

Contents

Preface	ix
Part One: Introduction to the Key Issues	
Chapter 1. Introduction..... <i>Bruce Christie and Anthony Gale</i>	3
Chapter 2. The Psychophysiological Context	17
<i>Anthony Gale</i>	
Chapter 3. The Technological and Work Context: The Office as the Prototypical Electronic Workplace of the 1990s	33
<i>Bruce Christie</i>	
Part Two: Psychological Concepts in the Analysis of User–System Interaction	
Chapter 4. Contemporary Models of Information Processing and the Cognitive Demands of User–System Interaction	65
<i>Margaret M. Gardiner</i>	
Chapter 5. The Social Psychology of Working Situations	89
<i>Adrian Furnham</i>	
Chapter 6. Sources of Stress in the Modern Office	113
<i>Stephen J. Sloan and Cary L. Cooper</i>	
Part Three: Special Demands of the Electronic Workplace	
Chapter 7. Psychophysiology and the Ergonomic Demands of Visual Display Terminals.....	139
<i>David J. Osborne</i>	

Chapter 8. Attention and Vigilance in Human–Computer Interaction.....	163
<i>Raja Parasuraman and John C. Bowers</i>	
Part Four: Psychophysiology Research and Findings	
Chapter 9. Event-related Brain Potentials.....	197
<i>Arthur F. Kramer</i>	
Chapter 10. The Electroencephalogram.....	223
<i>Anthony Gale</i>	
Chapter 11. Oculomotor Activity and User-System Interaction in the Workplace	239
<i>John A. Stern and Barbara D. Strock</i>	
Chapter 12. Heart Rate and Sinus Arrhythmia.....	255
<i>Michael G.H. Coles and Erik Sirevaag</i>	
Chapter 13. Adrenal Hormone Production as Indices of Occupational Stress.....	275
<i>David Benton</i>	
Chapter 14. Self-Report Techniques	293
<i>Colin Mackay and Tom Cox</i>	
Part Five: Overview, Predictions and Recommendations	
Chapter 15. Psychophysiology and the Electronic Workplace: The Future	315
<i>Anthony Gale and Bruce Christie</i>	
Author Index.....	335
Subject Index	347