# INDUSTRIAL-ORGANIZATIONAL PSYCHOLOGY

IOHN B. MINER

# Industrial-Organizational Psychology

John B. Miner

The State University of New York at Buffalo

### McGraw-Hill, Inc.

New York St. Louis San Francisco Auckland Bogotá
Caracas Lisbon London Madrid Mexico City Milan
Montreal New Delhi San Juan Singapore
Sydney Tokyo Toronto

#### Industrial-Organizational Psychology

Copyright © 1992 by McGraw-Hill, Inc. All rights reserved. Printed in the United States of America. Except as permitted under the United States Copyright Act of 1976, no part of this publication may be reproduced or distributed in any form or by any means, or stored in a data base or retrieval system, without the prior written permission of the publisher.

6 7 8 9 0 DOC/DOC 9 0 9 8

#### ISBN 0-07-042440-3

This book was set in Palatino by The Clarinda Company. The editors were Christopher Rogers and James R. Belser; the designer was Wanda Siedlecka; the production supervisor was Denise L. Puryear. R. R. Donnelley & Sons Company was printer and binder.

This book is printed on acid-free paper.

#### Library of Congress Cataloging-in-Publication Data

Miner, John B.

Industrial-organizational psychology/John B. Miner.

Includes bibliographical references and index.

ISBN 0-07-042440-3

1. Psychology, Industrial. 2. Oganizational behavior.

I. Title.

HF5548.8.M497 1992

158.7-dc20 91-16818

### **Preface**

In recent decades, industrial-organizational psychology has been changing rapidly. Twenty-five years ago the textbooks carried titles such as *Industrial Psychology* and *Personnel and Industrial Psychology*. Their content concentrated heavily on personnel matters, with a smattering of organizational psychology and human factors psychology. Consumer psychology and applications of psychological knowledge to marketing might or might not be covered.

What the field now has come to can be illustrated with reference to a survey of 427 psychologists teaching courses in industrialorganizational psychology. This survey preceded the writing of this book and in a number of respects helped to guide its development. The most striking aspect of the responses was what these psychologists had to say about organizational psychology. Roughly 55 percent taught a course that was equally balanced between organizational and personnel content. Another 30 percent emphasized organizational psychology more than personnel psychology. Only about 15 percent were following the prevailing practice of twenty-five years before. In this book the balance between organizational and personnel content is roughly equal, although there is one more chapter in the organizational part. The part of the book dealing with organizational psychology is placed first to reflect the predominant emphasis in courses at the present time. As indicated in Chapter 1, there is a logical rationale for this placement as well. However, some professors may wish to take up personnel psychology first. The material is presented so as to facilitate doing this.

The survey yielded mixed results regarding human factors and engineering psychology. A slight majority of the respondents gave little or no attention to this subject in their courses. Either they considered it more appropriately taught elsewhere in the curriculum, or they felt that they had insufficient time to include it. Clearly, the time devoted to human factors subject matter in industrialorganizational psychology courses has declined sharply over the past twenty-five years; new developments in personnel-related areas and the burgeoning of the field of organizational psychology have simply pushed it to the periphery. Reflecting this trend, and in order to cover all that is needed in the key organizational and personnel areas, this book does not contain a separate, chapter-length treatment of human factors and engineering psychology. Content from this area is included at various points, however, throughout the book. This is true in particular of the discussion of work redesign in Chapter 4, of work and stress in Chapter 6, of work redesign and sociotechnical interventions in Chapter 11, of job analysis in Chapter 13, and of safety psychology and the work context in Chapter 20.

Consumer psychology has never been part of the standard fare in industrial-organizational psychology. The survey results indicate that it still is not. Just over 70 percent of the professors give little or no attention to this subject. There are a number of reasons for this, including the rise of consumer behavior and consumer psychology as a separate and distinct field of its own. In any event, this book follows prevailing practice and accordingly devotes little space to this topic.

Twenty-five years ago legal considerations would hardly have been mentioned in a book such as this. Today they are entwined with almost every aspect of the field. The practice here has been to consider relevant legal constraints and methods of dealing with them as appropriate throughout the book. Chapter 12 in particular is concerned with fair employment practices law and its relationship to psychology. The statistical appendix presents various statistical approaches in the context of their relevance for dealing with legal issues.

One factor that has changed very little over the years is the importance of research and research design, including statistical analysis, to industrial-organizational psychology. The field not only uses knowledge gained from research as its stock in trade, it is one of the few social science disciplines where normal professional practice actually involves the conduct of applied research. Accordingly, it should not come as a surprise that substantial attention is given to research procedures and results in this book. In general, the approach has been to take up appropriate research designs as the need to do so emerges. However, Chapters 16 and 19 both contain major segments dealing with research design, and statistics receive special attention in the appendix. Furthermore, among the 100 boxes scattered throughout the book, fifty-eight present actual research studies conducted either in a field setting or in the laboratory. Many more exhibits present the results of research studies.

### ■ THE ORGANIZATION OF THE BOOK

As noted, organizational psychology comes first, after the introductory chapter. The approach in presenting this material is the

common one of moving from aspects of the individual, to groups, and finally to the organizational level, thus dealing with increasing degrees of social complexity. At the individual level, Chapter 2 takes up cognitive processes such as learning, intelligence, and individual decision making. Then there are two chapters dealing with individual motivation, a core aspect of organizational psychology. Chapter 5 considers attitudes, commitments, and values; job satisfaction has long been of major concern to industrialorganizational psychologists. The concluding chapter among those dealing with factors within the individual focuses on human personality, with particular attention to emotional stress.

Chapters 7 and 8 move to the next higher level, dealing with group processes and group decision making, respectively. Chapters 9 and 10 discuss leadership, another key area within organizational psychology. Leadership is both an aspect of group functioning and an organizational activity; as such, the subject bridges the two levels. Chapter 11 discusses issues of exclusively organizational concern.

Part Three takes up subject matter related to personnel and human resources practice. Chapters 12 and 13 form something of a unit. The first deals with the people who come into an organization. The second considers the jobs that they find there. Both subjects, individual differences and job analysis, form a backdrop for the chapters which follow. Chapters 14 and 15 are concerned with the evaluation of employee performance. It is important to understand how performance is graded at an early point, because information of this kind is used subsequently to select people for hiring and placement. The next three chapters focus on the process of bringing people into organizations and jobs: Chapter 16 takes up selection research designs in all their complexity; Chapter 17 deals with interviews, application blanks, references, and the like; and Chapter 18 discusses psychological testing. The remaining two

chapters introduce various topics related to maintaining and improving performance once the individual enters an organization. Training, management development, and career development are considered in Chapter 19. Safety psychology, accident prevention, and a group of procedures which have become the focus of industrial clinical psychology are the concern of Chapter 20.

### ■ SPECIAL FEATURES AND SUPPORTING MATERIALS

Certain features of Industrial-Organizational Psychology require explanation. The boxes, "Research in I/O Psychology" and "I/O Psychology in Practice," have already been noted. These are intended to give some flavor of the field as it really happens. In addition, each chapter is introduced with an episode or illustration intended to provide an introduction to the material that follows. Other aids to learning include an outline of chapter content at the beginning of each chapter and a listing of key terms used in the chapter at the end. These key terms are printed in bold type when initially described in the text and they are included in the glossary at the end of the book. The references cited in the text are listed in full at the back of the book. These titles. and the sources noted for exhibits, boxes, and the like, may be used to explore the various subjects in greater depth. Discussion questions and chapter summaries also appear at the end of the chapters. Along with the statistical appendix at the end of the book are three indexes—one broken down by the names of organizations mentioned, one by the names of individual authors cited, and one by subject matter.

One question asked of professors teaching this course was whether they wanted cases to supplement the text; 65 percent said they did. There are 20 cases, one for each chapter. The cases are presented with questions following, the objective being to focus on key points.

A number of the cases, boxes, and exhibits derive from the author's own experience. Given this, it is appropriate to be somewhat more explicit in this regard. There is no question but that my professional experience has influenced much that is written here. I have been a licensed psychologist since 1960. Early in my career I served as chief psychologist for the Atlantic Refining Company (now ARCO) at corporate headquarters. Later I served in a similar capacity, albeit on a consulting basis, with McKinsey and Company, the international consulting firm. For many years I have handled consulting assignments of a psychological nature for a variety of organizations-Baxter Laboratories; the U.S. Equal Employment Opportunity Commission; Rubbermaid; Towers, Perrin, Forster and Crosby; Western Michigan University; and many others. This experience includes work with a number of lawyers and law firms as an expert witness in discrimination cases. To write effectively about research in industrial-organizational psychology, one needs to have done it. To write about practice, one needs to have done that, too. I am privileged to have had considerable experience in both areas. This experience has had a profound impact at many points in this book.

The survey of professors in the field of industrial-organizational psychology mentioned earlier indicated that 70 percent wanted an instructors' manual. This manual, with test questions, has been provided by Dean McFarlin, Marquette University. Other supporting materials, such as readings, films, experiential exercises, and the like, may also be incorporated in a particular offering, but are not a specific part of the package included with this text.

### **■** ACKNOWLEDGMENTS

First and foremost, it is important to acknowledge the guidance received from the 427 professors who participated in the initial survey.

Obviously there are too many to thank individually, but the collective impact of these people on this book's structure and organization has been substantial.

At the next level are seven professors who reviewed all or major portions of the manuscript in considerable detail. These individuals did a great deal of work, and their suggestions resulted in many changes throughout the manuscript. I am most grateful of them: Donald D. Davis, Old Dominion University; Christopher J. Frost, Southwest Texas State University; Jane A. Halpert, DePaul University; Steven W. J. Kozlowski, Michigan State University; Leonard Kroecker, San Diego State University; Rosemary H. Lowe, University of West Florida; Janet A. Sniezek, University of Illinois.

It is difficult to acknowledge all the help received from my publisher, because this book has been through so many hands. Like many other books in the recent past, this one has resulted from the merger of two organizations—the college division of Random House and McGraw-Hill. As a result, more than the usual number of individuals have made a contribution. I do thank all of them.

Finally, I owe a deep debt of appreciation to two people who have become true experts at moving a book such as this through to publication. One is my secretary at SUNY Buffalo, Nancy Carrigan. She has taken the manuscript through every phase, from typing the first chapter into the computer to obtaining the last permissions. Second is my wife, Barbara Miner, who knows every aspect of manuscript publication and accordingly has eased the way at numerous points throughout this lengthy process.

JOHN B. MINER

## Contents

| PART ONE<br>INTRODUCTION   | 1          | World War II The Recent Past Organization of the Book Key Terms Summary Questions Case Problem: David D. Robinson, Ph.D., Industrial-Organizational Psychology Consultant | 22<br>22<br>23<br>24<br>24<br>25 |
|--|------------|---|----------------------------------|
| 1 The Field of Industrial- Organizational Psychology                 | 2          | PART TWO<br>ORGANIZATIONAL<br>PSYCHOLOGY  | 27                               |
| Relations to Human Resource  |            |   |                                  |
| Management   | 5          | 2   |                                  |
| What Is Human Resource Management?<br>How Does Psychology Fit In?    | 5<br>5     | <b>Cognitive Processes</b>  | 28                               |
| Relations to Organizational Science                                  | 8          | Learning  | 31                               |
| What Is Organizational Science                                       | 8          | Learning Concepts   | 32                               |
| How Does Psychology Fit In?  | 8          | Identifying Learning Effects  | 34                               |
| Careers in Industrial-Organizational                                 |            | Single and Double Loop Learning Intelligence and Mental Abilities   | 34                               |
| Psychology   | 10         | Development of Intelligence   | 37                               |
| Industrial-Organizational Psychology<br>in the Context of Psychology | 11         | Intelligence and Performance Dealing with Intellectual Influences   | 37<br>38                         |
| Primary Employment Settings<br>Licensing and Certification Issues    | 11<br>12   | on Performance  | 39                               |
| Theory and Research  | 14         | Individual Decision Making  | 41                               |
| Theory   | 14         | Approaches to Decision Making   | 41                               |
| Research   | 14         | Creativity  | 44                               |
| Scientific Values  | 15         | Cognitive Style   | 47                               |
| Brief History of Industrial-Organizational                           |            | Key Terms   | 49                               |
| Psychology   | 1 <i>7</i> | Summary   | 49                               |
| Beginnings   | 18         | Questions   | 50                               |
| World War I<br>The Interval between the Wars                         | 21         | Case Problem: Elizabeth Kasabian,   |                                  |
| rne mervar between the wars  | 21         | Saleswoman  | 50                               |
|  |            |   | vii                              |

| 2  |            | Behavior Modeling   | 10.        |
|--|------------|---|------------|
| 3  |            | Reward Systems  | 105        |
| Motivation Theories and Their                            |            | The Role of Rewards in Organizations                                | 105        |
| Applications   | 53         | Monetary Reward Systems   | 10         |
| Need Theories  | 55         | Rewards and Punishments   | 108        |
| Need-Hierarchy Theory                                    | 55         | Key Terms   | 109        |
| Achievement-Motivation Theory                            | 59         | Summary   | 110        |
| Role-Motivation Theories                                 | 62         | Questions   | 111        |
| Hierarchic (Managerial) Role-Motivation                  |            | Case Problem: Willard Davison,                                      |            |
| Theory   | 63         | Industrial Salesman   | 111        |
| Professional Role-Motivation Theory                      | 64         |   |            |
| Task Role-Motivation Theory                              | 65         | 5   |            |
| Equity Theory  | 67         | Attitudes, Commitments, and   |            |
| Formulas and Propositions<br>Reactions to Inequity       | 68<br>70   | Values  | 114        |
| Scientific Value and Practical Usefulness                | 70<br>70   | Mode Assistance and Late Cartiff                                    |            |
| Expectancy Theories                                      | 72         | Work Attitudes and Job Satisfaction  The Nature of Job Satisfaction | 115        |
| The Model  | 72         | Consequences of Job Satisfaction                                    | 116<br>119 |
| Scientific Value and Practical Usefulness                | 74         | The Importance of Job Satisfaction                                  | 122        |
| Key Terms  | <i>7</i> 5 | Types of Work-Related Commitments                                   | 124        |
| Summary  | 76         | The Nature of Organizational  |            |
| Questions  | 76         | Commitment  | 124        |
| Case Problem: Adele Jones, Publishing                    | , 0        | Consequences of Organizational                                      |            |
| Executive  | 77         | Commitment  | 127        |
|  | ,,         | Union Commitment<br>Behavioral Commitment                           | 127        |
|  |            | Values and Ethics   | 128        |
| 4  |            |   | 130        |
| <b>Motivational Practices and Their</b>                  |            | Values in International Perspective<br>The Mesh of Values and Jobs  | 130<br>133 |
| Theories   | 79         | The Work Ethic  | 134        |
| Carl Cattle  |            | Ethical Systems   | 135        |
| Goal Setting   | 80         | Key Terms   | 136        |
| Locke's Concept of Goal Setting Management by Objectives | 81         | Summary   | 137        |
| Goal Setting in Perspective                              | 83<br>85   | Questions   | 139        |
| Work Redesign  | 85         | Case Problem: Chuck Holeman, Retail                                 | 133        |
| Herzberg's Approach                                      | 86         | Sales Representative  | 140        |
| The Hackman-Oldham Approach                              | 88         |   |            |
| Alternative Work Schedules                               | 93         | 6   |            |
| Organizational Behavior Modification                     | 96         | Personality Processes Including                                     |            |
| The Nature of Operant Learning                           | 96         | Emotional Stress  | 143        |
| Contingencies of Reinforcement                           | 96         |   |            |
| Reinforcement Schedules                                  | 97         | Personality Constructs and Performance                              | 145        |
| The Process of Organizational Behavior<br>Modification   | 00         | The Meaning of Personality  | 145        |
| From Radical Behaviorism to Social                       | 98         | Assessment Centers Personality Characteristics Important            | 148        |
| Learning Theory  | 101        | to Performance  | 149        |

| Work, Stress, and Emotion                             | 152        | The Phases of Group Decision Making                        | 204        |
|---|------------|--|------------|
| The Nature of Stress                                  | 152        | Where Group Decision Making Can                            |            |
| External Sources of Stress                            | 158        | Go Wrong   | 205        |
| The Person in Stress Reactions                        | 160        | Conformity   | 203        |
| Dealing with Stress                                   | 162        | Groupthink   | 206        |
| Key Terms   | 166        | Group Polarization and the Risky Shift                     | 208        |
| Summary   | 166        | Escalating Behavioral Commitments                          | 209        |
| Questions   | 167        | The Effect of Group Composition                            |            |
| Case Problem: Marcia White, Utility                   |            | on Decision Making   | 209        |
| Machine Operator                                      | 167        | How Large Should the Group Be?                             | 209        |
|   |            | How Similar Should the Members Be?                         | 210        |
| 7   |            | Which Decision-Making Structure Should<br>Be Used?         | 211        |
| Groups in Organizations                               | 171        | Quality Circles  |            |
| · ·   | 171        | Japanese Origins   | 214        |
| Roles of Groups in Organizations                      | 174        | What Is Involved   | 215<br>215 |
| The Nature of Organizational Groups:                  |            | Effectiveness of Quality Circles                           | 218        |
| Definitions   | 174        | Key Terms  | 221        |
| Membership and Reference Groups<br>Formal Work Groups | 174<br>176 | Summary  | 221        |
| Management Teams                                      | 176        | Questions  |            |
| Part-Time Groups                                      | 177        | •  | 222        |
| Temporary Groups                                      | 178        | Case Problem: Joyce Greenberg, Lawyer                      | 223        |
| Informal Groups                                       | 178        |  |            |
| Group Processes                                       | 179        | 9  |            |
| Group Maturity  | 179        | Leadership Styles  | 225        |
| Group Norms   | 181        | • ,  |            |
| Group Cohesion<br>Factors in Effectiveness            | 182        | Leadership Issues  | 227        |
|   | 185        | Defining Leadership  | 227        |
| Participative Groups and Group-Based Systems          | 106        | Does Leadership Make a Difference?<br>Traits in Leadership | 228        |
| ·   | 186        | Male and Female Leaders                                    | 230<br>231 |
| Laboratory, Sensitivity, or T-Group<br>Training       | 186        | Substitutes for Leadership                                 | 231        |
| Team Building   | 187        | Participative Leadership Theories                          | 233        |
| Autonomous Work Groups                                | 190        | Theory X and Theory Y                                      | 233        |
| Key Terms   | 193        | The Theory of System 4 and 4T                              | 233        |
| Summary   | 193        | Contingency Theory of Leadership                           | 241        |
| Questions   | 194        | The Least Preferred Coworker (LPC)                         | 241        |
| Case Problem: Joe Johnson, Production                 | 1 3-4      | Measure  | 242        |
| Foreman   | 194        | Defining the Leadership Situation                          | 242        |
| . Greman  | 134        | The Octant Model   | 244        |
| 0   |            | How Well Does Contingency Theory                           |            |
| 8   |            | Work?<br>The Leader Match Concept                          | 244        |
| Group Decision Making                                 | 198        | Theoretical Extensions to Cognitive                        | 244        |
| Creativity in Groups                                  | 200        | Resources  | 245        |
| Ways to Foster Creativity                             | 200        | Theories of Consideration and Initiating                   | _,,        |
| Group Processes and Creativity                        | 202        | Structure, and Their Derivatives                           | 247        |
| *   |            |  | • • •      |

| Constructs The Managerial Grid  | 247<br>250 | 11<br>Organization Development            | 290        |
|---|------------|---|------------|
| Situational-Leadership Theory   | 252        | Concepts and Values                       | 292        |
| Key Terms   | 253        | What Is Organization Development?         | 292        |
| Summary   | 254        | Organization Development and Quality      |            |
| Questions   | 255        | of Work Life                              | 293        |
| Case Problem: Wayne Tindall, Sales                                    |            | The Matter of Values                      | 293        |
| Manager   | 255        | Resistance to Change                      | 295        |
|   |            | Process and Technology Stemming from      |            |
| 10  |            | Individual and Group-Membership           | 206        |
| <b>Leadership Frontiers</b>   | 258        | Concepts                                  | 296        |
| •   |            | Management by Objectives<br>Work Redesign | 297        |
| Choice Approaches to Participation                                    | 259        | The Scanlon Plan                          | 297<br>299 |
| Vroom and Yetton's Decision Tree for                                  |            | From T-Groups to Team Building            | 299        |
| Leadership<br>The Influence-Power Continuum                           | 259        | Sociotechnical Interventions and          | 200        |
|   | 263        | Autonomous Groups                         | 301        |
| The Vertical-Dyad Linkage Model                                       | 266        | Quality Circles                           | 303        |
| In-Group and Out-Group Relationships<br>Consequences of Vertical-Dyad | 266        | Process and Technology Stemming from      |            |
| Relationships   | 267        | Leadership Concepts                       | 303        |
| Training toward In-Group Relationships                                | 267<br>269 | Grid Organization Development             | 303        |
| The Idea of Mentoring   | 270        | The Survey-Feedback Approach              | 308        |
| Attribution Theory and Leader   |            | Organization Development and              |            |
| Perceptions of Poor Performance                                       | 270        | Performance                               | 309        |
| Attribution Theory and the Individual                                 |            | Overall Evaluations of Research           | 309        |
| Employee  | 271        | The Problem of Positive-Findings Bias     | 311        |
| Extensions to Group Poor Performance                                  | 274        | Quantum versus Incremental Change         | 311        |
| Significance for Improving Performance                                | 274        | Key Terms                                 | 313        |
| Path-Goal Theory  | 276        | Summary                                   | 313        |
| Evans's Views   | 277        | Questions                                 | 314        |
| House's Views   | 277        | Case Problem: W. Warner Burke,            |            |
| Evidence  | 279        | Organization Development Consultant       | 314        |
| Charismatic and Transformational                                      |            |   |            |
| Leaders   | 279        | PART THREE                                |            |
| Formulations Regarding Charismatic                                    |            | INDUSTRIAL PSYCHOLOGY                     | 319        |
| Leadership<br>Transactional and Transformational                      | 279        |   |            |
| Leaders   | 201        | 12  |            |
| The Romance of Leadership   | 281<br>285 | The Role of Individual, Group,            |            |
| Key Terms   | 286        | and Cultural Differences                  | 320        |
| Summary   | 286        |   | 320        |
| Questions   | 287        | The Importance of Individual and Group    |            |
| Case Problem: Phyllis McCarthy Glaze,                                 | 20/        | Differences                               | 322        |
| Factory Inspector   | 288        | Group Differences                         | 322        |
| / moperior  | 200        | How Groups Are Formed                     | 324        |

| Group Differences Made Important  |            | Summary  | 374 |
|---|------------|--|-----|
| by Legislation  | 325        | Questions  | 374 |
| Gender Differences  | 325        | Case Problem: Job Analysis: Problems             |     |
| Black–White Differences   | 326        | in New-Product Development                       | 375 |
| Age Difference  | 328        |  |     |
| The Reason Legally Specified Group  | 330        | 14   |     |
| Differences Are Important Cultural Differences                            |            |  |     |
|   | 330        | Approaches to Performance                        |     |
| Managerial Authority in French Culture<br>Paternalism in Japanese Culture | 333<br>334 | Appraisal  | 377 |
| Dealing with Cultural Differences   | 335        | The Roles of Performance Appraisal               | 379 |
| Key Terms   | 338        | The Nature of Performance Appraisal              | 379 |
| Summary   | 338        | Uses of Performance Appraisals                   | 379 |
| ·   |            | Judgmental Appraisal                             | 381 |
| Questions   | 338        | Appraisal by Supervisors                         | 381 |
| Case Problem: Caught between the Court                                    | .S         | Appraisal by Peers or Subordinates               | 383 |
| and Organizational Values: A Bank in Trouble                              | 220        | Alternative Approaches                           | 386 |
| Trouble   | 339        | Objective Measures                               | 395 |
|   |            | Quality and Quantity of Work as                  |     |
| 13  |            | Performance Standards                            | 395 |
| Job Analysis and Job Evaluation   | 341        | Cost and Profit                                  | 396 |
| Job Analysis and Job Evaluation   | 341        | Productivity Measurement                         | 397 |
| Job Analysis: Definitions, Applications,                                  |            | Measures of Withdrawal<br>Measures of Resistance | 400 |
| and Scope   | 344        |  | 403 |
| Terminology of Occupational Study   | 344        | Appraisal by Attitude Survey                     | 406 |
| Applications of Job Analysis  | 345        | Career Appraisal                                 | 406 |
| Elements of the Job Description   | 347        | Key Terms  | 407 |
| The Job Specification   | 349        | Summary  | 408 |
| Methods of Job Analysis   | 352        | Questions  | 408 |
| Observation of the Job Occupant   | 352        | Case Problem: Management Appraisal:              |     |
| Interview of the Job Occupant<br>Job Occupant Description                 | 353<br>354 | MBO and Alternatives                             | 409 |
| Examination of Previous Job Descriptions                                  | 355        |  |     |
| Examination of Work Materials   | 355        |  |     |
| Performance of Work Activities  | 355        | 15   |     |
| Developing Job Families   | 357        | Performance Rating Systems                       | 411 |
| The Position Analysis Questionnaire                                       | 358        | Behavioral Specificity in Rating Systems         | 413 |
| Career Ladders and Functional Job   |            | Evaluation against Highly Behaviorally           |     |
| Analysis  | 360        | Specific, Formal Role Requirements               | 413 |
| Using the Approaches  | 361        | Evaluation against Low Behavioral                |     |
| Job Evaluation  | 363        | Specificity Criteria                             | 414 |
| Methods of Job Evaluation   | 363        | Error and Bias in Ratings                        | 415 |
| Selecting a Job Evaluation Method   | 367        | Halo   | 415 |
| Bias in Evaluating Jobs<br>The Comparable-Worth Issue                     | 369<br>370 | Constant Error                                   | 419 |
| Key Terms   |            | Errors of Central Tendency and Range             |     |
| ncy reinis  | 373        | Restriction                                      | 419 |

| Recency Error                                      | 419        | Differential Validity                     | 460 |
|--|------------|---|-----|
| Similar-to-Me Errors                               | 420        | Limitations on Selection                  | 462 |
| Personal Bias                                      | 420        | Sources of Failure                        | 462 |
| Bias and Equal Employment Opportunity              | 420        | Self-Selection and Realistic Job Previews | 464 |
| Reducing Error through Training                    | 421        | The Invasion-of-Privacy Question          | 466 |
| Types of Rating Methods                            | 421        | Union Influence                           | 466 |
| Rating Scales                                      | 421        | Return on the Investment                  | 467 |
| Employee Comparison Systems                        | 423        | Key Terms                                 | 468 |
| Behavior Lists<br>Essay Evaluations                | 425<br>431 | Summary                                   | 469 |
| Performance Simulations                            | 433        | Questions                                 | 469 |
| Resistance to Evaluation                           | 434        | Case Problem: Selection Processes: City   |     |
| Seniority and Union Resistance                     | 435        | Government Priorities                     | 470 |
| Overcoming Resistance                              | 436        |   |     |
| Legal Considerations                               | 437        | 17  |     |
| Usefulness of Appraisal Methods                    | 438        | 17  |     |
| Judged Usefulness                                  | 438        | Interviews, Application Blanks,           |     |
| Use as a Criterion                                 | 440        | and References                            | 471 |
| Key Terms  | 440        | The Interview                             | 474 |
| Summary  | 440        | What Is Known                             | 474 |
| Questions  | 441        | Types of Employment Interviews            | 481 |
| Case Problem: Performance Appraisal:               |            | The Interview and Selection Models        | 482 |
| The Rated Ranking Technique at                     |            | Application Blanks and Biographical       |     |
| Georgia Kaolin                                     | 442        | Inventories                               | 483 |
|  |            | Application Blanks                        | 483 |
| 16   |            | Weighting Application Blank Items         | 484 |
| Research Designs and Selection                     |            | Biographical Inventories                  | 486 |
| Models   | 445        | References and Background                 |     |
| Models   | 443        | Investigations                            | 491 |
| The Longitudinal Prediction Model                  | 447        | Validity Considerations                   | 491 |
| Case 1: Single Predictor                           | 447        | Written Recommendations and Field         | 400 |
| Case 2: Multiple Predictors                        | 448        | Investigations<br>Legal Considerations    | 492 |
| The Concurrent Model                               | 452        | Key Terms                                 | 493 |
| Other Approaches to Validation                     | 453        | Summary                                   | 494 |
| Content and Construct Validity                     | 453        | •   | 494 |
| Moderator Variables                                | 454        | Questions                                 | 495 |
| Utility Analysis in Selection                      | 455        | Case Problem: Validation of Selection     |     |
| Validity Generalization                            | 456        | Procedures: Comprehensive Analysis        |     |
| Reliability  | 457        | in an Oil Company                         | 495 |
| Test-Retest Reliability                            | <i>457</i> |   |     |
| Parallel-Form Reliability                          | <i>457</i> | 18  |     |
| Internal Consistency Reliability                   | 458        | <b>Employment Testing</b>                 | 497 |
| Interrater Reliability<br>Reliability and Validity | 458<br>450 | . ,                                       | 731 |
|  | 459<br>460 | Testing Abilities                         | 499 |
| Selection and Fair Employment                      | 460        | Multiability Tests                        | 499 |
| Validation Requirements                            | 460        | Tests of Special Intellectual Abilities   | 501 |

|  |            | CONTENTS  | xiii         |
|--|------------|---|--------------|
| Psychomotor and Physical Ability Tests     | 502        | Committee Assignments   | 541          |
| General Pattern of Validities: Abilities   | 504        | Methods and Approaches in Employee                            |              |
| Festing Personality                        | 506        | Training  | 542          |
| Self-Report Techniques                     | 506        | On-the-Job Training   | 542          |
| Projective Techniques                      | 508        | Vestibule Training  | 543          |
| Graphology                                 | 511        | Orientation Training and Socialization                        | 543          |
| Drug Testing                               | 511        | Apprenticeship  | 545          |
| General Pattern of Validities: Personality | 512        | Individualized Instruction                                    | 545          |
| Festing Skills and Achievements            | 513        | Individual and Team Simulations                               | <i>547</i>   |
| Work Sample Procedures                     | 513        | Career Planning and Development                               | 549          |
| Achievement Tests                          | 515        | Activities Involved   | 549          |
| General Pattern of Validities: Skills and  |            | Evaluation  | 551          |
| Achievements                               | 516        | Key Terms   | 553          |
| Using and Not Using Tests                  | 516        | Summary   | 553          |
| Key Terms                                  | 518        | Questions   | 554          |
| Summary                                    | 518        | Case Problem: Sales Training: The                             | 55.          |
| Questions                                  | 519        | Needs of Department Store Clerks                              | 554          |
| Case Problem: Introducing a Testing        |            | recess of Department Store Crerks                             | 337          |
| Program: Upgrading Sales Operations        |            |   |              |
| or a Publishing House                      | 519        | 20<br>Safety Psychology and Industrial<br>Clinical Psychology | 556          |
| 19   |            | Safety Management and Safety                                  |              |
| Training and Development                   | 521        | Psychology  | 558          |
| introduction to Training and               |            | Accident Statistics and Reports                               | 562          |
| Development                                | 523        | Safety Training   | 564          |
| Training versus Education                  | 523        | Safety Publicity and Contests                                 | 566          |
| Approaches Previously Discussed            | 524        | Control of the Work Environment                               | 566          |
| Evaluation of Change Models                | 525        | Inspection and Discipline                                     | 568          |
| The Before–After Model                     | 525        | Improved Safety Climate                                       | 568          |
| The After-Only Model                       | 526        | Differential Accident Liability                               | 568          |
| Retention and Organizational Relevance     | 320        | Characteristics of Accident Repeaters                         | <i>570</i>   |
| Factors                                    | <i>527</i> | Dealing with High Accident Liability                          | <i>572</i>   |
| Subjects as Their Own Controls             | 531        | Industrial Clinical Psychology:                               |              |
| Establishing Training Needs                | 532        | Diagnosis   | 573          |
| Specific Techniques in Training-Needs      |            | The Clinical Model and Performance                            |              |
| Analysis                                   | 533        | Control   | <i>573</i>   |
| Training Needs and Jobs Analysis           | 535        | Individual Causes of Failure                                  | <i>576</i>   |
| Methods and Approaches in Management       |            | Group Causes of Failure                                       | 578          |
| Development                                | 535        | Organizational/Contextual Causes                              | F <b>3</b> 0 |
| Lecture and Discussion                     | 535        | of Failure  | <i>579</i>   |
| Case Study                                 | 536        | Industrial Clinical Psychology: Treatment                     | _            |
| Polo Plaving                               | 527        | and Corrective Action   | 581          |

*537* 

*537* 

539

540

Counseling

**Key Terms** 

Employee Assistance Programs

582

585

587

Role Playing

Business Games

University and University-Type Programs

Job Rotation and Understudy Assignments

### xiv CONTENTS

| Summary   | 58 <i>7</i> | Indexes             |     |
|---|-------------|---------------------|-----|
| Questions   | 588         |                     |     |
| Case Problem: Anthony Ciccelli,<br>Training Coordinator | 589         | Organizations Index | 649 |
| Statistical Appendix                                    | 592         | Name Index          | 653 |
| Glossary  | 603         | Subject Index       | 665 |
| References  | 619         |                     |     |

# **Case Problems**

| 1. | David D. Robinson, Ph.D.,<br>Industrial-Organizational |     | 13. | Job Analysis: Problems in New-<br>Product Development | 375 |
|----|--|-----|-----|---|-----|
|    | Psychology Consultant                                  | 25  | 14. | Management Appraisal: MBO and                         |     |
| 2. | Elizabeth Kasabian, Saleswoman                         | 50  |     | Alternatives  | 409 |
| 3. | Adele Jones, Publishing Executive                      | 77  | 15. | Performance Appraisal: The Rated                      |     |
| 4. | Willard Davison, Industrial                            |     |     | Ranking Technique at Georgia                          |     |
|    | Salesman   | 111 |     | Kaolin  | 442 |
| 5. | Chuck Holeman, Retail Sales                            |     | 16. | Selection Processes: City                             |     |
|    | Representative   | 140 |     | Government Priorities                                 | 470 |
| 6. | Marcia White, Utility Machine                          |     | 17. | Validation of Selection Procedures:                   |     |
|    | Operator   | 167 |     | Comprehensive Analysis in an Oil                      |     |
| 7. | Joe Johnson, Production Foreman                        | 194 |     | Company   | 495 |
| 8. | Joyce Greenberg, Lawyer                                | 223 | 18. | Introducing a Testing Program:                        |     |
| 9. | Wayne Tindall, Sales Manager                           | 255 |     | Upgrading Sales Operations for a                      |     |
| 0. | Phyllis McCarthy Glaze, Factory                        |     |     | Publishing House                                      | 519 |
|    | Inspector  | 288 | 19. | Sales Training: The Needs                             |     |
| 1. | W. Warner Burke, Organization                          |     |     | of Department Store Clerks                            | 554 |
|    | Development Consultant                                 | 314 | 20. | Anthony Ciccelli, Training                            |     |
| 2. | Caught between the Courts and                          |     |     | Coordinator   | 589 |
|    | Organizational Values: A Bank                          |     |     |   |     |
|    | in Trouble   | 339 |     |   |     |

## List of Boxes

| 1-1 | Industrial-Organizational Psychology at AT&T after             |    | 3-5 | "Cafeteria Compensation" at TRW                                 | 75   |
|-----|--|----|-----|---|------|
| 1-2 | Divestiture How Industrial-Organizational                      | 13 | 4-1 | Goal Setting by Logging Crews<br>Supplying Timber to Georgia    |      |
|     | Psychology's Theories Have Fared                               | 16 |     | Kraft Company   | 83   |
| 1-3 | Did Psychological Evaluations at McKinsey and Company Result   |    | 4-2 | Orthodox Job Enrichment at Hill Air Force Base                  | 88   |
|     | in the Hiring of Better<br>Consultants                         | 18 | 4-3 | Job Enrichment at Bankers Trust<br>Company                      | 92   |
| 1-4 | An Example of Laboratory Research—Studying Performance         |    | 4-4 | The Compressed Work Week at<br>Temple-Eastex                    | 94   |
| 1 5 | Appraisal with College Students at the University of Tennessee | 19 | 4-5 | Reinforcement Schedules at Weyerhaeuser                         | 98   |
| 1-5 | How Researchers' and Managers' Values Can Clash                | 20 | 4-6 | Effects of Removing Contingent<br>Reinforcement on Major League |      |
| 2-1 | The Strategic Role of Engineering<br>Training at IBM           | 32 | 4-7 | Baseball Pitchers  Monetary Incentives at Lincoln               | 101  |
| 2-2 | Intelligence and Management Assessment at ITT                  | 40 |     | Electric Company  | 108  |
| 2-3 | Departures from Maximizing in a                                | 40 | 5-1 | Is Job Satisfaction Inherited?                                  | 117  |
|     | Computer Simulation at MIT                                     | 45 | 5-2 | The Sears, Roebuck Attitude<br>Surveys as Predictors            |      |
| 2-4 | Training in Creative Problem Solving                           | 48 |     | of Absenteeism  | 122  |
| 3-1 | Abraham Maslow on Different                                    | 40 | 5-3 | Organizational Commitment in the U.S. Army Reserve              | 126  |
|     | Management Principles at Different Levels in the               |    | 5-4 | Examples of Behavioral Commitment                               | 129  |
| 3-2 | Management Hierarchy Achievement-Motivation Training           | 57 | 5-5 | Values in the Multinational<br>Operations of IBM                | 132  |
|     | at Metropolitan Economic<br>Development Association            | 61 | 5-6 | Morality and Ethics at Norton<br>Company                        | 136  |
| 3-3 | Managerial Role-Motivation Training at the University          |    | 6-1 | Personality Profile of Effective                                |      |
|     | of Denver  | 64 | 6-2 | Sears, Roebuck Store Managers Personality Characteristics       | 146  |
| 3-4 | The Initial Research on Equity Theory at New York University   | 71 | 0-2 | Required in Various Strategic Situations                        | 147  |
|     |  |    |     | ORGANIO III   |      |
|     |  |    |     |   | xvii |