

Contents in Brief

Preface xi

PART I INTRODUCTION

- 1 Introduction 1
- 2 Bases for Job-Related Behavior 10
- 3 Behavioral Research 20

PART II JOB-RELATED BEHAVIOR AND ITS MEASUREMENT

- 4 Job Analysis 38
- 5 Behavioral Measurement: General Considerations 53
- 6 Personnel Rating 69

PART III PERSONNEL SELECTION

- 7 Staffing Organizations: Selection and Placement 94
- 8 General Practices in Personnel Selection 111
- 9 Human Abilities and Their Measurement 152
- 10 Personality and Interest 175
- 11 Nontest Methods of Personnel Selection 187

PART IV PERSONNEL TRAINING AND DEVELOPMENT

- 12 Personnel Training 210
- 13 Careers 240

PART V THE ORGANIZATIONAL AND SOCIAL CONTEXT OF HUMAN WORK

- 14 Work Motivation 266
- 15 Job Satisfaction, Attitudes, and Opinions 307
- 16 Group Processes and Leadership 325

PART VI THE JOB AND WORK ENVIRONMENT

- 17 Human Factors in Job Design 348
- 18 Job Enrichment 374
- 19 Job Evaluation 384
- 20 Working Conditions 397
- 21 Accidents and Safety 422

APPENDICES

- A Elementary Descriptive Statistics 437
- B Taylor-Russel Tables 454
- C Lawshe Expectency Tables 457
- D Representative Personnel Tests 459
- About the Authors 462
- Index 463

Contents

Preface

xi

PART I INTRODUCTION

Psychology is the study of human behavior, but in contrast to most disciplines, it has two faces. One face, that of research, is sometimes called the *science* of psychology. The other, the application side, is called the *profession* of psychology. The profession is similar to that of physicians, engineers, and others concerned with the application of knowledge of some field to the practical problems of the real world.

The scientific aspect of industrial-organizational psychology is rooted in research that provides the knowledge that is a prerequisite for any

practical applications. This knowledge can be in the form of theories or in the form of empirically determined relationships. In either case, such knowledge frequently can be applied by organizations to minimize some of the human problems that inevitably arise in the operations of all kinds of organizations.

The first part of the text includes an overall introduction to industrial psychology, a discussion of some of the factors that influence job-related behavior (the "bases" of such behavior), and an overview of behavioral research.

1	Introduction	1
	Industrial-Organizational Psychology, 2	Past and Future, 4
	Plan of the Book, 8	
2	Bases for Job-Related Behavior	10
	Behavior in Organizations, 11	The Nature of Variables, 15
	Factors Influencing Human Behavior, 16	Discussion, 17
3	Behavioral Research	20
	Types of Variables Used in Behavioral Research, 20	Types of Measurement Scales, 21
	Standard Scores, 23	Statistical Analyses in Research, 31
	Discussion, 36	

PART II JOB-RELATED BEHAVIOR AND ITS MEASUREMENT

There are two primary purposes for the "measurement" of job-related behavior. First, vir-

tually all psychological research in industrial-organizational psychology depends on the

measurement of various aspects of behavior in the working environment. Second, certain personnel management functions (such as personnel evaluation) require the measurement in quantitative terms of work-related behavior, such as job performance.

The measurement of job-related behavior has its roots in the nature of the work activities that people perform. Chapter 4 consists of an overview

of the field of job analysis. Chapters 5 and 6 deal with the circumstances in which the measurement of job-related behavior is useful, the type of job-related behaviors for which measurements can be developed, the methods of developing or obtaining such measurements, and some of the pitfalls that can be encountered in their development and use.

4 Job Analysis 38

Why Jobs Are Like They Are, 38 Uses of Job Information, 39
 Terminology, 39 Conventional Job Analysis, 42 Structured Job-Analysis
 Questionnaires, 42 Critical Incident Technique (CIT), 46 Comparison
 of Job-Analysis Methods, 46 Statistical Treatment of Job-Analysis
 Data, 47 Discussion, 51

5 Behavioral Measurement: General Considerations 53

Types of Behavioral Measures, 54 Selection of Criteria, 59 Dealing
 with Criterion Data, 63 Criterion Dimensions, 63 Criteria in
 Evaluating Situational Variables, 66 Discussion, 67

6 Personnel Rating 69

Reliability and Validity of Ratings, 70 The Rater as an Information
 Processor, 71 Personnel-Rating Factors, 71 Sources of Possible
 Distortions in Ratings, 82 Weighting Factors in Rating Scales, 86
 Developing and Administering Personnel-Rating Systems, 89
 Discussion, 91

PART III PERSONNEL SELECTION

One of the most important roles of some industrial-organizational psychologists is that which is related to personnel selection. Although some psychologists become directly involved in day-to-day personnel selection operations (including interviewing, testing, and appraisal), usually they are behind the scenes carrying out research to establish selection standards, developing and validating tests, and providing related consulting services to those responsible for personnel selection operations.

This part of the text deals with the various aspects of personnel selection with which psychologists become involved, including the development of general practices in personnel selection; the use of personnel tests, biographical data, and interviews in personnel selection. It also addresses the implications of the Equal Employment Opportunity Act and other legislation related to personnel selection.

7	Staffing Organizations: Selection and Placement	94
	Matching Assumptions, 94 Internal and External Demands, 95 Human-Resource Planning, 96 Employment Practices and the Law, 98 Legal Considerations, 99 Uniform Guidelines, 102 EEO in Perspective, 108 Discussion, 109	
8	General Practices in Personnel Selection	111
	Types of Personnel Actions, 111 Job Requirements and Personnel Specifications, 112 Objectives in Establishing Personnel Specifications, 113 Reliability, 114 Validity, 116 Assessing Personnel Specifications, 118 Assessing Individual Characteristics, 124 Evaluating the Person-Job Match, 125 Factors Affecting the Functional Value of Personnel Tests, 131 Limitations of Criterion-Related Validation, 136 Validity Generalization, 137 Job-Component Validity, 140 J-Coefficient, 144 Evaluation of Validity Generalization, Job-Component Validity, and the J-Coefficient, 144 How to Use Tests for Employment, 146 Combining Tests into a Battery, 147 Test Administration and Confidentiality, 149 Discussion, 150	
9	Human Abilities and Their Measurement	152
	Basic Human Characteristics, 152 Test Construction, 153 Cognitive Abilities and Tests, 154 Mechanical Ability, 156 Psychomotor and Physical Abilities, 157 Visual Skills, 160 Job-Specific Abilities and Tests, 162 The Concept of Behavioral Consistency, 166 Validity of Various Types of Ability Tests, 168 Generalized Validity of Basic Ability Tests, 168	
10	Personality and Interest	175
	Personality Factors, 175 Types of Personality Tests, 176 Examples of Personality Inventories, 177 Interest Factors, 178 Examples of Interest Inventories, 179 Limitations of Personality and Interest Inventories, 181 Validity of Personality and Interest Inventories, 183 Discussion, 186	
11	Nontest Methods of Personnel Selection	187
	Biographical Data, 187 Self-Assessments, 194 References, 194 The Interview, 195 Discussion, 207	

PART IV PERSONNEL TRAINING AND DEVELOPMENT

The personnel training provided by an organization should fulfill three broad objectives: (1) it should be compatible with the goals and objectives of the organization; (2) the job-related training should be rooted in an analysis of the job activities that are to be performed; and (3) the training should provide for fulfilling the training needs of individuals, considering their previous ex-

perience and training and their potential for further development in the organization.

Although the primary focus of most programs is that of training people to be able to perform their present jobs effectively, there is a trend toward placing additional emphasis on the career development of individuals. Such efforts can be of mutual benefit to the organization and the individual. Chapter 13 reflects this trend.

12 Personnel Training 210

The Nature of Learning, 210 Learning Theories, 212 Principles of Learning, 212 Principles of Training Design, 217 Learning Curves, 218 Training Needs, 219 Training Methods and Techniques, 223 Types of Training Programs, 230 The Evaluation of Training, 231 Special Aspects of Training, 234 Discussion, 237

13 Careers 240

Perspectives on Careers, 241 Orientations Toward Careers, 241
Critical Times, 247 Career Assessment, 252 Career Development, 259
Career Motivation, 261 Other Career-Related Topics, 262
Discussion, 263

PART V THE ORGANIZATIONAL AND SOCIAL CONTEXT OF HUMAN WORK

Working relationships are an important part of a person's life. Motivation and commitment to work and the satisfactions from it, are the mutual concern of the organization and the individual. Thus, the interaction of motivation factors, value systems, attitudes, and the like with the working situation is part of the study of human behavior in industry. In recent years, there has been increasing concern that many workers express dissatisfaction with their work situations. Much of the current interest of industrial-organizational psychologists is with regard to this problem.

This part of the text covers some of the personal and situational variables that, in combination, create the organizational and social context within which people perform their work activities. First, individual issues of motivation and job satisfaction are addressed. This is followed by interpersonal issues of power and status differences, leadership, and the communication and execution of work roles in the social context.

14 Work Motivation 266

Ability versus Motivation, 266 Definition of Work Motivation, 267
Problems Facing the Understanding of Work Behavior, 268

Approach to Motivation, 269 Theories of Work Motivation, 269
 Motivational Practices in Organizations, 291 Trends in Overall
 Work Motivation, 302 Discussion, 302

15 Job Satisfaction, Attitudes, and Opinions 307

Beliefs or Opinions, 307 Attitudes, 308 Job Satisfaction, 309
 Quality of Working Life, 319 Stress, 321 Discussion, 322

16 Group Processes and Leadership 325

Norms and Roles, 325 Conformity, 330 Status Differences, 332
 Leaders and Leadership: Positions, Persons, or Processes? 333
 Theories of Leadership, 334 Discussion, 345

PART VI THE JOB AND WORK ENVIRONMENT

For approximately forty hours a week most people in the labor force perform work activities that are assigned to them within certain predetermined working conditions and environments. In recent decades there has been increased attention to the "design" of the jobs people are expected to perform and the conditions and environments in which they are to work. Chapters 17 and 18 deal with two approaches to job design, namely human factors and job enrichment. The nature of the jobs

people perform leads logically to the consideration of the rates of pay for jobs; thus, Chapter 19 deals with job evaluation, a procedure used to establish pay scales. Chapter 20 deals with working conditions (illumination, noise, atmospheric conditions, and work schedules). In turn, Chapter 21 deals with accidents and safety which are integrally related to the nature of the job and to the working conditions.

17 Human Factors in Job Design 348

Major Approaches to Job Design, 348 Criteria for Evaluating Human
 Factors, 350 Human Factors: A Frame of Reference, 351
 Information-Input Processes, 351 Mediation Processes, 355
 Action Processes, 359 Workspace Design, 363 Examples of
 Human-Factors Problems, 364 Discussion, 371

18 Job Enrichment 374

Job Enrichment: A Definition, 375 Two Examples, 375 Reactions
 to Research, 376 Job-Characteristic Model, 377 Critique of the
 Job-Characteristic Model, 379 Other Factors and Job Enrichment, 381
 Discussion, 382

19	Job Evaluation	384
	Forms of Compensation, 385 Factors That Influence Wage Rates, 385 Procedures for Setting Wage Rates, 387 Methods of Job Evaluation, 388 Converting Job-Evaluation Results to Pay Scales, 393 Factors in Job-Evaluation Systems, 395 Discussion, 396	
20	Working Conditions	397
	Illumination, 397 Thermal Conditions, 402 Noise, 407 Work Schedule, 411 Discussion of Working Conditions, 420	
21	Accidents and Safety	422
	Definitions, 422 The "Causes" of Accidents, 423 A Model of the Accident Phenomenon, 423 Situational Factors in Accident Occurrence, 423 Individual Differences in Accident Occurrence, 425 The Reduction of Accidents, 433 Discussion, 435	
APPENDICES		
A	Elementary Descriptive Statistics	437
	Descriptive versus Sampling Statistics, 437 Graphic Representation of Data, 437 Measures of Central Tendency, 440 Measures of Variability, 442 Comparable Scores, 443 Percentiles, 446 Correlation, 447	
B	Taylor-Russel Tables (Institutional Prediction)	454
C	Lawshe Expectancy Tables (Individual Prediction)	457
D	Representative Personnel Tests	459
	Tests, 459 Test Publishers, 460	
	About the Authors	462
	Index	463