- 1 Yes
- 5 No (SKIP TO Q88)

86. Roughly how many miles is it from your home to the place where you report for work each day?

- 01 R lives at or adjacent to work-site  
(SKIP TO Q92, PAGE 25)

About \_\_\_\_\_ miles

87. On the average day about how long does it take you to get from your home to the place where you report for work each day?

About \_\_\_\_\_ hours and \_\_\_\_\_ minutes

88. How do you usually go to and from work - in your own car, in someone else's car, on public transportation, walk, or what?

- 1 Ride in own car, motorcycle
- 2 Ride in someone else's car
- 3 Drive company car
- 4 Public transportation
- 5 Walk, bicycle
- 7 Other (SPECIFY) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

89. Considering how much you earn from your job, do you think the cost of traveling to and from work is too much or just about right?

- 1 Too much
- 5 Just about right

90. What things concerning your travel to and from work do you consider problems and would like to see changed if possible?

R has nothing he considers a problem (SKIP TO Q92)

---

---

---

---

---

91. How much of a problem (are these things/is this) for you? (SHOW CARD 3)

- 1 No problem at all
- 2 A slight problem.
- 3 A sizeable problem
- 4 A great problem

92. How much does your pay or income from your job figure out to be a year, before taxes and other deductions are made?

8 Don't know

\_\_\_\_\_ dollars a year (SKIP TO Q95, PAGE 26)

IF R IS SELF-EMPLOYED, SKIP TO Q95, PAGE 26

93. How often do you get a paycheck on your job?

- 12' Once a month
- 24 Twice a month
- 26 Every two weeks
- 52 Once a week
- Other (SPECIFY) \_\_\_\_\_

94. How much is your paycheck for this job, before taxes and other deductions are made?

\_\_\_\_\_ dollars a paycheck

95. INTERVIEWER: SEE COVER SHEET.

CHECK BOX BELOW INDICATING WHETHER THERE ARE OTHER PEOPLE IN R'S IMMEDIATE FAMILY LIVING HERE WHO WORK.

1 Other people who work

5 No other people who work (SKIP TO Q97)

96. Are you the major wage earner in your immediate family?

1 Yes

5 No

97. Roughly what is the total yearly income before taxes of your immediate family-- including your own wages, the wages of everyone else in the family who works, and income from any other sources?

\_\_\_\_\_ dollars a year

98. Do you feel that this total income is enough to meet your family's usual monthly expenses and bills?

1 Yes (SKIP TO Q100)

5 No

99. How much of a problem is this for you? (SHOW CARD 3)

1 No problem

2 A slight problem

3 A sizeable problem

4 A great problem

100. Do you feel that this total income is enough for you and your family to live as comfortably as you would like?

1 Yes

5 No

IF R IS SELF-EMPLOYED, SKIP TO Q105, PAGE 28

101. I'll read off some fringe benefits. Just tell me whether or not your employer makes each available to you.

	(1) <u>Yes</u>	(5) <u>No</u>
a. Medical, surgical, or hospital insurance that covers any illness or injury that might occur to you while <u>off</u> the job	<input type="checkbox"/>	<input type="checkbox"/>
b. Life insurance that would cover a death occurring for reasons <u>not</u> connected with your job	<input type="checkbox"/>	<input type="checkbox"/>
c. A retirement program	<input type="checkbox"/>	<input type="checkbox"/>
d. A training program you can take to improve your skills	<input type="checkbox"/>	<input type="checkbox"/>
e. Profit sharing	<input type="checkbox"/>	<input type="checkbox"/>
f. Stock options	<input type="checkbox"/>	<input type="checkbox"/>
g. Discounts on or free meals	<input type="checkbox"/>	<input type="checkbox"/>
h. Discounts on or free merchandise or service	<input type="checkbox"/>	<input type="checkbox"/>
i. A place for employee's children to be taken care of while their parents are working	<input type="checkbox"/>	<input type="checkbox"/>
j. (WOMEN ONLY) Maternity leave with pay	<input type="checkbox"/>	<input type="checkbox"/>
k. (WOMEN ONLY) Maternity leave with full re-employment rights	<input type="checkbox"/>	<input type="checkbox"/>

102. Are there any fringe benefits that you're not getting now that you'd like to be getting?

- 1 Yes  
 5 No (SKIP TO Q106, PAGE 28)

103. Which one benefit you're not getting now would you most like to be getting?

\_\_\_\_\_

\_\_\_\_\_

104. How much of a problem for you is not getting this particular fringe benefit? (SHOW CARD 3)

- 1 No problem at all  
 2 A slight problem  
 3 A sizeable problem  
 4 A great problem



ASK ONLY IF R IS SELF-EMPLOYED. IF R IS NOT SELF-EMPLOYED, SKIP TO Q106.

105. In the last three years was there any time when you worked on any job where you were not self-employed and where your employer paid you a wage or salary?

- 1 Yes  
 5 No (SKIP TO Q112, PAGE 29)

106. In the last three years have your wages ever been garnisheed or assigned?

- 1 Yes  
 5 No (SKIP TO Q108)

107. How much of a problem was this garnishment/assignment for you?  
(SHOW CARD 3)

- 1 No problem at all  
 2 A slight problem  
 3 A sizeable problem  
 4 A great problem

108. Other than garnishment or assignment have you at any time in the last three years had any trouble getting your wages paid in full, or on time, or regularly?

- 1 Yes  
 5 No (SKIP TO Q112, PAGE 29)

109. How often in the past three years did this happen?

- 1 Once only

IF MORE THAN ONCE ENTER NUMBER OF TIMES: \_\_\_\_\_ AND ASK  
Qs 110 AND 111 WITH REFERENCE ONLY TO THE MOST RECENT CASE.

110. What was the trouble you had in getting your wages?

---

---

---

---

---

111. How much of a problem for you was this trouble you had getting your wages? (SHOW CARD 3)

- 1 No problem at all
- 2 A slight problem
- 3 A sizeable problem
- 4 A great problem

112. How likely is it that in the next few years machines or computers will be doing a lot of the things you now do on your job? Is it very likely, somewhat likely, a little likely, or not at all likely?

- 1 Very likely
- 2 Somewhat likely
- 3 A little likely
- 4 Not at all likely (SKIP TO Q114)

113. If this happens, would you be out of a job, or would your employer find something else for you to do, or would your job just be adapted to the machine or computer, or what?

- 1 Out of a job
  - 3 Something else with same employer
  - 5 Job adapted to machine or computer
  - 7 Other (SPECIFY) \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

IF P. IS SELF-EMPLOYED, SKIP TO Q115, PAGE 30

114. About how easy would it be for you to find a job with another employer with approximately the same income and fringe benefits you now have? Would you say very easy, somewhat easy, or not easy at all?

- 1 Very easy
- 3 Somewhat easy
- 5 Not easy at all

115. As part of your present job do you belong to a union or employee's association?

- 1 Yes
- 5 No (SKIP TO Q122, PAGE 31)

116. Is that union affiliated with the AFL-CIO or not?

- 1 Yes (SKIP TO Q118)
- 5 No

117. Is that union affiliated with any national or international union?

- 1 Yes
- 5 No

118. Could you tell me about any problems you feel there are with your union regarding how democratically it is run?

- No problems (SKIP TO Q120)

---

---

---

---

119. How much of a problem for you do you feel (this is/these things are)? (SHOW CARD 3)

- 1 No problem at all
- 2 A slight problem
- 3 A sizeable problem
- 4 A great problem

120. Could you tell me about any problems you feel there are with your union regarding how well it is managed?

- No problems (SKIP TO Q122, PAGE 31)

---

---

---

---

121. How much of a problem for you do you feel (this is/these things are)? (SHOW CARD 3)

- 1 No problem at all (SKIP TO Q123)
- 2 A slight problem (SKIP TO Q123)
- 3 A sizeable problem (SKIP TO Q123)
- 4 A great problem (SKIP TO Q123)

122. Even though you aren't a member of a union or employee's association, do you work under a union or employee's association contract with your employer?

- 1 Yes
- 5 No

123. Do you feel in any way discriminated against on your job because of your age?

- 1 Yes
- 5 No (SKIP TO Q126, PAGE 32)

124. In what ways do you feel you have been discriminated against?

---

---

---

---

125. How much of a problem for you is this discrimination that you face? (SHOW CARD 3)

- 1 No problem at all
- 2 A slight problem
- 3 A sizeable problem
- 4 A great problem

126. (WOMEN ONLY--FOR MEN SKIP TO Q129) Do you feel in any way discriminated against on your job because you are a woman?

- 1 Yes
- 5 No (SKIP TO Q129)

127. In what ways do you feel you have been discriminated against?

---

---

---

---

128. How much of a problem for you is this discrimination that you face?  
(SHOW CARD 3)

- 1 No problem at all
- 2 A slight problem
- 3 A sizeable problem
- 4 A great problem

129. Do you feel in any way discriminated against on your job because of your race or national origin?

- 1 Yes
- 5 No (SKIP TO Q132, PAGE 33)

130. In what ways do you feel you have been discriminated against?

---

---

---

---

131. How much of a problem for you is this discrimination that you face?  
(SHOW CARD 3)

- 1 No problem at all
- 2 A slight problem
- 3 A sizeable problem
- 4 A great problem

132. Do you have anything you regard as a physical or nervous condition that limits the amount or kind of work you do?

- 1 Yes
- 5 No (SKIP TO Q136, PAGE 34)

133. What is that?

---

---

---

---

134. Was this condition either caused by, or has it been made more severe by, any job you've ever had?

- 1 Yes
- 5 No

135. In general how much of a problem has this condition posed for you either in working on the jobs you've had or in getting jobs you would have liked to have had? (SHOW CARD 3)

- 1 No problem at all
- 2 A slight problem
- 3 A sizeable problem
- 4 A great problem

## 136. (VALUE REALIZATION SORT--YELLOW CARDS)

Here are some cards that describe different aspects of a person's job. I'd like you to put each in the pile which best reflects how true you feel each is of your job. (LAY DOWN SOLID YELLOW ALTERNATIVE CARDS WITH "VERY TRUE" ON R'S LEFT; COLLECT CARDS WITH ALTERNATIVE CARDS AT BOTTOM OF EACH PILE. KEEP UNSORTED CARDS ASIDE.)

QUESTION CARDS IN THE ORDER IN WHICH THEY ARE GIVEN ARE:

I am given a lot of chances to make friends  
the chances for promotion are good  
my co-workers are friendly and helpful  
I have an opportunity to develop my own special abilities  
travel to and from work is convenient  
I receive enough help and equipment to get the job done  
I am not asked to do excessive amounts of work  
the work is interesting  
I have enough information to get the job done  
the pay is good  
I am given a lot of freedom to decide how I do my own work  
I am given a chance to do the things I do best  
the job security is good  
the problems I am expected to solve are hard enough  
my supervisor is competent in doing his job  
my responsibilities are clearly defined  
I have enough authority to do my job  
my fringe benefits are good  
the physical surroundings are pleasant  
I can see the results of my work  
I can forget about my personal problems  
I have enough time to get the job done  
my supervisor is very concerned about the welfare of those under him  
I am free from conflicting demands that other people make of me  
the hours are good

137. If you were to get enough money to live as comfortably as you'd like for the rest of your life, would you continue to work?

1 Yes

5 No

138. Taking all things together, how would you say things are these days? Would you say you're very happy, pretty happy, or not too happy these days?

1 Very happy

3 Pretty happy

5 Not too happy

139. In general, how satisfying do you find the ways you're spending your life these days? Would you call it completely satisfying, pretty satisfying, or not very satisfying?

- 1 Completely satisfying  
 3 Pretty satisfying  
 5 Not very satisfying

140. All in all, how satisfied would you say you are with your job--very satisfied, somewhat satisfied, not too satisfied, or not at all satisfied?

- 1 Very satisfied  
 2 Somewhat satisfied  
 3 Not too satisfied  
 4 Not at all satisfied

141. How often do you get so wrapped up in your work that you lose track of the time--very often, pretty often, once in a while, or never?

- 1 Very often  
 2 Pretty often  
 3 Once in a while  
 4 Never

142. (PHRASE IN SAME SEX AS R) If a good friend of yours told you (he/she) was interested in working in a job like yours for your employer, what would you tell (him/her)? Would you strongly recommend this job, would you have doubts about recommending it, or would you strongly advise (him/her) against this sort of job?

- 1 Strongly recommend it  
 3 Have doubts about recommending it  
 5 Advise him against it

143. Knowing what you know now, if you had to decide all over again whether to take the job you now have, what would you decide? Would you decide without any hesitation to take the same job, would you have some second thoughts, or would you decide definitely not to take the same job?

- 1 Decide without hesitation to take same job  
 3 Have some second thoughts  
 5 Decide definitely not to take the job





147. Within the past three years have you tried to find a job through a private employment agency?

- 1 Yes
- 5 No (SKIP TO Q149)

(IF YES TO Q147)

148. Within the past three years have you tried to find a job through the state employment service?

- 1 Yes (SKIP TO Q150; ASK Qs 151 THROUGH 155 WITH REFERENCE TO MOST RECENT EXPERIENCE WITH EITHER A PRIVATE OR STATE AGENCY)
- 5 No (SKIP TO Q150; ASK Qs 151 THROUGH 155 WITH REFERENCE TO MOST RECENT EXPERIENCE WITH A PRIVATE AGENCY)

(IF NO TO Q147)

149. Within the past three years have you tried to find a job through the state employment service?

- 1 Yes (GO TO Q150; ASK Qs 151 THROUGH 155 WITH REFERENCE TO MOST RECENT EXPERIENCE WITH A STATE AGENCY)
- 5 No (SKIP TO Q156, PAGE 39)

150. INTERVIEWER: CHECK ONE

- 1 Qs 151 THROUGH 155 ARE BEING ASKED WITH REFERENCE TO PRIVATE AGENCY
- 5 Qs 151 THROUGH 155 ARE BEING ASKED WITH REFERENCE TO STATE AGENCY

151. Was the agency successful in finding you a job?

1 Yes (SKIP TO Q153)

5 No

152. Is the agency still trying to find you a job?

1 Yes (SKIP TO Q154)

5 No (SKIP TO Q154)

153. Was the job they found you the kind of job you'd hoped you'd get?

1 Yes

5 No

154. Could you tell me what problems or difficulties you ran into in dealing with the agency?

No problems (SKIP TO Q156, PAGE 39)

---

---

---

---

---

---

---

---

155. In general how severe would you say (this problem was/these problems were) that you've just told me about concerning the agency? (SHOW CARD 3)

1 No problem at all

2 A slight problem

3 A sizeable problem

4 A great problem

156. Finally I'd like to get some information about you and your background. First, are you single, married, widowed, separated or divorced?

- 1 Single (SKIP TO Q163, PAGE 40)
- 2 Married
- 3 Widowed
- 4 Separated
- 5 Divorced

157. Are there any children for whom you are the major financial support?

- 1 Yes
- 5 No (SKIP TO Q162)

158. How many children?

Number: \_\_\_\_\_

159. Are there any children under six you support financially living in your home now?

- 1 Yes
- 5 No (SKIP TO Q162)

160. Do you have to pay anyone to take care of them while you're working?

- 1 Yes
- 5 No

161. Would you work any more hours than you do now if there were a good day-care center available to you at prices you could afford.

- 1 Yes
- 5 No

162. INTERVIEWER: REFER BACK TO Q156 AT TOP OF PAGE

IF R IS: 7

A MARRIED MAN SKIP TO Q165.  
A MARRIED WOMAN SKIP TO Q167  
WIDOWED, DIVORCED, SEPARATED SKIP TO Q169

163. Outside yourself, is there anyone for whom you are the major financial support?

1 Yes

5 No (SKIP TO Q171, PAGE 41)

164. How many other people?

Number: \_\_\_\_\_ (SKIP TO Q171, PAGE 41)

165. Not counting your wife (and children), is there anyone outside yourself for whom you are the major financial support?

1 Yes

5 No (SKIP TO Q171, PAGE 41)

166. How many other people?

Number: \_\_\_\_\_ (SKIP TO Q171, PAGE 41)

167. Not counting your husband (and children), is there anyone outside yourself for whom you are the major financial support?

1 Yes

5 No (SKIP TO Q171, PAGE 41)

168. How many other people?

Number: \_\_\_\_\_ (SKIP TO Q171, PAGE 41)

169. (Other than children) is there anyone outside yourself for whom you are the major financial support?

1 Yes

5 No (SKIP TO Q171, PAGE 41)

170. How many other people?

Number: \_\_\_\_\_

171. How old were you on your last birthday?

\_\_\_\_\_ years old

172. What was the highest grade of school you completed?

- 00 none
- 10 some grade school (grades 1 to 7)
- 20 completed grade school (grade 8)
- 30 some high school (grades 9 to 11)
- 40 has high school diploma (grade 12)
- 50 some college (grades 13 to 15)
- 60 has college degree (grade 16)
- 70 graduate or professional training

173. Before we complete this interview I'd like to ask you one final set of questions. This is a list of things that describe how anyone can feel at certain times. I'd like you to check in the appropriate box how often each of these things happens to you or is true of you. I'd just like to remind you again that all information in this interview is voluntary and completely confidential.

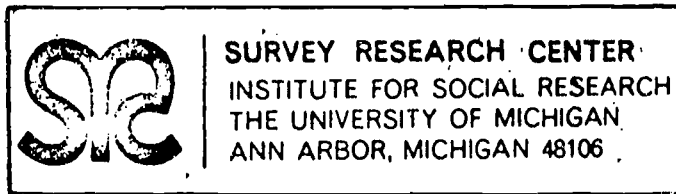
HAND R SELF-REPORT FORM

INTERVIEWER OBSERVATION

174. R's sex is:  1 Male  
 5 Female

175. R's race is:  1 White  
 5 Negro  
 7 Other (SPECIFY) \_\_\_\_\_

Thumbnail sketch: Please include any observations you think may be helpful to our understanding of R and the interview situation (such as R's cooperativeness, attitude toward this research, his ability to understand you, and the presence of other parties during the interview).



Interviewer's Label

WORKING CONDITIONS SURVEY

• SELF-REPORT FORM

	(1)	(2)	(3)	(4)
	Often	Some-	Rarely	Never
How often is this true of you?	<u>true</u>	<u>times</u>	<u>true</u>	<u>true</u>
1. My hands sweat so that they feel damp and clammy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I expect to succeed in things I do.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I feel depressed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I am able to work under a great deal of pressure.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I get a soreness in my muscles.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I get headaches.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. I feel inferior to others.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I feel happy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. I get a numbness or tingling in parts of my body.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. I have to do things very slowly in order to be sure I am doing them right.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. I feel that life is worthwhile.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. I feel my heart pounding or racing.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. I feel low in spirits.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. I feel others do not understand me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. I get a weakness in parts of my body.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. I have trouble remembering things.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. I can carry out things the way I expect to.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. I get pains in the lower part of my back.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(continued on other side)



	(1) Often true	(2) Some- times true	(3) Rarely true	(4) Never true
How often is this true of you?				
19. I have difficulty in making decisions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. I feel lonely.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. I get pains in my heart or chest.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. I feel hopeless about the future.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. I feel trapped or caught.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. I get heavy feelings in my arms or legs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. I have trouble in concentrating.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. I blame myself for things.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. I feel blocked or stymied in getting things done.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	(1) True	(4) False
Is this true of you?		
1. There have been times when I felt like smashing things.	<input type="checkbox"/>	<input type="checkbox"/>
2. I am always willing to admit it when I make a mistake.	<input type="checkbox"/>	<input type="checkbox"/>
3. I can remember "playing sick" to get out of something.	<input type="checkbox"/>	<input type="checkbox"/>
4. I sometimes feel resentful when I don't get my way.	<input type="checkbox"/>	<input type="checkbox"/>
5. At times I have really insisted on having things my own way.	<input type="checkbox"/>	<input type="checkbox"/>
6. I am always courteous even to people who are disagreeable.	<input type="checkbox"/>	<input type="checkbox"/>
7. I never hesitate to go out of my way to help someone in trouble.	<input type="checkbox"/>	<input type="checkbox"/>
8. I don't find it particularly difficult to get along with loud-mouthed, obnoxious people.	<input type="checkbox"/>	<input type="checkbox"/>
9. I sometimes try to get even rather than forgive and forget.	<input type="checkbox"/>	<input type="checkbox"/>
10. There have been times when I was quite jealous of the good fortune of others.	<input type="checkbox"/>	<input type="checkbox"/>
11. I have never been irked when people expressed ideas very different from my own.	<input type="checkbox"/>	<input type="checkbox"/>
12. I never resent being asked to return a favor.	<input type="checkbox"/>	<input type="checkbox"/>

## REFERENCES

- Bauman, A., "Measuring Employee Compensation in U.S. Industry". Monthly Labor Review, October, 1970, pp. 17-24.
- Bradburn, N. & Caplovitz, D., Reports on Happiness. Chicago: Aldine, 1965.
- Campbell, D. B., "Relative Influence on Job and Supervision on Shared Worker Attitudes". Journal of Applied Psychology. In press.
- Cohen, M., "Discrimination and Women Workers". Unpublished manuscript.
- Converse, P. & Robinson, J., The Use of Time in American Society. In press. Employment and Earnings. U.S. Department of Labor, 16(7), 1970.
- Fine, D., "Comparison of Organizational Membership and Self-Employment". Unpublished doctoral dissertation, University of Michigan, 1970.
- General Characteristics, Part I: U.S. Summary. U.S. Bureau of the Census, U.S. Census of Housing, 1950.
- Gooding, J., "Blue-collar Blues on the Assembly Line". Fortune, July, 1970, pp. 69-71.
- Gurin, G., Veroff, J., & Feld, S., Americans View Their Mental Health. New York: Basic Books, 1960.
- Herzberg, F., Mausner, B., & Snyderman, B., The Motivation to Work. New York: John Wiley, 1959.
- Hunt, S.M., Singer, K., & Cobb, S., "Components of Depression Identified From a Self-Rating Depression Inventory for Survey Use". Archives of General Psychiatry, April, 1967, Vol. 16, pp. 441-447.
- Hunt, P., Schupp, D., & Cobb, S., An Automated Self Report Technique. Unpublished manuscript, Mental Health and Industry Program Document, Institute for Social Research, 1966.
- Kahn, R.L., Wolfe, D.M., Quinn, R.P., Snoek, J.D., & Rosenthal, R.A., Organizational Stress: Studies in Role Conflict and Ambiguity. New York: John Wiley, 1964.
- Kish, L., & Hess, I., The Survey Research Center's National Sample of Dwellings. Ann Arbor, Institute for Social Research, 1965.
- Likert, R., New Patterns of Management. New York: McGraw-Hill, 1961.
- Lipman, R., Love, L., Rickles, K., Ulenhuth, E., & Lazer, R., "Selected Measures of Changes in Outpatient Drug Evaluation". San Juan, A.C.N.P. meeting, 1967.
- Pelz, D.C., Scientists in Organizations. New York: John Wiley, 1966.
- Porter, L.W., "Job Attitudes in Management: Perceived Deficiencies in Need Fulfillment as a Function of Job Level". Journal of Applied Psychology, 1962, 46, 375-384.
- Quinn, R.P., Tabor, J.M., & Gordon, L.K., The Decision to Discriminate: A Study of Executive Selection. Ann Arbor, University of Michigan, 1968.

- Robinson, J.R., & Shaver, P.R., Measures of Social Psychological Attitudes.  
Ann Arbor, Institute for Social Research, 1969.
- Roe, A., The Psychology of Occupations. New York: John Wiley, 1956.
- Sonquist, J.A., Multivariate Model Building, The Valedation of a Search Strategy. Ann Arbor, Institute for Social Research, 1970.
- Sonquist, J.A., & Morgan, J.N., The Detection of Interaction Effects: A Report of a Computer Program for the Selection of Optimal Combinations of Explanatory Variables. Ann Arbor, Institute for Social Research, 1964.
- Statistics on Manpower. U.S. Department of Labor, 1970.
- Vroom, V.H., Work and Motivation. New York: John Wiley, 1964.