

EMOTION

MICHELLE N. SHIOTA

JAMES W. KALAT

NEW YORK OXFORD
OXFORD UNIVERSITY PRESS

Oxford University Press is a department of the University of Oxford. It furthers the University's objective of excellence in research, scholarship, and education by publishing worldwide. Oxford is a registered trademark of Oxford University Press in the UK and certain other countries.

Published in the United States of America by Oxford University Press
198 Madison Avenue, New York, NY 10016, United States of America.

© 2018 by Oxford University Press
© 2013, 2011 by Wadsworth Publishing Co. Inc.

For titles covered by Section 112 of the US Higher Education Opportunity Act, please visit www.oup.com/us/he for the latest information about pricing and alternate formats.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, without the prior permission in writing of Oxford University Press, or as expressly permitted by law, by license, or under terms agreed with the appropriate reproduction rights organization. Inquiries concerning reproduction outside the scope of the above should be sent to the Rights Department, Oxford University Press, at the address above.

You must not circulate this work in any other form and you must impose this same condition on any acquirer.

Library of Congress Cataloging-in-Publication Data

Names: Shiota, Michelle N., author. | Kalat, James W., author.
Title: Emotion / Michelle N. Shiota, James W. Kalat.
Description: New York, NY : Oxford University Press, [2018]
Identifiers: LCCN 2017023268 (print) | LCCN 2017036205 (ebook) | ISBN 9780190635541 (ebook) | ISBN 9780190635510 (pbk.) | ISBN 9780190644260 (looseleaf)
Subjects: LCSH: Emotions.
Classification: LCC BF531 (ebook) | LCC BF531 .K35 2018 (print) | DDC 152.4—dc23
LC record available at <https://lcn.loc.gov/2017023268>

9 8 7 6 5 4 3
Printed by Webcom, Inc., Canada

PART 1 What Are Emotions, and Why Do We Have Them? 1

CHAPTER 1	THE NATURE OF EMOTION 2
CHAPTER 2	THE EVOLUTION OF EMOTION 39
CHAPTER 3	CULTURE AND EMOTION 65
CHAPTER 4	WHAT ELICITS EMOTIONS? 95
CHAPTER 5	EMOTIONAL EXPRESSION IN THE FACE, POSTURE, AND VOICE 119

PART 2 How Do Emotions Affect Our Lives? 151

CHAPTER 6	EMOTION AND THE CENTRAL NERVOUS SYSTEM 152
CHAPTER 7	THE AUTONOMIC NERVOUS SYSTEM AND HORMONES 183
CHAPTER 8	EMOTIONAL DEVELOPMENT 218
CHAPTER 9	EMOTION IN RELATIONSHIPS AND SOCIETY 243
CHAPTER 10	EMOTION AND COGNITION 279

PART 3 How Can We Improve Emotional Well-Being? 311

CHAPTER 11	THE VALUE OF NEGATIVE EMOTIONS 312
CHAPTER 12	HAPPINESS AND THE POSITIVE EMOTIONS 347
CHAPTER 13	INDIVIDUAL DIFFERENCES IN EMOTION 378
CHAPTER 14	EMOTION IN CLINICAL PSYCHOLOGY 411
CHAPTER 15	EMOTION REGULATION 441

Preface xvii

Acknowledgments xx

PART 1 What Are Emotions, and Why Do We Have Them? 1

CHAPTER 1 THE NATURE OF EMOTION 2

What Is Emotion?	3
An Attempt to Define Emotion	5
A Different Type of Definition: The Prototype Approach	7
Classic Theories of Emotion	7
James–Lange Theory	8
Cannon–Bard Theory	9
Schachter–Singer Theory	10
Modern Theories of Emotion	15
Basic/Discrete Emotions	15
Core Affect and Psychological Construction	17
The Component Process Model	21
Which Modern Theory Is Right?	23
Research Methods: How Do We Study Emotion?	23
Inducing Emotion	24
Measuring Emotion	26
Behavioral Observations	31
Do Different Aspects of Emotion Hang Together?	32
SUMMARY	35
KEY TERMS	35
THOUGHT/DISCUSSION QUESTIONS	37
SUGGESTIONS FOR FURTHER READING	38

CHAPTER 2 THE EVOLUTION OF EMOTION 39

- What Is an Evolutionary Perspective? 40
 - Basic Principles of Evolutionary Theory 40
 - Emotions as Adaptations 43
- Functions of Emotion 46
 - Intrapersonal Functions of Emotion 46
 - Social Functions of Emotion 47
- Roles of Evolution in Modern Theories of Emotion 49
 - The Signal Value of Emotional Feelings 49
 - Approach and Avoidance Motivation 51
 - Emotions as Superordinate Neural Programs 53
 - A Phylogeny of Emotions? 56
- Methodological Considerations 57
 - Example: Are Physiological Aspects of Emotion Universal? 59
- SUMMARY 62**
- KEY TERMS 62**
- THOUGHT/DISCUSSION QUESTIONS 63**
- SUGGESTIONS FOR FURTHER READING 64**

CHAPTER 3 CULTURE AND EMOTION 65

- What Is Culture? 66
 - A Definition and Its Implications 66
- Cultural Differences in Concepts of Emotion 67
 - Do All Cultures Have the Same “Basic” Emotions? 69
 - The Sapir–Whorf Hypothesis 72
 - Hyper- Versus Hypocognized Emotions 73
- Aspects of Culture That Predict Differences in Emotion 75
 - Individualism Versus Collectivism 75
 - Power Distance: Vertical Versus Horizontal Societies 79
 - Linear Versus Dialectical Epistemology 82
- Methodological Considerations 83
 - Example: Culture of Honor and Implications for Anger 86
- Integrating Evolutionary and Cultural Approaches 87
 - Ekman (1972): Neurocultural Theory of Emotion 88

Russell (1991): Emotion Episodes as Socially
Constructed Scripts 89

Keltner & Haidt (1999): Levels of Analysis 90

SUMMARY 91

KEY TERMS 92

THOUGHT/DISCUSSION QUESTIONS 93

SUGGESTIONS FOR FURTHER READING 94

CHAPTER 4 **WHAT ELICITS EMOTIONS?** 95

What Is Appraisal? 96

The Speed of Emotional Appraisals 98

What Is the Content of Appraisal? 100

Core Relational Themes 100

Appraisal Dimensions 100

Which Approach Is Correct? 103

Evidence Linking Appraisal to Emotion 104

Does Appraisal Cause Emotion? 104

Universals and Cultural Differences in Emotional Appraisals 107

Is Appraisal Necessary for Emotion? 110

The Mere Exposure Effect 111

Example: What Elicits Anger? 113

Core Relational Theme Approach 113

Appraisal Dimension Approach 114

No-Cognition Approach: The Cognitive Neoassociationistic Model 115

SUMMARY 117

KEY TERMS 117

THOUGHT/DISCUSSION QUESTIONS 118

SUGGESTIONS FOR FURTHER READING 118

CHAPTER 5 **EMOTIONAL EXPRESSION IN THE FACE, POSTURE, AND VOICE** 119

Historical Importance of Facial Expression Research 120

Are Facial Expressions of Emotion Universal? 125

Ekman's Cross-Cultural Studies 125

How Many Expressions Are There? 129

Culture and Emotional Expression	130
Cultural Display Rules	131
Facial Expression Dialects	134
Emotion in Posture and the Voice	135
Posture and Emotion	136
Vocal Expression of Emotion	138
Can Expression Influence Emotional Feelings?	142
SUMMARY	147
KEY TERMS	148
THOUGHT/DISCUSSION QUESTIONS	149
SUGGESTIONS FOR FURTHER READING	149

PART 2 How Do Emotions Affect Our Lives? 151

CHAPTER 6 **EMOTION AND THE CENTRAL NERVOUS SYSTEM** 152

Methods to Study Emotion and the Brain	153
Brain Damage	154
Electroencephalography	155
Functional Magnetic Resonance Imaging	157
Neurochemistry Techniques	158
The Reverse Inference Problem	159
The Amygdala and Emotion	160
Effects of Amygdala Damage	160
Laboratory Studies of Fear Conditioning	162
Events That Activate the Human Amygdala	163
The Amygdala and Emotional Memory	165
Emotion Neuroanatomy: Important Structures	166
The Hypothalamus	166
The Nucleus Accumbens and Ventral Tegmental Area	167
The Insular Cortex	169
The Prefrontal Cortex	170
Emotion Neurochemistry: Important Neurotransmitters	173
Dopamine	173
β -Endorphin and the Opioid Peptides	175
Serotonin	175
Oxytocin	176

Theories of Emotion: Evidence from Neuroscience 177

SUMMARY 180

KEY TERMS 180

THOUGHT/DISCUSSION QUESTIONS 182

SUGGESTIONS FOR FURTHER READING 182

CHAPTER 7

THE AUTONOMIC NERVOUS SYSTEM AND HORMONES 183

The Autonomic Nervous System 184

 Fight or Flight: The Sympathetic Nervous System 184

 Rest and Digest: The Parasympathetic Nervous System 187

 How the Sympathetic and Parasympathetic Systems
 Work Together 189

Hormones and the Endocrine System 190

Measuring Physiological Aspects of Emotion 192

 Commonly Used Measures 193

 Measurement Challenges 197

The Autonomic Nervous System and Emotion 197

 Are Bodily Sensations Necessary for Emotional Feelings? 198

 Autonomic Nervous System Specificity of Emotions 200

 Culture and Emotion Physiology 203

 Physiological Aspects of Positive Emotions 204

Stress and Its Health Consequences 206

 Hans Selye and the Concept of Stress 207

 Defining and Measuring Stress 209

 How Stress Can Affect Health 211

SUMMARY 214

KEY TERMS 215

THOUGHT/DISCUSSION QUESTIONS 217

SUGGESTIONS FOR FURTHER READING 217

CHAPTER 8

EMOTIONAL DEVELOPMENT 218

Emotional Reactions in Infancy 219

 Crying 220

 Smiling and Laughing 221

 Responses to Danger 222

When Do Specific Emotions Emerge?	223
How Do Emotions Develop?	226
Physical Maturation	227
Cognitive Maturation	227
Social Interaction	228
Development of Emotional Communication: Perceiving, Sharing, and Talking About Emotions	228
Interpreting Facial Expressions of Emotion	230
Emotional Language	231
Socialization of Emotional Expression	232
Emotion in Adolescence	234
Emotional Development in Adulthood	236
Individual Consistency Across the Lifespan	236
Age Trends in Emotion	237
SUMMARY	240
KEY TERMS	241
THOUGHT/DISCUSSION QUESTIONS	242
SUGGESTIONS FOR FURTHER READING	242

CHAPTER 9 **EMOTION IN RELATIONSHIPS AND SOCIETY** 243

Early Emotional Bonds: Infant Attachment	244
What Is the Function of Attachment?	246
Behavioral and Biological Mechanisms of Attachment	247
Types of Attachment: Secure, Anxious-Ambivalent, and Avoidant	249
Romantic Love and Marriage	251
Romantic Attraction and Falling in Love	253
Attachment in Adult Romantic Relationships	256
Marriage: Predicting Satisfaction and Stability	262
Emotions in Caring for Others	265
Sympathy, Compassion, and Nurturant Love	266
Empathy	269
Emotions in Society	270
Attachment Processes in Friendships and Groups	270
Gratitude: Find, Remind, and Bind	272

The Appeasement Function of Embarrassment 273

Pride and Social Status 274

SUMMARY 275

KEY TERMS 276

THOUGHT/DISCUSSION QUESTIONS 277

SUGGESTIONS FOR FURTHER READING 278

CHAPTER 10 **EMOTION AND COGNITION** 279

Emotions and Attention 280

Emotions and Memory 283

Emotion and Memory Encoding 284

Emotion and Consolidation 288

Emotion and Retrieval 290

Emotions and Information Processing 290

Systematic Versus Heuristic Processing 292

Mood and Systematic Versus Heuristic Cognition 292

Are Depressed People More Realistic? 294

Positive Affect and Creativity 297

Emotions and Decision Making 298

The Somatic Marker Hypothesis 299

Choices Based on Preferences and Values 301

Emotions and Moral Reasoning 302

The Downside of Relying on Emotions 305

SUMMARY 306

KEY TERMS 307

THOUGHT/DISCUSSION QUESTIONS 308

SUGGESTIONS FOR FURTHER READING 308

PART 3 **How Can We Improve Emotional Well-Being?** 311

CHAPTER 11 **THE VALUE OF NEGATIVE EMOTIONS** 312

Fear 313

The Value of Fear 316

The Biology of Fear and Anxiety 318

Individual Differences: Gender and Genetics 320

Anger	322
The Value of Anger	325
The Biology of Anger and Aggression	326
Individual Differences: Expression and Management	328
Disgust	329
The Biology of Disgust	331
Individual Differences: Development and Implications	332
Sadness	334
The Value of Sadness	334
The Biology of Sadness	336
Individual Differences: Aging and Loss	336
Embarrassment, Shame, and Guilt	337
The Value of Self-Conscious Negative Emotions	338
The Biology of Embarrassment	341
Individual Differences in Self-Conscious Emotions	341
SUMMARY	342
KEY TERMS	343
THOUGHT/DISCUSSION QUESTIONS	345
SUGGESTIONS FOR FURTHER READING	345

CHAPTER 12 **HAPPINESS AND THE POSITIVE EMOTIONS** 347

Is Happiness an Emotion?	348
Measuring Subjective Well-Being	349
What Predicts Happiness?	350
Personality: The Top-Down Theory of Happiness	352
Life Events That Impact Happiness	353
Wealth and Happiness	354
Other Correlates of Happiness	356
The Broaden-and-Build Theory of Positive Emotion	359
Are There Multiple Positive Emotions?	361
Enthusiasm: The Anticipation of Reward	361
Contentment	363
Pride	365
Love	366
Amusement and Humor	369

Awe	372
Hope and Optimism	373
SUMMARY	375
KEY TERMS	375
THOUGHT/DISCUSSION QUESTIONS	376
SUGGESTIONS FOR FURTHER READING	377

CHAPTER 13 INDIVIDUAL DIFFERENCES IN EMOTION 378

Gender and Emotion	379
Gender Differences in Emotional Experience and Expression	379
Gender and Emotion Regulation	383
Gender and Empathy	384
Personality and Emotion	386
Biological Mechanisms of Individual Differences in Emotion	393
Frontal Lobe Activation Asymmetry	393
Serotonin Transporter Gene Polymorphism	395
Emotional Intelligence	398
Measuring Emotional Intelligence	399
Reliability and Validity of Emotional Intelligence Tests	403
Can Emotional Intelligence Be Taught?	406
SUMMARY	407
KEY TERMS	407
THOUGHT/DISCUSSION QUESTIONS	409
SUGGESTIONS FOR FURTHER READING	410

CHAPTER 14 EMOTION IN CLINICAL PSYCHOLOGY 411

Diagnosis in Clinical Psychology	412
Major Depressive Disorder	414
Multiple Types of Depression?	415
Causes of Depression	417
Treating Depression	422
Mania and Bipolar Disorder	424
Anxiety Disorders	426
Causes of Anxiety Disorders	429
Treating Anxiety Disorders	432

Obsessive–Compulsive Disorder	433
Antisocial Personality Disorder	434
Emotional Disturbances as Transdiagnostic Aspects of Disorder	435
SUMMARY	437
KEY TERMS	438
THOUGHT/DISCUSSION QUESTIONS	440
SUGGESTIONS FOR FURTHER READING	440

CHAPTER 15 **EMOTION REGULATION** 441

Freud’s Ego Defense Mechanisms: An Early Taxonomy of Coping Strategies	442
The Process Model of Emotion Regulation	444
Situation-Focused Strategies	446
Choosing Situations Wisely	446
Active Coping: Changing the Situation	447
Cognition-Focused Strategies	450
Attentional Control	450
Cognitive Reappraisal	453
Different Types of Reappraisal	455
Response-Focused Strategies	457
Escaping Emotions: Drugs, Alcohol, and Food	458
Suppressing Emotional Expression	458
Catharsis: Expressing Your Feelings	459
Exercise	461
Relaxation	462
The Neurobiology of Emotion Regulation	463
Which Emotion Regulation Strategies Are Best?	464
SUMMARY	466
KEY TERMS	467
THOUGHT/DISCUSSION QUESTIONS	469
SUGGESTIONS FOR FURTHER READING	469
References	470
Photo Credits	527
Name Index	529
Subject Index	543