BRIEF CONTENTS

PART 1 FUNDAMENTALS

1 WHAT IS INDUSTRIAL AND ORGANIZATIONAL PSYCHOLOGY? 2

2 STUDYING AND INTERPRETING WORKER BEHAVIOR 40

PART 2 INDUSTRIAL PSYCHOLOGY

3 INDIVIDUAL DIFFERENCES 76

4 ASSESSING INDIVIDUALS 120

5 UNDERSTANDING PERFORMANCE 163

6 PERFORMANCE MEASUREMENT 208

7 STAFFING DECISIONS 252

8 TRAINING AND DEVELOPMENT 291

PART 3 ORGANIZATIONAL PSYCHOLOGY

9 THE MOTIVATION TO WORK 336

10 ATTITUDES, EMOTIONS, AND WORK 378

11 FAIRNESS AND DIVERSITY IN THE WORKPLACE 412

12 LEADERSHIP 439

13 TEAMS IN ORGANIZATIONS 478

14 THE ORGANIZATION OF WORK BEHAVIOR 508

PART 4 THE WORK ENVIRONMENT

15 STRESS AND WORKPLACE HEALTH 552

16 DESIGNING WORK FOR PEOPLE 585

Glossary G-1
References R-1
Credits C-1
Index I-1

CONTENTS

Preface xv

PART 1 FUNDAMENTALS

1 WHAT IS INDUSTRIAL AND ORGANIZATIONAL PSYCHOLOGY? 2

MODULE 1.1
THE IMPORTANCE OF I-O PSYCHOLOGY 3

The Importance of Work in People's Lives 3
The Concept of "Good Work" 3
How Does I-O Psychology Contribute to Society? 6
What Is I-O Psychology? 6
The Demographics of I-O Psychologists 9
SIOP as a Resource 10
A Brief History of I-O Psychology
1876–1930 11
1930–1964 13
The Challenges to I-O Psychology in the 21st Century 15

MODULE 1.2
HOW THIS COURSE CAN HELP YOU 17

Knowledge about the 21st-Century Workplace 17
Preparing for a Career in I-O Psychology 19
Education and Training 19
Getting into a Graduate Program 19

MODULE 1.3
MULTICULTURAL AND CROSS-CULTURAL ISSUES IN I-O PSYCHOLOGY 22

Multiculturalism 22
The Multicultural Nature of Work in the 21st Century 23
Why Should Multiculturalism Be Important to You? 24
Why Is Multiculturalism Important for I-O Psychology? 25
A Theory of Cultural Influence 26
Hofstede's Theory 26
Some Thoughts on Theories of Cultural Influence 29

MODULE 1.4
THE ORGANIZATION OF THIS BOOK 32

Themes 32
Parts 33
Resources 33

2 STUDYING AND INTERPRETING WORKER BEHAVIOR 40

MODULE 2.1
SCIENCE 41

What Is Science? 41
The Role of Science in Society 42
Why Do I-O Psychologists Engage in Research? 43

MODULE 2.2
RESEARCH 45

Research Design 45
Methods of Data Collection 47
Qualitative and Quantitative Research 47
Generalizability and Control in Research 48
Generalizability 48
Control 49
Ethics 50

MODULE 2.3
DATA ANALYSIS 52

Descriptive and Inferential Statistics 52
Descriptive Statistics 52
Inferential Statistics 54
Statistical Significance 54
The Concept of Statistical Power 55
Correlation and Regression 55
The Concept of Correlation 56
The Correlation Coefficient 57
Multiple Correlation 59
Correlation and Causation 60
Meta-Analysis 60

MODULE 2.4
INTERPRETATION 63
Reliability 63
Test-Retest Reliability 64
Equivalent Forms Reliability 64
Internal Consistency 65
Inter-Rater Reliability 65
Validity 66
Criterion-Related Validity 67
Content-Related Validity 69
Construct-Related Validity 70
Validity and the Law: A Mixed Blessing 72

PART 2 INDUSTRIAL PSYCHOLOGY

3 INDIVIDUAL DIFFERENCES 76

MODULE 3.1
AN INTRODUCTION TO INDIVIDUAL DIFFERENCES 77
Some Background 77
Differential Psychology, Psychometrics, and I-O Psychology 78
Varieties of Individual Differences 79

MODULE 3.2
MENTAL AND PHYSICAL ABILITIES 83
A Taxonomy of Abilities 83
Cognitive Abilities 89
Intelligence as "g" 89
Is "g" Important at Work? 90
Can Your Level of "g" Change? 91
Cognitive Abilities beyond "g" 91
Physical, Sensory, and Psychomotor Abilities 93
Physical Abilities 93
Sensory Abilities 95
Psychomotor Abilities 95

MODULE 3.3
PERSONALITY AND INTERESTS 99
Personality 99
The Five Factor Model 99
Practical Issues Associated with Personality Measures 103
Vocational Interests 105

MODULE 3.4
ADDITIONAL PROPOSED INDIVIDUAL DIFFERENCES 109
Skills 109
Knowledge 109
Experience 115
Competencies 116
Emotional Intelligence 116
Identifying Individual Differences: Sinking Shafts 117

4 ASSESSING INDIVIDUALS 120

MODULE 4.1
FOUNDATIONS OF ASSESSMENT 121
The Past and the Present of Testing 121
What Is a Test? 123
What Is the Meaning of a Test Score? 123
Test Users and Test Interpretation 124
What Is a Test Battery? 124
Administrative Test Categories 126
Speed versus Power Tests 126
Group versus Individual Tests 127
Paper and Pencil versus Performance Tests 127
Where to Find Tests 127
Testing and Culture 128

MODULE 4.2
TRADITIONAL ASSESSMENT PROCEDURES 132
Procedures for Assessing Abilities 132
Cognitive Ability Tests 132
Knowledge Tests 134
Tests of Physical Abilities 134
Psychomotor Abilities 134
Personality 136
Emotional Intelligence 137
Interests and Values 137

MODULE 4.3
ADDITIONAL ASSESSMENT METHODS 140
Content versus Process 140
Individual Assessment 140
Interviews 143
Interview Content 143
Interview Process 144
Assessment Centers 144
Work Samples and Situational Tests 147
Work Sample Tests 147

Biographical Data 149
Grades and Letters of Recommendation 152

MODULE 4.4
SPECIAL TOPICS IN ASSESSMENT 154
Incremental Validity 154
Controversial Assessment Practices 154
Graphology 155
The Polygraph 155
Drug and Alcohol Testing 157
Integrity Testing 160
Computer-Based Assessment 160
Computer Adaptive Testing 161

5 UNDERSTANDING PERFORMANCE 163

MODULE 5.1
A BASIC MODEL OF PERFORMANCE 164
Campbell's Model of Job Performance 164
Criterion Deficiency and Contamination 168

MODULE 5.2
EXTENSIONS OF THE BASIC PERFORMANCE MODEL 170
Task Performance versus Contextual Performance 170
Types of Performance Measures 172
Adaptive Performance 173
The Case of Expert Performance 174
Constraints on Performance 176

MODULE 5.3
JOB ANALYSIS: FUNDAMENTAL PROPERTIES AND PRACTICES 180
The Uses of Job Analysis Information 180
A Brief History of Job Analysis 183
Types of Job Analysis 184
How Job Analysis Is Done 185

MODULE 5.4
JOB ANALYSIS: NEWER DEVELOPMENTS 188
Electronic Performance Monitoring as Part of a Job Analysis 188
Cognitive Task Analysis 189
The Context of Work 190
A New Addition to Job Analysis Instruments: The Personality-Related Position Requirements Form (PPRF) 193
A Summary of the Job Analysis Process 195
An Example of a PC-Based Job Analysis Instrument 196
O*NET 198
Competency Modeling 199

MODULE 5.5
JOB EVALUATION, COMPARABLE WORTH, AND THE LAW 202
Job Evaluation 202
An Example of a Job Evaluation 202
The Concept of Comparable Worth 202
Job Analysis and Employment Litigation 205

6 PERFORMANCE MEASUREMENT 208

MODULE 6.1
BASIC CONCEPTS IN PERFORMANCE MEASUREMENT 209
Uses for Performance Information 209
Types of Performance Data 209
Relationships among Performance Measures 210
Hands-On Performance Measures 210
Electronic Performance Monitoring 211
Performance Management 212
Perceptions of Fairness in Performance Measurement 214

MODULE 6.2
PERFORMANCE RATING—SUBSTANCE 217
Close-Up on a Rating System 217
Theories of Performance Rating 219
Focus on Performance Ratings 220
Overall Performance Ratings 220
Trait Ratings 221
Task-Based Ratings 221
Critical Incidents Methods 221
Contextual and Adaptive Performance Ratings 222
Structural Characteristics of a Performance Rating Scale 222
Rating Formats 224
Graphic Rating Scales 224
Checklists 224
Behavioral Rating 226
Employee Comparison Methods 229
Concluding Thoughts on Performance Rating Formats 230

MODULE 6.3
PERFORMANCE RATING—PROCESS 232
Rating Sources 232
Supervisors 232
Peers 233
Self-Ratings 233

Subordinate Ratings 234
Customer and Supplier Ratings 234
360 Degree Systems 234
Rating Distortions 235
Central Tendency Error 236
Leniency Severity Error 236
Halo Error 236
Rater Training 236
Administrative Training 237
Psychometric Training 237
Frame-of-Reference Training 237
The Reliability and Validity of Ratings 238
Reliability 238
Validity 239

MODULE 6.4
THE SOCIAL AND LEGAL CONTEXT OF PERFORMANCE EVALUATION 240
The Motivation to Rate 240
Rater Goals 240
Goal Conflict 240
Ratee Goals 241
Organizational Goals 241
Performance Feedback 242
"Destructive" Criticism 243
360 Degree Feedback 244
Performance Evaluation and Culture 245
Performance Evaluation and the Law 246
Performance Evaluation and Protected Groups 249

7 STAFFING DECISIONS 252

MODULE 7.1
CONCEPTUAL ISSUES IN STAFFING 253
An Overview of the Staffing Process 253
Staffing from the Strategic Perspective 253
The Impact of Staffing Practices on Firm Performance 257
Stakeholders in the Staffing Process 257
Line Managers 257
Co-Workers 258
Applicants 258
Staffing from the International Perspective 259

MODULE 7.2
EVALUATION OF STAFFING OUTCOMES 262
Validity 262
Selection Ratios 262
Prediction Errors and Cut Scores 263
Establishing Cut Scores 265
Utility 266
Fairness 268

MODULE 7.3
PRACTICAL ISSUES IN STAFFING 271
A Staffing Model 271
Comprehensiveness 271
Compensatory 272
Combining Information 273
Statistical versus Clinical Decision Making 273
The Hurdle System of Combining Scores 273
Combination Scores by Regression: The Compensatory Approach 274
Score Banding 275
Subgroup Norming 277
Selection versus Placement 278
Deselection 279
Number of Decisions to Be Made 280
Large Staffing Projects 280
Small Staffing Projects 281

MODULE 7.4
LEGAL ISSUES IN STAFFING DECISIONS 284
Charges of Employment Discrimination 284
Theories of Discrimination 285
Intentional Discrimination or Adverse Treatment 285
Unintentional Discrimination or Adverse Impact 285

8 TRAINING AND DEVELOPMENT 291

MODULE 8.1
FOUNDATIONS OF TRAINING AND LEARNING 292
Training, Learning, and Performance 293
Training Needs Analysis 294
The Learning Process in Training 297
Trainee Characteristics 297
Learning and Motivational Theories Applied to Training 298
Principles of Learning 301
Learning Organizations 304

MODULE 8.2
CONTENT AND METHODS OF TRAINING 308
Training Methods 308
On-Site Training Methods 308

Off-Site Training Methods 309
Distance Learning and Computer-Based Training 311
Training "Critical Thinking" 312
Transfer of Training 313

MODULE 8.3
EVALUATING TRAINING PROGRAMS 316
Training Evaluation 316
Training Criteria 316
Utility Analysis 318
Validity of Training Programs 318
Training Evaluation Designs 319
Special Topics in Training Evaluation 321
Equal Employment Opportunity Issues in Training 321
Training/Coaching for Tests 322

MODULE 8.4
SPECIALIZED TRAINING PROGRAMS 325
Management and Leadership Development 325
Assessment Centers 325
360 Degree Feedback 326
Coaching 327
Informal Training 327
Specialized Training Programs 329
Sexual Harassment Awareness Training 329
Ethics Training 330
Cross-Cultural Training 330

9 THE MOTIVATION TO WORK 336

MODULE 9.1
AN INTRODUCTION TO MOTIVATION 337
The Central Position of Motivation in Psychology 337
A Brief History of Motivation Theory in I-O Psychology 339
Metaphors for Motivation 340
Person as Machine 340
Person as Godlike 340
The Meaning and Importance of Motivation in the Workplace 342
Motivation and Performance 342
Motivation and Work—Life Balance 342
Motivation and Attitudes 343
Motivation and Personality 343

MODULE 9.2
MOTIVATIONAL THEORIES—CLASSIC APPROACHES 346
Person-as-Machine Theories 346
An Internal Mechanical Theory: Maslow's Need Theory 346
An External Mechanical Theory: Reinforcement Theory 349
Person-as-Godlike Theories: The Scientist Model 350
Vroom's VIE Theory 350
Dissonance Theory 352
Equity Theory 352

MODULE 9.3
MODERN APPROACHES TO WORK MOTIVATION 355
Person-as-Intentional 355
Goal-Setting Theory 355
Control Theories and the Concept of Self-Regulation 359
The Concept of Self-Efficacy in Modern Motivation Theory 360
Action Theory 362
Common Themes in Modern Approaches 364

MODULE 9.4
PRACTICAL ISSUES IN MOTIVATION 366
Can Motivation Be Measured? 366
Cross-Cultural Issues in Motivation 367
Generational Differences and Work Motivation 368
Motivational Interventions 370
Contingent Rewards 370
Job Enrichment 372
ProMES 373
Some Sample Applications 377

10 ATTITUDES, EMOTIONS, AND WORK 378

MODULE 10.1
JOB SATISFACTION 379
The Experience of Emotion at Work 379
Job Satisfaction: Some History 380
The Early Period of Job Satisfaction Research 380
An Evolution 382
Antecedents and Consequences of Job Satisfaction 384
The Measurement of Job Satisfaction 386
Overall versus Facet Satisfaction 386
Satisfaction Questionnaires 386

MODULE 10.2
MOODS, EMOTIONS, ATTITUDES, AND BEHAVIOR 390
Is Everybody Happy? Does It Matter if They Are? 390
Alternative Forms of Work Satisfaction 390
Satisfaction versus Mood versus Emotion 393
Disposition and Affectivity 395
Genetics and Job Satisfaction 395
The Concept of Core Evaluations 396
The Concept of Commitment 397
Forms of Commitment 398
Individual Difference Variables and Commitment 398
Withdrawal Behaviors 400

MODULE 10.3
RELATED TOPICS 402
Job Loss 402
Telecommuting 404
Work–Family Balance 405
Work-Related Attitudes and Emotions from the Cross-Cultural Perspective 408
A Possible Connection between Motivation and Emotion 409

11 FAIRNESS AND DIVERSITY IN THE WORKPLACE 412

MODULE 11.1
FAIRNESS 413
The Concept of Justice 413
Justice, Fairness, and Trust 415
Approaches to Organizational Justice 416
Distributive Justice 416
Procedural Justice 417
Interactional Justice 419
Justice versus Injustice 420

MODULE 11.2
THE PRACTICAL IMPLICATIONS OF JUSTICE PERCEPTIONS 422
Performance Evaluation 423
Applicant Perceptions of Selection Fairness 424
A Model of Applicant Decision Making 425
The Rejected Applicant 427
The Special Case of Affirmative Action 428
Culture and Affirmative Action Programs 431

MODULE 11.3
DIVERSITY 433
What Does Diversity Mean? 433
The Dynamics of Diversity 433
Diversity from the Work Group Perspective 435
Managing Diversity from the Organizational Perspective 436
Leadership and Diversity 437

12 LEADERSHIP 439

MODULE 12.1
THE CONCEPT OF LEADERSHIP 440
Some Conceptual Distinctions 440
Leader Emergence versus Leader Effectiveness 440
Leader Emergence 440
The Problem of Defining Leadership Outcomes 441
Leader versus Manager or Supervisor 441
The Blending of Managerial and Leadership Roles 442
Leader Development versus Leadership Development 444
The Motivation to Lead 445

MODULE 12.2
TRADITIONAL THEORIES OF LEADERSHIP 448
The Great Man and Great Woman Theories 448
The Trait Approach 448
The "Power" Approach to Leadership 449
The Behavioral Approach 451
The Ohio State University Studies 451
The University of Michigan Studies 452
The Contingency Approach 452
Hersey and Blanchard's Situational Theory 453
House's Path-Goal Theory 453
The Case of Social Undermining: What about the "Fickle" Leader? 455
The Consequences of Participation: The Vroom-Yetton Model 456

MODULE 12.3
NEW APPROACHES TO LEADERSHIP 460
Leader-Member Exchange (LMX) 460
Transformational Leadership 461
The Charismatic Leader 464

MODULE 12.4
EMERGING TOPICS AND CHALLENGES IN LEADERSHIP RESEARCH 467
Leadership in a Changing Workplace 467

Male and Female Leaders: Are They Different? 468
Personality and Leadership 470
Cross-Cultural Studies of Leadership 472
Leadership in a Diverse Environment 475

13 TEAMS IN ORGANIZATIONS 478

MODULE 13.1
TYPES OF TEAMS 479
Groups and Teams: Definitions 480
Types of Teams 480
Quality Circles 480
Project Teams 481
Production Teams 482
Virtual Teams 484
A Specialized Team: Airline Cockpit Crew 485

MODULE 13.2
A MODEL OF TEAM EFFECTIVENESS 488
Input-Process-Output Model of Team Effectiveness 488
Team Inputs 488
Team Processes 493
Team Outputs 497

MODULE 13.3
SPECIAL ISSUES IN TEAMS 500
Team Appraisal and Feedback 500
ProMES 501
Team Roles 501
Team Development 503
Team Training 504
Cultural Issues in Teams 505

14 THE ORGANIZATION OF WORK BEHAVIOR 508

MODULE 14.1
THE CONCEPTUAL AND THEORETICAL FOUNDATIONS OF ORGANIZATIONS 509
Organizations and People 509
Organizations as Integration 511
Theories of Organization 512
Classic Organizational Theory 512
Human Relations Theory 514
Contingency Theories 515
Two Recent Approaches 518
Conclusions about Theories of Organization 519

MODULE 14.2
SOME SOCIAL DYNAMICS OF ORGANIZATIONS 521
Climate and Culture 521
A Brief History of Climate 522
An Even Briefer History of Culture 524
An Integration of Concepts 526
A New Avenue for Exploration: Climate and Culture Strength 527
Organizational Climate and Culture from the Multicultural Perspective 528
When Cultures Clash 528
Socialization and the Concept of Person-Organization (P-O) Fit 529
Organizational Socialization 529
Socialization from the International Perspective 534

MODULE 14.3
ORGANIZATIONAL DEVELOPMENT AND CHANGE 537
Organizational Change 537
Episodic Change 537
Continuous Change 539
Resistance to Change 541
Examples of Large-Scale Organizational Change Initiatives 541
Management by Objectives (MBO) 542
Matrix Organizations 542
Total Quality Management (TQM) 542
Six Sigma Systems 545
Lean Production Manufacturing 545
Emerging Commonalities among Organizational Interventions 547
Organizational Development 547
Examples of OD Techniques 549

PART 4 THE WORK ENVIRONMENT

15 STRESS AND WORKPLACE HEALTH 552

MODULE 15.1
THE PROBLEM OF STRESS 553
Studying Workplace Stress 553
What Is a Stressor 555

Common Stressors at Work 556
Physical/Task Stressors 556
Psychological Stressors 556
Consequences of Stress 560
Behavioral Consequences of Stress 560
Psychological Consequences of Stress 562
Physiological Consequences of Stress 564

MODULE 15.2
THEORIES OF STRESS 566
Demand-Control Model 566
Person-Environment Fit Model 567
Individual Differences in Resistance to Stress 568
The Type A Behavior Pattern 569

MODULE 15.3
REDUCING AND MANAGING STRESS 575
Primary Prevention Strategies 575
Work and Job Design 576
Cognitive Restructuring 577
Secondary Prevention Strategies 577
Stress Management Training 577
Relaxation and Biofeedback Techniques 579
Social Support 579
Tertiary Prevention Strategies 580
Summary of Stress Intervention Strategies 581
Stress and Workplace Violence 582
Future Work Trends and Challenges to Stress and Stress Management 583

16 DESIGNING WORK FOR PEOPLE 585

MODULE 16.1
HUMAN FACTORS ENGINEERING (HFE) 586
The Importance and Meaning of Human Factors 586
Human Factors Models 588
A Modern Human Factors Challenge: Cell Phones and Driving 591

MODULE 16.2
CONTEMPORARY WORK DESIGN CHALLENGES 594
Technology 594
Automation 594
Computers 597
Work Schedules 598
Shift Work 598
Flexible and Compressed Workweek Schedules 600
Approaches to Work Design and Redesign 602
Work Design and Disabilities 604
A Cross-Cultural Issue in Disability and Design 606

MODULE 16.3
SAFETY IN THE WORKPLACE 608
Safety Regulation 609
Traditional Approaches to Workplace Safety 609
A Model of Unsafe Behavior 609
The Engineering Approach 609
The Personnel Approach 613
The Motivational Approach 614
Newer Approaches to Safety 616
The Role of Leaders in Safety 616
Safety Climate and Culture 617
Safety from the International Perspective 618

MODULE 16.4
VIOLENCE AT WORK 620
Levels of Violence 621
The Experiential Sequence of Violence 622
The "Typical" Violent Worker 622
Theories of Workplace Violence 623
Frustration-Aggression Hypothesis 623
The "Justice" Hypothesis 624
A Special Type of Violence: Bullying 626
What Can We Conclude about Workplace Violence? 629

Glossary G-1
References R-1
Credits C-1
Index I-1