

Health Psychology

A Textbook

Third edition

Screening 211

Stress 233

Stress and illness 251

Pain 285

Jane Ogden

HIV and cancer: psych 403

Illness (1) 327

Obesity and coronary
the course of illness (2) 403

Measuring health statu
life 383

The assumptions of health psychology 397

Methodology glossary 403

References 405

Index 459

Health Psychology: A textbook 3rd edition

Open University Press
McGraw-Hill Education
McGraw-Hill House
Shoppenhangers Road
Maidenhead
Berkshire
England
SL6 2QL

email: enquiries@openup.co.uk
world wide web: www.openup.co.uk

and Two Penn Plaza, New York, NY 10121-2289, USA

First published 2004
Second impression 2004

Copyright © Jane Ogden 2004

All rights reserved. Except for the quotation of short passages for the purposes of criticism and review, no part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form, or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the publisher or a licence from the Copyright Licensing Agency Limited. Details of such licences (for reprographic reproduction) may be obtained from the Copyright Licensing Agency Ltd of 90 Tottenham Court Road, London, W1T 4LP.

A catalogue record of this book is available from the British Library

ISBN 0 335 21471 1 (pb) 0335 21487 8 (hb)

Library of Congress Cataloging-in-Publication Data
CIP data applied for

Typeset by RefineCatch Limited, Bungay, Suffolk
Printed in Spain by Mateu Cromo Artes Graficas, SA, Madrid

PREFACE TO THE THIRD EDITION

Why I first wrote this book

I first wrote this book in 1995 after several years of teaching my own course in Health Psychology. The texts I recommended to my students were by US authors and this was reflected in their focus on US research and US health care provision. In addition, they tended to be driven by examples rather than by theories or models which made them difficult to turn into lectures (from my perspective) or to use for essays or revision (from my students perspective). I decided to write my own book to solve some of these problems. I wanted to supplement US work with that from my colleagues from the UK, the rest of Europe, New Zealand and Australia. I also wanted to emphasize theory and to write the book in a way that would be useful ('easily plagiarized' I often think!). I hope that the first two editions have succeeded.

Aims of this new third edition

This third edition started as a quick update but has ended up as a fairly major revision. Health psychologists sometimes refer to the indirect and direct pathways between psychology and health. The indirect pathway refers to the role of factors such as health related behaviours (smoking, drinking, eating, etc.), social support and coping on the link between the mind and the body. To date this book has mostly reflected this indirect pathway with its emphasis on beliefs and a range of health behaviours. These chapters have always been the strongest and have presented the theories and research in greatest depth, probably reflecting my own research interests. In contrast, the direct pathway refers to the role of factors such as stress and pain and draws upon the more biologically minded literatures. The weakest chapters in this book have always been the ones on stress and pain.

- This edition is an attempt to strengthen stress and pain and to cover the biological aspects of health psychology in greater depth.
- I have now included two chapters on stress rather than one.

The first chapter (Chapter 10) examines models of stress, stress and changes in physiology and how stress is measured. The second chapter (Chapter 11) describes the link between stress and illness. It includes a review of the literature on whether stress does result in illness and describes research which has explored how this association might come about.

- I have also greatly expanded the section on PNI to reflect the growing interest in this field.

This chapter also describes the role of coping, social support, control and personality in moderating the stress illness link.

- The chapter on pain has also been expanded.

I have included more work on how psychological factors may exacerbate pain perception and have detailed the recent reviews of pain management and the interesting work on pain acceptance.

- The other major revision has been a new chapter on eating behaviour (Chapter 6) and the placement of obesity with the chronic illnesses at the end of the book (Chapters 14 and 15).

In addition to these major changes I have added sections on problems with social cognition models (Chapter 2), predicting adherence (Chapter 3), patient centredness (Chapter 4), the psychological consequences of CHD and the rehabilitation of CHD patients (Chapter 15). In addition, the book has been updated throughout.

The structure of the third edition

Health psychology is an expanding area in terms of teaching, research and practice. Health psychology *teaching* occurs at both the undergraduate and postgraduate level and is experienced by both mainstream psychology students and those studying other health-related subjects. Health psychology *research* also takes many forms. Undergraduates are often expected to produce research projects as part of their assessment, and academic staff and research teams carry out research to develop and test theories and to explore new areas. Such research often feeds directly into *practice*, with intervention programmes aiming to change the factors identified by research. This book aims to provide a comprehensive introduction to the main topics of health psychology. The book will focus on psychological theory supported by research. In addition, how these theories can be turned into practice will also be described. This book is now supported by a comprehensive website which includes teaching supports such as lectures and assessments.

Health psychology focuses on the indirect pathway between psychology and health which emphasizes the role that *beliefs* and *behaviours* play in health and illness. The contents of the first half of this book reflect this emphasis and illustrate how different sets of beliefs relate to behaviours and how both these factors are associated with illness.

Chapters 2–4 emphasize beliefs. Chapter 2 examines changes in the causes of death over the twentieth century and why this shift suggests an increasing role for beliefs and behaviours. The chapter then assesses theories of health beliefs and the models that have been developed to describe beliefs and predict behaviour. Chapter 3 examines beliefs individuals have about illness and Chapter 4 examines health professionals' health beliefs in the context of doctor–patient communication.

Chapters 5–9 examine health-related behaviours and illustrate many of the theories and constructs which have been applied to specific behaviours. Chapter 5 describes theories of addictive behaviours and the factors that predict smoking and alcohol consumption. Chapter 6 examines theories of eating behaviour drawing upon developmental models, cognitive theories and the role of weight concern. Chapter 7 describes the literature on exercise behaviour both in terms of its initiation and methods to

encourage individuals to continue exercising. Chapter 8 examines sexual behaviour and the factors that predict self-protective behaviour both in terms of pregnancy avoidance and in the context of HIV. Chapter 9 examines screening as a health behaviour and assesses the psychological factors that relate to whether or not someone attends for a health check and the psychological consequences of screening programmes.

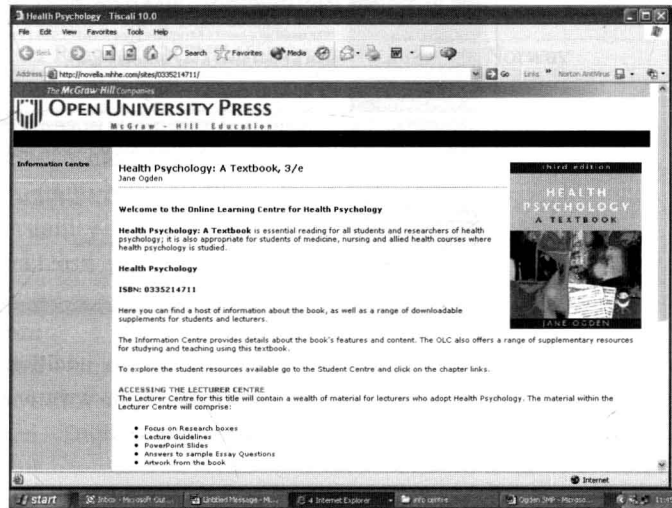
Health psychology also focuses on the direct pathway between psychology and health and this is the focus for the second half of the book. Chapter 10 examines research on stress in terms of its definition and measurement and Chapter 11 assesses the links between stress and illness via changes in both physiology and behaviour and the role of moderating variables. Chapter 12 focuses on pain and evaluates the psychological factors in exacerbating pain perception and explores how psychological interventions can be used to reduce pain and encourage pain acceptance. Chapter 13 specifically examines the interrelationships between beliefs, behaviour and health using the example of placebo effects. Chapters 14 and 15 further illustrate this interrelationship in the context of illness, focusing on HIV and cancer (Chapter 14) and obesity and coronary heart disease (Chapter 15). Chapter 16 explores the problems with measuring health status and the issues surrounding the measurement of quality of life.

Finally, Chapter 17 examines some of the assumptions within health psychology that are described throughout the book.

My thanks again go to my psychology and medical students and to my colleagues over the years for their comments and feedback. For this edition I am particularly grateful to Derek Johnston and Amanda Williams for pointing me in the right direction, to David Armstrong for conversation and cooking, to Cecilia Clementi for help with all the new references and for Harry and Ellie for being wonderful and for going to bed on time.

Visit www.mcgraw-hill.co.uk/textbooks/ogden today

Online Learning Centre (OLC)



After completing each chapter, log on to the supporting Online Learning Centre website. Take advantage of the study tools offered to reinforce the material you have read in the text, and to develop your knowledge of Health Psychology in a fun and effective way.

Resources for students include:

- ◆ Short answer questions
- ◆ Sample essay questions
- ◆ Images
- ◆ Health Psychology weblinks

Also available for lecturers:

- ◆ Powerpoints
- ◆ Instructor Resource Manual
- ◆ Images
- ◆ Sample Essay questions
- ◆ Research focus boxes

For lecturers: Primis Content Centre

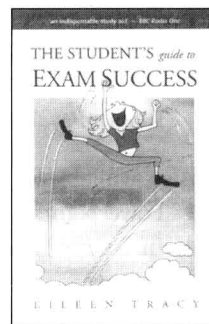
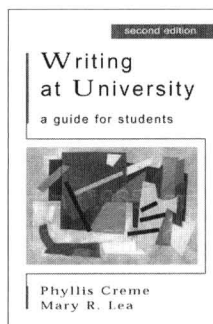


If you need to supplement your course with additional cases or content, create a personalized e-Book for your students. Visit www.primiscontentcenter.com or e-mail primis_euro@mcgraw-hill.com for more information.

Study Skills

Open University Press publishes guides to study, research and exam skills, to help undergraduate and postgraduate students through their university studies.

Visit www.openup.co.uk/ss/ to see the full selection.



Computing Skills

If you'd like to brush up on your Computing skills, we have a range of titles covering MS Office applications such as Word, Excel, PowerPoint, Access and more.

Get a £2 discount off these titles by entering the promotional code **app** when ordering online at www.mcgraw-hill.co.uk/app.

ACKNOWLEDGEMENTS

Our thanks go to the following reviewers for their comments at various stages in the text's development:

Development Reviewers of 2nd Edition:

Dr Karen Rodham – Bath University
Dr Gerd Inger Ringdal – NTNU University, Trondheim, Norway
Professor Ronan O'Carroll – University of Stirling
Dr Iain Williamson – University College Northampton
Dr Aled Jones – University of Wales, Swansea
Dr Brian Hughes – National University of Ireland, Galway
Dr Sue Winstanley – De Montfort University
Dr Christina Liossi – University of Wales, Swansea

3rd Edition:

Paul Norman – University of Sheffield
Ad Kaptein – University of Leiden, Netherlands
Sandra Horn – Southampton University

BRIEF TABLE OF CONTENTS

Detailed table of contents	vi
List of figures and tables	xx
Preface to the third edition	xxii
Technology to enhance learning and teaching	xxv
Acknowledgements	xxvii
1 An introduction to health psychology	1
2 Health beliefs	13
3 Illness cognitions	47
4 Doctor–patient communication and the role of health professionals’ health beliefs	75
5 Smoking and alcohol use	99
6 Eating behaviour	133
7 Exercise	167
8 Sex	183
9 Screening	211
10 Stress	233
11 Stress and illness	251
12 Pain	285
13 Placebos and the interrelationship between beliefs, behaviour and health	307
14 HIV and cancer: psychology throughout the course of illness (1)	327
15 Obesity and coronary heart disease: psychology throughout the course of illness (2)	351
16 Measuring health status: from mortality rates to quality of life	383
17 The assumptions of health psychology	397
Methodology glossary	403
References	405
Index	459

DETAILED TABLE OF CONTENTS

List of figures and tables	xx
Preface to the third edition	xxii
Technology to enhance learning and teaching	xxv
Acknowledgements	xxvii

1: An introduction to health psychology 1

CHAPTER OVERVIEW	1
THE BACKGROUND TO HEALTH PSYCHOLOGY	2
WHAT IS THE BIOMEDICAL MODEL?	2
THE TWENTIETH CENTURY	3
Psychosomatic medicine	3
Behavioural health	3
Behavioural medicine	3
Health psychology	4
WHAT ARE THE AIMS OF HEALTH PSYCHOLOGY?	6
WHAT IS THE FUTURE OF HEALTH PSYCHOLOGY?	7
The clinical health psychologist	7
A professional health psychologist	8
WHAT ARE THE AIMS OF THIS BOOK?	8
A note on theory and health psychology	8
A note on methodology and health psychology	9
THE CONTENTS OF THIS BOOK	9
THE STRUCTURE OF THIS BOOK	10
QUESTIONS	11
FOR DISCUSSION	11
FURTHER READING	11

2: Health beliefs 13

CHAPTER OVERVIEW	13
WHAT ARE HEALTH BEHAVIOURS?	14
WHY STUDY HEALTH BEHAVIOURS?	14
McKeown's thesis	14
LAY THEORIES ABOUT HEALTH	18
PREDICTING HEALTH BEHAVIOURS	18
Attribution theory	19
Health locus of control	20
Unrealistic optimism	21
The stages of change model	22
Integrating these different health beliefs: developing models	24
COGNITION MODELS	24

The health belief model	24
The protection motivation theory	27
FOCUS ON RESEARCH 2.1: TESTING A THEORY – PREDICTING SEXUAL BEHAVIOUR	28
SOCIAL COGNITION MODELS	31
The theories of reasoned action and planned behaviour	31
The health action process approach	34
PROBLEMS WITH THE MODELS	36
Conceptual problems	36
Methodological problems	36
Predictive problems	37
Predicting intentions: the need to incorporate new cognitions	37
Predicting behaviour: exploring the intention–behaviour gap	39
Developing theory based interventions	41
Putting theory into practice	42
Existing theory based interventions	43
TO CONCLUDE	43
QUESTIONS	44
FOR DISCUSSION	44
ASSUMPTIONS IN HEALTH PSYCHOLOGY	44
FURTHER READING	45

3: Illness cognitions 47

CHAPTER OVERVIEW	47
WHAT DOES IT MEAN TO BE HEALTHY?	48
WHAT DOES IT MEAN TO BE ILL?	49
WHAT ARE ILLNESS COGNITIONS?	49
Evidence for these dimensions of illness cognitions	50
Measuring illness cognitions	51
LEVENTHAL'S SELF-REGULATORY MODEL OF ILLNESS COGNITIONS	53
Stage 1: Interpretation	54
Stage 2: Coping	54
Stage 3: Appraisal	54
WHY IS THE MODEL CALLED SELF-REGULATORY?	54
FOCUS ON RESEARCH 3.1: TESTING A THEORY – ILLNESS REPRESENTATIONS AND COPING	55
Problems with assessment	58
STAGE 1: INTERPRETATION	58
Symptom perception	58
Social messages	60
STAGE 2: COPING	61
Coping with a diagnosis	61
Coping with the crisis of illness	62

Adjustment to physical illness and the theory of cognitive adaptation	67
The role of illusions	68
Implications for the outcome of the coping process	69
THE POSITIVE INTERPRETATION OF ILLNESS	69
USING THE SELF-REGULATORY MODEL TO PREDICT OUTCOMES	70
Predicting adherence to treatment	70
Predicting recovery from stroke	70
Predicting recovery from MI	71
TO CONCLUDE	71
QUESTIONS	72
FOR DISCUSSION	72
ASSUMPTIONS IN HEALTH PSYCHOLOGY	72
FURTHER READING	73

4: Doctor–patient communication and the role of health professionals’ health beliefs 75

CHAPTER OVERVIEW	75
WHAT IS COMPLIANCE?	77
PREDICTING WHETHER PATIENTS ARE COMPLIANT: THE WORK OF LEY	77
Patient satisfaction	77
Patient understanding	78
FOCUS ON RESEARCH 4.1: TESTING A THEORY – PATIENT SATISFACTION	79
Patient’s recall	81
HOW CAN COMPLIANCE BE IMPROVED?	81
The role of information	82
Recommendations for improving compliance	82
THE WIDER ROLE OF INFORMATION IN ILLNESS	83
Information and recovery from surgery	83
Using information to improve recovery	83
THE ROLE OF KNOWLEDGE IN DOCTOR–PATIENT COMMUNICATION	84
Problems with the traditional approach to doctor–patient communication	85
The adherence model of communication	85
THE PROBLEM OF DOCTOR VARIABILITY	85
Explaining variability – clinical decision making as problem solving	86
Explaining variability – the role of health professionals’ health beliefs	89
Communicating beliefs to patients	91
Explaining variability – an interaction between health professional and patient	92
Patient centredness	92
Agreement between health professional and patient	93
TO CONCLUDE	95
QUESTIONS	95
FOR DISCUSSION	96

ASSUMPTIONS IN HEALTH PSYCHOLOGY	96
FURTHER READING	96

5: Smoking and alcohol use 99

CHAPTER OVERVIEW	99
WHO SMOKES?	100
WHO DRINKS?	101
HEALTH IMPLICATIONS OF SMOKING AND ALCOHOL USE	101
Is smoking bad for health?	101
Is alcohol consumption bad for health?	102
WHAT IS AN ADDICTION?	103
HISTORICAL CHANGES IN ATTITUDE AND THEORETICAL APPROACH	104
The seventeenth century and the moral model of addictions	104
The nineteenth century and the 1st disease concept	105
The twentieth century and the 2nd disease concept	105
The 1970s and onwards – social learning theory	105
WHAT IS THE 2ND DISEASE CONCEPT?	106
A pre-existing physical abnormality	106
A pre-existing psychological abnormality	107
Acquired dependency	107
PROBLEMS WITH A DISEASE MODEL OF ADDICTION	107
WHAT IS THE SOCIAL LEARNING PERSPECTIVE?	108
The processes involved in learning an addictive behaviour	108
Integrating a disease and social learning perspective	109
THE STAGES OF SUBSTANCE USE	110
STAGES 1 AND 2: INITIATING AND MAINTAINING AN ADDICTIVE BEHAVIOUR	110
Smoking initiation and maintenance	110
Alcohol initiation and maintenance	112
Psychological predictors of alcohol limitation and maintenance	112
STAGE 3: THE CESSATION OF AN ADDICTIVE BEHAVIOUR	113
The process of cessation	113
FOCUS ON RESEARCH 5.1: TESTING A THEORY – STAGES OF SMOKING CESSATION	115
INTERVENTIONS TO PROMOTE CESSATION	116
Clinical interventions: promoting individual change	116
Public health interventions: promoting cessation in populations	120
FOCUS ON RESEARCH 5.2: PUTTING THEORY INTO PRACTICE – WORKSITE SMOKING BAN	122
Methodological problems evaluating clinical and public health interventions	124
STAGE 4: RELAPSE IN SMOKING AND DRINKING	124
Baseline state	125
Pre-lapse state	126
No lapse or lapse?	126
The abstinence violation effect	127

A CROSS-ADDICTIVE BEHAVIOUR PERSPECTIVE	128
Smoking and eating behaviour	128
TO CONCLUDE	129
QUESTIONS	130
FOR DISCUSSION	130
ASSUMPTIONS IN HEALTH PSYCHOLOGY	130
FURTHER READING	131

6: Eating behaviour 133

CHAPTER OVERVIEW	133
WHAT IS A HEALTHY DIET?	134
HOW DOES DIET AFFECT HEALTH?	134
Diet and illness onset	135
Diet and treating illness	135
WHO EATS A HEALTHY DIET?	136
DEVELOPMENTAL MODELS OF EATING BEHAVIOUR	137
Exposure	137
Social learning	138
Associative learning	141
Problems with a developmental model	142
COGNITIVE MODELS OF EATING BEHAVIOUR	143
Using the TRA and TPB	143
Adding extra variables	144
Problems with a cognitive model of eating behaviour	145
A WEIGHT CONCERN MODEL OF EATING BEHAVIOUR	146
The meaning of food and weight	146
What is body dissatisfaction?	146
THE CAUSES OF BODY DISSATISFACTION	148
SOCIAL FACTORS	148
The role of the media	148
Ethnicity	149
Social class	149
The family	150
PSYCHOLOGICAL FACTORS	150
Beliefs	151
DIETING	153
Dieting and undereating	153
Dieting and overeating	153
The causes of overeating	154
FOCUS ON RESEARCH 6.1: TESTING A THEORY – OVEREATING AS A REBELLION	160
Dieting and weight loss	162
The role of dieting in mood and cognitive changes	163
Problems with a weight concern model of eating behaviour	164
TO CONCLUDE	164

QUESTIONS	164
FOR DISCUSSION	164
FURTHER READING	165

7: Exercise 167

CHAPTER OVERVIEW	167
DEVELOPING THE CONTEMPORARY CONCERN WITH EXERCISE BEHAVIOUR	168
WHAT IS EXERCISE?	168
WHO EXERCISES?	169
WHY EXERCISE?	169
The physical benefits of exercise	170
The psychological benefits of exercise	171
FOCUS ON RESEARCH 7.1: TESTING A THEORY – EXERCISE AND MOOD	173
WHAT FACTORS PREDICT EXERCISE?	174
Social/political predictors of exercise	174
FOCUS ON RESEARCH 7.2: TESTING A THEORY – PREDICTING EXERCISE	179
EXERCISE RELAPSE	181
TO CONCLUDE	181
QUESTIONS	182
FOR DISCUSSION	182
ASSUMPTIONS IN HEALTH PSYCHOLOGY	182
FURTHER READING	182

8: Sex 183

CHAPTER OVERVIEW	183
DEVELOPING THE CONTEMPORARY RESEARCH PERSPECTIVES ON SEX	184
Sex as biological, for reproduction	184
Sex as biological, for pleasure	184
Sex as a risk to health	185
Sex as interaction	186
Sex as a risk and pregnancy avoidance	186
What is contraceptive use?	187
Who uses contraception?	187
Developmental models	187
Decision-making models	190
Integrating developmental and decision-making approaches to contraception use	192
SEX AS A RISK IN THE CONTEXT OF STDs/HIV AND AIDS	194
Do people use condoms?	195
Predicting condom use	197
Social cognition models	197
Perceptions of susceptibility – are you at risk?	200
Sex as an interaction between individuals	201

FOCUS ON RESEARCH 8.1: TESTING A THEORY – THE SITUATION AND CONDOM USE	201
THE BROADER SOCIAL CONTEXT	204
Sex education	204
Power relations between men and women	206
Social norms of the gay community	206
Discourses about sex, HIV and illness	207
TO CONCLUDE	207
QUESTIONS	208
FOR DISCUSSION	208
ASSUMPTIONS IN HEALTH PSYCHOLOGY	208
FURTHER READING	209

9: Screening 211

CHAPTER OVERVIEW	211
WHAT IS SCREENING?	212
THE HISTORY OF THE SCREENING ETHOS	212
Early screening programmes	212
Recent screening programmes	213
SCREENING AS A USEFUL TOOL	213
GUIDELINES FOR SCREENING	214
PSYCHOLOGICAL PREDICTORS OF THE UPTAKE OF SCREENING	215
Patient factors	215
Health professional factors	216
FOCUS ON RESEARCH 9.1: TESTING A THEORY – PREDICTING SCREENING	217
Organizational factors	220
SCREENING AS PROBLEMATIC	220
Is screening ethical?	221
Is screening cost-effective?	224
The effects of screening on the psychological state of the individual	226
The debates	226
Why has this backlash happened?	229
TO CONCLUDE	230
QUESTIONS	230
FOR DISCUSSION	230
ASSUMPTIONS IN HEALTH PSYCHOLOGY	230
FURTHER READING	231

10: Stress 233

CHAPTER OVERVIEW	233
WHAT IS STRESS?	234
THE DEVELOPMENT OF STRESS MODELS	234
Cannon's fight or flight model	234

Selye's general adaptation syndrome	234
Life events theory	235
A ROLE FOR PSYCHOLOGICAL FACTORS IN STRESS	238
The transactional model of stress	238
Does appraisal influence the stress response?	239
What events are appraised as stressful?	240
Self-control and stress	240
STRESS AND CHANGES IN PHYSIOLOGY	241
Stress reactivity	242
MEASURING STRESS	243
Laboratory setting	243
Naturalistic setting	243
Physiological measures	244
Self-report measures	244
FOCUS ON RESEARCH 10.1: PUTTING THEORY INTO PRACTICE	246
Laboratory versus naturalistic measures	247
Physiological versus self-report measures	248
THE INTERACTION BETWEEN PSYCHOLOGICAL AND PHYSIOLOGICAL ASPECTS OF STRESS	248
TO CONCLUDE	248
QUESTIONS	249
FOR DISCUSSION	249
ASSUMPTIONS IN HEALTH PSYCHOLOGY	250
FURTHER READING	250
 11: Stress and illness	251
CHAPTER OVERVIEW	251
DOES STRESS CAUSE ILLNESS?	252
How does stress cause illness?	252
The chronic process	253
The acute process	253
STRESS AND CHANGES IN BEHAVIOUR	254
Smoking	254
Alcohol	255
Eating	255
Exercise	256
Accidents	256
Illness as a stressor	256
STRESS AND CHANGES IN PHYSIOLOGY	257
Stress and illness onset and progression	257
Interaction between the behavioural and physiological pathways	258
INDIVIDUAL VARIABILITY IN THE STRESS-ILLNESS LINK	258
Stress reactivity	258
Stress recovery	259