

*Making Everything Easier!™*

2nd Edition

# Psychology

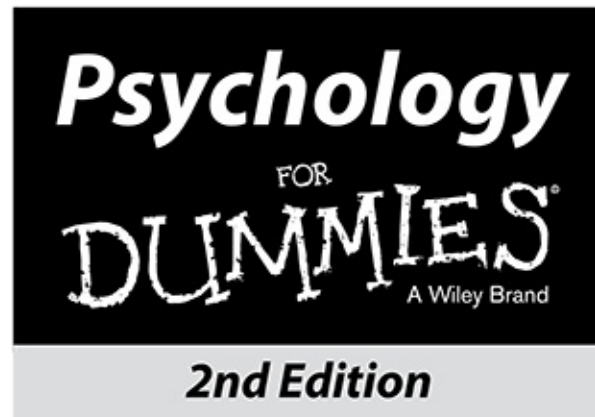
FOR  
**DUMMIES®**  
A Wiley Brand

## **Learn to:**

- Understand why you feel and act the way you do
- Grasp human behavior and mental processes
- Discover what psychology is all about

**Adam Cash, PsyD**  
*Psychologist*





by **Adam Cash, PsyD**  
Psychologist

FOR  
DUMMIES<sup>®</sup>  
A Wiley Brand

**Psychology For Dummies®, 2nd Edition**

Published by

**John Wiley & Sons, Inc.**

111 River Street,

Hoboken NJ 07030-5774

[www.wiley.com](http://www.wiley.com)

Copyright © 2013 by John Wiley & Sons, Inc., Hoboken, New Jersey

Published simultaneously in Canada

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, scanning or otherwise, except as permitted under Sections 107 or 108 of the 1976 United States Copyright Act, without the prior written permission of the Publisher. Requests to the Publisher for permission should be addressed to the Permissions Department, John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030, (201) 748-6011, fax (201) 748-6008, or online at <http://www.wiley.com/go/permissions>.

**Trademarks:** Wiley, For Dummies, the Dummies Man logo, Dummies.com, Making Everything Easier, and related trade dress are trademarks or registered trademarks of John Wiley & Sons, Inc., and may not be used without written permission. All other trademarks are the property of their respective owners. John Wiley & Sons, Inc., is not associated with any product or vendor mentioned in this book.

**Limit of Liability/Disclaimer of Warranty:** The contents of this work are intended to further general scientific research, understanding, and discussion only and are not intended and should not be relied upon as recommending or promoting a specific method, diagnosis, or treatment by physicians for any particular patient. The publisher and the author make no representations or warranties with respect to the accuracy or completeness of the contents of this work and specifically disclaim all warranties, including without limitation any implied warranties of fitness for a particular purpose. In view of ongoing research, equipment modifications, changes in governmental regulations, and the constant flow of information, the reader is urged to review and evaluate the information provided in the package insert or instructions for each medicine, equipment, or device for, among other things, any changes in the instructions or indication of usage and for added warnings and precautions. Readers should consult with a specialist where appropriate. Neither the publisher nor the author shall be liable for any damages arising herefrom.

For general information on our other products and services, please contact our Customer Care Department within the U.S. at 877-762-2974, outside the U.S. at 317-572-3993, or fax 317-572-4002. For technical support, please

visit [www.wiley.com/techsupport](http://www.wiley.com/techsupport).

Wiley publishes in a variety of print and electronic formats and by print-on-demand. Some material included with standard print versions of this book may not be included in e-books or in print-on-demand. If this book refers to media such as a CD or DVD that is not included in the version you purchased, you may download this material at <http://booksupport.wiley.com>. For more information about Wiley products, visit [www.wiley.com](http://www.wiley.com).

Library of Congress Control Number: 2013936850

ISBN 978-1-11860359-8 (pbk); ISBN 978-1-118-61132-6 (ebk); ISBN 978-1-118-61139-5 (ebk); ISBN 978-1-118-61142-5 (ebk)

Manufactured in the United States of America

10 9 8 7 6 5 4 3 2 1

# Psychology For Dummies<sup>®</sup>, 2nd Edition

Visit [www.dummies.com/cheatsheet/psychology](http://www.dummies.com/cheatsheet/psychology) to view this book's cheat sheet.

## Table of Contents

### Introduction

[About This Book](#)

[Foolish Assumptions](#)

[Icons Used In This Book](#)

[Beyond the Book](#)

[Where to Go from Here](#)

### Part I: Getting Started with Psychology

#### Chapter 1: Seeing the Purpose of Psychology

[What Is Psychology?](#)

[Whys, hows, and whats](#)

[Building a person](#)

[Finding the function](#)

[Checking the Parts List](#)

[Troubleshooting](#)

[Finding Professional Help](#)

[Putting It into Practice](#)

## Chapter 2: Making Sense of What People Do: Psychology Essentials

### Finding a Framework

Biological

Psychoanalytic/Psychodynamic

Behaviorism

Cognitive

Humanistic and existential

Sociocultural

Feminism

Postmodernism

### Working with the Biopsychosocial Model

Feeling out the role of the body

Thinking about the role of the mind

Observing the role of the outside world

### Resolving the Nature versus Nurture Debate

### Branching Off

### Seeking Truth

Applying the scientific method

Developing a good theory

### Researching Matters

Understanding descriptive research

Doing experimental research

Measuring one, measuring all with statistics

Relating variables: Correlation versus causation

Doing nothing is something: The placebo effect

## Part II: Picking Your Brain (And Body)

## Chapter 3: Hardware, Software, and Wetware

Believing in Biology

Recognizing the Body's Control Room

Tiptoeing into the periphery

Moving to the center

Running Like a Well-Oiled Machine: Body Systems

Forebrain

Midbrain

Hindbrain

Finding Out About Cells and Chemicals

Crossing the divide

Branching out

Activating brain change

Finding Destiny with DNA

Understanding Psychopharmacology

Easing depression

Shushing the voices

Relaxing

Undergoing No-Knife Brain Surgery

## Chapter 4: Conscious Beings

Exploring the Horizons of Awareness

Catching some zzzzs

Understanding tired brains, slipping minds

Arriving at Work Naked: Dreams

Altering Your Consciousness

Mind on the mind (meditative states)



[Getting high on conscious life](#)

[Falling into hypnosis](#)

## [Chapter 5: Getting Sensitive](#)

[Building Blocks: Our Senses](#)

[The sensing process](#)

[Seeing](#)

[Hearing](#)

[Touching and feeling pain](#)

[Smelling and tasting](#)

[Balancing and moving](#)

[Finishing the Product: Perception](#)

[Organizing by Principles](#)

## [Part III: Thinking and Feeling and Acting](#)

### [Chapter 6: Thinking and Speaking](#)

[Finding Out What's On Your Mind](#)

[Thinking Like a PC](#)

[Computing](#)

[Representing](#)

[Processing](#)

[Exploring Operations of the Mind](#)

[Focusing your attention](#)

[Packing it away in the ol' memory box](#)

[Conceptualizing](#)

[Making decisions](#)

[Thinking You're Pretty Smart](#)

[Considering the factors of intelligence](#)

[Getting a closer look](#)

[Adding in street smarts](#)

[Excelling with multiple intelligences](#)

[Making the grade — on a curve](#)

[Figuring Out Language](#)

[Babel-On](#)

[Sounds, bites, pieces, and pieces](#)

## [Chapter 7: How Does That Make You Feel?](#)

[Calling on Tony for Some Motivation](#)

[Trusting your instincts](#)

[Feeling needy](#)

[Arousing interest in prime rib](#)

[Getting cheaper long distance is rewarding](#)

[Facing your opponent-process theory](#)

[Knowing who's the boss](#)

[Launching Countless Bad Poems: Emotions](#)

[Finding out which comes first, the body or the mind?](#)

[Expressing yourself](#)

[Feeling the power of love](#)

[Acknowledging anger](#)

[Checking out happy](#)

[Discovering your smart heart: Emotional intelligence and styles](#)

## [Chapter 8: Barking up the Learning Tree: Dogs, Cats, and Rats](#)

[Learning to Behave](#)

[Drooling like Pavlov's Dogs](#)

[Conditioning responses and stimuli](#)

[Becoming extinct](#)

[Classic generalizing and discriminating](#)

[Conditioning rules!](#)

[Battling theories: Why does conditioning work?](#)

[Studying Thorndike's Cats](#)

[Reinforcing the Rat Case](#)

[Finding the right reinforcer](#)

[Using punishment](#)

[Scheduling and timing reinforcement](#)

[Becoming Aware of Stimulus Control and Operant Generalization](#)

[Discovering Operant Discrimination](#)

## [Part IV: Me, You, and Everything in Between](#)

### [Chapter 9: Developing an Award-Winning Personality](#)

[Knowing Who's a Nerd](#)

[Getting into the Mood with Freud](#)

[Having unique memories](#)

[Getting down with id, ego, and superego](#)

[Thinking about sex](#)

[Being defensive? I'm not defensive!](#)

[Going Beyond Freud](#)

[Heinz Hartmann](#)

[Robert White](#)

[Erik Erikson](#)

[Relating to Object\(s\)](#)

[Self Psychology](#)

[Object Relations](#)

[Learning from Others](#)

[Representing Ourselves](#)

[Schemas](#)

[Scripts](#)

[Getting the Magic Number 5](#)

## [Chapter 10: Catching the First Boat off Isolation Island](#)

[Feeling Self-Conscious](#)

[Becoming aware of your body](#)

[Keeping it private](#)

[Showing it off](#)

[Identifying Yourself](#)

[Forging a personal identity](#)

[Carving out a social identity](#)

[Mustering up some self-esteem](#)

[Getting Attached](#)

[Realizing even monkeys get the blues](#)

[Attaching with style](#)

[Cavorting with Family and Friends](#)

[Parenting with panache](#)

[Embracing your rival: Siblings](#)

[Getting chummy](#)

[Understanding Person Perception](#)

[Explaining others](#)

[Explaining yourself](#)

[Communicating Is Easier Said Than Done](#)

[Asking questions](#)

[Explaining](#)

[Listening](#)

[Asserting yourself](#)

## [Chapter 11: Conforming Like a Contortionist: Social Psychology](#)

[Playing Your Part](#)

[Ganging Up in a Group](#)

[Conforming](#)

[Doing better with help](#)

[Kicking back](#)

[Remaining anonymous](#)

[Thinking as one](#)

[Persuading](#)

[Being Mean](#)

[Acting naturally](#)

[Being frustrated](#)

[Doing what's learned](#)

[Lending a Helping Hand](#)

[Why help?](#)

[When to help?](#)

[Who gives and receives help?](#)

[Birds of a Feather . . . or Not](#)

[Finding out about isms](#)

[Understanding discrimination](#)

[Making contact](#)

## [Chapter 12: Growing Up with Psychology](#)

## Beginning with Conception and Birth

X's and Y's get together . . .

Uniting and dividing all in one night

## Going from Diapers to Drool

Survival instincts

Motoring about

Flexing their muscles

Scheduling time for schemata

Getting your sensorimotor running

Learning within the lines

Saying what you think

Blooming social butterflies

## Getting on the Big Yellow Bus

Mastering the crayon

Being preoperational doesn't mean you're having surgery

In the zone

Becoming even more social

## Agonizing over Adolescence

Pining over puberty

Moving away from parents

## Existing as a Grown-Up

Looking at you

Connecting and working

## Aging and Geropsychology

# Chapter 13: Modern Abnormal Psychology

Figuring Out What's Normal

Categorizing Symptoms and Disorders

[Grasping for Reality](#)

[Schizophrenia](#)

[Struggling with other types of psychoses](#)

[Feeling Funky](#)

[Staying in the rut of major depression](#)

[Riding the waves of bipolar disorder](#)

[Being Scared](#)

[Revealing panic disorder's causes](#)

[Treating panic disorder](#)

[Understanding Young People's Problems](#)

[Dealing with ADHD](#)

[Living in a world of her own](#)

## [Part V: Building a Better You](#)

### [Chapter 14: Assessing the Problem and Testing the Psyche](#)

[Naming the Problem](#)

[Documenting history](#)

[Examining mental status](#)

[Checking Under the Hood with Psychological Testing](#)

[Standardizing](#)

[Relying on tests](#)

[Trusting tests](#)

[Testing Types](#)

[Clinical testing](#)

[Educational/achievement testing](#)

[Personality testing](#)

[Intelligence testing](#)

[Neuropsychological and cognitive testing](#)

[Keeping Them Honest](#)

## [Chapter 15: Getting Comfy on the Couch](#)

[Finding Out What's Really Going On](#)

[Doing Analysis](#)

[Getting practical](#)

[Keeping an eye on the ball](#)

[Being \(the\) patient](#)

[Getting down to analyzing](#)

[Seeing the overall process](#)

[Transferring to the New School](#)

## [Chapter 16: Changing Behavior, Changing Thinking](#)

[Weeding Out Bad Behavior with Behavior Therapy](#)

[Basing therapy on learning theories](#)

[Assessing the problem](#)

[Trying different techniques](#)

[Applying Some Soap to Your Mind with Cognitive Therapy](#)

[Exploring distorted thinking](#)

[Changing the way you think](#)

[Playing Together Nicely: Behavior and Cognitive Therapies](#)

[Being Aware with Acceptance and Mindfulness-Based Therapies](#)

[You're Okay, Now Change: Dialectical Behavior Therapy](#)

## [Chapter 17: Being a Person Is Tough: Client-Centered and Existential Therapies](#)



## Client-Centered Therapy: Shining in the Therapist's Spotlight

Understanding theory of the person

Reconnecting in therapy

## Being at Peace with Your Being: Existential Therapy

Hanging out with your hang-ups: Death, guilt, and anxiety

Being in the here and now: Time and transcendence

Facing freedom, isolation, and meaninglessness

Letting go of defense mechanisms

Claiming responsibility

# Chapter 18: Stress, Illness, Growth, and Strength

## Stressing Out

Considering ways to think about stress

Stressing to the types

Getting sick of being worried

## Coping Is No Gamble

Discovering how to cope

Finding resources

## Going Beyond Stress: The Psychology of Health

Preventing illness

Making changes

Intervening

## Harnessing the Power of Positivity

## Acquiring the Bionic Brain

Doing smart drugs

Hitting the limits of the skull

# Part VI: The Part of Tens

## Chapter 19: Ten Tips for Maintaining Psychological Health

Accept Yourself

Strive for Self-Determination

Stay Connected and Nurture Relationships

Lend a Helping Hand

Find Meaning and Purpose and Work Toward Goals

Find Hope and Maintain Faith

Find Flow and Be Engaged

Enjoy the Beautiful Things in Life

Struggle to Overcome; Learn to Let Go

Don't Be Afraid to Change

## Chapter 20: Ten Great Psychological Movies

One Flew Over the Cuckoo's Nest

A Clockwork Orange

12 Monkeys

Ordinary People

Girl, Interrupted

The Silence of the Lambs

Sybil

Psycho

The Matrix

The Boost

## Cheat Sheet

# Introduction

So you've bought *Psychology For Dummies*. How does that make you feel? Hopefully, you're feeling pretty good. And why shouldn't you be? You're going to discover all kinds of interesting information about the basics of human behavior and mental processes.

Everybody is interested in psychology. People are fascinating, and that includes you! Humans often defy explanation and evade prediction. Figuring people out can be pretty hard. Just when you think that you've figured someone out, bang, he surprises you. Now I know that some of you may be thinking, "Actually, I'm a pretty good judge of people. I've got a handle on things." If that's the case, that's great! Some folks do seem to have a more intuitive understanding of people than others. For the rest of us though, there's psychology.

## About This Book

*Psychology For Dummies* is an introduction to the field of psychology. I tried to write this book using plain English and everyday examples with the hope that it will be real and applicable to everyday life. I've always felt that tackling a new subject is more enjoyable when it has real-world importance. Psychology is full of jargon, so much jargon that it even has its own dictionary, aptly named *The Dictionary of Psychology* (Penguin Reference Books). This book is for those of you who are interested in what people do, think, say, and feel, but want the information presented in a clear and easily understandable manner.



The information in this reference is not intended to substitute for expert psychological, healthcare, or medical advice or treatment; it is designed to help you make informed choices. Because each individual is unique, a psychologist, healthcare practitioner, or physician must diagnose conditions and supervise treatments for each individual health problem. If an individual is under a psychologist's or physician's care

and receives advice contrary to information provided in this reference, the psychologist's or physician's advice should be followed, as it is based on the unique characteristics of that individual.

Conventional language for psychologists can sound like gibberish to someone who has never had a psychology class. As I state earlier in this chapter, I try to stay away from jargon and technical language in this book. You may come across an attempt at a joke or two. I tend to take a lighter approach to life, but sometimes people don't get my sense of humor. If I try to crack a joke in the text and it bombs, please don't be too harsh. I'm a psychologist after all, and I don't think we're known for our sense of humor. I hope I don't come across as insensitive or cavalier either — that is certainly not my intention.

Sometimes, talking about psychology can be pretty dry, so I try to liven things up with examples and personal stories. I make no references to any patients I've ever had in therapy. If there appears to be a resemblance, it's purely coincidental. In fact, I took great care in preserving the privacy and confidentiality of the people I have worked with.

## ***Foolish Assumptions***

You can find a lot of psychology books out there. Most of them are either too technical and specialized or cover too narrow an area of psychology. Here are some of the reasons why I think *Psychology For Dummies* is the book for you:

- ✓ You've got a lot of questions about people.
- ✓ You've got a lot of questions about yourself.
- ✓ You're thinking about going into the field of psychology.
- ✓ You're currently studying psychology or a related discipline, such as social work or counseling.
- ✓ You're interested in psychology but don't have the time or the money to take a psychology course.
- ✓ You've got people all figured out, and you want to see if I'm on track.

## ***Icons Used In This Book***

Throughout this book, you find icons in the margins. They're there to help you easily find certain types of information. Here's a list of the icons you see:



When you see this one, I'm asking you to engage in a little psychological experimentation. In other words, you're the guinea pig when you run across this icon. What would psychology be without its guinea pigs? Don't worry — the experiments are harmless. No shocks, I promise.



When you see this icon, I'm trying to emphasize a bit of information that may come in handy someday.



With this creative piece of art, I'm trying to alert you to information that is a “must know” if you're going to learn psychology.



Don't forget it. When you see this icon I am reminding you of the highlights from that section. It flags the “if you learn just one thing from this chapter” type of stuff, so pay attention.



This icon flags discussions that may rise above the level you need to basically understand the topic at hand. These sections can safely be skipped without harming your comprehension of the main point.

## ***Beyond the Book***

In addition to the chapters in this print book, you'll find lots more *Psychology for Dummies* information on the Web at [www.dummies.com/extras/psychology](http://www.dummies.com/extras/psychology). For free!

There's just too much good information out there, and I want you to learn as much as you can about psychology. But there was only so much space I had to work with in print. So I put the rest online for you.

Check out the eCheat Sheets for quick access to information about the differences between psychologists and other mental health professionals and coping with psychological crises.

You'll also find three extra online "chapters" — full articles on the following topics:

- ✓ "Ten Ways the Internet and Psychology are Intersecting" deals with the psychology of the Internet and cyberpsychology.
- ✓ "Applying Psychology for a Better World" covers behavioral economics and forensic psychology.
- ✓ "Exploring Human Differences: Culture, Gender, and Sexuality" is a look at the differences that make us unique as individuals and groups.

For fun, you can also take a couple of mock tests to check out your intelligence and personality!

## *Where to Go from Here*

Psychology is a broad field. I think you'll find that the organization of this book lets you check out what you're interested in and leave the rest of the stuff behind, if you want.

Use the table of contents and index to see what grabs your interest. If you're new to the subject, by all means start with [Chapter 1](#) and go. But you don't have to read it cover to cover. Kind of like a cafeteria — take what you like and leave the rest.

But hey, if I can write an entire book on psychology, I think you can read an entire book on this stuff. Besides, I think you'll like it. Psychology is a great subject. Enjoy!

## **Chapter 2**

# **Making Sense of What People Do: Psychology Essentials**

---

## In This Chapter

- ▶ Figuring ourselves out
- ▶ Using a little folk psychology
- ▶ Clearing things up
- ▶ Understanding the placebo effect

In a way, each of us is an amateur psychologist of sorts. Professional psychologists aren't the only ones who try to figure people out. When I started taking psychology courses, I had my own ideas about people. Sometimes I agreed with the theories of Freud and others, and sometimes I disagreed wholeheartedly. I'm not alone. Most people seem to have specific ideas about what makes others tick.

Psychology covers a topic we all have experience with — people. It's pretty hard to say the same thing about chemistry, astronomy, or electrical engineering. Of course, we all encounter chemicals every day, but I can't remember the last time I asked, "How do they get that mouthwash to taste like mint?" However, a psychologist may ask, "What happens inside a person so that her toothpaste tastes like mint?"

One of the best places to catch armchair psychologists (people who speculate without systematic evidence) in action is the local coffeehouse or watering hole. People love talking about the whys and the wherefores of other people's behavior. "And then I said. . . ." "You should have told him. . . ." Hanging out in public social spaces is much like being in group therapy sometimes. People work hard at figuring out other people.



Psychologists sometimes call this armchair psychologizing *folk psychology* — a framework of principles used by ordinary people to understand, explain, and predict their own and other people's behavior and mental states. In practice, everyone uses a variety of psychological notions or concepts to explain individuals' mental states, personalities, and behaviors. Two concepts in particular that people tend to rely on are *beliefs* and *desires*. That is, most people assume that people have beliefs and that they act on those beliefs. So when you wonder why people do



what they do, it's easy; it's because of their beliefs.

Yet folk psychology isn't the only tool in the bag of an armchair psychologist. People also explain other's behavior in terms of luck, curses, blessings, karma, fate, destiny, and other non-psychological terms. Using these explanations isn't necessarily a bad thing. It's pretty hard to explain from a psychological perspective why someone wins the lottery. Explaining why someone continues to buy tickets when they keep losing, however, is a question for psychology.

In this chapter, you find out how psychologists go about their business, including how overarching theories frame the questions they ask and the variables they look at. You also get a look at the various branches of psychology that include more than what people typically think of such as clinical psychology. Finally, you see how the discipline of psychology works to be as scientific as possible by basing its knowledge on research and statistical methods, which shores up its credibility among the other scholarly disciplines.

# *Finding a Framework*

At a very basic level, psychology is a branch of knowledge. Psychology exists among and interacts with other scientific and scholarly disciplines in a community-like environment of knowledge, and contributes a vast collection of theories and research to help answer questions related to human behavior and mental processes. A number of other fields of study — physics, biology, chemistry, history, economics, political science, sociology, medicine, and anthropology — attempt to use their own perspectives to answer the same basic questions about people that psychology addresses.

One comment I get from students from time to time is, “What makes you think that psychology has all the answers?” My answer is, “Psychologists are just trying to provide a piece of the puzzle, not all the answers.”

To enable psychology to contribute to the community of knowledge about people, over the years, psychologists as a group have come up with a basic set of *broad theoretical perspectives*, or frameworks to guide the work of psychology. These broad theoretical frameworks are sometimes referred to as *metatheories*. The lion’s share of psychological research is based on one or more of these broad frameworks or metatheories.

Each metatheory provides an overarching framework for conducting psychological research and comes with a different point of emphasis to figure out what people do, and why and how they do it. Other perspectives represent hybridized approaches, such as motivational science and affective neuroscience. But for now, I’m just sticking with the basics.

In this section, I describe the most common metatheories psychologists use when they find a behavior or mental process they’re interested in researching. Work typically begins from within one of these theories.

## ***Biological***

The biological approach centers on the biological underpinnings of behavior, including the effects of evolution and genetics. The premise is that behavior and mental processes can be explained by understanding genetics, human physiology, and anatomy. Biological psychologists focus mostly on the brain and the nervous system. (For more on biological psychology, see [Chapter 3](#).) Neuropsychology and the study of the brain, genetics, and evolutionary psychology are included within the biological metatheory.

For an example of biology's impact on behavior, just think about how differently people act when they're under the influence of alcohol. Holiday office parties are good laboratories for applying the biological perspective. You walk into the party and see Bob, the relatively quiet guy from accounting, burning up the cubicles. Bob's transformed into a lady's man. He's funny. He's drunk. Do you think Bob will remember?

## ***Psychoanalytic/Psychodynamic***

The psychoanalytic/psychodynamic metatheory emphasizes the importance of unconscious mental processes, early child development, personality, the self, attachment patterns, and relationships. This approach explores how these mental and developmental processes interact with the challenges of life and everyday demands to affect the person you are and how you behave.

Sigmund Freud founded psychoanalysis in the early 1900s; since then, hundreds of theorists have added to his work. The later theories are typically labeled *psychodynamic* because they emphasize the dynamic interplay between various components of mind, the self, personality, others, and reality. Object Relations Theory and Self Psychology are two specific theoretical perspectives that fall within the psychoanalytic/psychodynamic metatheory. (For more on psychoanalysis/psychodynamics, flip to Chapters [9](#) and [15](#).)

## ***Behaviorism***

Behaviorism emphasizes the role and influence of a person's environment and previous learning experiences to understanding behavior. Behaviorists don't traditionally focus on mental processes per se because they believe that mental processes are too difficult to observe and measure objectively. In the framework of behaviorism, the "why" of behavior can be explained by looking at the circumstances in which it occurs and the consequences surrounding someone's actions. Classical conditioning and operant conditioning are ways of understanding behavior and they lead to behavior modification, a specific approach to modifying behavior, and helping people change that comes from the metatheory of behaviorism (see [Chapter 8](#) for details on some behavior-modification techniques that are based on classical and operant conditioning).

## *Cognitive*

The cognitive framework centers on the mental processing of information, including the specific functions of attention, concentration, reasoning, problem solving, and memory. Cognitive psychologists are interested in the mental plans and thoughts that guide and cause behavior and affect how people feel. Intelligence testing and information-processing theories are examples that fall within the cognitive metatheory.

Whenever someone tells you to look at the bright side, they're coming from a cognitive perspective. When something bad happens, most people feel better if the problem gets solved or the issue is resolved. But how should you feel if nothing changes? If circumstances don't change, do you have to feel bad forever? Of course not; in most cases, people can change the way they think about a situation. You can choose to look on the bright side — or at least not look solely at the downside. That's the gist of cognitive therapy.

## *Humanistic and existential*

The humanistic and existential metatheory emphasizes that each person is unique and that humans have the ability and responsibility to make choices in their lives. I'm not a victim of circumstance! I have choices in my life.

Humanists believe that a person's free choice, free will, and understanding of the meaning of events in his or her life are the most important things to study in order to understand behavior. The works of Victor Frankl, Rollo May, and Fritz Perls and the study of spirituality and religion are examples that fall within this framework.

In your own life, have you ever felt like just another nameless face in the crowd? Has your life ever seemed as if it's controlled by the winds of chance? How did it feel? Probably not very good. Feeling like you have choices — and making good choices — gives you a sense of true being and affirms your existence. That's the case with most people anyway, and psychologists who work within the humanistic and existential metatheory believe that behavior is simply a result of choice.

## ***Sociocultural***

The sociocultural approach focuses on the social and cultural factors that affect behavior. This is all about the enormous power of groups and culture on the why, how, and what of behavior and mental processes.

Tattoos and body piercings are good examples of this power. At one point in mainstream culture, people who got ink and piercings were perceived to be acting outside of the status quo, so “status quo” people weren’t lined up outside the tattoo or piercing parlor. Nowadays, both are widely accepted, and even Mr. Status Quo may have a tat or piercing (or two or three).

Social and cross-cultural psychology fall within the sociocultural metatheory.

## ***Feminism***

Feminist psychology focuses on the political, economic, and social rights of women and how these forces influence the behavior of both men and women. Although feminism had some earlier influence, the feminist perspective in psychology gained momentum during the women's movement of the 1960s.

One issue in particular that has caught the attention of feminist researchers and clinicians is eating disorders. From the perspective of feminists, eating disorders are largely the consequence of excessive pressures to be thin that mass media and culture place upon females of all ages. Feminists draw attention to the fashion magazines and female role models in popular culture.



## ***Postmodernism***

The Postmodern metatheory questions the very core of psychological science, challenging its approach to truth and its focus on the individual.

Postmodernists propose, for example, that in order to understand human thinking and reason, we need to look at the social and communal processes involved in thinking and reason. Reality is not something out there independently; it is something that humans, as a community, create.

Postmodernists make the argument that people in powerful positions have too much to say about what is “real” and “true” in psychology, and they advocate a *social constructionist* view of reality, which states that the concepts of “reality” and “truth” are defined, or constructed, by society. These concepts, according to this framework, have no meaning apart from the meanings that society and its experts assign to them. Narrative and constructionist theories are examples that fall within the metatheory of Postmodernism.

# *Working with the Biopsychosocial Model*

Over the years, each of these metatheories has enjoyed its day in the sun, only to be put on the shelf when the next big thing came along. This revolving door of explanatory frameworks makes it tough to sort through the different metatheories and choose the best one for finding the answers you're seeking. Where do you begin?

One alternative to picking a metatheory is to combine several views together, thus adopting an integrationist approach. The *biopsychosocial model* of psychology represents a popular attempt at integration.

The basic idea behind this model is that human behavior and mental processes are the products of biological, psychological, and social influences. Biopsychosocialists try to find out how these influences interact to produce behavior. They believe that any explanation of behavior and mental processes that doesn't consider all three primary factors (body, mind, and environment) is incomplete.

## *Feeling out the role of the body*

As material beings, humans are made of flesh and bones. Any discussion of thoughts, feelings, and other psychological concepts that doesn't factor in biological makeup and function, especially the brain and nervous system, ignores the fundamental facts of human existence.

Take the mind for example. Most people agree that they have a mind and that others (well, most others) have one too. But where does this mind exist? Psychologists accept that the mind exists in, or is synonymous with, the brain. The biological metatheory is integrated into the biopsychosocial model because of this component. You may say that, just as digestion is what the stomach does, "mind" is what the brain does.

## *Thinking about the role of the mind*

When most people think about psychology, they have this aspect of the biopsychosocial model in mind (no pun intended). Thoughts, feelings, desires, beliefs, and numerous other mental concepts are addressed by the

biopsychosocial model through analysis of the role of the mind.

What if this book was about botany? Would the biopsychosocial model apply? Only if you believe that plants have minds. In other words, it'd be a stretch! This highlights the uniqueness of the biopsychosocial model of psychology: The mind is central to understanding behavior and mental processes.

Behaviorists neglect the mind. Biological psychologists study the mind as the brain. By considering a person's mental state in the context of the biological systems and social environment, biopsychosocial psychologists get a broader view of a person's behavior and mental state than those who focus exclusively on one aspect of the three-part model.

### ***Observing the role of the outside world***

Brains don't work and minds don't think in a vacuum. Behavior and mental processes are embedded within a context that includes other people and things in the environment in which people live. Therefore, the social aspect of the biopsychosocial model also includes parent-child relationships, families, communities, and culture.

Other people have enormous power in shaping and influencing an individual's behavior and mental processes. If you're unsure, consider the detrimental effects that negative social events or experiences, such as physical or sexual abuse, can have on a person. Overlooking the impact of a person's interaction with family and friends is to neglect reality.

Do behaviors and mental processes vary across cultures? Let me put the question to you this way: If I only conducted research with white, middle-class, college students, can I state that my results apply to all people? Definitely not. This subject has been a hot topic in psychology over the last 30 years or so. Technological advances help make our world a smaller place and different cultures come into contact with each other more often than ever before, making a person's social life increasingly complex. Thus, just as the influence of family and friend relations is critical, it is also vital that psychologists consider cultural differences.

So it's safe to say that the culture in which an individual is raised as well as the cultures he experiences or adopts throughout life impact his behavior and mental processes.

Cultural influence needs to be addressed in psychology for at least two

Cultural influence needs to be addressed in psychology for at least two reasons:

- ✓ **Science seeks objectivity and truth.** Everyone is vulnerable to cultural bias, and psychologists are no exception. Therefore, psychology should try to identify the influence of culture on their own thinking, theories, and research in order to provide the most objective and complete picture of reality possible.
- ✓ **Accuracy depends on the relativity of truth in a specific culture.** So, just because research with Americans shows that using baby talk to communicate with infants stunts the growth of mature speech, this doesn't mean that these findings hold true in other countries.

## *Resolving the Nature versus Nurture Debate*

Consider professional athletes, those elite performers who are lucky enough to get paid to play games for a living. How much luck do you think is really involved? A common misconception about professional, elite athletes is that their natural raw talent accounts for their success. Yet anyone who has worked with or known one of these individuals will tell you that hard work has a lot to do with his success.

So which is it? Talent or hard work? This question lies at the heart of a long-running debate within psychology; it's known as the *nature versus nurture* debate. Talent versus hard work. Inborn ability versus learning and effort.



*Nature* refers to the concept that behavior and mental processes are innate, inborn, and hard-wired and will unfold over time as a person develops and her genetic blueprint is revealed. *Nurture* refers to the idea that behavior and mental processes are not inborn and instead are learned from the environment in which people live.

Both perspectives have their proponents. John Locke, a 17th-century British philosopher, espoused the concept of *tabula rasa*, the “blank slate” and believed that, given the right learning experiences, a person can become anything in life. On the other side is Charles Darwin, the father of evolution

and nature advocate, who believed that a person's destiny is found in his biology and genes.

A quote by John Watson, considered by some historians as the founder of behaviorism, epitomizes this perspective:

Give me a dozen healthy infants, well-formed, and my own specified world to bring them up in and I'll guarantee to take any one at random and train him to become any type of specialist I might select — doctor, lawyer, artist, merchant-chief, and, yes, even beggarman and thief, regardless of his talents, penchants, tendencies, abilities, vocations, and race of his ancestors. I am going beyond my facts and I admit it, but so have the advocates of the contrary and they have been doing it for many thousands of years.

— John B. Watson, *Behaviorism*, 1930

Most modern psychologists consider this debate over. The simple answer is that both nature and nurture impact a person's behavior and level of success. This means that making sense of what people do and why they do it is ultimately accomplished only by investigating and understanding the relative contributions of innate biological influences and learned environmental influences.

# Branching Off

Fundamentally, psychologists are scientists who are armed with metatheory, the biopsychosocial model, research, and data as they go about their business. There are three main types of psychologists:

- ✓ **Experimental psychologists** spend the majority of their time conducting research and teaching, and they often work in academic settings. Experimental psychology covers a wide range of topics, but individual researchers typically have a specialty such as social psychology or developmental psychology.
- ✓ **Applied psychologists** directly apply research findings and psychological theory to everyday settings and problems. Applied psychologists work in a wide variety of settings, such as business, government, education, and even sports. Popular areas of applied psychology include Industrial/Organizational Psychology, Forensic Psychology, and Military Psychology.
- ✓ **Clinical psychologists** study, diagnose, and treat psychological problems.

Of course, some psychologists fit in more than one of these categories, for example, clinical psychologists conducting research.

The American Psychological Association states that in order for an individual to be considered a psychologist, he or she must possess a doctoral degree (a PhD, PsyD, or EdD, for example), and although requirements may vary from country to country, this is a generally accepted standard in much of the world as well. And nearly all US states require the individual to obtain a license to practice psychology, which typically involves taking an intensive licensing exam. In the United Kingdom, the British Psychological Society requires doctoral-level training in order to practice as a clinical psychologist, and practitioners are regulated by the Health and Care Professions Council.

## Considering ethics

Human conduct is guided by codes of behavior known as *ethics*. Simply put, ethics refers to the prescribing of *right* behavior and the proscribing of *wrong* behavior. In addition to psychologists being guided by the principles of science, they are also guided by their own code of ethics, their own understanding of right and wrong behavior.

The *American Psychological Association* (APA; visit its website, [www.APA.org](http://www.APA.org)) is the largest organization in the world representing psychology as a profession. Other countries, including the UK, have their own professional bodies, with similar regulatory frameworks. The mission of the APA is to advance the field of psychology and to benefit society. The APA's *Ethical Principles of Psychologists and Code of Conduct* is the ethical rule book for psychologists. The main components of this rulebook are the "General Principles" and specific "Ethical Standards." The Ethical Standards are numerous and cover topics ranging from resolution of ethical dilemmas to competence, education and training, and therapy.

Although all the ethical standards are important, the one that is often considered tantamount is the ethical principle of *confidentiality* — that information of a research participant or therapy client information is kept private and there are limits on how and when it can be disclosed to a third party. The APA's code is enforceable for members of the association, and a breach of the code can result in expulsion from the association. Most state licensing boards in the United States have adopted the APA's code as their guide and standard as well and can enforce compliance through various forms of disciplinary action including revoking licenses.

Generally speaking, the code of ethics is shaped by several overarching principles that compel psychologists to act in the best interest of the people they are working with or for (for example, clients, patients, students, or research subjects) and to avoid any harm. They are expected to act responsibly and with best practices in mind, with honesty and integrity. Basic human rights and dignity should be respected and justice should be preserved and pursued.

# Seeking Truth

It seems that I've always been looking for *the* truth. When I was in college, I frequented a little bookstore near campus that specialized in spiritual, philosophical, and popular-psychology books. At least once a week, I would peruse the shelves looking for something interesting. The books were arranged by topic: metaphysics, Eastern wisdom, Western wisdom, Buddhism, Taoism, Judaism, Islam, Christianity, new age, channeling, and so on. I read books from every section. I was searching for some kind of ultimate truth, some kind of answer.

One day, I realized that I had sampled works from every section in this bookstore, but I still wasn't satisfied. Then, I had a strange thought: This bookstore is full of opinions! How was I supposed to find the answers or the truth when I was only getting opinions? Many of the books contained testimonials, logical arguments, and stories, but very little, if any, evidence or proof. If I questioned something, I simply had to take an author's word for it and trust it was true. But they couldn't all be right because some authors contradicted or criticized others. So who was right?

I guess I'm just one of those people who needs proof. It would be an exaggeration to say that I'm finding all the answers in psychology, but, as a field, psychology makes a serious effort to establish the truth of its claims with proof, or *empirical evidence*, which comes from applying the *empirical method*, an approach to truth that uses observation and experiment.

Psychology, as the scientific study of human behavior and mental processes, uses the empirical method. It relies on data and information obtained from research, experimentation, observation, and measurement. The empiricist motto is *Show me the data*. This is not to deny the importance of theory. But theory is insufficient as a working position for reliable psychologists.

Psychologists act responsibly when they are working with empirical evidence and less responsibly when not. These scientists are expected to base their work on solid data and information, not opinion.

From an empirical perspective, just because a psychologist says something doesn't make it true. A psychologist is compelled to base her claims on empirical evidence gathered from research and statistical analysis. Is it really



worth paying for a psychologist's services to treat depression or a phobia, for example, if what she is saying and doing is just based on her opinion? What makes her the expert? You expect professionals to possess a credible amount of specific knowledge about their area of expertise, and this knowledge and expertise should be based on empirical evidence.

The authority of these experts is maintained through the ways in which they know and investigate their subject matter.

Words like *knowledge* and *truth* can be tricky sometimes. Knowing where psychologists' knowledge comes from is an important first step in learning about psychology. In this section, I explore the different ways that psychologists gather evidence and try to substantiate the truth of their claims and knowledge. Specifically, I describe scientific research and theory development, the two primary tools psychologists use to establish expertise in human behavior and mental processes.

## *Applying the scientific method*

Most everyone has an opinion about the behavior and mental processes of others and ourselves. “She left you because you’re emotionally unavailable.” “If you don’t express yourself, it just stays bottled up inside.” We’re full of answers to the why, how, and what questions regarding people. But how do we really know that not talking about feelings leads to bottling them up? I may think that not expressing feelings allows them to drift away like clouds on a windy day. Who’s right? You may be thinking that it doesn’t matter, but we’ve got this whole group of psychologists who claim to be experts on these matters. On what grounds can they make this claim to expertise?

Psychologists strive to maintain their expertise and knowledge through the use of three forms of knowledge acquisition or ways of knowing:

- ✓ **Authority:** Utilized to transmit information, usually in a therapy setting or the education and training process. Patients and students don’t have time to go out and research everything that they’re told. They have to take someone’s word for it at some point.
- ✓ **Rationalism/logic:** Used to create theories and hypotheses. If things don’t make logical sense, they probably won’t make sense when researchers use the scientific method to investigate them.
- ✓ **Scientific method:** Used as the preferred method of obtaining information and investigating behavior and mental processes. Psychologists implement the scientific method through a variety of different techniques.



Let me be perfectly clear: Not everything that psychologists do, talk about, and believe is based on scientific research. A lot of stuff is based on the authority of well-known personalities in the field. Other knowledge is based on clinical experience without any systematic investigation. A good-sized chunk of information that’s out there is also purely theoretical, but it makes sense on rational or logical grounds.

The vast majority of psychologists prefer to use the scientific method when seeking truth because it’s seen as a fair and impartial process. When I do a research study, I’m expected to outline exactly what I’m doing and what it is I claim to be looking for. That way, if people want to try to prove me wrong,

they can repeat my work, step by step, and see if they get the same results. If knowledge is based on authority alone, I can never be sure that the information I receive is unbiased and trustworthy. When the scientific method is in place, a theory that doesn't match the empirical results experienced in a research study is labeled inaccurate. Time for a new theory!



Scientists should never change their experimental data to match their original theory; that's cheating!

## *Developing a good theory*

A *theory* is a set of related statements about a set of objects or events (the ones being studied) that explains how these objects or events are related. Knowing this is important because a significant amount of psychological knowledge is based on theory. Theories perform two main functions: They combine what is already known into a simpler package of knowledge and they help psychologists plan future investigations: Theories *summarize* and *guide*.

Theories and hypotheses are similar but not exactly the same thing. Psychologists test theories by studying their logical implications. Hypotheses are specific predictions based on these implications. You can add new information to theories, and you can use existing theories to generate new ones.



Not every theory is a good theory. In order for a theory to be good, it must meet three criteria:

- ✓ **Parsimony:** It must be the simplest explanation possible that still explains the available observation.
- ✓ **Precision:** It must make precise, not overly large or vague, statements about reality.
- ✓ **Testability:** It must lend itself to scientific investigation. There must be some way to show that the theory can be wrong. It is easy to collect more information consistent with one's theory. It is braver to be a scientist: to examine situations that may prove one's theory wrong.

# *Researching Matters*

Psychologists use two broad categories of research when they want to scientifically evaluate a theory: descriptive research and experimental research. In this section, I describe these approaches and dig into matters related to statistics, understanding cause and effect in correlational studies, and the fascinating placebo effect.

## ***Understanding descriptive research***

Descriptive research consists of observation and the collection of data without trying to manipulate any of the conditions or circumstances being observed. It's a passive observation of the topics being investigated.

Descriptive studies are good for developing new theories and hypotheses and are often the first step for a researcher investigating things that haven't been studied much. However, they don't help much if you're interested in cause and effect relationships.

If I'm only interested in the content of bus-stop conversations, I may videotape people talking to each other at a bus stop and analyze the video. But, if I want to know what causes people to talk about certain subjects at bus stops, I should conduct an experiment.

## *Doing experimental research*

Experimental research involves the control and manipulation of the objects and events being investigated in order to get a better idea of the cause and effect relationships between the objects or events.

Say I have a theory about bus-stop conversations called the “five-minute or more rule” that states, “Strangers will engage in conversation with each other only after having been in each other’s presence for five or more minutes.” My hypothesis is, “After five minutes, apparent strangers will engage in a conversation beyond the simple pleasantries and greetings afforded to strangers.” That is, I am hypothesizing that after strangers at a bus stop have been there for five minutes, they will start having a conversation. How can I test my hypothesis?

I can just hang out at a bus stop and watch to see if it happens. But how do I know that my five-minute-or-more rule is behind my observations? I don’t. It maybe any number of things. This is a problematic issue in research I like to call the *z-factor*. A *z-factor* is something affecting the hypothesis that I am unaware of or not accounting for. It is an extraneous variable that I need to control in order to have confidence in my theory. Some possible *z-factors* in the bus-stop study may be culture, age, and time of day. Good research studies try to eliminate *z-factors* or extraneous variables by controlling for their influence and factoring them out of the explanation.

A descriptive or observational study won’t account for *z-factors*, so instead I set up an experiment in which I approach people at bus stops and try a variety of things to test my hypothesis. I may go up and try to talk to someone after two minutes. I may wait for ten minutes. I may conduct studies during a thunderstorm or while dressed in particular ways, and I would try to prove my hypothesis wrong! I seek to find that people have conversations at bus stops before five minutes. If this is the case, then the five-minute rule is inaccurate. The more often I fail to prove my five-minute-or-more rule wrong, the more it deserves my confidence.

This is confusing. Why would I try to disprove my hypothesis instead of just proving it right? In any scientific investigation, I can never really prove a hypothesis true. Instead, I set out to disprove the opposite of my hypothesis. For example, people once thought the earth was flat. Everything observed at that time was consistent with this idea. However, someone came along and

provided evidence that disputed this idea, which showed the flaw in the thinking. If I have a hypothesis and I keep finding evidence for it, I can be more and more confident in my hypothesis but never really know for sure. But if I can find just one example that contradicts my hypothesis, then this casts doubt on my hypothesis. If I say all swans are white, what happens when I find one black swan? The notion that all swans are white is false!

## ***Measuring one, measuring all with statistics***

Good psychology is based on solid theory and good data, whether the data is obtained through observation or experimentation. And psychology claims to make statements about all people. That is, psychologists claim that their research applies to people in general most of the time. They seek the truth as it applies to all people. But without conducting research on everyone on Earth, how can psychologists possibly make this claim?

A branch of mathematics called *statistics* comes riding in on a white horse to enable a psychologist to make claims about humanity based on studies and research conducted on only a few dozen or a couple hundred people. After a theory is developed, the scientific method dictates that that theory then be put to the test, either through observation or experimentation. Again, we run into the problem of not being able to observe or experiment with everyone and this is where statistics helps out.

Statistics is concerned with the rules of data collection and analysis. Generally, two types of statistical analyses are used in psychology, descriptive and inferential:

- ✓ **Descriptive statistics** refer to the direct numerical measurement of characteristics of a *population* such as how many of something there are, what the average number of some phenomenon is, or what the range of a particular value of something is. I am describing what is there, but not going beyond the data. If I conduct descriptive statistics on all swans to test my hypothesis that all swans are white, I would have to describe every swan. Formally, a *population* is defined as a well-defined, complete collection of things, objects, and so on. A descriptive analysis requires a description of the entire swan population.
- ✓ **Inferential statistics** comes to the rescue when I can't measure all swans, because this approach allows me to measure a *sample* of swans, a subset



of the swan population, and then make inferences or estimates about the population as a whole from the sample that was drawn.

Inferential statistics solves the measurement dilemma as long, of course, as you follow some basic rules such as *randomization* and appropriate *sample size*.



Randomization allows researchers to make inferences about a population based on the way a sample is chosen. Every member of the population must have the same chance of being in the sample.

Collecting a random sample ensures that the population is well represented. If you don't randomly choose the people to measure, then you can fall prey to *sampling bias*, choosing in a way so that some members of the population are less likely to be included than others. Sampling bias prevents you from being able to make statements about an entire population.

This issue often comes up in the use of polls during election season. A pollster claims that a result from measuring a sample extends to the population of likely voters, and critics are quick to point out that the sample consisted of 20-to 25-year-old graduate students at a liberal arts college in the Northwest. Is this a representative sample of likely voters?

Another key ingredient to ensuring that your sample is representative of the population is *sample size*, the number or  $n$  of individuals in your sample. Certainly the larger the sample the better because you get closer to measuring the population more directly and less inference is required. Of course, the size of your sample, your  $n$ , is determined by logistics and practicality so you typically have to settle for something much smaller than anything approaching the total population.

This brings up a pet peeve for psychologists, and scientists in general, known as the “N of One” problem. Everyone gets advice and information from friends about dieting and nutrition. My buddy tried the “caveman diet” and swears he lost 40 lbs. My officemate was on the “cupcake” diet and lost 20 lbs. My cousin was on the “carbs only” diet and gained 100 lbs. These people are offering data from their own experience. However, they have only sampled one individual from the population, themselves. They have a sample size of one. So, from a statistical perspective, how likely is it that their sample

represents the population as a whole? Not likely at all. Correspondingly, this is why most people are more likely to trust advice if the same data comes from multiple people.

### ***Relating variables: Correlation versus causation***

A *variable* is the thing, characteristic, behavior, or mental process that is being measured or observed. Psychologists are interested in how variables relate, that is how do the things that are measured affect, impact, or alter each other? How does child abuse affect school performance? How does work stress affect depression? How does obsessive thinking affect relationships? In research, there are two types of variables, *independent* and *dependent*. A *dependent variable* is the thing that is impacted or altered as a function of the independent variable. The *independent variable* impacts the dependent variable as it changes.

My pulse and heart rate go way up when I am involved in a near-miss car accident situation. The dependent variable is my heart rate. The independent variable is the near miss. So, the near miss *causes* my heart rate to go up. This is a *causal relationship*. The value of the dependent variable is directly caused or influenced by the independent variable.

Does that mean that if two variables are related that there is a causal relationship? No, sometimes variables can be involved in a non-causal manner known as a *correlation* or a correlational relationship. A *correlation* exists between two variables when the value of one is related to the value of the other but not necessarily in a causal manner. For example, a semifamous correlation is that the crime rate tends to be higher in the summer months. So, there *is* a relationship between heat and crime rate; when one is high, the other is too. But does that mean that hot weather *causes* crime to go up? Not necessarily, it can be rather that youth and adolescents have more free time on their hands and therefore get into more trouble and commit more crime. This is conjecture of course and is just to prove the point that simply because hot weather and crime are related does not mean that one causes the other to happen. Correlation, not causation.

### ***Doing nothing is something: The placebo effect***

Psychologists want to test the impact of independent variables on dependent variables. They may want to test the impact of a new medication (independent variable) on levels of anxiety (dependent variable). This can be

done by comparing people with anxiety who get the medication with those who do not. If anxiety goes down (or up), then maybe the medication is helping (or making things worse). This is considered a simple experimental and control group approach. An experimental group is the group that is getting the independent variable, and the control group is not; it is getting nothing in essence.

This is a solid experimental approach but there is another variation of this approach that is often used to help make the impact of the independent variable stand out more. This is done by using a *placebo group* in addition to the control group. A *placebo* is a decoy variable of sorts, a fake independent variable that is not expected to have an impact on the dependent variable, but the person in the study thinks it is an actual treatment or independent variable. Of course, some psychologists fit in more than one of these categories, for example, clinical psychologists conducting research.

From the preceding anxiety example, there would then be three groups, the medication group (independent variable group), the no-medication group (control group), and the placebo medication group (another control group). So, if at the end of the experiment the findings are that the medication group's anxiety went down substantially, we can conclude the medication worked right? This can be said only in contrast to the no-medication group. But with the placebo group, another level of confidence exists because sometimes in studies like this both the independent variable and the placebo group show change. That would shed doubt on the trustworthiness of the finding from the independent variable group. But if the independent variable group shows change and *neither* the control group nor the placebo group showed change, we can be that much more confident in that finding.

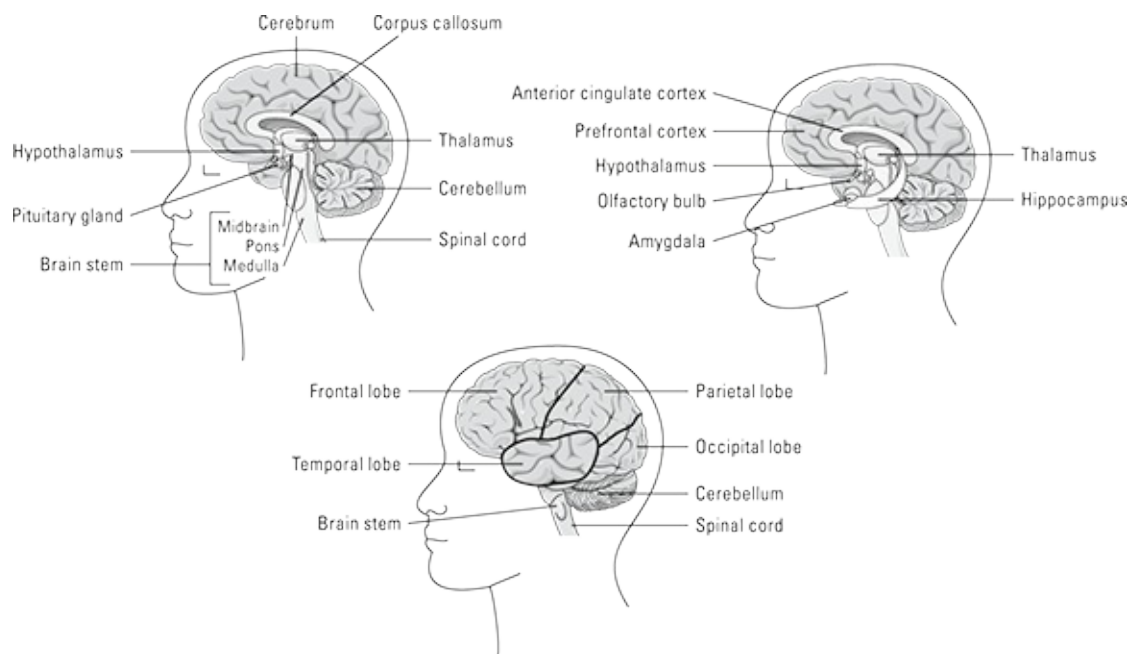
What is interesting about this, however, is that the placebo group quite often shows change or improvement. This is known as the *placebo effect*, when an experimental effect is related to the presence of the placebo. For example, it is amazing how often a sugar pill (placebo) produces reductions in anxiety in experimental subjects. This truly fascinating phenomenon is one that scientists from all fields are trying to learn more about but have not quite figured out yet.

The rest of this book introduces you to various theories and research. There's a lot of stuff in here! Because psychology is about people, some people may

argue that everything about people is psychology. I couldn't write a book about everything. This is not *Everything About People For Dummies*. In establishing a way to decide what to put in the book and what not to, I used scientific research and theory as my measuring rod. The information you find in this book is considered part of legitimate psychological science and theory.

## Part II

# Picking Your Brain (And Body)



Check out more about how psychology can be applied to help in different corners of society in the free article "Applying Psychology for a Better World" at [www.dummies.com/extras/psychology](http://www.dummies.com/extras/psychology).

## *In this part...*

- ✓ Explore the basics of biological psychology, including coverage of the basic structures of the nervous system and the important role that biology plays in psychological knowledge.
- ✓ Navigate the varieties of conscious awareness and its important role in psychology.
- ✓ Find out how you touch, see, hear, and sense the world and how the senses shape our perception of the world around us.
- ✓ Take a glimpse at pharmacology and the ways chemistry can help alleviate some psychological problems.
- ✓ Discover how to change the brain without neurosurgery

## Chapter 3

# Hardware, Software, and Wetware

---

### *In This Chapter*

- ▶ Biologizing psychology
- ▶ Slicing and dicing the brain
- ▶ Getting up the nerve
- ▶ Discovering DNA
- ▶ Finding out how medications change behavior

Psychology can seem pretty abstract, seemingly having more in common with philosophy than biology. In this book, I introduce you to all kinds of psychological concepts — thoughts, feelings, beliefs, and personalities among them. But have you ever wondered *where* all of these things exist? If I need to find a thought or feeling, where do I look?

One place that seems logical to look for these psychological concepts is inside the human mind. But where is a person's mind? The quick response for many people: It's inside my skull, in my brain! So, I wonder, if you opened someone's skull and could gaze upon the brain, would you see various kinds of thoughts, feelings, and other psychological stuff tucked away in there? Definitely not. You'd see a wrinkled and convoluted mass of grayish-pinkish-whitish tissue. There are no visible thoughts, feelings, or beliefs. Yet you know they exist because you experience them every day.

The question of where the mind, the home of psychological concepts, exists is an age-old philosophical question. Is the mind in the brain? Is the mind somewhere other than the brain? Are the brain and the mind the same thing? Most scientists today hold the position that the mind and the brain are one and the same. Scientists taking this position, known as *monism*, believe that the key to understanding the human mind, with all of its psychological concepts, lies in understanding the body, specifically the nervous system.

Psychologist Neil Carlson states, “What we call the ‘mind’ is a consequence of the functioning of the human body and its interactions with the environment.” This is a powerful idea — the key to unlocking the mysteries of such psychological concepts as thinking and feeling lies in a thorough understanding of biology.



The idea that all of human psychology can be reduced to biology is known as *biological reductionism*. This idea seems to insult the esteemed sense of free will, self-awareness, and consciousness. I mean, how can all this complex stuff going on inside my mind be reduced to a hunk of flesh resting between my ears? If you feel this way, maybe you’re not a *biological reductionist*. But for the sake of this chapter, I’m going to be one. I focus on human biology as the pathway to understanding human psychology.

In this chapter, you’re introduced to the major components of biological psychology, including related body systems, the brain, and the chemical messengers of the brain. The role of genetics in understanding behavior and mental processes is covered as well. The chapter closes with a discussion of medications and newer forms of brain-based treatments for mental disorders.

## *Believing in Biology*

People haven’t always believed that human behavior and mental processes are the consequences of biology. In the times of ancient Greeks and Romans, human behavior was seen as the consequence of supernatural forces, namely the whims and passions of the gods. But somewhere along the line, suspicion grew that maybe the human body had something to do with it. Where would such a radical idea come from?



The history of research in this area is long, but at the core of all the research is a very simple observation: Changes in a person’s biology result in changes in her behavior and mental processes.

Take alcohol consumption, for example. No question that people act differently when under the influence of alcohol. They may flirt, dance like an



idiot, get emotional and sentimental, or even become angry and violent. Alcohol has a chemical effect on the brain; it alters the biology of the drinker's brain. It goes something like this:

Alcohol consumption → chemical effect on brain → thinks he's Don Juan

What about more serious changes in biology like brain damage? People who suffer from brain damage can exhibit drastic changes in their personality and thinking. They may go from being very organized to very messy. Or a once very laid-back, easygoing person may fly into a rage at the slightest frustration. They may have difficulty with memory or understanding.

I think you probably have an intuitive understanding that what goes on within your body has an effect on your behavior and mental processes. *Biological psychologists* are a group of psychologists who have extended this intuitive belief and these casual observations, using techniques and methods of modern science to investigate the idea that changes in biology lead to changes in psychology.

Although a lot of this seems logical, you may be thinking that there must be more to you than biology. And I say, that's just the dualist in you acting up. Try not to struggle with it too much, at least while you read this chapter. Even if you think you're more than just cells and molecules, you can still benefit from the research of biological psychology.



Did you read about the *biopsychosocial model* in [Chapter 2](#)? (If not, you may want to check it out. Trust me — it's a good chapter.) That model proposes that human psychology is a function of the three important levels of understanding:

- ✓ The biological level
- ✓ The psychological level
- ✓ The social level

This chapter focuses on the biological level, and the remainder of the book focuses on the other two. But you need to find out how the three levels interact — that is, how biology influences psychology, how psychology influences biology, and so on — to really get a handle on behavior and mental processes.

A useful metaphor for describing how the different levels interact is the modern computer. You may know that a computer has at least two functional components: hardware and software. The hardware consists of the actual physical components of the computer: the processor, hard drive, wires, CD-ROM, and various other components. The software includes the operating system, a word-processing program, and various other tools you use to actually work on a computer.

In this metaphor, the hardware of a computer represents the biological level of understanding. This is the physical body, specifically the nervous system. The software represents the psychological level, and the interface between the user and the software represents the social level. The hardware is useless without software, and vice versa. So, see, even if you're not a monist, you can still respect the role that biology (hardware) plays in psychology (software).

The word “wetware” in the title of this chapter represents the actual physical substance of the brain. Most people don't have “hard” ware in their brains (wires, plastic, silicon, and so on); instead, they have “wet” ware (neurons, tissue, and chemicals, for example). To stay consistent in my metaphor, I really focus on the wetware level of psychology in this chapter. Specifically, I introduce the wetware of the human nervous system as well as the endocrine system, genetics, and medications.

## ***Recognizing the Body's Control Room***

The human nervous system consists of two large divisions: the *peripheral nervous system (PNS)* and the *central nervous system (CNS)*. The CNS includes the brain and spinal cord. The PNS includes the nerves outside the CNS; they are in the rest (the periphery) of the body.

The basic building blocks of the nervous system are nerves, neurons, and neurotransmitters and glial cells. The nerves are, essentially, bundles of neurons, like a box of spaghetti is a bundle of individual strips of pasta. The neurons are individual nerve cells. Usually, they receive signals from other neurons, evaluate those signals, and then transmit new signals to other parts of the nervous system.

Electrical changes allow signals to be transmitted within a neuron: Because these electrical changes involve the movement of chemical ions, the

transmission system is called an electrochemical system. Neurotransmitters are chemicals that play a critical role in transmitting signals between neurons. The glial cells are cells within the nervous system that play a variety of support roles for the neurons; they protect neurons from damage, repair them when they are damaged, and remove damaged or dead tissue when it can't be repaired ("taking out the trash").



The nervous system is a living part of the body and, therefore, has the same basic needs as any other body part; it needs fuel and immune protection. The components of the nervous system stay alive and healthy by the circulatory system and other regulatory body functions. The specifics of the support systems for each division of the nervous system are described in more detail within each division's corresponding section in this chapter.

If you've studied any physics, chemistry, or biology, you may remember that the building blocks of life begin with atoms (operating under the laws of physics); atoms are grouped in particular ways to make up molecules that then form compounds. Compounds combine to create cells, and cells build tissue, and eventually an entire person is standing there! So if you really want to be a reductionist, you can just study physics and do away with all other branches of science. Or, you can look at human behavior and mental processes from a molecular level. This is the focus of the field of *neurobiology*.

Typically, however, biological psychology begins at the cellular level of study. Two types of cells appear in the nervous system, *supporting cells* and *neurons*. In this section, you discover the main divisions of the human nervous system, the brain, and how the brain is organized.

### ***Tiptoeing into the periphery***

Of the two divisions of the body's nervous system, think of the peripheral nervous system (PNS) as a system of connections that make it possible for the brain and spinal cord to communicate with the rest of the body. Two sets of nerves are involved:

- ✓ **Spinal nerves:** These nerves carry neural signals both to and from the spinal cord. Sensory nerves carry information from the body to the central

nervous system: For example, they carry signals from sensors in your foot when somebody steps on your foot. Motor nerves carry signals from the central nervous system to the body; they cause the muscles in your limbs to move (raising your hand).

- ✓ **Cranial nerves:** These nerves are involved in the muscular (motor) and sensory processes, except that they are connected directly to the brain itself, not to the spinal cord. Cranial nerves support functions occurring in your face and head, including seeing and hearing, blinking and speaking.

In addition to these two sets of nerves, the PNS contains a subsystem known as the *autonomic nervous system (ANS)*. The autonomic nervous system helps regulate two specific types of muscles (smooth and cardiac) and the glands in our body. The ANS is involved in automatic, or involuntary, action. Bodily organs, reflexive muscle contractions, and even the dilation of our pupils are all automatic behaviors governed by the ANS. There are two very important divisions of the ANS:

- ✓ **Sympathetic nervous system (SNS):** The sympathetic branch of the ANS is involved in energetic activation of the body when it needs high levels of energy. For example, when you are confronted with a life-threatening situation, your sympathetic nervous system kicks in and gives you the energy to either take on the challenge or flee the situation.
- ✓ **Parasympathetic nervous system:** The parasympathetic branch of the ANS deactivates the SNS after it has been engaged. This action is sometimes called the *relaxation response* because the activity of the SNS is relaxed, or turned off, and then returns to normal functioning.

## *Moving to the center*

The CNS consists of both the brain and the spinal cord. Although the spinal cord is critical, the focus of this section is on the brain, which is considered to be the underlying physical foundation for psychological functioning. It is, literally, the command center for behavior. The brain, with billions of cells and sophisticated networks, is among the most complex biological structures known to scientists.

Throughout the history of studying the brain, many attempts have been made to understand exactly what it is made of and how it works and is organized. So far, the simplest way to think of the brain (the “city”) is in terms of these different levels:

#### DIFFERENT LEVELS:

- ✓ **Structural:** Basic anatomical divisions of the brain, identified by their major functions (the “neighborhoods”)
- ✓ **Network:** The pathways that connect different parts of the brain and allow them to interact (the “roads”)
- ✓ **Neural:** Cellular and microcellular functions (the “houses and furniture”)

Essentially, everything people do involves the brain. What happens, though, when some part of the brain gets damaged? The behavior and mental processes associated with the damaged portion of the brain are adversely affected, which affects related functions. Clinical neuropsychologists are particularly interested in the behavioral and mental consequences of brain injuries.

The brain can be damaged in numerous ways:

- ✓ **Closed-head injuries:** These injuries occur when someone sustains a blow to the head but the skull is not penetrated. A common form of closed-head injury is a *contrecoup* injury — the injury occurs to the part of the brain opposite from where the individual was struck. For example, if you’re hit in the back of the head, this could cause the front of your brain to hit the inside of your forehead, and you may sustain damage to your frontal lobe, thus affecting your organizational and planning abilities. Even though the skull is not broken, serious damage can occur if the brain bleeds or swells resulting in pressure and additional damage beyond the site of injury.
- ✓ **Open-head injuries:** These injuries occur when the skull is either penetrated or fractured; both closed-head and open-head injuries can lead to serious brain damage.
- ✓ **Other brain disorders:** Degenerative diseases such as Alzheimer’s can produce brain damage in the form of atrophied (for example, a reduction in size or loss of cells) brain tissue and cellular death. Strokes (a blood clot or bleed in the brain) and other vascular accidents also can result in brain damage by denying parts of the brain blood and oxygen, causing cellular death.

## *Running Like a Well-Oiled Machine:*

# Body Systems

Structurally, there are three main divisions of the brain: *forebrain*, *midbrain*, and *hindbrain*. Each of these divisions consists of many substructures that are involved in various behaviors and activity.



The brain is a complex, integrated system. All of its components work together to produce the complexity of human behavior. The concept of *localization* refers to the idea that there are specific parts of the brain for specific components of behaviors. Various parts work together to produce vision, hearing, speech, and so forth. Neurological techniques such as post-mortem brain examination, CT (co-axial tomography) scans, MRI (magnetic resonance imaging) scans, and PET (positron-emission tomography) scans have been used to identify and explore these systems.

## Forebrain

The human forebrain is involved in a wide range of mental processes, including the sensing, perceiving, and processing of information. It is also involved in thinking, problem solving, organizing, and language functions.

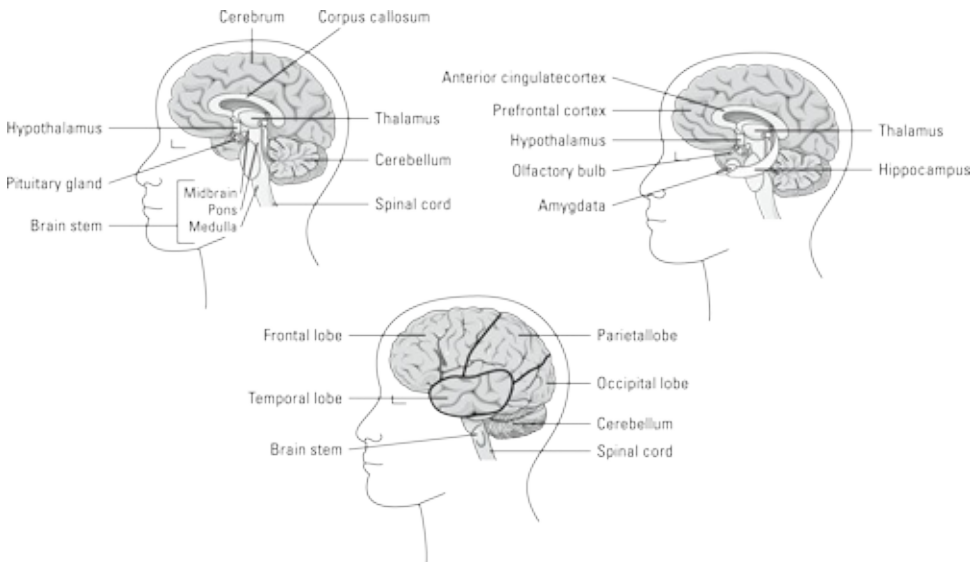
The human forebrain consists of four sections:

- ✓ **Cerebral cortex:** If you think of the brain as a mushroom, with a top and a stalk, then the cerebral cortex is the top of the mushroom. It's divided into two halves, called *cerebral hemispheres* (the left and the right — pretty creative, I know). These halves are connected by a bundle of nerve fibers known as the *corpus callosum*. Without the corpus callosum, the halves wouldn't be able to communicate with each other.

[Figure 3-1](#) shows the four major divisions of the cerebral cortex and their corresponding functions:

- **Frontal lobe:** Planning, organizing, coordinating, and controlling movements (in an area known as the primary motor cortex), reasoning, and overall monitoring of the thinking process
- **Parietal lobe:** Sensation, spatial and somatosensory (bodily) awareness
- **Temporal lobe:** Hearing, language, and other verbal activity

- **Occipital lobe:** Vision



**Figure 3-1:** The lobes of the cerebral cortex.

- ✓ **Limbic system:** Located on the underside of the mushroom top (the cerebral cortex), the limbic system is involved in learning, memory, emotional behavior, and mating or reproduction.
- ✓ **Basal ganglia:** This part of the brain is involved in controlling movement.
- ✓ **Thalamus:** This “neural switchboard” is a relay station for the different parts of the brain. However, it is more than simply a connection. It analyzes inputs to construct organized outputs.
- ✓ **Hypothalamus:** The hypothalamus takes part in the control of the endocrine system and works with the limbic system to control behaviors such as aggression, eating, protection, and mating.

## Midbrain

The midbrain is involved in the auditory and visual processes and in motor control.

The midbrain consists of the following divisions and their respective areas of responsibility:

- ✓ **Tectum:** Auditory and visual systems
- ✓ **Tegmentum:** Sleep, arousal, attention, muscle tone, and reflexes

THE MIDBRAIN



## *Hindbrain*

The hindbrain is involved in the autonomic functions of the body such as heart rate and breathing as well as the coordination of movement.

The hindbrain includes two divisions with assigned duties:

- ✓ **Cerebellum:** Motor movement and its coordination
- ✓ **Pons:** The bridge connecting the cerebellum to the rest of the brain
- ✓ **Medulla:** Vital functions of the body such as the cardiovascular system, breathing, and the movement of skeletal muscles

# *Finding Out About Cells and Chemicals*

At the neural level of the brain is what many brain scientists consider to be the fundamental unit of the brain and the nervous system: the *neuron*, a specialized cell that provides the foundation for brain functioning: communication among nerve cells. Actually, there is another important type of cell in the brain: the *glial cells*. Glial cells provide the basic structure to the nervous system and nourish the neurons. But neurons are the star of the brain show according to most scientists.

A neuron is considered the information cell; it's involved in the processing and storage of information. Neurons contain the following parts:

- ✓ **Soma:** The cell body of the neuron containing the nucleus and supportive structures of the cell, including the mitochondria
- ✓ **Dendrite:** Projections from the cell body that receive information from other neurons
- ✓ **Axon:** The nerve fiber that conducts the electrical impulse
- ✓ **Terminal button:** The end of the axon involved in neurotransmitter release and signaling to other neurons

The center of action in the brain happens at the cellular level, when a neuron is activated and fires. Neurons become activated by input from other neurons, which in turn impacts the other neurons in a given network. Simply put, when information from the environment (or inside the brain itself from other



neurons) comes into the brain through the sensory organs and activates a particular neuron (or, more often, a set of neurons), an *action potential* is created.

Action potentials are the movement of electrochemical energy through a neuron toward its terminal button, toward other neurons. Something called the *all-or-none law* states that neurons are either “on” or “off”; they are either firing an action potential or not. After a neuron is activated, it fires. If it’s not activated: no action, no fire!

Some people consider the firing of a neuron (the action potential) to be an electrical process; others say it’s a chemical process. In essence, however, it’s both. The action potential consists of electrical energy that’s created and activated by the exchange of positive and negative chemical ions between the inside and the outside of the neuron. It’s electrochemical.

When a neuron is not firing, it is considered to be in the state of a *resting potential* and its electrical charge is more negative on the inside relative to the outside. There are more negatively charged ions inside than outside. But when a neuron receives a signal from another neuron, gates in the cell *membrane* (its covering) open and positive ions rush into the negatively charged inside of the cell. Chemistry and physics point out that positive charges move toward negative charges; they attract! So as the inside of the cell spikes to the positive, the action potential is created and the neuron “fires”! In many ways, the action potential is an electrical disturbance in the axon that travels along the axon, like the fire moves down a lit fuse of a firecracker.

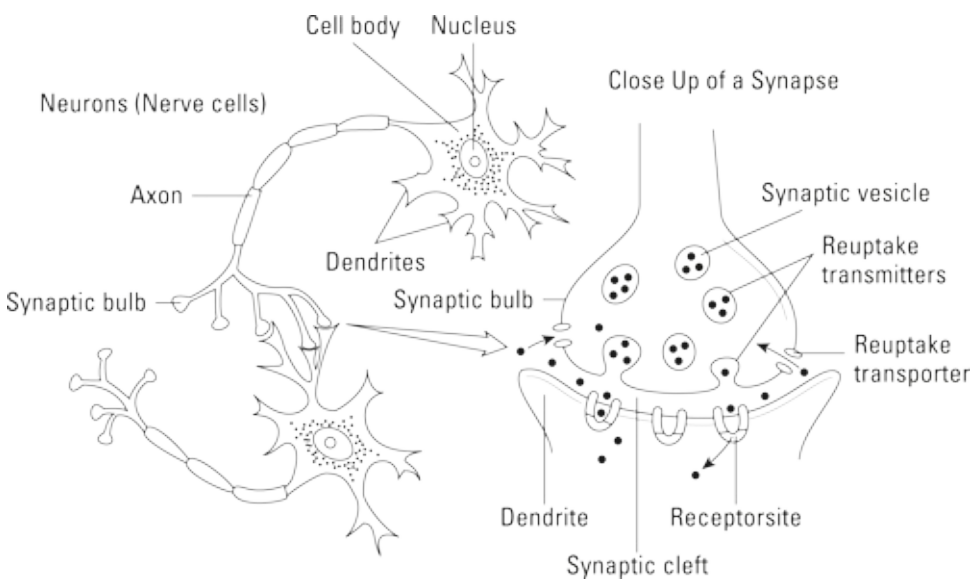
When the action potential occurs, the cell cannot fire again for a short period of time. During this refractory period, small pumps in the cell membrane work to reset the neuron by moving positive ions back out of the cell, returning the chemical balance of the neuron to its original state to prepare for another round of action.

In this section, you discover more about how a neural signal travels from one neuron to another in a process called *synaptic transmission*.

## ***Crossing the divide***

As an action potential speeds through a neuron toward its terminal button, how does it propagate that signal to other neurons in the network? Before I

can answer, you need to know that neurons don't actually connect to each other in a physical sense. There are gaps between them known as *synapse*, spaces between axon terminals of one neuron (the neuron sending the signal) and the dendrites of the next neuron (the neuron receiving the signal); this is where inter-neuronal communication happens through chemical messengers called *neurotransmitters*. [Figure 3-2](#) shows a neuron and a synapse. Although they are only millionths of an inch apart, the sending neuron throws its “message in a bottle” into the sea-napse, where it drifts to the other shore (the receiving dendrite). The message says, “Please hear me; please fire!” Dramatic stuff!



**Figure 3-2:** Neuron and synapse.

Neurotransmitters are stored in the axon of the sending cell. An action potential stimulates their release into the synapse. They travel (actually drift) to a receiving neuron in which specialized docks known as *receptor sites* are present. Different shaped neurotransmitters have different docks.

Basically, neurotransmitters have one of two effects; they either *excite* the receiving neuron (make it more likely to fire) or *inhibit* the receiving neuron (make it less likely to fire). Some neurotransmitters are excitatory and some are inhibitory. Whether a particular neuron fires (transmits a signal) depends on the balance between excitatory and inhibitory neurotransmitters.

Following the docking process, neurotransmitters are either broken down by enzymes or reabsorbed by the sending neurons in a process called *reuptake*.

These two processes clear neurotransmitters from the synapse after they have done their job (enough, already!). This is critical to prepare the cells for the next neural communication. And neurotransmitter manipulation is a primary mechanism of action for most psychiatric medications (find information on the actions of medications in the [Understanding Psychopharmacology](#) section later in this chapter).

Scientists have discovered more than 100 neurotransmitters in the human brain. Many, including the following, play a major role:

- ✓ **Glutamate:** The most common excitatory neurotransmitter
- ✓ **GABA:** The most common inhibitory transmitter; involved in eating, aggression, and sleep
- ✓ **Acetylcholine:** A common neurotransmitter with multiple excitatory and inhibitory functions; involved in movement and memory

Another group of four chemically similar neurotransmitters modify behavior in many ways. These neurotransmitters are particularly important regarding psychological disorders:

- ✓ **Serotonin:** An inhibitory transmitter that is involved in balancing excitatory transmitters as well as mood, sleep, eating, and pain
- ✓ **Dopamine:** Can be either inhibitory or excitatory and is implicated in attention, pleasure and reward, and movement
- ✓ **Epinephrine:** An excitatory transmitter related to stress responses, heart rate, and blood pressure
- ✓ **Norepinephrine:** An excitatory transmitter involved in energy regulation, anxiety, and fear

## ***Branching out***

An estimated 86 billion neurons live in the human brain and form trillions of connections among themselves. So you can think of the brain as a massive collection of nodes in a well-connected network. Just exactly how information is kept and processed in the brain remains the focus of incredible amounts of neuroscience research, but here's what scientists do know.



The brain is a “massively parallel” information-processing system (flip to [Chapter 6](#) for more about information processing). If each neuron was connected to only one other neuron, the neuron system would be considered “massively serial.” Compared to electronic signals, neural signals travel very slowly (like 5–100 mph), so it is efficient to do many things at once — called *parallel processing*. Think of it like finding a person who is lost in a large national park. The search party probably doesn’t stay together and follow each other on the same path (serial processing); instead, they “branch out” (parallel processing) to cover more ground in the same amount of time. Likewise, the brain, with its billions of neurons and trillions of connections, uses the branching-out method to process, store, and find information among its cells and cell clusters.

Not every neuron is connected to every other neuron, but neurons are connected to multiple others that form clusters or networks involved in particular psychological processes and behaviors. For example, if seeing a red ball activates neurons #3, 4, 192, X, A, and 56, then the network for “seeing a red ball” would be called 3-4-192-X-A-56. Neuroscience researchers are working hard to map the brain and its networks in order to connect cell clusters to respective mental functions and behavior. The International Consortium for Brain Mapping (ICBM) is one such group of scientists that is dedicated to this endeavor.

## ***Activating brain change***

Have you ever scratched your nose and noticed that your foot stopped itching? Okay, well, that’s a slight stretch, but there is something called *phantom limb syndrome* in which people who have lost a limb (an arm or leg for example) continue to report feeling sensations from that limb such as pain, cold, touch, and so on. How can this be? The limb is gone so where are the sensations coming from?

In his book, *Half a Brain is Enough: The Story of Nico*, Dr. Antonio Battro tells the story of a boy named Nico who has a very significant portion of his brain surgically removed to control seizure activity (a drastic but sometimes necessary surgery for individuals with intractable seizures). However, after

having that large portion of his brain removed, Nico remains relatively normal and maintains a fair amount of brain functioning — as if the brain tissue had not been removed. Why does Nico remain relatively unimpaired while working with half a brain?

Both phantom limb and Nico's brain demonstrate what brain scientists refer to as *neuroplasticity* — the notion that the brain's neural networks and connections continually reorganize. At one point in time, scientists believed that the brain's organization was “fixed,” but this is simply not the case. The brain can change its size and connections throughout a person's lifetime: this ability is called *neuroplasticity*.

The ability for the brain to update itself in response to new stimulation and input represents the neurobiological foundation of learning. In phantom limb syndrome it was found that the neural networks devoted to the lost limb (arm, leg, and so on) had been co-opted by neurons and networks proximal to it such as neurons associated with sensation in the in nearby body parts. So, when the face had a sensation, the neurons that were previously associated with the lost limb were being stimulated, and other parts of the brain interpreted the sensations as coming from the limb.

In Nico's case, the functions performed by the lost brain cells from surgical removal were taken over by neighboring or other cells and networks. Other parts of the brain essentially learned how to do the functions once performed by the lost cells. In both cases, phantom limb and Nico, the brain essentially rewired itself in response to new inputs and learning experiences.

Neuroplasticity is good news for people who lose brain tissue through trauma or disease. But what about growing new brain cells? After all, new skin cells grow after a cut. Does this happen in the brain?

For many years scientists believed that it was not possible to grow new neurons or brain cells. However, research has shown that *neurogenesis* (regeneration of nerve cells) is possible in specific regions of the brain, particularly the lateral ventricles and the hippocampus. More research is being conducted to see if this process is happening in other parts of the brain as well. If neurogenesis is found to be more widespread or possible in other brain areas or if scientists can find a way to stimulate the process, manipulate it, or otherwise impact it, then there may be a great ray of sunshine for people who now suffer from diseases or trauma such as Alzheimer's, stroke,

traumatic brain injury, or spinal cord injury. However, the science and research is very preliminary in this area and much more work needs to be done before such a thing is possible.

## *Finding Destiny with DNA*

I look a lot like my father's father. But do I act like him, too? Does your personality come from your parents? Do people inherit intellect and good looks? The field of psychology known as *behavioral genetics*, the study of the role of genetics and heredity in determining mental processes and behavior, investigates these questions.

The brain influences behavior. The endocrine system influences behavior. But what about your genetic makeup? Scientists have answered this question with a resounding “yes”; genetics do matter! Research implicates genetic contributions to cognition and intelligence, personality, and even psychopathology.

Genetic contributions to psychology have been traditionally performed using *twin and adoption studies*, in which identical twins (who share a common genetic code) who've been adopted separately at birth and raised in different environments are compared for some psychological construct or disorder (such as the presence of ADHD). This testing setup allows for the control of the influence of different environments, so if the identical twins show similar findings on the construct in question, then it is deduced that it must be due primarily to their genetic similarities — DNA. Research continues to evolve, and other techniques, such as large-scale DNA sampling and gene manipulation, push the field of behavioral genetics.



Researchers are looking for *genetic markers* for particular behaviors, including disorders. A genetic marker is a gene with a known location on the human genome. Genetic markers for such disorders as autism, schizophrenia, and reading disabilities have been found. Just keep in mind that the presence of a genetic marker in a person's genome does not guarantee that he will have a particular trait or disorder; it simply increases the odds of such.

Although the complexity of behavioral genetics leaves much to be

discovered, one thing is clear: genes matter. But where do these inherited traits, behaviors, and mental processes come from? How do gene-behavior relationships come about? Evolution.

*Evolutionary psychology* is a branch of psychology that says human psychology (behavior and mental processes) is the result of the evolutionary process of natural selection. *Natural selection* is the process by which specific genes become more or less common in a population of a species through reproduction and mating. In other words, genes that contribute to survival are more likely to be passed on than those that don't. After all, if your genes help you live long enough to pass them on to your offspring, then those genes perpetuate. If they don't, and you don't perpetuate, then your genes don't survive either.

Evolutionary biologists look at biological phenomena (such as opposable thumbs and walking upright) as adaptations that thrived. Evolutionary psychologists take the same approach with psychological phenomena such as language, memory, attention, visual perception, happiness, and so forth. Finding out how these psychological phenomena helped our ancestors adapt as a way to explain why they exist in us today is a matter of extreme interest. An evolutionary psychologist, for example, may look at attachment theory (see [Chapter 10](#)) and propose that the behaviors and mental processes underlying the mother-infant bonding process evolved over time to the state they can be observed today because these behaviors and processes enable the human species to survive.

## ***Understanding Psychopharmacology***

The use of medications in the treatment of mental disorders (such as schizophrenia and major depressive disorder) gained significant prominence over the last half of the 20th century. (For more about mental disorders see [Chapter 13](#).) Prior to that, medications were used to a lesser extent, along with psychotherapy, psychosocial, and behavioral treatments. But advances in research and drug development led to the creation of more effective drugs, which in turn spurred an increase in their use. Hundreds of drugs have been developed that are used to target the specific symptoms of a particular mental disorder. The primary goals of pharmacotherapy are to produce improvements in behavior and thinking, alleviation of suffering, and

enhancement of functioning.

Many brain systems involved in the symptoms of mental illness involve one particular neurotransmitter, and drugs used for the treatment of a particular illness are designed to affect the functioning of that specific neurotransmitter. The sleep difficulties and appetite disturbance often seen in major depressive disorder, for example, are thought to be related to the limbic system. For these symptoms, most drugs for depression target the neurotransmitter serotonin.

In this section, I describe common symptoms of and treatment for depression, schizophrenia, and anxiety, three of the better known mental disorders, pointing out various medications and their biological mechanism of action.

## *Easing depression*

Medications that are used to treat depression are called *antidepressants*. Most antidepressants affect one or both of two neurotransmitters: *norepinephrine* and *serotonin*. Basically, there are two major classes of antidepressant medications (although there are some that don't fit in either class, such as Wellbutrin, Remeron, or Effexor) differentiated by their mechanism of action:

- ✓ **Tricyclic antidepressants:** Block the presynaptic neuron's re-absorption of mostly norepinephrine (NE). This allows for a functional "increase" in the level of NE in the synapse and prolongs the activation of the postsynaptic neuron when stimulated by NE.
- ✓ **Selective serotonin reuptake inhibitors (SSRIs):** Block the re-absorption of serotonin rather than NE and have the similar effect of prolonging activation. Some of the more popular brands of SSRIs are Prozac, Paxil, and Zoloft.

## *Shushing the voices*

The experience of auditory hallucinations or feeling like someone is out to get you can be extremely troubling. These are common symptoms of the mental disorder schizophrenia. One of the most powerful treatments for some of the symptoms of schizophrenia is the use of *antipsychotic medications*.

Antipsychotic medications have a specific effect on the neurotransmitter dopamine. The *dopamine dysregulation hypothesis* of schizophrenia holds



that the symptoms of psychosis result from disruptions in the action of dopamine in the brain. Antipsychotic medications block the postsynaptic receptor sites of dopamine. This blockage keeps dopamine from being able to activate the postsynaptic neuron and has been found to reduce the presence of psychotic symptoms substantially.



Unfortunately, antipsychotic medications, as do all medications, don't just affect the neurotransmitters in the brain areas theorized to be implicated in the disorder. Most medications also affect other brain areas and can often lead to very unpleasant side effects. Side effects associated with antipsychotic medication can include weight gain; repetitive, involuntary motor movements (known as tardive dyskinesia); or sexual dysfunction, to name just a few. The experience of these side effects often leads people to stop taking their medication, which can have serious negative consequences. This situation keeps drug researchers searching for even more selective drugs.

## Relaxing

Anxiety disorders are the most common mental disorder in the United States. Millions of people suffer from intolerable worry, panic attacks, and disabling phobias. The good news is that medications can help with these symptoms.

*Anxiolytic medications* are drugs designed to relieve the symptoms of anxiety disorders. Psychiatrists and family physicians prescribe one class of Anxiolytics, *benzodiazepines*, quite often. Benzodiazepines affect the neurotransmitter GABA, which has a suppressing effect on the central nervous system. In other words, it slows things down in the brain.

Benzodiazepines are very effective in reducing anxiety. Unfortunately, they are also highly addictive. Benzodiazepines have a near-immediate effect and often produce sedation and an overall feeling of calmness. These feelings are highly pleasurable, and patients sometimes don't want to stop taking these medications even after their anxiety disorder has been successfully medicated. [Table 3-1](#) gives an overview of some frequently prescribed medications.

### Table 3-1 Major Medication Groups

---

| <i>Medication</i>       | <i>Problem</i>                | <i>Common Example</i>   |
|-------------------------|-------------------------------|-------------------------|
| <b>Antidepressants</b>  | Depression                    | Prozac                  |
|                         | Panic disorder                | Zoloft                  |
|                         | Obsessive-compulsive disorder | Paxil                   |
|                         | Insomnia                      | Benzodiazepines (Xanax) |
|                         | Generalized anxiety disorder  | Benzodiazepines         |
|                         | Panic disorder                | Benzodiazepines         |
| <b>Antipsychotics</b>   | Schizophrenia                 | Haldol                  |
|                         | Mania                         | Zyprexa                 |
| <b>Mood stabilizers</b> | Mania                         | Lithium                 |
|                         | Bipolar disorder              | Depakote                |
| <b>Stimulants</b>       | ADHD                          | Ritalin                 |

## *Undergoing No-Knife Brain Surgery*

Changes in biological functioning can and do result in psychological changes. Medications have a direct biological effect on the brain. Neurosurgeons lesion, excise, and cut brain tissue. But imagine a day when doctors can change your brain directly without a pill or surgery.

Dr. “Bones” McCoy of *Star Trek* used to use a device that he placed on the head of patients with neurological conditions. Using some form of energy field, the device alleviated all sorts of conditions, including brain injury and bleeding. Well, Dr. McCoy, that day has arrived!

*Transcranial Magnetic Stimulation* (or TMS) is a technology right out of *Star Trek*. TMS devices are placed on the head and use electromagnetic pulses to activate specific parts of the brain. This technique is being used to treat migraines, stroke symptoms, hallucinations, and even depression.

For depression, TMS stimulates the brain’s frontal lobe and limbic system, parts impacted by the disorder. The medical world is excited and hopeful about the prospects of TMS as a treatment for a broad range of other disorders.

## Chapter 7

# How Does That Make You Feel?

---

## ***In This Chapter***

- ▶ Discovering why you do the things you do
- ▶ Running hot, cold, and in between
- ▶ Thinking before you act
- ▶ Considering love and war
- ▶ Adapting heads and hearts

Why do people get up and go to work every day? Why did my teenage cousin get her bellybutton pierced? Why do people go to the gym? Honestly, I think the best part of psychology is getting to ask all these interesting questions!

But there isn't always a lot of mystery behind why people do what they do. Most of us work to pay the bills and earn money for vacations, comfort, and entertainment. You eat to stay alive. You tolerate irritating neighbors to avoid going to jail. These things make sense and don't usually require much thought. But when someone does something extraordinary, extremely difficult, or horrific, the "Why?" question comes up.

Trauma, especially when caused by someone else, often leaves a person feeling confused and in need of answers. Why would someone do such a thing to me? Answers can help people come to terms with the way they feel.

But the quest for answers isn't always focused on the negative. Take Mother Teresa, for example. She dedicated the greater part of her life to working with the sick and the poor in India. She lived in abject poverty, sacrificing all comfort in order to help the poor and seemingly forgotten. Why would she do such a thing? Mother Teresa's dedication to her religious calling and duty was remarkable. She endured harsh conditions and stayed the course; her motivation was strong and unyielding. Were her actions a result of love for the people she helped?

In this chapter, I introduce the psychological approach to motivation. Simply knowing the nuts and bolts of an action leaves a gaping hole in what you know about behavior if you don't know why someone chooses a certain course of action — or at least why he thinks he does something.

In addition to exploring the various theories of motivation, I also take a look at emotions, which some psychologists tag as the primary motivating factors

for all of us. Psychologists make a big deal about emotions because of the central role emotions play in human behavior and mental processes. “Why we do what we do” has a lot to do with the way we feel.

A popular retort about seeing a psychologist is that she’ll always ask, “How does that make you feel?” So what’s the big deal about feelings and emotions? Most people agree that being hungry or tired can be important. But wait a minute. Is hunger a feeling? What about feeling tired? It seems like some people wouldn’t know an emotion if it crash-landed on their doorstep. Yet other people seem to be a little too “in touch” with their emotions. For the record: Hunger and fatigue are not considered emotions. But, like food and sleep, emotions are important to psychological survival.

## *Calling on Tony for Some Motivation*

Tony Robbins, an American motivational speaker, has built a multimillion-dollar empire by helping people find their proverbial kick in the pants. I’m not familiar with the specifics of his technique, and I’m not even sure his approach to motivation really works, but he’s got an army of celebrities endorsing him. And from a business standpoint, it doesn’t really matter whether or not his technique really works. The point is that people want to be motivated. People need to be motivated. People are spending a lot of money to find out how to motivate themselves the Tony Robbins way.

It’s hard to imagine life without motivation. Without incentive to get things done, I may decide to just sit on the couch all day, eating chips and watching television. Not everyone wants to save the world or cure cancer! Whatever I choose to do, psychologists who study motivation believe that some psychological process is responsible for my behavior.

In the following sections I describe the various theories related to the sources and structures of motivation — ranging from basic biological needs to a striving for independence and freedom.



**Would you like some adrenaline with that**

## bear?

Over the course of human evolution, certain behaviors were naturally selected (put in the “to keep” pile) because they contribute to the survival of particular individuals in a species. Imagine a group of people that lives in a forest with wolves, bears, and various other dangerous beasts. Now, imagine that a group of three men and three women from this community encounters a bear. One man and one woman take off running the instant they see the bear, and they get away. Another man and woman stand there, frozen in their tracks. They become the bear’s lunch. The final couple tries to fight the bear with sticks and rocks. They lose.

If the man and woman who ran away decide to have a child, there's a good chance that their child will be a runner when it comes to encounters with bears. The other couples (the freezers and the fighters) died, so they can't have children. This is a crude illustration of how evolution selects for traits that help us survive. Those who survive reproduce. It is safe to assume that the couple that ran away had better instincts than the other two couples. Their instincts were better in the sense that they were able to stay alive. Instincts that help keep us alive stay in the gene pool.

## Trusting your instincts

Does a plant grow toward sunlight because it wants to? Would a little rebellious plant, the black sheep of ferns, grow toward the shade just to be different? No, a plant couldn't perform this feat even if it wanted to. Plants grow toward the sunlight because they can't help themselves. They need sunlight in order to survive. That's an instinct.



An *instinct* is an automatic, involuntary, and unlearned behavior that occurs in response to a specific trigger, or *stimulus*. Numerous examples of what are considered human instincts can be found in phrases that people use every day: the maternal instinct, the survival instinct, the killer instinct, the gut instinct, and so on. Instincts motivate in the sense that you do what you do because you have to do it. You take certain actions automatically and involuntarily.

James McDougall came up with a way to classify some of our basic instincts. He believed that an instinct can be identified by pinpointing its intended goal. He identified numerous instincts, including parenting, seeking food, and mating. If you're looking to relieve your guilt about eating so many cheeseburgers, you can use the nonscientific and flimsy excuse: It's just your food-seeking curiosity instinct driving you!

A lot of instinct research has been done with animals. Instincts are also called “modal action patterns” by animal researchers. Geese fly south for the winter. Why? Maybe they like the poolside bars in Florida, or maybe it's instinct. Konrad Lorenz conducted extensive research exploring the instinctive behaviors of animals. Lorenz's specific approach is known as the *ethological* approach to motivation; and according to Petri, an ethologist, instinctive behaviors have *action specific energy* — the idea that a specific trigger sets an instinct into action. All instinctive behaviors have a specific trigger or triggers, called *key stimuli*. Driving by a nice coffee shop is a key stimulus for my coffee instinct. Maybe caffeine helped my ancestors survive. Were there Starbucks in Neolithic Europe, I wonder? Key stimuli come from the environment. Key stimuli that come from other members of an animal group are called *releasers*.

Key stimuli produce behaviors that are fixed and automatic. These behaviors

are called *fixed action patterns*. One of the popular examples of a fixed action pattern is something that Lorenz called *imprinting*. Imprinting is a kind of bonding instinct between a young animal and its parents. Remember that cartoon where the baby duck hatches from its egg and starts following around the first animal that it sees, even though it's not a duck? That's imprinting.



## Feeling needy

Many people can relate to being worried about money and finances. I'm sure that even the billionaires of the world have spent one or two sleepless nights of their lives mentally counting their Benjamins. Some have learned to live on a budget, setting aside money for the mortgage, car payments, medical insurance, and household costs — even keeping a little money for entertainment if there's any left over. When I started living on a budget, something weird began to happen. When I went to a store and saw something I liked, such as a pair of shoes or fancy power tool, I asked myself if I really needed it. Part of developing a budget involves figuring out what you truly need and what your financial priorities are.

I first spend my money on what I need. My needs are a powerful determinant in what I do with my money. I may even say that I'm *driven* (or pushed) by my prioritized needs. Satisfying my needs is one of my top, if not the top, drives in my life. Needs drive my behavior; they motivate me.



Clark Hull came up with a theory of motivation that emphasized need satisfaction. Needs are generated from two things: *homeostasis* and *equilibrium restoration*. I experience homeostasis when my needs are met and I feel balanced — not in need of anything. When my needs aren't being met, I find myself out of balance, and I'm then motivated to restore the equilibrium through the satisfaction of my needs.

Hull's theory is called *drive reduction theory* because people are driven to satisfy their needs. *Drives* are motivations toward satisfaction and homeostasis. There are two kinds of drives:

- ✓ Biological needs that are necessary for survival are called *primary drives*. Hunger, fatigue, and thirst are all examples of primary drives. If you think about it, primary drives play a pretty big role in everyday life. A large part of the day revolves around satisfying hunger and obtaining shelter.
- ✓ Any need other than a primary drive is called a *secondary drive*. A lot of these are learned from families, social groups, and the larger culture. The importance of secondary drives is determined by how they become associated with primary drives. People are driven to go to school and get

good grades in order to have a better life and provide for themselves and their families. Secondary drives have no inherent worth; they only matter as they relate to primary drives.

One of the limitations of drive reduction theory is that it leaves no room for needs that seem only peripherally related to our biological survival. Does a day of surfing restore my homeostatic balance? What basic need does surfing satisfy? I may be able to stretch it a little and say that I make it a point to go surfing because if I don't, I'll get depressed and then I won't be able to go to work and then I won't be able to eat. That would make surfing a secondary drive at the bottom of a long chain of other secondary drives. But most people probably don't reduce, consciously anyway, their every activity to the lowest common denominator of biological survival.

Although it's not technically an instinct theory, Abraham Maslow's motivational theory states that motivations stem from a basic set of needs that you naturally strive to satisfy. Maslow believed that some needs are more basic than others. Eating is more basic than getting an A on your English final. They're both needs (for some people anyway), but one is more fundamental than the other.



Maslow created a priority list of needs that he arranged into a triangle called the *hierarchy of needs*:

- ✓ At the lowest and most foundational level are *basic physical needs* for food, water, and sleep. These needs direct behavior until they are satisfied.
- ✓ The next level of the triangle contains needs for *safety and security* such as proper shelter and protection.
- ✓ *Love and belonging* is the next level of need.
- ✓ The fourth level of need is *self-esteem*, striving toward situations that enhance self-worth.
- ✓ *Self-actualization* — the need to fulfill our top potential and to live at a high level of awareness of ourselves and our desires — is the top level. When someone has reached the highest part of the triangle/hierarchy, he has a *peak experience*, or a feeling that signals arrival at the highest level of motivation. It is important to point out though that even for one who

self-actualizes, these peak experiences are brief and infrequent. A person does not settle in at the level of peak experiences.

## ***Arousing interest in prime rib***

*Optimal level of arousal theory* is considered a more refined version of drive reduction theory. Instead of just being driven to satisfy basic biological needs at a minimum level, this theory states that people are motivated to reach the highest level of satisfaction possible.

What do I mean by “highest level of satisfaction?” Think of this as the “prime rib theory” of arousal. When my body needs energy, I get hungry, and I develop a primary drive or motivation to eat something. Now, if this theory was the “hamburger theory” of arousal or the “minimal level of arousal theory,” then I’d just get a greasy drive-through cheeseburger and be done with it. But why would I eat hamburger if I can eat steak? I can satisfy the primary need and also enjoy great flavor at the same time.



Another component of the optimal level of arousal theory involves being driven to seek the best (optimal) level of arousal in order to maximize performance. In an example of how optimal level of arousal theory may work, in 1908 psychologists Yerkes and Dodson found that people perform activities best when moderately aroused — not too relaxed, not too uptight. This is called the *Yerkes-Dodson law*.



Have you ever had to make a presentation in front of a large group or class? Were you nervous? If so, how nervous? Throwing-up, passing-out nervous? Being that nervous constitutes an extreme level of arousal; and if you’ve been there, you know it doesn’t contribute to a top-notch performance. Similarly, if someone is too relaxed, he may not put out enough effort to properly prepare for the presentation, and he may end up giving a terrible performance. The best place to be is right in the middle.

## ***Getting cheaper long distance is rewarding***

When I come home and find the red light on my answering machine flashing, I wonder who called. Was it a friend I haven’t talked to in a while? A long-lost relative? No, it was one of those annoying long-distance phone companies trying to get me to change my provider.

A lot of marketing efforts are based on a motivational theory called *expectancy theory*. Expectancy theory holds that motivations are the product of an individual's analysis of the potential rewards associated with a particular behavior and the likelihood of achieving those rewards. Long-distance carriers count on me associating a switch with an expectation of a reward. This is a straightforward but powerful means of motivating people, especially if you can get them thinking that the rewards are likely to come rolling in!

*Incentive theory*, which is closely related to expectancy theory, simply states that we are motivated to seek rewards and avoid negative experiences such as pain. My experience with spam e-mail ads has led me to expect pain in my inbox from unsolicited purveyors of stuff I don't need every day, which overpowers the expected reward of saving a few bucks from their "great deals." What I expect, whether it's really the case or not, ultimately has a powerful effect on my behavior. When I see these e-mails I don't even open them, I just delete them.

### ***Facing your opponent-process theory***

Sometimes I am motivated to do things that aren't much fun, like going to the gym — at least I don't think that's much fun. Some people may like it. But the point is that people can engage in behaviors that seem more painful than pleasurable on the surface. This doesn't mean that they have some masochistic need or instinct. Motivations that may appear outwardly painful and not so pleasurable can sometimes be explained with the *opponent-process theory*, which states that people are motivated not by the initial response or incentive, like the pain of a tough workout, but by the reaction that occurs after the initial response, like the reflection of a toned, fit, and healthy body in the mirror looking back at me.

For every response that occurs, there's an opposite reaction called the *opponent process*. After being exposed to a particular stimulus for a while, the initial response diminishes, and the opposite response grows stronger.

A lot of people like to eat hot and spicy foods. Personally, I like to taste my food, not feel it for 20 minutes after I take a bite, but to each his own. What's the opposite response, the opponent process, of hot foods? It's the endorphins — those natural painkillers released by the body to combat pain. Spicy foods

actually chemically burn the tongue, and the body combats those burns with these natural painkillers. It feels good when the endorphin painkillers kick in to soothe the burning. People who enjoy hot foods think that they eat spicy foods for the spice, but according to opponent-process theory, they're just a bunch of endorphin junkies. Yep, they're burning their tongues in order to benefit from the opposite or *opponent* reaction of endorphin release!

The opponent-process theory has been used to explain the sometimes baffling affliction of drug addiction. Of course, when a substance or drug is used there is a high, euphoria, and an experience of pleasant feelings. Once the effects of the drug wear off, however, there is an unpleasant experience from the aftereffects of the drug. According to the opponent-process theory, the addicted person then uses the drugs again to get relief from those unpleasant experiences. They don't use for the initial high necessarily — they use to alleviate the negative aftereffects.

## ***Knowing who's the boss***

Freedom may be the best motivator of all. Throughout history, societies and large groups have sacrificed their lives for the right to determine their own fates, make their own decisions, and be masters of their own lives. The US Declaration of Independence, authored by Thomas Jefferson, is perhaps the quintessential document of such self-determination, the right to determine one's actions without compulsion from others or outside influence.

Edward Deci and Richard Ryan proposed a psychological theory of motivation known as *self-determination theory (SDT)*; it states that the human motives for competence, autonomy, and relatedness are at the center of what drives behavior. These fellows may even be considered the “Thomas Jeffersons” of motivational psychology. They propose and cite research to support the concept that the needs to feel competent, autonomous, and related are universal human needs and found in all cultures. These needs are considered necessary for people to feel a sense of well-being and to perform or achieve at an optimal level at life's tasks such as work, school, and relationships. SDT acknowledges two different kinds of motivation:

- ✓ **Autonomous motivation** is *intrinsic*, or internal, to a person; it comes from within and reflects a sense of non-coercion and freedom of choice.
- ✓ **Controlled motivation** is a function of external contingencies and rewards or punishments such as shame, pay, or public recognition.

Controlled motivation is associated with feelings of being pressured to think, feel, or act according to some external standard as opposed to an individual's internal standard. A wonderful historical example of autonomous motivation is the great American Rosa Parks, an African American woman who challenged racial segregation in the United States by sitting in the "white only" seats on a public bus. She was brave enough to sit on a bus seat of her own choosing. Despite the pressure to conform and concede and have her motivation "controlled," *she chose* where to sit, was autonomously motivated, and changed history. According to SDT, it is best to be in control of one's self, to be one's own boss, to have the freedom to make choices; this satisfies a basic human need and drives motivation.

Deci and Ryan consider autonomy to be synonymous with being in control of oneself, to regulate oneself, to engage in *self-regulation*. Whereas SDT refers to the human need and motive to be autonomous and in control of oneself, *self-regulation* is a set of psychological controls over emotions, behavior, and thoughts in a manner that is consistent with meeting personal goals. SDT can be considered the "why" of human behavior but self-regulation is the "how."

Psychologist Andrea Burger defines self-regulation as an individual's ability to monitor and modulate cognition, emotion, and behavior to accomplish goals, and/or to adapt to the demands of specific situations. Self-regulated behavior involves controlled, focused, and attentive thought and action as opposed to impulsive and reactive action. Self-determination, it would seem, is not possible without adequate self-regulation.

Being autonomous and in control of yourselves is all well and good, but many people have had the experience of letting themselves down after a resolution to diet, exercise, quit smoking, or change some other undesirable aspect of their behavior. They "want" to diet but they overeat. They want to exercise, but end up watching that movie they rented instead.

This is where the concept of willpower comes in. There is a struggle for self-control going on, a struggle of the will. Roy Baumeister defines *willpower* as the ability to resist short-term temptations in order to meet long-term goals. Some psychologists consider willpower a logical component of self-regulation, to be in control of oneself in the face of competing or contradictory motives or impulses. You can diet and lose weight or enjoy eating that entire plate of Kung Pao chicken and bloat.

Psychologist Walter Mischel in the 1960s conducted a very simple but

Psychologist Walter Mischel in the 1960s conducted a very simple but powerful set of experiments popularly known as the “marshmallow studies.” Basically, the experimental subject, a child, is offered a small reward such as a marshmallow but is told by the researcher that he or she could get a bigger reward if they don’t eat the marshmallow while the researcher steps out of the room for a short time. If they delay their gratification for a short time, they will get a bigger reward. Well, some children could do it and some could not. Those who could were considered to have stronger abilities to delay gratification. Follow-up research on those same children many years later showed that children who could delay had better academic outcomes and were less likely to be overweight.

Research suggests that willpower is a psychological ability that exists in all people to a greater or lesser extent. Willpower has been likened to a “mental muscle” that can grow, get stronger, weaken, fatigue, and even atrophy. Strong willpower has been associated with success at behavioral change such as quitting smoking or sticking to an exercise regime. Stress and needing to resist too much temptation have been found to weaken willpower. This is why it’s probably a good idea to avoid going to a donut shop when all you want is a cup of coffee. Unless of course you’ve already “chosen” to eat an apple fritter or a chocolate twist.

## *Launching Countless Bad Poems: Emotions*

At this point, none of the theories on motivation address the power of emotion to spur action or initiate behavior. Yet emotion and motivation are intimately related. When I need something, I am motivated to satisfy that need. When my stomach growls, I know I’m hungry. But how do I know when other, more psychological needs aren’t being met, like the need for self-esteem? When certain personal needs aren’t being met, emotions send out a signal. Emotions can indicate that you are not reaching your motivational goals (in the form of disappointment, for example) or that you are meeting your motivational goals (perhaps in the form of happiness).

In the following sections I define emotion, explore its functions, and discuss how emotions can be “used” to improve functioning.





An *emotion* is a complex phenomenon with three interrelated components:

- ✓ **Subjective experience:** When I have a particular emotion, I call this a *feeling*. My experience of sadness may consist of wanting to cry and lacking energy or motivation. This is my experience of sadness; it's subjective.
- ✓ **Physiological response:** All emotions are comprised of responses that involve brain and nervous system activity. When I'm angry, my heart beats quickly and my breathing rates increases. When I'm sad I may feel tired.
- ✓ **Expressive component:** Each emotion is expressed and communicated in a unique way. Facial expressions, body language, posture, words, phrases, gestures, and numerous other means of expression accompany and communicate the experience of an emotion.

Another theory of emotions that has gained more support over the last few years comes from evolutionary psychology. Psychologists subscribing to this perspective view specific behaviors and mental processes as adaptive responses developed through natural selection. Emotions are assumed to be part of this adaptation process.



## Feelings save lives

In addition to signaling whether someone has achieved his or her goals or not, emotions have a couple of other functions. Emotions prepare people for and alert them to potentially dangerous situations. Gavin De Becker sings high praises for this function of emotions in his book, *The Gift of Fear* (Dell Publishing). In a sentence, fear saves our lives. Have you ever been in a situation where you got that feeling that something just wasn't right? That "feeling" was your emotions alerting you to the possible presence of danger that you may have not consciously observed or been aware of. De Becker advocates listening to that voice more often and being more attuned to it as a powerful survival tool.

Positive emotions can provide relief from the trials and tribulations of life. Happiness feels good. What would life be like if you never felt happy? Pretty miserable, obviously! It's easier to have a good relationship with someone who is happy. Happiness also leads to socializing, which may lead to romance, which may lead to children, which may lead to passing on whatever genes worked to produce that happy progenitor in the first place. Positive emotions

whatever genes worked to produce that happy procreator in the first place. Positive emotions have the potential to make people more attractive and allow for social connection.

Cosmides and Tooby propose an extensive set of behavioral and mental programs (think computer programs) that help people address the challenges of survival. Each program functions independently, which creates a logistical nightmare. If you think getting ready for a camping trip is logistically difficult, try coordinating all the behaviors and mental processes that humans possess! This is where emotions come into play. Cosmides and Tooby view emotions as “master programs” of sorts, working to organize and integrate all those behaviors and thoughts. From this perspective, emotions serve a regulatory function. They help people figure out what they need to do in a particular situation and whether or not they’ve accomplished a desired goal.

### ***Finding out which comes first, the body or the mind?***

If emotions consist of three components — subjective experience, physiological reactions, and the expressive component — which comes first? Do I think and feel angry before my muscles tense up? Do I say I’m angry before I know I’m angry? Figuring out this process can get confusing; it’s like the chicken or the egg argument for emotions. But don’t worry; Farmer Cash — that’s me! — is here for you to put all the eggs in the right basket. Three main theories address the birth order of emotion components.

#### ***James-Lange theory***

The *James-Lange theory* attempts to make sense of this mess. When a person encounters a situation or stimulus that leads to an emotional reaction, his body reacts first. There is a set of automatic physical reactions to emotional stimuli. The sensory systems respond by sending signals to the emotional centers of the brain, creating a state of arousal. After this physiological reaction, the brain analyzes what is occurring. Finally, after arousal and appraisal, the subjective experience of the emotion occurs. The brain then recognizes fear, for example, after interpreting this long chain of physiological reactions. Emotional expression comes after recognition of an experience of emotion.

First you see the bear. Then your heart starts pounding, and other fear-related physiological reactions occur. You think to yourself that your heart is pounding, and you are running away from the bear and must be scared. Only

after the analysis are you able to communicate that you are “scared.”

### ***Cannon-Bard theory***

The *Cannon-Bard theory* of emotion is a variation on the James-Lange theory. This theory also proposes that the physiological reaction to stimuli occurs before the subjective experience of an emotion, but there’s a little twist. Cannon-Bard doesn’t agree that the complex activities of muscle activation and the subsequent actions (like running from a bear) are the first physiological processes to get involved.

Specific parts of the brain that are considered less sophisticated are activated first, according to Cannon-Bard. These “lower” parts of the brain then simultaneously send signals to three “higher-level” brain areas: the appraisal area, the arousal area, and the experience area. When compared to James-Lange, the main difference here is that arousal, analysis, experience, and expression all occur at the same time, but only after more basic areas of the brain are cued or activated.

So I encounter the bear, my lower brain areas activate, and then I run, analyze my running, realize I’m scared, and yell out, “Help, I’m going to die” all at the same time. If this fascinates you, check out [Chapter 3](#) to read more about the brain.

### ***Two-factor theory***

Stanley Schacter of Columbia University and Jerrold Singer of Penn State University are psychologists who came up with a third variation on the emotional process. Their *two-factor theory* takes elements from James-Lange and Cannon-Bard but changes things around just a tiny bit. Instead of having an initial reaction from the body or lower brain areas followed by the evaluation process, the two-factor theory states that physiological reactions and cognitive appraisal occur together, creating a feedback loop and co-producing the subjective experience of an emotion. Information from the situation and the environment are used in the appraisal process. Emotional arousal is seen as *generic* (not specific to a particular emotion) until an evaluation is conducted.

According to this theory, I see the bear and experience physiological arousal and cognitive appraisal at the same time. “I’m aroused and there’s a dangerous animal in front of me. I must be scared.”

## *Expressing yourself*

When someone is smiling, is she happy? What about someone who glares at you, puffs out his chest, and turns red in the face? Can you guess what emotion he's experiencing? Of course you can. All emotions have an expressive and communicative component that consists of verbal signals, facial expressions, eye contact, and other body movements and nonverbal expressions.

Some people believe that the expressive components of emotions are innate or inborn. The same goes for the ability to discern what someone is feeling by observing these expressions. Some emotional expressions seem to be universal, such as smiling when happy and frowning when sad.

Certain situations place constraints on these aspects of emotions as well. Although not always the case, people don't typically cheer and laugh at funerals and they don't usually scream angrily at people when given a compliment or a gift. In some cultures, funerals are somber, quiet affairs in which there is very little public display of emotion, although in other cultures there may be a great outpouring of emotion with people screaming, hitting themselves in the head, and grabbing at the casket of the deceased.

## Injecting a little fun

Consider the following experiment: Research subjects are given a shot of epinephrine that activates their sympathetic nervous system. It engages their fight-or-flight response. Some subjects are told what the injection will do, and others are told either something misleading or nothing at all about the injection. Then the subjects are placed into one of two groups: an anger-situation group or a euphoria-situation group. The anger group is asked to fill out an insulting questionnaire that's designed to make them angry. The euphoria group is put in a room with a researcher who is laughing, smiling, and having a good ol' time!

Both groups received the same drug, so their bodies produced the same physiological reaction and the same type of arousal. But do you think they experienced arousal as the same emotions? The subjects in the anger group said they felt angry, and subjects in the euphoria group said they felt happy. Keep in mind that both groups had the same physiological arousal so their experienced emotion was all based on the information provided to them by environmental cues applied to the generic experience of autonomic nervous system arousal. Just as the two-factor theory predicted, subjects apparently labeled their physiological arousal by evaluating the situation, or the context.

Culture has a lot to do with how and when emotions are expressed, including what emotions are appropriate to feel and express.

Speech gives expression to feelings in several ways:

- ✓ **Rate of speech:** Rate of speech can increase or slow down depending on how a person is feeling.
- ✓ **Tone of voice:** A person's voice can be friendly or sharp, and this tone variation says a lot about the emotions being experienced.
- ✓ **Volume:** Volume of voice conveys information as well. When someone is angry or excited he may talk more loudly, for example.



If you want to appear calm when you're angry, make an effort to speak slowly, use soft tones, and keep the volume down. If you're looking to intimidate someone, speak fast, in harsh tones, and very loudly. This sends the signal that you're angry.



Human beings experience many different emotions: fear, sadness,

elation, and disgust to name just a few. Take a second and think about your life: What emotions do you experience most often? As a therapist, I've seen the whole range, but love and anger are two feelings that come up time and time again — maybe more than any others. People want to talk about wanting love, not getting love, giving love, and so on. They also want to express their anger in a safe place where they know they won't experience retaliation.

## Feeling the power of love

Love makes the world go 'round. Or is it money? Whether love makes the world go around or not doesn't diminish the power that it seems to hold over most people, who want love, even if they don't want to admit it at times. It feels good to be loved and to love someone else. I think most people would have a hard time arguing that there's just too much darn love in the world.

If you think love is magical, I hope I don't burst your bubble with a psychological analysis of it. Elaine Hatfield and Richard Rapson, psychologists at the University of Hawaii, identify two specific types of love:

- ✓ **Passionate love:** Intense love with a sexual or romantic quality. It's the kind of love Romeo and Juliet had for each other. It's the kind of love you don't have for your grandmother!
- ✓ **Companionate love:** This is the love between friends and family members. There isn't much passion here, but there are high levels of attachment, commitment, and intimacy.

Robert Sternberg created a theory that outlines six forms of love. Each form is distinguished by varying degrees of *passion*, a strong desire for another person and the expectation that sex with that person will be rewarding; *commitment*, the conviction that a person will stick around, no matter what happens; and *intimacy*, the ability to share our deepest and most secret feelings and thoughts with another person.



Here are Sternberg's six forms of love that are based on varying levels of passion, commitment, and intimacy:

- ✓ **Liking:** There's intimacy but no passion or commitment here. A relationship with a therapist is a good example of this form of love. I can tell my therapist my thoughts and feelings, but I don't necessarily feel passion for or commitment to her.
- ✓ **Infatuation:** Here, there's passion but no intimacy or commitment. This form of love is like lust. It's the one-night-stand or seventh-grade crush version of love.
- ✓ **Empty love:** This is what people have who are committed but share no

passion or intimacy. Some married couples are committed to each other out of necessity or convenience and stay together despite the lack of passion or intimacy.

- ✓ **Fatuous love:** This is the highest level of commitment and passion but it offers low levels of intimacy. Romeo and Juliet seemed to be under the spell of fatuous love. I don't see how they could have become intimate when they never really got a chance to talk.
- ✓ **Companionate love:** This form of love is being committed and intimate but lacking in passion. It epitomizes a really good friendship.
- ✓ **Consummate love:** I guess Sternberg used *consummate* to describe this form of love because it's the total package: high passion, strong commitment, and deep intimacy. This has got to be "consuming."

Are the foundations of love formed in childhood? Some psychologists feel that our love relationships as adults are extensions of our childhood attachments. Children who have healthy attachments have more mature adult relationships with higher levels of intimacy and trust, and they're comfortable with higher levels of interdependency. Children who experience anxious or ambivalent attachments to their primary caregivers may "fall in love" too easily, seeking extreme closeness right off the bat and reacting intensely to any suggestion of abandonment. Glenn Close's character in the drama-filled movie *Fatal Attraction* must have had a hard time with attachments when she was a child. Children who avoid social interaction tend to be uncomfortable with closeness and have a tough time with being dependent upon others in their adult relationships.

Hatfield and Rappon proposed that people possess love templates in the form of mental schemas or scripts. Templates are formed early in life and are revised and solidified over the years as individuals experience various relationships with other people. These templates shape how a person thinks about relationships and determine what expectations he has upon entering into relationships. It seems that a lot of people on those TV dating shows have some pretty interesting love schemas because some of their expectations are, let's just say, interesting.



There are six basic love schemas that apply to romantic relationships.



Each schema is differentiated by a person's comfort level with closeness and independence and how eager she is to be in a romantic relationship.

- ✓ **Casual:** No strings attached. Interested in a problem-free relationship. Dream on!
- ✓ **Clingy:** Seeks closeness (a little too much) and fears independence. Anybody got a spatula?
- ✓ **Fickle:** Uneasy with both closeness and independence. Can't make up your mind? Flip a coin already!
- ✓ **Secure:** Comfortable with both closeness and independence and doesn't rush things.
- ✓ **Skittish:** Fearful of too much closeness and perfectly comfortable with independence. Don't run!
- ✓ **Uninterested:** Just not into the whole relationship thing.

Everyone has an opinion on each of these love schemas. It's hard to judge people who may use one type of schema over another. Different schemas seem to apply to different periods of life, but many people strive toward the secure schema. If someone feels that her schema is causing problems in her life, therapy is a good place to work out these issues.

## Acknowledging anger

Speaking of issues, anger is an issue that deserves a lot of attention. On the one hand, anger can be suppressed and not expressed enough. But on the other hand, anger is expressed in inappropriate and extreme ways every day. Either way, anger is a natural emotion and is as important to human relationships as love.

Have you ever seen that T-shirt that has “I’m not prejudiced, I hate everybody” printed on it? Wonderful message, right? That ranks right up there with the bumper stickers with the cartoon character Calvin, from the American cartoon *Calvin and Hobbes*, peeing on everything from the symbols of different car manufacturers to the Internal Revenue Service. Sometimes it seems like there’s a heck of a lot of anger out there.

Where does anger come from? Lots of theories exist. One is that anger is a consequence of experiencing negative or painful feelings. All kinds of things can lead to negative feelings: unpleasant physical conditions, physical pain, limits on our movement, and even loud noises. I like to refer to this theory as the “grouch factor.” Psychologists theorize that the following things trigger anger:

- ✓ **Feeling depressed:** People who are depressed are more at risk for feeling angry. Even sadness and grief can generate angry feelings. It is not uncommon for people to become extremely angry when someone they are close to dies.
- ✓ **Being separated from desires:** When people are unable to engage in a desired activity or carry out a desired action, they tend to become angry. Sroufe proposed the existence of an *anger* system, which works like a pressure cooker. A person gets increasingly frustrated as his desires and activities are blocked time and time again, which eventually leads to the experience of anger with the blockade. There are no guidelines in this theory about where the breaking points are.
- ✓ **Separation from attachment figure(s):** An *attachment figure* is someone we have attached to or formed a strong emotional bond with. When someone you are attached to leaves you, you may react with anger. These types of anger reactions were determined by researchers observing young children’s reactions to being separated from their mothers. This seems to

happen as adults as well. Have you ever seen someone fly into a rage when their romantic partner wants to break things off? This has been the story in many horrific romantic related crimes, unfortunately.

Although it can be quite destructive, anger is a valid and important emotion, and there are some positives to it. Anger can be pretty adaptive. It can aid in self-defense, fuel ambition, and sometimes prevent someone from acting aggressively toward another person. If someone is going to hurt you, sometimes a display of anger can make her think twice.



Keep in mind that some people react to anger with even more anger, so be careful with this tactic. Anger can mobilize a lot of physical energy in a short period of time. If two angry people meet up, who is going to be the one back down first? Maybe neither. When I worked in the prison system, I witnessed this often. Tough guys with a lot to prove would meet anger with anger and the result was not pretty; usually both people got hurt and put other inmates and correctional staff at risk as well.

Anger need not be destructive, as long as it is expressed appropriately and constructively. Research shows that children who appropriately express their anger have fewer emotional and social problems growing up. Infants and toddlers sometimes use anger as a signal that they're frustrated and may need help with something, like eating.

## Checking out happy

The other day, in the middle of my workday, I caught myself feeling good and particularly positive and I stopped to think about what I was doing, what was going on around me, and what may be producing this positive experience. Was I happy?

Philosophers, poets, and many a middle-ager in midlife crisis would agree: Happiness is an elusive concept. Psychologists do not disagree. The exact definition of happiness and how to study and research it has been controversial, in part because research consistently shows that happiness is more than having the experience of positive emotions. Happiness can be understood as a multifaceted experience consisting of many things, including a person's self-view of life satisfaction, positive beliefs about life, and having more positive emotions than negative ones on average. Happiness is considered synonymous with well-being in psychological research.

Was my positive experience the other day the product of my exceptional cup of coffee, the unexpectedly delicious breakfast burrito, the warm welcome I got from the clinic staff, or my sense of being helpful to my first few clients? What were the ingredients of my happiness that day? What are the ingredients of my well-being?

Take two people: One has a good job, friends, a loving spouse, and well-behaved children; the other has unpredictable work, few friends, and no spouse. Which person is happier? This question gets to the heart of the approach to happiness known as *subjective well-being (SWB)*.

University of Illinois psychologist Ed Diener has done some important work on subjective well-being and the self-evaluation process involved. The SWB approach to happiness posits that well-being is essentially the strong positive emotions a person may experience as she reflects on and evaluates her life. SWB is the “whatever floats your boat” approach to happiness. The answer to the initial question is whoever evaluates her life more positively — the friendly person with a good job or the single guy with unstable work. Maybe neither; maybe both; the answer does not come from some objective list of “happiness ingredients.” The happiest person of the two is the one who individually and subjectively judges himself or herself to be happy. That's it!

Perhaps this approach seems rather simplistic; to some people it is wholly profound. Whichever position a person may take, the subjective well-being

profound. Whichever position a person may take, the subjective well-being theory of happiness leaves one's judgment of happiness up to individuals to judge for themselves.

Some think the SWB approach to happiness is too limited because it does not address why or how someone has high SWB or what she bases her SWB evaluations on. It doesn't address what "leads" to SWB and therefore is not prescriptive, not helpful, cannot be learned from, and cannot be taught.

Psychologist C. D. Ryff presents a more "list like" approach to happiness known as the *Psychological Well-Being Approach*. Ryff's model proposes

- ✓ **Self-acceptance:** Feeling positive about yourself
- ✓ **Positive relations with others:** Good relationships
- ✓ **Autonomy:** Being independent with self-control and self-determination
- ✓ **Environmental mastery:** Being able to choose and create environments that fit your needs and wants
- ✓ **Purpose in life:** Having beliefs that give meaning to your life
- ✓ **Personal growth:** Developing your potential and growing as a person

Martin Seligman is another psychologist who approaches happiness from a broader perspective than the "whatever floats your boat" approach of SWB. Seligman's ingredients to happiness and the good life are captured in the acronym *PERMA*:

- ✓ **Positive emotions:** Feeling good more often than feeling bad
- ✓ **Engagement:** Feeling absorbed and highly focused on what you are doing — akin to being "in the zone" during a sports performance or composing a piece of music
- ✓ **(Positive) relationships:** Having good relationships with good people in your life
- ✓ **Meaning:** A sense that your efforts and talents are serving a purpose greater than oneself
- ✓ **Accomplishment:** Mastery and success at the highest level or a particular pursuit, be it work, sports, or school

Taking the SWB, Psychological Well-Being Approach, and PERMA model all together, it would seem that some degree of positive subjective evaluation,

good relationships, mastery, and meaning are core components to the good life, to happiness. So, the next time I'm feeling happy, it just may be a result of that good cup of coffee and breakfast burrito (SWB), warm staff (good relationships), and knowing I'm helping somebody (mastery and meaning)!

## ***Discovering your smart heart: Emotional intelligence and styles***

In 1996, psychologist Daniel Goleman introduced the public at large to the concept of *Emotional Intelligence* in his book, *Emotional Intelligence: Why It Can Matter More than IQ*. In the years since, there has been a great deal of research on Emotional Intelligence (EQ) — a person's ability to perceive, control, and utilize his emotions in a productive manner. EQ has been likened to a form of intelligence because it is seen as a particular mental skill or ability and has been found to be associated with some positive outcomes in a person's life, just as being traditionally (cognitively) intelligent has, as in success at work.

Psychologists Mayer, Salovey, and Caruso define EQ as the ability to accurately reason about emotions and use that knowledge to enhance thinking. Dr. Reuvan Bar-On considers EQ to be a set of emotional skills that help a person cope and succeed in the world and environment. Perhaps an example of "emotionally unintelligent" behavior or skill can illustrate the point best. During a staff meeting I once saw a well-respected colleague scream and berate a graduate student for making a menial clerical error on some documentation. This caused quite an uproar, but it was later revealed that the colleague had received very distressing news about his personal health just a few minutes before the meeting. The poor student was the target of a lot of emotion he did not deserve. The colleague was clearly not aware of how his emotions were playing out in this interaction. Not so smart, not an example of high EQ.

Richard Davidson, in his book *The Emotional Life of Your Brain: How Its Unique Patterns Affect the Way You Think, Feel, and Live and How You Can Change Them*, takes the concept of emotion perhaps a little further than the concept of a "skill" or "ability" in his model of *emotional style*. For Davidson, it's less about EQ and more about a person's predominant and consistent responses to his or her life's experiences. Davidson proposes the following six dimensions for determining a person's emotional style:

- ✓ **Resilience:** How quickly you recover from stress and challenge
- ✓ **Outlook:** How long you can maintain a positive perspective
- ✓ **Social intuition:** How good you are at picking up social signals
- ✓ **Self-awareness:** How well you perceive body sensations related to emotions
- ✓ **Sensitivity to context:** How good you are at using your surroundings in regulating your emotions
- ✓ **Attention:** How focused you are

Both emotional intelligence and emotional style approaches look at emotion from a broader perspective that put emotional “skillfulness” and ability at the heart of coping and success. It’s not enough to be “book smart”; you need to be “heart smart” — to know how you feel, what do to about it, and how to use it to your advantage.

## Chapter 8

# Barking up the Learning Tree: Dogs, Cats, and Rats

---



## ***In This Chapter***

- ▶ Ringing the bell for Pavlov
- ▶ Teaching an old dog new tricks
- ▶ Making connections and staying in condition
- ▶ Reinforcing behavior and punishing the culprit
- ▶ Fighting extinction
- ▶ Scheduling rewards

Athletes are some of the most superstitious people around — only gamblers can outdo them in this category. When I played college baseball, I had one teammate, a pitcher, who wore the same undershirt without washing it for as long as he kept winning. Some of us kind of hoped we'd lose so he'd wash his shirt. Other athletes carry lucky charms, perform rituals, or engage in elaborate routines to keep a winning streak alive.

I had a couple of superstitions of my own during my college baseball years. For starters, I couldn't knock the dirt off just one of my cleats (shoes) with my bat. I had to do both, even if the other one was clean. And when running in from the field, I never stepped on the chalk line. The other players never questioned me about my superstitions; they had their own weird habits.

When I started studying psychology, I began to wonder where this stuff comes from. What convinced me that I'd have a bad game if I stepped on the chalk line? At some point in time, I must have stepped on the line and then had a bad game. I saw a connection between what I did (stepped on the line) and what happened to me (had a bad game). I drew a connection between my behavior and a consequence, in this case, a negative consequence.

Psychologists call this *superstitious learning*.

When an actual connection exists between what you do and a particular event that follows, be it positive or negative, a specific type of learning takes place. You learn that when you do something, the action is followed by consequence. Behaviorists use the acronym A-B-C: Antecedent (what happens before) → Behavior (the action performed) → Consequence (what happens after the action). All learning is a process of *conditioning*, a type of learning in which an association between events is made.

In this chapter, I describe the learning process and point out how learned behaviors apply to *classical conditioning*, a type of learning in which in which two events become associated with each other, as well as *operant conditioning*, learning in which an important consequence follows a specific response, leading to that response being more or less likely to happen again.

Both classical and operant conditioning lead to learning. What is “learned” in classical conditioning is that two previously unassociated stimuli are now “related” or *associated*. A good example is something called *taste aversion learning*. I once ate a shrimp cocktail and got ill and vomited. From that point on, just the thought of shrimp cocktail has made me nauseated. I *learned* that shrimp cocktail and illness are related, at least for me. I *learned* that the *taste* of shrimp was *aversive* because it was associated with nausea.

In operant conditioning, the learned association is between a particular behavior and what happens after it, the consequence. If you’ve ever caught a fish in a particular spot on a lake or river, you know from that point on you will continue to try that spot first every time you go fishing. What you learn is that your behavior of fishing (behavior) in spot X (context) resulted in a *positive consequence*, or a reward. The receipt of that reward increases the likelihood that you will repeat the behavior that triggered the reward when you are next in the same situation.

Classical conditioning is about two stimuli becoming related to each other. Operant conditioning is about the relation of two stimuli increasing the likelihood that a behavior will occur again (or not).

# *Learning to Behave*

You've been there or at least you've seen it, and I'm not judging — too much. It's the public tantrum with all the key ingredients: parent shame, onlooker disdain, child out of control. And only the coveted toy, piece of candy, or permission has the power to end it. Desperate, you give in and appease the hostile creature.

Most people seem to agree that throwing a public tantrum to fulfill an emotional or physical goal is a *learned behavior*, a response that is taught or acquired through experience. So when a tantrum erupts, parents tend to bear blame for teaching the child that tantrums work. Because work they do! A screaming and flailing child often does get what he wants; children see it work for others (observational learning), and they experience results when they do it (operant conditioning). So why not create a spectacle?

More than a hundred years ago, a group of British philosophers asked this very same question and tried to figure out the nature of learning. They observed that when two experiences occur together in time (temporal contiguity) and space (spatial contiguity), they become associated with each other. In other words, people learn that when event or object A occurs, so does event or object B. It sounds gossipy — “A and B are always together!” The freeway and traffic stay together; hamburgers and French fries don't make individual plans; and tantrums go hand-in-hand with new toys. They go together. They're associated!

Public tantrums capitalize on associations. The child realizes, “Every time I'm in the store, my terrible behavior leads to a new toy in my hands.” And unfortunately for the tired, stressed out, and impatient parent, frequency is at play as well. The parent learns that buying a toy stops the tantrum — quick relief for the weary! As this scene continues to play out over and over again, an ever-stronger association forms.

The good news is that learned behavior can be unlearned through the same learning processes, which is also known as conditioning.

## *Drooling like Pavlov's Dogs*

Kind of a gross visual, huh?

Kind of a gross visual, huh?

Personally, I would rather go to the dentist than conduct research on the salivation patterns of dogs. That's just me. But one brave man, Russian physiologist Ivan Pavlov, was up for the job. Pavlov was actually studying digestion with dogs when he became interested in how the presentation of food automatically activated the salivation response in the dogs that he was studying. He found that the formation of saliva was automatic.



Try it. Think about something really tasty and see if your mouth waters automatically. Did it work? It should have because salivation is a reflexive response to food. It's the body's way of preparing to receive food. Saliva helps break down food into digestible bits.

In this section, I describe how Pavlov figured out why certain associations trigger certain natural responses and thereby discovered classical conditioning. I also point out how associations can change to alter certain learned responses.

## Conditioning responses and stimuli

Pavlov constructed a device to collect the saliva directly from the dogs' salivary glands as the glands went to work. He could then measure how much saliva the dogs reflexively produced. Picture a dog strapped into a cage with a tube attached to its salivary glands and this wacky scientist counting each drop. Not even Hollywood could have imagined a more eccentric scene.

At this point, Pavlov was probably happy with his canine digestion research; but one day, he noticed something strange — the dogs salivated sometimes even when the food wasn't presented. What was going on? Was something else causing the salivation?

Pavlov came up with an *associationist* explanation. That is, the dogs had learned to associate other stimuli with the food. But what was triggering this response?

Pavlov conducted a whole series of experiments to figure out how the dogs had learned to automatically associate non-food stimuli with food in a way that produced salivation. A typical experiment went something like this:

1. Pavlov placed his dogs in their harness with the saliva tubes attached to the dogs' salivary glands.
2. He rang a bell and observed whether the dogs salivated or not. He found that they didn't.
3. Then he rang the bell, waited a few seconds, and then presented food to the dogs. The dogs salivated.
4. He repeated the bell plus food presentation several times. These pairings, by the way, are called *trials*.
5. After Pavlov was satisfied with the number of trials, he presented the bell alone, without the food.
6. He found that the bell by itself produced salivation!



*Conditioning* refers to learning through the associative process, learning through experience. Pavlov's discovery became known as *classical conditioning*.

After conducting his experiments, he identified four necessary components of

classical conditioning:

- ✓ **Unconditioned stimuli (US):** The food that Pavlov presented to his dogs, the *unconditioned stimulus*, is the thing that triggers the unconditioned response. Food prompts salivation.
- ✓ **Unconditioned responses (UR):** Pavlov's dogs automatically, or reflexively, salivated when presented with food. They didn't need to learn or be conditioned to salivate in the presence of food. Pavlov called this response the *unconditioned*, or not-learned, *response*. It happened without learning. It was a reflex.
- ✓ **Conditioned stimuli (CS):** The bell that Pavlov rang in a typical experiment, called the *conditioned stimulus*, is the item that the dogs learned to associate with the food through the process of pairing trials. After enough trials, a conditioned stimulus produces a response on its own.
- ✓ **Conditioned responses (CR):** After the CS begins producing the UR without the US, the response is called the *conditioned response*. In symbolic form, this system looks something like [Table 8-1](#).

## Table 8-1 Classical Conditioning

**Trial Number**

---

---

**Result**

---

|     |  |
|-----|--|
|     | US → UR (food automatically produces salivation)   |
| 1   | CS + US → UR (bell + food produces salivation)     |
| 2   | (bell + food produces salivation)                  |
| 3   | (bell + food produces salivation)                  |
| 4–9 | (bell + food a few more times produces salivation) |
| 10  | CS → CR (bell alone produces salivation)           |

---

---



## Becoming extinct

The power of classical conditioning is pretty impressive. Just think — if you appropriately pair two stimuli, the CS alone will eventually get the job done. But when the pairing stops, and the CS is producing the response by itself, the power of the CS eventually fades. If a CS is presented enough times without the US, the CS eventually will cease to elicit the CR.

This phenomenon is called *extinction*, and it is a way to reverse the process of classical conditioning. For example, Pavlov's dogs learned to salivate at the sound of a bell. But if the bell continued to be presented without the delivery of food, the dogs would eventually stop slobbering to the bell.

But wait, there's more!

Something even more interesting happens if the US is reintroduced sometime after extinction — *spontaneous recovery*. At this point, the CS's ability to elicit the response comes bouncing back, and once again the CS triggers the CR. This means that you can use classical conditioning techniques to teach an old dog new tricks, and you can reverse the process through extinction. With this skill, you'll never be the boring guy at the party sitting in the corner. You can dazzle your newfound friends with classical conditioning tricks and come to the rescue of parents of a toy-hungry tantrum king by teaching them to just stop giving in and let extinction take over.



Here's a fun party trick if you're thinking about testing your own classical conditioning prowess.

1. Gather a few people together — family, friends, coworkers, whomever. Get some packets of powdered, lemonade drink mix. This stuff is really sour without sugar. Give one packet to each participant.
2. Ask each person in the crowd to dip a finger in the lemonade and take a lick. (This is the US.) Ask them to observe if their mouths watered. They should have. If not, get yourself some better droolers.
3. Now choose a CS (a bell, a light, a whistle, whatever). Go through the process of pairing the CS with tasting the lemonade (CS → US → UR over and over again).
4. After 10 to 20 trials, go through a couple of trials where you present just

the CS and ask the participants to observe if their mouths watered. They should have! That's classical conditioning.

5. If your crew is really into spending this kind of time with you, you can now start playing around with extinction and spontaneous recovery!

One more way to reverse the effects of classical conditioning is worth mentioning. You've conducted the lemonade test, and you've successfully taught your Pavlovian subjects to drool on command. If you want to change the effect, choose another US that produces some other response (UR) and classically condition your subjects with the new US. This process is called *counterconditioning*.

Counterconditioning works especially well if the new US produces a response that is incompatible with the old CR. If the old CR was a watering mouth, maybe you pick a new US that produces a dry mouth. I don't know what that may be — maybe eating sand.

I guarantee that if you classically condition the bell with the eating of sand, the bell will have a very hard time triggering a watering mouth ever again . . . unless, of course, you reverse the process all over again. Just be sure to give your subjects a break from time to time, and don't actually try the sand-eating thing as a parlor game; it's just an example!

## *Classic generalizing and discriminating*

You may be thinking, “Big deal. Dogs learn to salivate to a bell; so what?”

Well, if you’re going to be so tough to impress, you should know that classical conditioning is actually a very important phenomenon in terms of human survival. It helps people learn things simply by association, without effort; and this can be very beneficial. In other words, after a CS becomes associated with a US to the point where the CS produces the CR by itself, that learning can expand automatically through a process known as *generalization*.

Generalization happens when something similar to the CS — I’ll call it CS-2 — elicits the CR, even if CS-2 has never before been associated with the original US. For instance, if you learn to associate certain facial gestures, like a snarl or a sneer, with eventual violence, then the snarl or sneer (CS) produces fear (CR), whereas only a flying fist or a verbal threat (US) elicited fear (UR) in the past. You may then generalize the snarl and experience fear in connection with direct and non-averted eye contact (CS-2). This generalization can save your tail. Generalization helps people adapt, because learned responses are applied to new situations.



Generalization can backfire, though. If, for example, I am attacked by a gray-colored pit bull, I may get scared every time I see a gray dog of any type, even a Chihuahua. This “over-learning” can limit my behavior and cause unnecessary suffering because I become afraid of dogs that pose no actual danger to me, so instead of just avoiding gray pit bulls I avoid all dogs.

Another example of generalization backfiring comes from the traumatic experiences of war veterans who suffer from post-traumatic stress. If they’ve experienced loud explosions and heavy gunfire and developed a strong fear reaction to these events, these veterans may respond to hearing a car backfire or some other loud noise in the same way they responded to gunfire in a war zone. This can make life pretty difficult, especially for people living in an urban area with a lot of loud noises.

When people begin to overgeneralize learned behaviors, a process known as

*discrimination* is absent. You know how to *discriminate*, or tell the difference, between stimuli such as the sound of a potentially fatal gunshot and the merely annoying sound of a car backfiring. Discrimination is learned when a CS-2 (or 3 or 8 or 25) is presented enough times without eliciting a response. It becomes apparent that only the CS, and not the CS-2, is necessarily going to produce the CR.

## Conditioning rules!

If all it takes to trigger a natural response to an unnatural stimulus is pairing a natural stimulus with an unnatural stimulus and presenting them together for a while, it can't get much easier.

But not so fast! The process sounds as straightforward as it gets, but some specific rules must be followed in order to achieve conditioning.



In order for associations to form, they must conform to the following two very important rules:

- ✓ **Contiguity:** Associations are only formed when events occur together. For example, I feel depressed when I wake up every Monday morning and think about going back to work. Therefore, for me, work and waking up are associated.
- ✓ **Frequency:** The more often that two (or more) events occur together, the stronger the association becomes.

*Contiguity*, when one event follows another in time, is absolutely required for classical conditioning to occur. Think about it: What if Pavlov had presented the bell (CS) after he presented the food (US)? Or what if he had presented the bell 15 minutes before the food? The CS must come immediately before the US in order for the association to form.

Each of these sequence and timing scenarios represents conditioning techniques that aren't very effective. If Pavlov presented the US before the CS, which is a process known as *backward conditioning*, the dogs would have either made no association at all or an extremely weak one. If he presented the bell well in advance of the food, a process known as *trace conditioning*, the dogs may have formed a weak association, if any.



The best way to ensure that a strong or more quickly formed association is formed during the conditioning process is to follow these guidelines:

- ✓ Present the CS just before the US and keep the CS on or around until the US appears. This way, the CS is perceived to be contiguous with the US.
- ✓ Conduct a lot of trials with the CS and US paired frequently. The strength of the association is a direct product of the frequency of the pairing.
- ✓ Use a strong or intense CS to condition faster. A bright light conditions faster than a dim one. A loud bell conditions faster than a faint one.

But I don't want to mislead you into thinking that all you have to do is frequently present an intense CS before a US to achieve classical conditioning. Even though the rule of contiguity states that if two stimuli are contiguous, an association will form, it's actually not that simple.

Blame it on a pesky graduate student named Robert Rescorla who questioned whether contiguity was enough. Maybe he thought it all seemed too simple.



Rescorla proposed that another rule — the rule of *contingency* — be added to the list of conditioning requirements. His idea was that a CS not only has to be contiguous with a US; it also has to be an accurate predictor of the US. In other words, if the CS is presented at random times (at 1 minute, 7 minutes, 2 minutes, or 12 minutes, for example) with the US, then the CS isn't a credible predictor of the US. The learner (animal or human) gains no predictive power from experiencing the CS, so the CS fails to trigger the CR. Therefore, the CS must be presented with the US in a way that the learner can anticipate, with a fair degree of certainty, that the US is soon to come.

Adding another rule to the requirements of Pavlov's classical conditioning is quite the accomplishment for a graduate student. But Rescorla wasn't finished. Later, he and another psychologist, Allan Wagner, made another huge contribution to learning theory. Ready?

The Rescorla-Wagner model (1972) simply states that in order for a CS to be maximally effective, the US must be unexpected. The learning process is

maximally effective, the US must be unexpected. The learning process is dependent on the element of surprise. If a learner expects the US every time she sees the CS, then she learns to associate it properly; but eventually, the strength of the association reaches a maximum. The strength increases dramatically at first and then levels off as the novelty of the CS wears off and it becomes more “expectable.” Therefore, the power of an association to elicit a CR is a function of surprise. The more novel the CS, the stronger the association.

## ***Battling theories: Why does conditioning work?***

Knowing how to perform classical conditioning is useful (check out the [Conditioning responses and stimuli](#) earlier for the how-to on this trick), and the conditioning response enables people to learn about their environment in ways that improve adaptability and a little something called survival. But why does conditioning work? Why do previously unrelated stimuli become associated with each other?

Pavlov believed that the simultaneous activation of two distinct areas in the brain form associations between a CS and a US. This activation results in the formation of a new pathway between the two areas. It’s like sitting next to a stranger on the bus and, through some polite chitchat, realizing you both know the same person. These two previously unrelated people become associated through this common association and a new connection is born.

Clark Hull presented an alternative account. He believed that the association formed is actually between the CS and the UR, which then becomes the CR. Scientists are at their most creative when they figure out how to make two different theories compete with each other in predicting the outcome of an experiment. This creativity makes it possible for them to dream up a critical experimental test. Holland and Staub set out to test Hull’s theory. They conditioned rats by using noise and food pellets.

According to Pavlov, the rats learned to associate the noise with the food. But Holland and Staub pitted Pavlov’s idea against Hull’s by trying to make the food an unattractive US. First, they taught the rats to associate noise (CS) with food (US). Then they put the rats on a turntable and spun them around to make them nauseous. Here, they taught the rats to associate food with nausea. Then, after spinning them for a while, they presented the noise again, and the rats didn’t respond to it. This “devalued” the food by associating it with nausea.

Pavlov thought that the original connection was between the noise and the food. But Hull predicted that devaluing the US would not make a difference in the rats' response; he suggested that the critical association forms between the noise (CS) and eating (UR). Devaluing the US did make a difference, though. Spinning the rats on the turntable and making the food less attractive to them as a result should not have made a difference, according to Hull, but he was wrong. A connection must exist between the CS and the US; the CS can't be left out of the loop for conditioning to occur.

So, Pavlov rules the day!

This isn't just rigid tradition. It actually has predictive value. Learning doesn't stop here, however. Check out [Chapter 9](#) for new adventures in learning about learning.

## *Studying Thorndike's Cats*

Operant conditioning takes place in all facets of everyday living — in homes, the workplace, and public spaces. Parents use rewards, or operant conditioning, to get their children to do their homework or follow through on chores. Here's how operant conditioning works.

Every month I get paid at my job. Am I paid just to sit around and take up space? No, I'm paid for performing the duties of my job, for working. I do something, and something happens. I work, and I get paid. Would I work if I didn't get paid? Probably not, for two reasons.

First, I have better things to do with my time than to work for free. (My credit card debtors wouldn't be too happy with me either.) Second, according to operant conditioning theory, I work *because* I get paid. The "something" that follows my working behavior is a reward, a positive consequence.

When I do something like work at my job, something happens; I get paid. Then what happens? I keep going to work every month, so that paycheck I get must be having an effect on me. Way back in early 1900s, Edward Thorndike created a theory, known as the *law of effect*, that addressed this idea of a consequence having an effect on behavior.

Thorndike decided to look into this phenomenon by doing research with cats. He constructed the *puzzle box* made from a wooden crate with spaced slats

and a door that could be opened by a special mechanism. Thorndike placed a hungry cat inside the box and closed the door. He then placed some food on a dish outside of the box that the cat could see through the slats in the crate. Sounds kind of cruel, doesn't it? The cat would reach for the food through the slats, but the food was out of reach. The only way for the cat to get the food was for Thorndike or the cat to open the door.

Obviously, Thorndike wasn't going to open the door; he was conducting an experiment. The cat had to figure out how to open the door himself. You don't see a lot of cats going around opening doors. So what did he do? It's suspenseful, isn't it? What will the little hungry cat do there in the puzzle box? Will he open the door and feed voraciously on the prized food that was just beyond his reach only moments before? Or will he meet his demise and starve at the hands of a fiendish psychologist?

The cat had to figure out how to open the door, and Thorndike was a patient man. He waited and watched, waited and watched. The cat wandered around the box, stuck his little paw out, meowed, bounced off the walls, and acted in any number of random ways inside of the box. But then, something remarkable happened. The cat accidentally hit the latch that was holding the door shut, and the door miraculously opened! Hurray! The cat got to eat, and everyone lived happily ever after.

What did Thorndike learn from his little experiment?

Nothing. He wasn't done yet.

So he put that poor cat back inside the box to go at it again. No problem, right? The cat knew what to do; just hit the latch, little kitty! But when it got back into the box, the cat acted like he didn't know that he had to hit the latch to open the door. He started acting in the same random ways all over again.

Never fear, eventually the cat triggered the latch by accident again and was again rewarded by gaining access to the food. Thorndike kept performing this experiment over and over again, and he made a remarkable observation. The amount of time that it took for the cat to figure out that the latch was the key to freedom — well, food! — got shorter and shorter with each subsequent trial. Why was the cat getting faster? Thorndike proposed that the food helped the cat learn the association between the triggering the latch and the escape.





Thorndike's law of effect states that a response that results in stronger satisfaction to an organism (for example, animal or human) will be more likely to be associated with the situation that preceded it. The greater the satisfaction, the greater the bond between the situation and response.

Basically, the consequence of getting the food served as a reward for learning how to open the box. The cat's opening-the-box behavior is like my job, and his food is like my paycheck.

So getting back to my original question of whether my paycheck has an effect on me or not — the fact is, I keep working, just like Thorndike's cat kept opening the box to get the food. Therefore, the consequence of my action does appear to lead me to perform that action again.

# *Reinforcing the Rat Case*

When a consequence of an action or event increases the probability that the event or action will happen again, that consequence is called a *reinforcer*. It's like a reward, and rewards often motivate a repeat of actions that earned the reward. Operant conditioning is all about the effects of reinforcers on behavior.

B. F. Skinner, one of the most famous psychologists of all time, followed in Thorndike's footsteps in using animals to investigate operant conditioning. He constructed a box with a lever inside and called it a *Skinner box*. When an animal pressed the lever, a food pellet fell out of a feeder and into the box. Skinner wanted to see if rats placed in the box could learn to press the lever in order to receive the food.

This task was a lot harder than one may think. Rats aren't used to pressing levers to get food. Skinner had to facilitate the process a little bit with a procedure known as *shaping*, a technique of rewarding successful approximations to the goal. Skinner rewarded the rats with food for performing a behavior that was close to, but not exactly, the required response. Shaping was done gradually so that the rats eventually got to the point where they pressed the bar and received their reinforcers of food.

After the rats got the hang of it, they learned to press the bar for food the same way Thorndike's cats learned to open the door. The rats learned because the reward of the food taught them how to press the bar.

## *Finding the right reinforcer*

In the cases of both Thorndike's cats and Skinner's rats, the subjects learned because they were rewarded with food. Food is a powerful reward for animals, but it's just one type of reinforcer. Anything that increases the likelihood that a behavior will occur again can be used as a reward or reinforcer. It can be food, money, recess, or vacations. It can also be something intangible like approval, praise, or attention from another person.

There are two basic types of reinforcement:

- ✓ **Positive reinforcement** is the use of any reinforcer that increases the likelihood that a behavior will occur again.
- ✓ **Negative reinforcement** occurs when the removal of negative stimuli leads to an increased likelihood that a behavior will occur again. A good example of this is when a student gets disruptive in class during an assignment he is trying to avoid or escape. The teacher sends him out of the room and negatively reinforces the disruptive behavior. The teacher thinks she is punishing the student but he is actually getting out of an aversive demand.

The basic idea of operant conditioning is that behaviors that are reinforced (either positively or negatively) are more likely to occur again. But is this true for all reinforcers? Are all reinforcers created equal? If Skinner had given the rats five dollars each time they pressed the lever, would they still have learned the response?

Probably not. Differences between reinforcers exist and affect the impact that the reinforcers have on responses. Not all consequences are rewarding or reinforcing as they vary from person to person (or animal to person).



Two types of positive reinforcers are effective:

- ✓ **Primary reinforcers** are rewards that don't require shaping or prior training to be effective. Examples may be food or pleasurable physical sensations.

David Premack in 1971 came up with the interesting idea that primary reinforcers can be identified by looking at what people spend most of their

time doing. If they spend a lot of time watching television, riding bikes, or sleeping, then these activities may be considered primary reinforcers. His *Premack principle* states that high probability responses can be used to reinforce lower probability responses. This is like using ice cream to get your child to eat his or her vegetables. If they want the ice cream (high probability response), they'll eat their vegetables (low probability response).

✓ **Secondary reinforcers** are things that become reinforcing through experience and learning. This result happens by associating the secondary reinforcer with a primary reinforcer by using classical conditioning techniques (see the section [Conditioning responses and stimuli](#) earlier in this chapter).

The best example of a secondary reinforcer is money. We aren't born knowing the value of money (and some of us never get it). But, eventually we learn the value of money as we experience its association with the things we like such as food, clothing, shelter, and expensive cars. So, money "acquires" its value to us as it becomes associated with primary reinforcers. In some institutions, like schools and hospitals, caretakers reward appropriate behaviors with *tokens*, which may be cashed in for specific rewards later. This type of system is called a token economy, like local money.

After identifying what a subject considers to be reinforcing, it becomes possible to influence behavior by providing rewards for performing the appropriate responses.

For example, consider an office manager who is having a difficult time getting her employees to come back from lunch on time. What can she do? First, she needs to figure out what is reinforcing for the group or each individual. Not all rewards are the reinforcing to all people. Then, she has to start rewarding anyone who performs the desired behavior, coming back from lunch on time. She could give them little gifts, money, or smiley-face stickers.

Or, the office manager could use negative reinforcement. For instance, she could send a really whiny employee out to lunch (who complains profusely and gets everyone's anxiety up at the thought of being late) with the latecomers. The latecomers hate hearing the whiny employee complain so much that they start returning on time just to avoid hearing him go on and on

much that they start returning on time just to avoid hearing him go on and on.

This concept of negative reinforcement confuses a lot of people. How can taking something away or removing a noxious stimulus increase the probability of a behavior? You may have some experience with this tactic if you've ever had a new puppy in your home that wouldn't stop whining while you tried to sleep. If you kept the puppy in another room or in the garage, you probably responded to the whining by getting up and checking on the cute little creature. What happened when you went to the puppy? It probably stopped crying. If you then went back to bed, I bet the crying woke you again less than ten minutes later.

The problem in this situation is that *your* behavior was under the control of negative reinforcement. The puppy's whining was a noxious (and annoying) stimulus. When you went to the garage, the whining stopped, increasing the likelihood that you kept going to the puppy every time he cried. You were negatively reinforced for going to the puppy — and that puppy got positively reinforced for whining! Oops.

## Using punishment

Both positive and negative reinforcements are consequences that are likely to increase certain behaviors. But what about that other consequence, *punishment*? Punishment is any consequence that decreases the likelihood of a response and not necessarily something typically thought of as a punishment. For example, if every time you call a certain friend he seems distracted, like he's not listening to what you're saying, you may experience negative feelings of not being valued; this "punishment" is likely to lead to you calling at person less often.

One type of punishment is straightforward — the introduction of something noxious or aversive.

Another type of punishment, *negative punishment*, involves removing a reinforcer, such as taking away a child's bicycle. Again, as for reinforcement, punishment can be a very individual matter; what one person experiences as aversive or punishing may not apply to the next person.

Punishment is used to influence people's behavior all the time. Parents punish children. Courts punish convicted criminals. Credit card companies punish people for late payments. But does punishment work?



Punishment can be a very potent and effective means for decreasing the frequency of a behavior, but keep a few things in mind:

- ✓ Punishment should be the least intense form necessary to produce the desired response. Recipients may acclimate to each subsequent increase in punishment, however, and overly intense punishment is problematic as well. In order for punishment to be effective over a long period of time, you have to adjust its intensity in a meaningful way.
- ✓ To be effective, punishment must occur as close in time as possible to the response being punished. If a parent waits three weeks to punish a child for breaking a lamp, the kid's likely to be completely clueless about why she's being punished; therefore, the punishment has no effect on deterring future behavior.
- ✓ Punishment should be firm, consistent, and accompanied with a clear explanation of why the punishment is being administered.

There are ethical issues associated with punishment which mean it has to be considered very carefully in all circumstances.



Of course, a lot of people are uncomfortable with the idea of inflicting pain or suffering on another person in order to alter behavior. The use of punishment can have some negative consequences:

- ✓ **Fear:** When people are effectively punished, they may learn to anticipate future punishment and develop severe anxiety while waiting for the next shoe to drop. This can have a disruptive effect on the life of a punished person, which can lead to avoidance and apathy.
- ✓ **Aggression:** I've worked in both jails and prisons, and I've seen men become angrier and more aggressive as a result of the harsh conditions that they face while incarcerated. When the time comes for these people to be released and face the world in a reformed manner, they are dysfunctional and institutionalized, often unable to make the transition to the outside world as a result of their punishment.

The person delivering the punishment may become an aversive CS through conditioning. For example, a child may avoid a parent who punishes the child frequently. Contiguity does its thing — that person is there every time I get scolded (“Just wait until your father gets home.” Thanks, Ma).

## *Scheduling and timing reinforcement*

Have you ever wondered why people keep going back to places like Las Vegas and Atlantic City time and time again to donate their money to the casino expansion fund? The bottom line with gambling is that the big winner is always the house, the casino. Everyone knows this, but some people can't stay away.

People keep going back because of something called a *schedule of reinforcement*, a schedule or determination for what responses to reinforce and when to reinforce them. There are four basic schedules of reinforcement, each with different effects on the response in question:

- ✓ Fixed ratio (continuous and partial types)
- ✓ Variable ratio
- ✓ Fixed interval
- ✓ Variable interval



### ***Ongoing rewards***

Perhaps the most common form of reinforcement is called *continuous reinforcement*, in which the ratio is one-to-one. One behavior, one reward. It involves reinforcing a behavior every time it occurs. Every time I pull the slot machine handle, I win! Yeah right, I wish.

Continuous reinforcement is good for the shaping phase of learning (see “Reinforcing the Rat Case” earlier for a discussion of shaping) or for what is called the *acquisition phase*. Learning a new behavior takes time. Continuous reinforcement speeds up the learning process.

The problem with continuous reinforcement, however, is that it extinguishes quickly. If I’m reinforced every time I return to work on time from lunch, then I’m likely to stop returning on time as soon as my boss stops reinforcing me for this behavior.

### *Patting heads sporadically*

Often, reinforcement in our world is intermittent and sporadic. Of course we don't win every time we pull the lever on the slot machine. B. F. Skinner didn't design slots.

B. A. Loser, the casino behavioral psychologist, did. Reinforcement on a less frequent basis (for example, requiring more than one response) is called *partial reinforcement*. There are two types of partial reinforcement schedules, and each is further divided by how predictably or randomly the reinforcers come.

✓ The first type of partial reinforcement is called a *ratio schedule that involves more than one response being required to gain a reward*. With a ratio schedule, reinforcement is only given after a specific number of responses have been given. If a parent is using this schedule with his children, he may only give a reward for some number of A's his child gets on her report card or after a certain number of times the child cleans her room. Ratio schedules can then vary based on whether a fixed number of responses or a variable number of responses are required to receive the reinforcement.

- A *fixed ratio* reinforcement schedule involves always reinforcing for the same number of given responses. If I'm going to reward my child for every two A's she earns, that never changes; reinforcement follows every two A's.
- A *variable ratio* reinforcement schedule involves giving reinforcement for a varied number of responses provided. I may reinforce my child for two As now, but then I may reinforce her for one A, three A's, or ten A's down the line. The key to this approach is to keep the recipient guessing. Doing so has a powerful effect on the persistence of a response because people keep doing the requisite behavior because they don't know when the reinforcement will come. A variable ratio is much more resistant to extinction than continuous reinforcement.

✓ The other type of partial reinforcement schedule, an *interval schedule*, is based on the amount of time that has passed between reinforcements. You still have to respond to get a reward, but you have to wait a certain time before your response "works."

- I get paid once a month. Time determines when I get paid. My pay schedule is an example of a *fixed interval* reinforcement schedule. The time frame never varies.
- The other type of interval schedule is *variable interval*. Here, responses are reinforced per a varied amount of time passed since the last reinforcement. This approach would be like getting paid at the end of one month, and then getting paid two days later, and again three weeks later, and so on. Variable interval schedules are also very resistant to extinction for the same reason as variable ratio schedules; the responder never knows when he is going to get reinforced, so he has to keep responding to find out.

Gambling is motivated by a variable interval schedule so that people keep pumping the money in, waiting for the big payoff.

I'm sure you've heard "You can't win if you don't play." The next time you think you're "due" or bound to win because you've been sitting at the same machine for three days without a shower, sleep, or anything to eat, remember that it's variable. You never know when the machine is going to hit. So try to manage your rage if you finally give up and the next person who sits down wins it all!

That's why they call it gambling.

The timing of the reinforcement is also critical. Research has shown that reinforcement must occur immediately, or as quickly as possible, following the desired response. If you wait too long, the connection between the response and the reinforcing consequence is lost. Skinner's rats would have never figured out how to press that lever if they were given a food voucher redeemable only after five visits to the Rat Food Deluxe shop — instead of instant gratification for their achievement.

## ***Becoming Aware of Stimulus Control and Operant Generalization***

Have you ever noticed how people slow down on the highway when they see a traffic cop? That's probably because they've all gotten tickets from them at one time or another. What happens when a good old city (non-traffic) cop is

on the road? Nobody slows down. They just ignore him. Is this an example of a blatant disrespect for the law? No. It's an example of *stimulus control*, the idea that a response can vary as a function of the stimulus present at the time of reinforcement or punishment. Although both law enforcement authorities can give tickets for speeding, most of us know that city cops don't typically give tickets on the highway. The stimuli have different effects on our behavior because they have led to different consequences. Punishment only comes from the traffic cop.

Sometimes, when we learn a response due to reinforcement, we may automatically *generalize* that response to other similar stimuli. If I generalized my traffic cop ticket experience to city cops, I would slow down for city cops, too. Or, if I'm reinforced for coming back from lunch on time, I may also generalize that behavior to coming to work in the morning on time. Generalization helps speed up the learning process because we don't have time to receive reinforcement for every single response we elicit.

# Discovering Operant Discrimination

Sometimes people can over-learn a response or behavior. They then engage in the response when they shouldn't because they've generalized a little too much.

I think this happens to psychotherapists sometimes. We may be in a social situation, not working, when someone starts talking about how hard his or her day was. "Tell me how that makes you feel," may slip out. Everyone looks at the psychotherapist in question like a quack. Maybe it's time for a vacation.



I've also seen this phenomenon in movies. An ex-cop overreacts to seeing his grandson point a water pistol at him, and he takes the kid down to "remove the threat." These are problems of *discrimination*, responding to only one of two or more particular stimuli. The problem is remedied by presenting someone with both stimuli and only reinforcing the response to the correct one. Put grandpa in the middle of a hold-up and throw his grandson with a water pistol into the mix. Only reinforce the Detective Grandpa when he successfully neutralizes the threat of the robber (stimulus 1) and not for taking grandson out (stimulus 2). He's learned to discriminate between a real threat and a benign one.

## Part IV

# Me, You, and Everything in Between

### *The Five Personality Traits of Humanity*

- ✓ **Openness to Experience:** Curious and open to new ideas and novelty
- ✓ **Conscientiousness:** Organized, thoughtful, dependable
- ✓ **Extroversion:** Outgoing, sociable, and stimulation seeking
- ✓ **Agreeableness:** Tolerant, sensitive, warm
- ✓ **Neuroticism:** Anxious, temperamental, moody



Take a mock personality test at  
[www.dummies.com/extras/psychology](http://www.dummies.com/extras/psychology).

## *In this part...*

- ✓ Discover personality theory, the most common personality types, and topics such as knowing yourself, developing identities, forming relationships, and communicating.
- ✓ Get connected to those around you and find out the influence that others have on your behavior and the different ways people behave in groups.
- ✓ Take a look at developmental psychology and trace development from conception to adolescence.
- ✓ Get out your cigar and cozy up with Sigmund Freud's work on the structure of the psyche and his famous theory of psychosexual development, including defense mechanisms, denial, and repression (plus discover other theorists who came after him).
- ✓ Get hip to contemporary approaches to abnormal psychology, including neuropsychological and cognitive explanations for psychological problems like anxiety disorders, depression, schizophrenia, and posttraumatic stress disorder.

## **Chapter 10**

# **Catching the First Boat off Isolation Island**

---



## ***In This Chapter***

- ▶ Knowing thyself
- ▶ Connecting with others
- ▶ Enjoying family
- ▶ Hanging out with friends
- ▶ Getting to know you . . . and me
- ▶ Communicating with others

One of the things that distinguishes psychology from other social sciences is the focus of its investigations and applications. Although psychologists do focus on groups at times, they focus a majority of their work on individuals. Therapy, for example, is typically an individual affair, even if it's group therapy.

Americans love the classic individual. John Wayne walked tall and independently for years. Rambo single-handedly took on entire divisions of enemy soldiers. These guys stood on their own. They were individuals who resisted pressures to go along with the crowd. They seemed to know who they were, and they were never willing to compromise their self-identity. Sometimes that's called integrity — which fits because one of the meanings of the word integrity is wholeness or completeness, and these guys were complete individuals. They had strong character and dominant personas. They knew who they were, and no one could tell them otherwise.

In case you haven't noticed, however, psychologists take nothing for granted. If I had John Wayne in therapy and he came in with his macho, "I know who I am, and I'm not going to change" attitude, I'd take the bait. I'd say, "Okay, who are you?" It's easy to take knowing who you are for granted. Until someone asks, most of us go around assuming we know who we are. This is the age-old question of *self*. What is a self, and how do I know if I have one? What is my identity? Who am I?

## ***Feeling Self-Conscious***

Have you ever seen a dog stand in front of a mirror? Sometimes they bark at themselves or stand there with a puzzled look. Believe it or not, the ability to

themselves or stand there with a puzzled look. Believe it or not, the ability to recognize oneself in the mirror is pretty advanced, and dogs have yet to demonstrate that they can do it. Some psychologists argue that it is a uniquely human ability, although some research has shown that teenage chimpanzees, magpies (a type of bird), elephants, and orangutans can recognize themselves in a mirror.

When we've developed a sense of self-awareness, we've achieved a state of self-consciousness. Why do I say "developed?" Aren't we aware of ourselves at birth? Actually, it may take up to five or six months for an infant to develop anything even remotely resembling self-consciousness.

The mirror technique is one of the tools that psychologists have used to test infants' and toddlers' levels of self-consciousness. The simplest form of this test involves just setting an infant down in front of a mirror and watching her response. Some researchers have shown that 5-to 6-month-olds will reach out and touch the mirror image, suggesting they think it's another baby, or at least different from them.

In 1979, Michael Lewis and Jeanne Brooks-Gunn conducted a sophisticated version of the mirror test. They applied some blush to the noses of two sets of children — 15-to 17-month-olds and 18-to 24-month-olds. The idea: If the kids look in the mirror and see the blush on their nose, they'll touch it or try to remove it in some way. But this requires the child to realize that the person in the mirror is himself. So what happened? Just a few of the 15-to 17-month-olds actually reached up and touched their noses, but the vast majority of the 18-to 24-month-old children did it. So, the older children were more likely to recognize themselves in the mirror.

## Showing up in the buff

I used to have this recurring dream where I would find myself naked in some public place. In one of the dreams, I was back in elementary school, and the only thing I was wearing was a fur coat, with nothing underneath. I was pretty worried about what these dreams meant. Did I have a fur-coat fetish or was I an exhibitionist? I was glad to find out that these dreams were probably about self-consciousness. Each of us has different situations that exemplify feeling extremely self-conscious and exposed. For some people, the situation is public speaking; for others, it's dancing in a nightclub or wearing nothing but a fur coat.



Self-consciousness and self-awareness are the same thing. Being self-conscious just means being aware of oneself. But too much of anything can be bad. Usually when someone says she is “self-conscious” she means that she is aware of some flaw. This is not the type of self-consciousness I am talking about in this section.

Here, I’m talking about these specific types of awareness:

- ✓ Body awareness
- ✓ Private self-consciousness
- ✓ Public self-consciousness

## ***Becoming aware of your body***

Body-awareness begins with a simple question: Where do I physically begin, and where do I physically stop? Remember the movie *Malice* with Bill Pullman, Nicole Kidman, and Alec Baldwin? In one scene, Bill and Alec are sitting in bar, and Alec asks Bill to name the part of his body that is most expendable. In other words, Alec wants Bill to choose the part of his body that he could lose without taking a severe blow to his sense of self. If you've seen the movie, you know why he asks this creepy question; it's foreshadowing.

What part of your body is most important to your sense of self? It may sound strange, but being able to tell the difference between your body and someone else's body is crucial to self-consciousness. Think about newborns. The physical connection between a child and a breast-feeding mother is undeniable, and a child's realization of a sense of difference, or separateness, from the mother develops slowly over a period of several months.

## ***Keeping it private***

How well do you know yourself? Are you always trying to figure yourself out? The internal focus on your thoughts, feelings, motivations, and overall sense of self is called your *private self-consciousness*. When you “look within,” you’re privately self-conscious. But if you “look within” a little too much, you can be privately “spaced-out.”

## *Showing it off*

I was leaving for work one morning and realized, when I got outside to my car, that I'd forgotten something. I did the big finger snap and the one-eye squint, made an about-face, and went back inside. What are these things? They sound like something from a *Seinfeld* episode, but you know these actions, I bet — those behaviors you do when you forget something. Why did I make these gestures? If I didn't, I'd look like an idiot for walking to my car and then walking back again for no apparent reason. Why did I need a reason? Someone was watching me!

This is the *invisible audience* phenomenon — a sense that you're on display when you're in public and that people are watching you. Teenagers always seem to be on stage. If they trip over a crack in the sidewalk, they turn bright red and run off giggling. This is an example of *public self-consciousness*, a sense of being in the presence of others, our public image — whether others are actually watching or not.

The most noticeable aspect of public self-consciousness is awareness and focus on appearances. People don't spend billions of dollars a year on nice clothes, gym memberships, and diets for nothing. Public self-consciousness is a big part of who you are and how you see yourself.

# Identifying Yourself

An easy way to find out who you are is to ask other people. Your identity is often deeply tied to the way other people see you. When you look into the mirror, what do you see? Have you ever wondered how you look to other people? Do they see the same person you see in the mirror? The part of your self-concept that is based on other people's reactions to and views of you is called your *looking-glass self*, one of the most basic concepts of self. People are, after all, social creatures, and it would be hard to argue against the idea that at least part of a person's self-concept depends on the views of others.

Daniel Stern (a notable psychoanalyst specializing in infant development) proposed a theory of self-concept that gives us a good look into how people develop a unique "self." From his studies on infants, he proposed that all people are born with an innate ability to become aware of themselves through a series of experiences.



People are born with the *emergent self*, which basically consists of subjective experiences of joy, distress, anger, and surprise. Feelings! The *core self* begins to arise between the ages of 2 and 4 months, when memories start to form and people develop a sense of their physical capabilities. Next comes the *subjective self*, which emerges when an infant realizes that she can share her experiences with other people. A good example of this is when a baby tries to give you a drink off her bottle before she drinks it. And finally, the *verbal self* develops as we use language to organize a sense of self.

Arnold Buss, an American researcher and psychologist, provides a good look at the meaning of *identity*. Two aspects comprise a person's identity:

- ✓ Personal identity
- ✓ Social identity

## Forging a personal identity

My *personal identity* consists of the things that make me stand out in a crowd — like my massive biceps and athletic prowess. Actually, I’m thinking of something a little more psychological, even though physical appearance does make up part of a person’s identity. According to Buss, the personal identity is comprised of a *public self* and a *private self*, each with its own components.

Three important aspects make up the *public self*:

- ✓ **Appearance:** As I mention earlier in the [Showing it off](#) section, being aware of your appearance is very much a part of your identity. This is not a uniquely western perspective. Cultures all over the world engage in elaborate and sophisticated attempts to improve appearances and enhance personal beauty, as defined by each particular culture. Some philosophers state that a sense of aesthetics is essential for the good life — central to a person’s self-concept.
- ✓ **Style:** George Clooney, Johnny Depp, and Jay Z have style. The way they talk, their body language, and their facial expressions are undeniably “them.” Everyone has a peculiar way of speaking and moving. Even a person’s handwriting is unique. These things make up a person’s style. Don’t get confused by the Clooney, Depp, or Z examples though; style isn’t about being “cool.” My style is unique to me, whether it’s cool or not. It’s the “Dr. Cash” style, and no matter what others may say, I think it’s very cool.
- ✓ **Personality:** Personality theories attempt to account for individuality based on differences among personalities. If someone put my personality inside another person’s body, would my friends recognize me? Maybe not at first, but they may eventually start to notice that something is up because personalities make people unique; they make a person identifiable. Personalities are enduring, and they don’t change easily. Because of their consistency and stability, personalities are good representations of who a person is, even if he acts differently from time to time. [Chapter 9](#) is about personality.

The *private self* consists of characteristics that are difficult for others to see and observe. When a patient comes in for psychotherapy, a psychologist has a difficult time helping him if he refuses to talk about his private self — his



thoughts, feelings, and daydreams and fantasies.

- ✓ **Thoughts:** Knowing what someone is thinking is hard, unless he tells you. Some people are better than others at figuring out what people are thinking, but it's really nothing more than a sophisticated guessing process. My thoughts are unique to me.
- ✓ **Feelings:** Mental health professionals often evaluate new patients at psychiatric hospitals with something called the *mental status examination*. The professional observes the patient, partly to figure out how the patient feels. This observable aspect of how someone feels is the *affect*. But what about what the person says? I've often not seen someone's depression even when she tells me that she is extremely sad. This is called *mood*, a person's own private experience of feeling. When patients tell me how they feel, I have to take their word for it. It's pretty hard to tell someone that he's not sad when he tells you he is.
- ✓ **Daydreams/Fantasies:** Who would you be without your daydreams and fantasies? Again, fantasies are typically private, especially the sexual ones. Yours are unique to you, and they define you.

## **You are what you do**

The most interesting aspect about identity is that, as people grow older, the way they define themselves changes. Elementary school children often define who they are by the things that they do. Very young children may identify themselves by saying, "I run. I play. I ride my bike." When these children become teenagers, this shifts to psychological concepts such as beliefs, motivations, desires, and feelings. "I want to go to the dance" or "I feel very sad today." How do adults define themselves? Probably by combining both types of self-definition: activity and psychological concepts, "I'm a sad psychologist who can't golf."

## *Carving out a social identity*

What's your name? Where are you from? What's your religion? Each of these questions is a component of one aspect of your *social identity* — those things that identify you with a particular societal category.

*Group affiliation* refers to things such as your vocations and social clubs. Many people identify themselves by the type of work they do for a living. “I’m a fireman!” “I’m a cop!” I’m a psychologist. But another important dimension of the social identity is the kinds of social clubs and cliques a person affiliates with. One would be hard pressed to deny the strong identification that many college men have with their fraternities. Other people see themselves as “cowboys” because they strap on boots, jeans, and a cowboy hat and go line dancing at a local Western club. No matter what you’re into, it often gives you a sense of uniqueness that goes beyond the other aspects of personal identity. Your social identity is comprised of certain identity factors that, when taken all together, equal the social “you.” These factors include kinship, race and ethnicity, and religious beliefs.

## ***Kinship***

Most people realize that *kinship* is central to social identity. Your relatives are your “kin,” and most people get their last name from their family of origin. In the United States, last names are legal names and a fairly reliable way to identify people. Although many people have the same name, many more do not.

In Arabic culture, a last name is not the primary way to identify someone’s kin. Legally, last names are often used for identification, but a person is socially identified by who his father is, and a father is identified by who his oldest son is. Instead of being “Mr. Nasser Khoury,” an individual in this culture would be “Father of Josef” or “Abu Josef.” The son, “Josef Khoury,” would be “Son of Nasser,” or “Bin Nasser,” or “Josef Nasser.” For more on family, see [Cavorting with Family and Friends](#) later in the chapter.

## ***Ethnicity and nationality***

*Ethnicity* is another important aspect of social identity and is defined as a classification of belonging to a particular group based on a similar cultural tradition. Often, you can find these common categories on job and school applications. The categories are rather arbitrary in name, but they do include a lot of information. Some people are more comfortable not identifying ethnic differences between people because they fear discrimination. But ethnicity is very much a part of who people are and the culture that guides their lives.



*Nationality* is not the same as ethnicity. I can be a born-and-raised Canadian citizen with Japanese ethnicity. Both ethnicity and nationality are important pieces of information about a person because a Peruvian citizen of Japanese descent is likely very different from a Canadian citizen of Japanese descent.

## Religious and group affiliations

*Religious affiliation* affects a person's social identity to varying degrees. In Israel, for example, most of the inhabitants of the city of Nazareth are of Arabic ethnicity, but there are two distinct religious groups: Muslims and Christians. An individual's religious identity is a core aspect in determining who she is. Some Americans strongly identify themselves by religious denomination: Roman Catholic, Presbyterian, Lutheran, Muslim, Jewish, Hindu, and so on.

## Mustering up some self-esteem

Unfortunately, sometimes having a *looking-glass self* can be a bad thing. (See "Identifying Yourself" earlier in this chapter.) As long as other people see you in a good light, all is well. But this is often not the case. Children, for example, are sometimes belittled, put down, or verbally abused by their own parents. Even adults know that others don't always hold them in the highest esteem, so many people don't have very high regard for themselves.

Sorry for the depressing introduction, but many people have come to understand the concept of *self-esteem*, an individual's evaluation of her self-worth, through its absence. Most of the people I know are pretty quick to point out if someone they know has low self-esteem. These folks are a dime a dozen. I mean, have you ever seen the "Self Improvement" section of a bookstore? It's usually pretty big, and I've yet to come across the "You're Already a Great Person!" section in the bookstores and libraries I visit.



Buss provides a good review of six main sources of self-esteem:

- ✓ **Appearance:** People usually feel better about themselves when they feel attractive. A lot of social psychology research has demonstrated that people judged to be attractive are granted more favors and preferred for social interaction than those who are not. Looking good means feeling good!
- ✓ **Ability and performance:** People feel better about themselves when they get good grades, perform well at work, and otherwise do things successfully. The more a person is able to accomplish for himself, the more likely he is going to feel good about himself.

- ✓ **Power:** When a person feels like she's in control of her life, she's more likely to feel good about herself. There are at least three sub-sources of a sense of power: dominance, status, and money. Domination can be achieved by coercion, competition, or leadership. Status and money pretty much speak for themselves. I'm not saying that unknown, poor people feel bad about themselves, but they'd probably feel better if they had some status and a bigger bank account.
- ✓ **Social rewards:** Three types of social rewards tend to make people feel good about who they are.
  - *Affection:* People like you.
  - *Praise:* Someone tells you that you're doing a good job.
  - *Respect:* Others value your opinions, thoughts, and actions.
- ✓ **Vicarious elements:** This source of self-esteem is all about feeling good about yourself because of things "outside" rather than "inside." *Reflected glory* makes you feel good because you get a boost from being around or associated with successful, powerful, or popular people. It's the I-know-famous-people form of self-esteem. Having nice material possessions can also make some people feel better about themselves.
- ✓ **Morality:** Morality involves being a good person and living according to the standards and rules of social conduct that you admire. Being a good person never hurts self-esteem. For the most part, morality is a relative term. But, when someone feels that he's taken the moral high ground (however he defines it) in a situation, he is likely to have positive self-esteem.

In addition to these sources of self-esteem, some research also suggests that certain aspects of personality can make an impact on self-esteem. Shyness and social loneliness have been found to be associated with a sense of low self-worth. On the flip side, people who are optimistic and sociable typically report feeling better about themselves. It seems, then, that being social and having good relationships are important to feeling good about oneself. That brings me to the topic of relationships, as I leave the realm of the isolated self behind.

# Getting Attached

Humans are unarguably social creatures. Some are very social, and others are less so; but most people have a desire to socialize at least a little bit. In fact, if a person has an extreme disinterest in social interactions, he may have a form of mental illness called *schizoid personality disorder*. Personality disorders are tackled in depth in [Chapter 13](#).

The most basic human relationships are between two people — husband and wife, brother and sister, friend and friend. How do you cross the divide between your isolated self and the people in the world around you?

Psychologists have approached this problem by looking at what is typically a person's first relationship: mother and child. I realize that this is not the first relationship for everyone. Some people are raised by their grandparents or by foster parents. So in actuality, the earliest relationships that people have are with primary caregivers, who may or may not be their mothers.

## Realizing even monkeys get the blues

Researchers often analyze the primary relationship between a caregiver and a child by using a concept called *attachment*. John Bowlby is considered the dominant figure in attachment research. (Does that mean he has high self-esteem, you think?) Bowlby's theory stated that infants are essentially dependent on their caregivers for providing the necessities of life (food, shelter, stimulation, love, and so forth). For the most part, infants are helpless, except for their ability to “attach” to and form a relationship with their primary caregiver(s). This connection or attachment ensures that the infant's needs are met.



When an infant finds himself in a threatening situation, he attempts to reconnect to his primary caregiver. This is called *attachment behavior* — anything an infant does to attain or maintain closeness to someone perceived as better able to cope with the world. A primary caregiver is viewed as an *attachment figure*. If you know that your attachment figures are available when you need them, you feel more secure.

Bowlby viewed attachment as an essential aspect of leading a productive and



psychologically healthy life. In fact, when attachment is lacking, infants often suffer from depression, anxiety, and a generally poor psychological well-being. In the 1950s for example, mental health professionals began to investigate the effects of long-term hospitalization and institutionalization on infants, and they documented severe problems. The adverse effects of inadequate or absent care during infancy and early childhood were undeniable. Children need access to caregivers whom they know and are connected to.

In 1959, University of Wisconsin-Madison psychologist Harry Harlow conducted an interesting experiment with monkeys. He put baby monkeys in a cage with two different dummy versions of mother monkeys. One of the dummies was made of soft cloth and had no food; the other was made of wire but had food for the babies to eat. The babies preferred contact with the soft dummy over the wire dummy in spite of the presence of food. Harlow conducted another experiment in which he deprived baby rhesus monkeys of social contact with other monkeys for as long as six months. When these monkeys were released to be with others, their behavior resembled that of a depressed and anxious human with severe levels of withdrawal, self-harming behavior (such as biting themselves), and nervousness.

## *Attaching with style*

It should be undeniable that attachment represents an essential relationship for all people, but I'm sure you well know that the gap between ideal and reality can be vast; the concept of human attachment is no exception. Some people are in therapy today because of the less-than-ideal relationships they had with their primary caregivers. So if Bowlby presented us with the ideal, what else is there?

Various *attachment styles* theories address the variations on Bowlby's ideal relationship. They used the *strange situation* technique to determine the nature and extent of children's attachment. In the strange situation, a child and her primary caregiver are put in a room with some toys to play with. Then, the primary caregiver gets up and leaves the room. Researchers observe and record the child's reaction. After a while, a stranger comes into the room, and the child's reaction is recorded again. Finally, the primary caregiver comes back into the room, and the child's behavior is recorded one last time.

Researchers designed the strange situation to determine if a child uses the caregiver as a secure base from which to explore the environment. A child sees a caregiver as a *secure base* — a safe place to launch explorations into the world from but someone to safely return to if there is a need. The strange situation observed the following in order to answer these questions:

- ✓ When the caregiver leaves, does the child fuss or react with protest?
- ✓ If there is a protest, is it because the child prefers to be with the caregiver, or is it because the child fears that the caregiver won't return?
- ✓ When the caregiver returns, does the child welcome him or her back, or does the child react in some other, more resentful or distant manner?

The answers to these questions lead to a description of three basic attachment styles:

- ✓ **Secure:** Securely attached children exhibit the following behavior:
  - They use their primary caregiver as a secure base from which to explore their environments.
  - They protest a little when their caregiver leaves but eventually calm down, seeming to trust that he will return.
  - While with strangers or other adults, they're friendly but not overly so.

- Upon reunion, they go to the primary caregiver and seek connection.

✓ **Anxious/ambivalent:** Anxious/ambivalently attached children act in the following ways:

- They do not use their caregivers as secure bases to explore from.
- They sometimes resist initial contact with the caregiver but staunchly resist any attempt to break it off after it has been established.
- They are avoidant or sometimes aggressive in the presence of strangers.
- They cry excessively upon separation and are difficult to console.

✓ **Avoidant:** Avoidant attached children act as follows:

- They seem to need less contact from the caregiver.
- They are indifferent when left alone or cry only because they are alone and not because they seem to miss the caregiver.
- Upon the return of the caregiver, they either avoid or ignore her.

Before anybody designs his own little “strange situation” at home to see how much his children love him or not, let me tell you about *goodness-of-fit*. Goodness-of-fit refers to how well the primary caregiver and the child are matched in terms of temperament and personality. This fit can have an effect on attachment style and should be considered before anyone writes himself off as a horrible parent or “unlovable child.”

Caregivers and infants sometimes can look like they’re engaged in a harmonious dance, perfectly synchronized with each other. Other times, they look like they both have two left feet. If a mother is high-strung and energetic, she may not do well with a mellow baby — and vice versa. The style of interaction and how smoothly it happens is a powerful factor in establishing a secure attachment. So if you’re having trouble and you think that your child is poorly attached, take a look at the style of interaction and see whether there’s anything you can do differently to improve it.

# *Cavorting with Family and Friends*

Ever wonder why so many people get depressed during the holidays? Maybe they're not looking forward to going into debt to finance all those gifts. Or maybe the holidays remind them how lonely they are. I'm not buying it. Here's my explanation: The holidays mean getting together with family, and families are pretty good at embarrassing and belittling each other by pointing out weight problems and receding hairlines or pitiful salaries. That can be pretty depressing! Fortunately, families are good for some positive things, too.

A *family* consists of at least two people related by blood, marriage, or adoption. It seems like families have changed quite a bit over the last 20 years, including increasing numbers of single-parent families, gay marriages, and blended families of divorce. A lot of marriages end in divorce, so children are learning to manage two sets of parents, half-siblings, and split holidays. Even though the modern face of the family has changed, many of the basic functions of a family have not.

The *McMaster model of family functioning* breaks down seven major components of, you guessed it, family functioning:

- ✓ **Problem solving:** The family's ability to resolve issues and maintain family functioning.
- ✓ **Communication:** The clarity and directness of information exchange in a family. You knew this one was coming.
- ✓ **Roles:** The different behaviors and responsibilities of each family member in terms of meeting basic needs, performing household tasks, and providing emotional support and nurturance.
- ✓ **Affective responsiveness:** Each family member's ability to express and experience a range, intensity, and quality of emotions.
- ✓ **Affective involvement:** The family as a whole's interest in the values, activities, and interests of others.
- ✓ **Behavior control:** The rules and standards of conduct. Belching at the dinner table was never a laughing matter in my family — even if we were supping on soda and cauliflower!

✓ **Overall family functioning:** A family's ability to accomplish its daily tasks across the other six areas. If you had to give your family a grade, what would it be?



## Children of divorce

The effects of divorce on children have been a matter of controversy since the first pen scrawled across the dotted line of those famed papers. And many parents stay together “for the sake of the kids.” Yet most research tends to show that children are not necessarily adversely affected by the divorce of their parents. Boys seem to do a little worse than girls in the long run, but research indicates that the most important predictor of how children will cope with a divorce is the nature of the marriage. If the parents always fight and have a tumultuous relationship while married, then the divorce is also likely to go poorly and have a negative impact on the children's adjustment. Researchers often advise couples to not argue or discuss divorce-related issues in front of children and to keep overall conflict to an absolute minimum in order to avoid undue stress and strain and coping difficulties for the children.

## *Parenting with panache*

A good friend of mine recently had a baby. Just when I was about to offer him some psychological advice on parenting, he started talking about all the advice people had been giving him and how it bothered him. I kept my opinion to myself. “Crying opens up their lungs.” “Don’t give babies a pacifier.” There are almost as many opinions on how to raise children as there are people on the planet. Fortunately, psychologists have been trying to simplify things.

Diana Baumrind, a clinical and developmental psychologist, took on the task of trying to boil down parenting into something a little more manageable. She came up with three main parenting styles: *authoritarian*, *authoritative*, and *permissive*:

- ✓ **Authoritarian:** These parents are rigid and dictatorial. Some kids feel like prisoners in their own families; parents are overly strict and don’t listen to what the children have to say. They’re like the drill sergeants of parenting. What they say goes, and there’s no discussion about it. Unfortunately, all that toughness tends to backfire. Authoritarian parents tend to have children that are either overly passive or excessively rebellious and sometimes hostile. These parents can learn a lot from the next style of parenting.
- ✓ **Authoritative:** These folks tend to approach parenting with a more democratic style. Parents from previous generations often criticize how “today’s” parents try to reason with their children too much. “What that kid needs is a good spanking!” Authoritative parents listen to their children and allow them to have input, while maintaining parental authority and control. Children seem to thrive in this environment, and they tend to act more sociable, feel more capable, and be more well-adjusted in general as they grow up.
- ✓ **Permissive:** There are two types of permissive parents:
  - **Indulgent:** Ever go to one of those backyard beer parties in high school? Me neither, but I hear they can get pretty wild. I’ve always wondered where those kids’ parents are. Oh, I get it; they’ve got the “cool parents.” Indulgent parents are involved with their children but shy away from control, authority, and discipline. They sometimes even

enable their children to engage in questionable behavior because they don't want to alienate their kids.

- **Indifferent:** These parents are neglectful due to a range of possible factors, including career obsession, drug abuse, or self-centeredness. Whatever the reason some people adopt this style, permissive parents tend to have children who report feeling ill-equipped to deal with the demands of growing up.

## *Embracing your rival: Siblings*

Ever wonder what siblings are good for? Those of you who are only children may have fantasized about having a brother or a sister. Those with siblings may think those creatures are pretty much only good for fighting and stealing your crush, but psychologists have found that there's actually more to it.

Siblings have a powerful effect on a person's development. They create a family environment that would be very different without them. Siblings are also good sources of friendship, companionship, and affection. Sometimes they can even be role models. Here are three other distinct functions that siblings provide for each other:

- ✓ **Mutual regulation:** Acting as sounding boards and testing grounds for new behavior, like practicing a break-up speech before delivering it to an unsuspecting sweetheart
- ✓ **Direct services:** Easing household burdens and sometimes providing practical support, such as rides, help with homework, or fashion advice
- ✓ **Support:** Helping each other in times of need by forming alliances and sticking together

Many people are familiar with sibling rivalry and discord. Research shows that the most common negative qualities associated with siblings are antagonism and quarreling. Some people think that the fighting goes away as people grow older, but the truth is that the basic emotional character of sibling relationships remains pretty stable over time. Interactions can change, but the feelings remain much the same.

## Getting chummy

How does that old saying go? “Friends are forever?” Or is it “Diamonds are forever?” I never can remember. I don’t have many diamonds, so it doesn’t really matter much anyway. But I do have friends, and friendship is an important element in life. Why do we remember Tonto’s name? Because he’s the Lone Ranger’s friend.

Psychologists Willard Hartup and Nan Stevens provide a nice review of research related to friendship. They basically define *friendship* as a relationship between mutually attracted people engaged in a reciprocal relationship of exchange. Friends are different from non-friends in that our relationships are typically mutual. There’s a lot of giving and taking and giving again in most friendships.

Good friends provide support and help people cope with life’s problems. But making friends isn’t necessarily easy; it requires a fair amount of social skill. It doesn’t hurt if you’re socially well-adjusted. Being equal and fair also helps. And knowing how to manage conflicts when they arise helps maintain the friendships you develop.

Who are your friends? I’m guessing they’re people much like you. Friends are typically similar in age, gender, ethnicity, and ability. A lot of times friends also have a similar lifestyle. Generally speaking, as people get older, friends tend to be people you work with, which means that they’re probably of the same socioeconomic class as well. This still remains relatively true despite the popularity of social media and the use of the Internet as a social tool. Shoot, guess that means no rich friends for me!

Friendship tends to have a positive effect on psychological well-being. People who have good friendships tend to be more sociable, helpful, and confident. Friends are good for your health. So go out there and make a few!



# *Understanding Person Perception*

Humans are social beings, and no small part of survival depends on a person's ability to understand the human environment. Social understanding — including alliances, enemies, allocations of resources, division of labor, relationships, communication, and self-awareness — is vital. Each person must possess a basic level of *social skill* to get along within the human environment. Researcher and psychologist Ewing Phillips offers a good working definition of social skill: the ability to communicate and interact with others in a way that allows for one's needs and goals to be met without interfering with others' goals.

In this section, I describe three very important social skills: understanding other people's behavior, understanding your own behavior, and communicating.

## *Explaining others*

People are always watching other people. When you go to a public place like a park or a busy shopping mall, how often do you just watch people? You may notice people's clothes, the bags they're carrying, or the conversations they're having. You're noticing all kinds of things about them and using your observations to draw conclusions.

Don't believe me? How many times have you decided that the teenager with purple hair and a pierced nose is just looking for attention? When's the last time you figured that the woman driving a brand-new SUV with kids in the back is a stay-at-home soccer mom with a successful husband paying the bills? Where do people come up with these ideas? Maybe, the purple-headed kid is conducting a psychology experiment. Perhaps the woman is a CEO and single mom. How do you know? If you're like most people, you almost instinctively begin drawing conclusions about other people based on what you see, hear, and experience.

The area of psychology that's devoted to understanding how people go about thinking about people, including themselves, is known as *social cognition*; it tries to break down the mental processes involved when people observe, think about, and make inferences about other's behavior.

## Assuming

Trying to explain other people's behavior can be difficult. You can't look inside their minds, so you can only guess what's going on in there. But this doesn't stop people from trying to explain others' actions. In fact, it's so common that there's a word for it. The complex process of drawing conclusions about other people's intentions and characteristics, based on a person's observations of them, is the social cognitive process known as *person perception*. Almost everyone uses some assumptions in the person-perception process, including these:

- ✓ People are *causal agents*; they play an active and intentional part in producing their own behavior. Nobody or nothing else causes them to behave in a particular way.
- ✓ People are like me, thinking and feeling in the same ways I do. Thinking like this allows people to use themselves as a baseline when trying to understand other people.

## Snapping to judgment

Have you ever experienced love at first sight? I've always wondered how that works. How can you fall in love with somebody based on just looking at him or her? Maybe research in the area of *snap judgments* can help answer that question. Snap judgments of people are instantaneous, automatic, and unconscious evaluations.



Snap judgments follow two types of cues:

- ✓ **Static cues:** Things that are relatively unchanging about a person like appearance, gender, and body type (not including clothing). People use this information to make *evaluative judgments* about other people, and these judgments can be right or wrong. I may evaluate a person with a particular hairstyle as laid-back and easygoing (long and hippie-esque), or I may see him as nerdy and uptight (high and tight around the ears). Either way, I'm using an aspect of someone's physical appearance to make a judgment about what kind of person he is.
- ✓ **Dynamic cues:** Things that tend to change depending on the situation, such as facial expressions, clothing, and mannerisms. When I see a person smile, I may evaluate him as generally happy, or I may assume that he just heard a funny joke. Either way, I'm using relatively basic information to make snappy evaluations of a person's personality or life.

### ***Making an impression***

Snap judgments are really just the beginning of attempts to figure out other people. We all make snap judgments and usually are unaware it's happening. In the process of *impression formation*, people go beyond snap judgments and make in-depth inferences about the kind of person someone is.

Solomon Asch, at Swarthmore College, came up with a popular theory of impression formation that focuses on the existence of *central traits* that color interpretations and perceived meanings of observed traits. It's like people have an internal sense that certain traits go together. For example, an attractive person may have an easier time getting someone to help him change a flat tire than an unattractive person. This may be related to an assumption that the attribute of attractiveness is automatically connected to the attribute of gratefulness. I'm not going to help an unattractive, ungrateful person change his tire.

### *Implicit personality theory*

Jerome Bruner and Renato Tagiuri in the 1950s considered the internal sense of traits that belong together as part of an *implicit personality theory*. People learn that certain traits go together because they've either been told that they go together or observed them going together. I was told a thousand times that polite people don't interrupt, so I guess I'm pretty rude because I interrupt all the time. Interrupting and rudeness "belong" together in my implicit personality theory.

Basically, implicit personality theories are stereotypes. Stereotypes are an inevitable consequence of attempts to make sense of the social world. Stereotypes are thinking shortcuts. No one can possibly store independent evaluations of every single person he ever meets. This would take up way too much space in the human memory. Instead, people categorize other people, and sometimes this categorization results in the formation of stereotypes. Unfortunately, in an attempt to simplify the world, people often over-generalize negative aspects of others, which too often leads to prejudice and racism.

### *Figuring out the causes of others' behavior*

Snappy judgments based on limited information aren't the only thinking shortcut; most people also attempt to determine why a person did what she did or what caused a particular behavior. This is known as *attribution*, a process by which a person's behavior is linked to either internal or external causes.



When making an attribution, a person typically considers three important pieces of information:

- ✓ **Consistency:** People generally behave in the same way every time a particular situation occurs.
- ✓ **Distinctiveness:** When a person behaves differently with different people and/or in different situations, his behaviors are considered "distinct."
- ✓ **Consensus:** There's agreement that all people act in a particular way when engaged in particular activities or within specific contexts.

Numerous possible combinations of these three pieces of information exist in varying degrees, and these variations provide clues to whether a behavior is internally or externally motivated. For example, the combination of high consistency, low distinctiveness, and low consensus leads to a *personal attribution* (internal cause or explanation for a person's behavior). When I act consistently across situations, respond to the same stimuli the same way every time, and act differently than other people in that same situation, it's probably me. High consistency, high distinctiveness, and high consensus lead to an external attribution. When I act the same across situations, but I respond differently — but the same as other people in the situation — to the same stimuli, it's probably the situation or the external environment. So what would you attribute my passion for polka music to? Doesn't everyone love polka?

All of this judging begs the question of whether or not people are accurate in their attributions. A consistent mistake is called the *fundamental attribution error*. Most of the time folks underestimate the role of external causes as determinants of other people's behavior. There's a tendency to see what people do as inherent to them, as actor-caused, because you lack significant information about a person's behavior across situations. When in doubt, attribute it to the actor. The more information you have, the better judge you become.

Conversely, people also have a tendency to see their own behavior as a result of external causes more so than other people's behavior (Jones and Nisbett). This is called the *actor-observer effect/bias*. Again, this tendency is probably due to the fact that people have access to more information about themselves.

Similarly, when it comes to success and failure, people tend to attribute their successes to internal causes and their failures to external causes. This reverses for other people's successes and failures.

## *Explaining yourself*

Do the famous people who endorse products on television commercials actually use the products they promote? Does Beyoncé really drink Pepsi? Does LeBron James really use a Samsung smartphone? Does Shaq drive a Buick? Maybe so, and maybe no. I don't know Beyoncé, LeBron, or Shaq, so all I can do is guess. But let's just say for the sake of discussion that they do use the products they endorse. If I asked them why they endorse those products, what would they say, and what would these responses tell you about how well these people know themselves?

Researchers Leon Festinger and James Carlsmith performed a classic experiment that offers some insight into the “Lebron James question.” They asked research subjects to perform a dull and boring task and then offered the subjects money to tell other people that the task was really interesting. There were two groups. One group was paid \$1 each, and the other was paid \$20 each. The subjects that received only \$1 reported that the task was more interesting than the \$20 subjects did when asked about their true feelings as opposed to their “endorsement” feelings. The \$20 created a larger gap between the subjects' actions and what they thought they felt. This experiment demonstrates *cognitive dissonance*, the process of changing one's beliefs to match one's actions. If I do something that contradicts my beliefs and I can't think of a another plausible explanation (like they paid me big bucks to lie — \$20 then would be worth about \$150 now), I will alter my beliefs to match my behavior.

The subjects who were paid \$1 must have figured that, if they were only getting bribed with one measly dollar, they must not have been so bored after all. The bigger the bribe, the more we perceive the task as being contrary to our true beliefs. In this case, the extra money represents an easy explanation for our behavior.

What does this tell us about our famous product endorsers? If they do use the products they endorse, they may do so because they don't want to admit that they only endorse the products for the money. LeBron may not want to admit to himself that he really wants an iPhone but endorses Samsung because he loves the money he gets to say that's the phone he prefers. So he may change his attitude to match his behavior.



Cognitive dissonance says a lot about how people know things about themselves and engage in the process of *self-attribution*. Daryl Bem of Cornell University developed a theory of self-perception that states that people know their own attitudes by drawing inferences based on observing their own behavior in the same way that they observe others. You know yourself in the same way you know others — by observing behavior.

When trying to figure out yourself and judging your own behavior, you may be guilty of some pretty interesting distortions. Here are three common distortions:

- ✓ **False consensus effect:** This is a tendency to overestimate how common your opinions and behaviors are, especially the undesirable ones. “Everyone’s doing it!” People tend to see a consensus that is consistent with their opinions, whether or not one exists.
- ✓ **False uniqueness effect (FUE):** There’s a saying in Alcoholics Anonymous, “You’re terminally unique!” The phrase is used for people who think that their problems are so different from everyone else’s that no one can possibly understand them. The FUE is the tendency to underestimate how common one’s beliefs are, especially the desirable ones.
- ✓ **Self-handicapping:** When I was in college and I knew I had a tough test coming up — one I was pretty sure I was going to fail no matter how much I studied — I wouldn’t study for it at all. That way, when I failed it, I could blame it on not studying instead of my lack of ability or intelligence. When people create excuses for failure in order to protect their self-esteem or self-image, they’re engaging in self-handicapping.

## *Communicating Is Easier Said Than Done*

One of Ronald Reagan’s nicknames was “The Great Communicator.” Supposedly, he could really get his point across, and people responded well to his speeches. I personally haven’t taken the time to analyze Reagan’s communication skills. But whether you’re negotiating with nations as the president of the United States or trying to order a hamburger at a drive-thru, communication skills are vital to being a socially skilled person.

Owen Hargie, Christine Saunders, and David Dickson at the University of Ulster developed a model of *interpersonal communication* that identified several important components of the communication process. All episodes of communication are goal-directed, and several goals may be pursued simultaneously. A conversation varies as a function of the intended goal. If my goal is to visit with an old friend, I may talk about different things than if I'm conducting a psychological evaluation.

There are also several *mediating processes* that shape the communication process. Any psychological process that affects the meeting of a communicative goal or the outcome of communication can be a mediating process. One important process is called *focusing* (what one pays attention to), which can have a major impact. How you connect current conversational information with previous knowledge is also important, and *inference* — going beyond the surface information being communicated — is also important.

Another core aspect of the communication process is *feedback*, which is information provided to me by the other person about how effectively I am communicating, and how I use it. If you use feedback to change the way you communicate, then you can better meet the conversation goals. But some people seem to just ramble on, oblivious to signals from other people in a conversation that they're not making any sense. These ramblers are not picking up on the feedback. Here's a hint: When someone falls asleep while you're talking to her, that's important feedback.

Being a great communicator involves being good at three specific communication skills: asking questions, explaining, and listening.

## Asking questions

An important feature of all effective communication is the process of *questioning*. Questions are a good way to open a conversation, gather information, and express to another person that you're interested in what he's saying. There are several different types of questions, such as:

- ✓ **Recall:** A question like “Where were you on the night of November 12 at 10 p.m.?” asks you to remember basic information. Just a little advice if the police ask you this question: Call a lawyer.
- ✓ **Hypothetical:** Questions designed to engender some creative thought such as “If you could have any job in the world, what would it be?”

Other questions that ask the responder to analyze, evaluate, or problem solve often have different formats that solicit different types of answers:

- ✓ **Closed-end** questions require just a yes or no or identification response.
- ✓ **Open-end** questions require description and elaboration.



There's an art to being a good questioner. Giving the responder a context and structure often helps the responder form answers that meet your actual information needs. You may start out by saying, “I have three main questions.” The point is to clue the person in to what you are trying to learn.

## *Explaining*

In addition to being good at questioning, the gift of gab often requires a certain level of skill at explaining oneself. Explanations provide information and clarify messages, and they're often used to demonstrate a point.



When making a point in a conversation, an individual can often bolster her argument by providing a solid explanation for the position being taken. Good explanations are clear, focused, and linked to the listener's knowledge base. Being brief and avoiding a lot fillers like "um," "uh," and "ya know" also helps. These terms interrupt the fluency of communication and can lead to loss of interest.

Sometimes it helps to pause and review so the listener can organize and absorb what has already been explained. It's also very important to use language that is appropriate to the audience or listener. If you're too technical, too gross, or too basic, you may lose their interest.

## Listening

A third critical aspect of effective communication is listening. One-way conversations are poor excuses for communication. If no one is listening, there's no "co" in communication.



Here are some good listener guidelines:

- ✓ **Focus:** Turn off the TV, put away your phone, reduce extraneous noise, and don't fidget or fool with stuff around you. Doing your taxes or looking at your mobile phone while someone is talking is a dead giveaway that you're not really listening.
- ✓ **Clear your head:** Be aware of your biases and preconceived ideas and mentally prepare yourself to pay attention and absorb the information being offered by the other person.
- ✓ **Mentally engage:** Keep yourself focused by asking questions to clarify what the speaker is saying.
- ✓ **Wait:** Don't interrupt if you can help it. Respond when the other person finishes making a point.
- ✓ **Process:** Mentally identify the main point of the speaker's communication and organize what he is telling you into categories such as who, what, when, why, and how.
- ✓ **Remain open and attentive:** Don't use *blocking techniques*, such as denying someone's feelings or changing the topic. Take in what the person is saying.
- ✓ **Demonstrate attention:** Maintain eye contact, nod, and orient your body toward the speaker and keep an open posture. Don't cross your arms or turn away.

## Asserting yourself

One of the most common problems I see in my clinical practice is that people don't know how to stand up for themselves and communicate their needs in a direct and confident manner. Complaints about pushy coworkers, jerky bosses, and grouchy spouses are commonly the result of a person's lack of assertiveness. For some people, assertiveness seems to come naturally; they're just good at telling people what they think in a way that doesn't put anybody off.



I'm not talking about being aggressive; that often involves a certain level of hostility and a denial of the other person's rights in the interaction. I am talking about something a little milder than aggression, *assertiveness*.

Assertiveness can be defined as standing up for one's rights and expressing one's thoughts, feelings, and beliefs in a direct, honest, and appropriate manner that respects others. Ever have someone cut in line when you're at the grocery store? Did you tell them to go to the end of the line, or did you keep your thoughts to yourself only to get increasingly resentful about it later? What about ordering food at a restaurant and getting something you didn't order? Did you eat it anyway or did you send it back? It sounds easy, but a lot of people won't say anything because they fear being seen as a jerk, being disliked, or hurting another person's feelings.

Assertiveness is a social skill that you can learn. Typically, when people get better at being assertive, the overall quality of their relationships improves. They no longer feel that they can't say what they really think or that they have to keep quiet for the sake of friendships. When people learn how to communicate assertively, they awaken to a whole new realm of possibilities in communication.

Want to be more assertive? *Basic assertions* are expressions such as "No, I don't like that movie" or "Thank you, but I've had enough fruitcake."

*Empathic assertions* are statements used to convey that you understand the other person's position even if you're not going along with it. "I understand that you prefer fast food over Italian, but I'm really craving spaghetti."

When someone begins with a basic assertion and then progresses into more straightforward statements with little ambiguity, she engages in *escalating assertiveness*. This is a good skill to use with pushy salespeople, as this example demonstrates:

**Salesperson:** Can I help you find something?

**Customer:** No thanks.

**Salesperson:** Well, we've got these great deals in women's apparel today.

**Customer:** Really, I'm not interested.

**Salesperson:** How about. . . .

**Customer:** For the third time, can you please leave me alone? I don't want your help.



A particularly useful tool in assertive language is the “I statement” — using a personal position rather than pointing out the other person's behavior and using the “you” word. Instead of telling my boss that he's been hounding me and he's starting to tick me off, I may say, “I get the sense that you're putting unfair pressure on me, and I'm feeling frustrated.” Easier said than done, I know, but it works pretty well. Try it!



The following is a quick list of verbal defense strategies that you can use against manipulative and rude people:

- ✓ **Broken record:** Simply repeating oneself over and over again. “I said no! What part of *no* don't you understand? I'll say it again. No! No!”
- ✓ **Fogging:** Agreeing with what someone is saying but not changing one's position. “You're right, I should watch what I eat. I have gained a few pounds.” All the while thinking to yourself, “I'm going to eat whatever I feel like eating. When can I get away from this jerk?”
- ✓ **Meta-level:** Taking a conversation to a more abstract level than the original conversation. “I think this is a good example of how hard it can be

to get one's point across. I've often wondered how we can get past this." I like to call this the old therapist switch-a-roo! "What is the ideal weight anyway? Being heavy used to be a sign of beauty and prosperity. I'm beautiful and prosperous, not fat."



## **Chapter 11**

# **Conforming Like a Contortionist: Social Psychology**

---

## ***In This Chapter***

- ▶ Meeting expectations
- ▶ Going with the flow
- ▶ Being a groupie
- ▶ Persuading with power
- ▶ Acting hostile
- ▶ Helping others
- ▶ Discovering how people are alike

I'll never forget the time I saw news video of two groups of Buddhist monks fistfighting for control over a monastery. I was shocked to see people whom I stereotypically perceived as peaceful acting so violently — toward each other! The image was disturbing, but it was also a potent demonstration of how a situation, or the influence of a group, can fuel individual behavior. These typically peaceful individuals seemingly were overcome by a situation that triggered them to engage in behavior that they themselves probably could not explain if asked.

It may be true that an individual is pushed and pulled by the dynamics of his personality and acts instinctively based on genetic makeup. Behavior also seems to vary as a function of thinking. However, psychology would be incomplete without considering the social influences on behavior and mental processes.



*Social psychology* is the study of the social causes of and influences on behavior.

Social psychologists have long suggested that many of the answers to questions about human behavior lie in understanding social influences such as group norms, conformity, and group pressure. This chapter explores these and other social influences on behavior and highlights the powerful impact of being around other people. The influence of social forces on individual behavior cannot be underestimated.

The study of social influences completes the biopsychosocial model of human behavior. (See [Chapter 2](#) for more on the biopsychosocial model.)

# Playing Your Part

Unless you're a hermit and you live by yourself in a shack in the middle of the desert, you exist within a *social matrix* — a multilayered configuration of social relationships that range from the parent-child bond to your co-worker–co-worker interactions. Picture yourself in the middle of a huge multi-ringed circle with each ring representing a level of social organization.



Each of these circles carries a set of expected behaviors — rules that dictate what each individual is supposed to do. Each social group's rules or behavioral expectations are called *norms*. Cultures have norms, families have norms, and even subcultures have norms.

A subculture may consist of a small social group, often organized around a recreational activity. A gang may be considered a subgroup within its own subculture. Gangs have their own language, clothing styles, and rituals that delineate clear rules for the behavior of each individual member. That social structure is what I'm talking about when I use the term *norm*.

Americans typically like to see themselves as rugged individualists, wincing at the idea of blindly following norms. But norms are not all that bad. They simplify complex social situations, allowing people to think about things other than how to act and what to say in a particular situation. Norms serve as “mental shortcuts,” and social situations operate more smoothly when norms are clear.

Some norms seem to be universal. Psychologist Roger Brown in 1965 found that people almost universally speak more respectfully to others of higher status and more casually to those of lower status. This manner of addressing others is built into the very structure of some languages, including Spanish and French. The appropriate way to conjugate a verb depends on how well you know the person you're speaking to.

Certainly, universal norms exist, but some variations exist as well. If you're a Palestinian Christian, it is customary and normative to firmly resist any food offered to you while visiting someone's home and only to accept after much counter-insistence by the host. Americans on the other hand may even ask for

something to eat or drink when visiting someone's home without thinking twice. Another common variation in cultural norms relates to waiting in line. Some cultures don't seem to appreciate the orderliness of waiting in a single-file line when ordering food at a fast-food establishment, but others do. The norm of *personal space* (the physical space or area around us) too can vary by culture. Some cultures seem to value personal space more than others.

## Getting carried away

Role definitions are a powerful determinant of behavior, and the definitions sometimes overpower individual personalities and preferences. In 1972, Phil Zimbardo, psychologist and professor emeritus of psychology at Stanford University, conducted a famous experiment known as the *Stanford prison experiment* that illustrated the power of roles. College students were recruited to participate in a mock-prison situation in which they were randomly assigned to be either guards or inmates. The experiment took place in a makeshift prison in the basement of the psychology building at Stanford University.

The experiment revealed that people seem to naturally know what the roles of both inmate and guard entail, and Zimbardo had to discontinue the experiment within a week because of what he saw happening. The otherwise normal and healthy college students began to take their roles far too seriously. The guards treated the inmates inhumanely and with harsh disdain, and the inmates began to truly hate the guards and focus only on the circumvention of the “prison” system and survival.

In other words, the students got caught up in their roles and forgot about the reality of the situation.



A *role* is a specific type of norm that defines how a person should act in a specific situation. Each individual has certain roles to play (student, employee, brother, sister, parent, and so on) that dictate different behaviors for different situations. Typically, individuals have clear roles to play in specific situations.

## *Ganging Up in a Group*

In a classic episode of the *Twilight Zone*, everyone gets plastic surgery when they reach adolescence, and everyone picks the same transformation so that everyone looks the same — a sort of Ken Doll for the men and a Barbie face for the women. In the episode, one girl decides to keep her natural-born look and is subsequently tormented and ridiculed for wanting to do so. She was under enormous pressure to conform, to give into group pressure, and to go along.

This dynamic is a very real part of everyday life in a community. Groups exert all kinds of pressure on their individual members. Sometimes groups have very clear and explicit rules that keep people in line; in other cases, the rules or pressures are more subtle.

In this section, I point out the group and social influences and determinants of an individual's behavior. This includes a discussion of how individuals conform and react to group pressure and influence an effort on tasks, as well as how people treat each other and “police” each other's thinking.

## Conforming

*Conformity* is a change in behavior that results from real or perceived group pressure. Most people are surprised to realize how much individuals conform. I mean, how many purple houses are on your block? Not many I bet.

In a study from 1937, Muzafer Sherif, one of the founders of social psychology, looked at how people would change their judgments based on knowing how other people answered certain questions. Subjects were asked to estimate how far a light moved across a dark room. Sherif found that when other people were present and offered a different estimate, the subject would change his or her answer to be more in-line with what the others' answers were. Knowledge of the other people's answers influenced the subjects' answers.

In 1955, Solomon Asch, another pioneer in social psychology, found the same thing when he put people in a group and asked them to estimate the lengths of lines. Subjects changed their answers to go along with the group consensus. Both of these experiments are good examples of how an individual may conform under group pressure, even if the pressure is subtle.

## Shocking, no?

Harvard University psychologist Stanley Milgram in 1965 conducted an obedience experiment that bordered on the extreme. In fact, it was so extreme that the same experiment would not be allowed today, because it would not pass the required ethics review. Subjects were seated at a control panel with a switch for delivering electrical shocks to a "subject" on the other side of a partition. The subjects were actually experimenters pretending to be participating as real subjects.

The premise: The subject is to be shocked each time that he or she gets a question wrong. With each subsequent wrong answer, the shock gets stronger and stronger. The shocks start at 75 volts and go up to 450 volts.

At some point, the subject is yelling and pleading with the real subject to stop administering the shock. An experimenter stands next to the real subject with a clipboard and a white lab-coat insisting that the real subject continue with the experiment and continue to administer shocks, despite the pretend subject's protests and obvious pain.

In reality, the fake subjects did not receive any shock at all; they only pretended to get shocked. But ask yourself, "When would I have stopped giving the shocks?" Maybe you think that you would have stopped the second the subject started yelling and asking you to stop. I'm sure the subjects in Milgram's study thought the same thing.

However, the shocking outcome (sorry about that one; couldn't resist) was that 63 percent of



the real subjects went all the way to 450 volts in compliance (or obedience) with the experimenter! That's enough voltage to potentially cause death.

*Obedience* is an extreme form of conformity and often involves going against one's better judgment or truest intentions. When I think of obedience, visions of dog-obedience school pop into my head — me standing there with a collar and leash around my neck, jumping up to get my treat for performing the requested trick. Sounds extreme, doesn't it?



I would like to think that I'd walk out of an experiment in which I had to torture someone with electric shocks, but the majority of subjects in one famous study followed orders and didn't stop applying shocks (see the nearby "Shocking, no?" sidebar). Why?

There are eight factors that seem to increase conformity and obedience:

- ✓ **Emotional distance:** The more personal contact someone has with an individual, the less likely he is to act without compassion against that person. It's harder to be cruel to another person when the victim has a face.
- ✓ **Proximity and legitimacy of authority:** When an authority figure is close by, obedience is more likely. The authority's legitimacy also matters. You are more likely to be obedient to an individual that you think has genuine authority than someone you perceive to be a poseur.
- ✓ **Institutional authority:** When an authority figure is part of an accepted institution, obedience is more likely. In other words, I'm more likely to comply with the suggestions of a court-appointed judge than some guy sitting next to me at the bus stop (assuming he's not a judge). Recognized institutional authority has a powerful effect on obedience.
- ✓ **Group size:** Groups of three to five people have a maximum effect on conformity pressure; groups containing fewer than three and more than five people have a less powerful effect.
- ✓ **Unanimity:** When groups are in complete agreement, it's more difficult for a single individual to resist conforming.

- ✓ **Cohesiveness:** The more a group feels that it is bound together and tightly organized, the more power the group has over its members. As an example, I used to play softball on a team without uniforms, and it just didn't feel right. We needed uniforms to be a *real* team. Uniforms are one way to increase cohesiveness because looking the same as others in a group strengthens a sense of unity.
- ✓ **Status:** People with a higher status than you tend to have more influence over your obedience/compliance.
- ✓ **Public response:** People conform more when their behaviors are made public. It's easier to disagree privately or anonymously.

Although conformity and obedience are not necessarily bad things, learning how to resist both may be important — just in case. One needs only to think of Nazi Germany, perhaps the most horrific example of the dangers of conformity, to understand why maintaining a certain degree of individual diversity is important in any social group.

The best way to prevent conformity may be to maintain a sense of and respect for human uniqueness. Freedom of speech and religious tolerance are also good protections against conformity. As long as people feel comfortable being themselves and can freely speak their minds, conformity is a little more difficult (see the [Birds of a Feather . . . Or Not](#) section later in this chapter for more on prejudice and stereotypes).

## *Doing better with help*

“There’s no I in TEAM!” A lot of coaches use this line in their pep talks, trying to convey the idea that the better a team plays together, the better their results will be. And social psychologists have found that this idea is true to a certain extent. When we’re in the presence of others, people are more physiologically aroused and energized, and dominant behaviors are strengthened. This phenomenon is called *social facilitation*.

Robert Zajonc, professor emeritus at Stanford University, found that when a person does something relatively simple and routine, being in the presence of others improves her performance. But when a task is complex, having others around can hinder performance. So it may be a good idea to conduct that calculus contest somewhere other than Madison Square Garden. Although, folding laundry in the Garden is probably okay.

## Kicking back

When I was in junior high school, teachers often asked me to participate in group projects. It usually went something like this: Four less-motivated students would pair up with the “smart” kid and let the “smart” kid do all the work. The motivationally challenged pupils would then ascribe their names to the project in order to get the credit.



This is an example of *social loafing* — the tendency for people to exert less energy and effort when engaged in a group task that ignores individual accountability.

In 1979, psychologists Latane, Kipling, Williams, and Harkins found, for example, that when people were put in groups of six and instructed to clap as loudly as they possibly could, the amount of noise produced was less than that of one person clapping alone. People loaf when engaged in activities as groups. Loafers are *free riders*, people who rest on the efforts of other people in the group, like those kids who just mouth the words in the school choir.

Hey, if nobody can tell if I’m singing or not, then why should I exert myself? I’m not getting credit for my individual effort anyway.

## ***Remaining anonymous***

Ever wonder why groups of people who do really awful things often wear uniforms? Take the Ku Klux Klan, for example. What's with the pointy hats? Researchers have found that diminishing individual identity and diffusing individual responsibility reduces people's inhibitions. Uniforms reduce the individual member's uniqueness as well as inhibitions. This dynamic can result in people doing things that they may not do if they were alone or more easily identifiable. When this happens, people become *deindividuated*.

A certain amount of freedom seems to accompany blending into a crowd or being anonymous. Maybe people are less afraid of getting caught doing something bad in this situation. Children, for example, have been found to steal more when they are deindividuated.

It seems that anonymity and a lack of unique identification can facilitate antisocial behavior — something to think about when you consider how anonymous American society can be. Some people don't even know their next-door neighbors. Then again, with social media and the Internet becoming ever more pervasive, living anonymously is getting harder and harder. (For more about the impact of the Internet on behavior and mental processes, check out the free online article "Ten Ways Psychology and the Internet are Intersecting" at [www.dummies.com/extras/psychology](http://www.dummies.com/extras/psychology).)

## Thinking as one

Groups can have both positive and negative effects on individual behavior. You may perform some tasks better when working within a group and get lazier while performing others.

In 1971, Irving L. Janis, a research psychologist at Yale University and professor emeritus at the University of California, Berkeley, introduced a concept related to a potentially adverse effect of group participation: a phenomenon known as *groupthink*. When groups work to suppress disagreement and dissent in order to maintain group harmony, they are engaged in groupthink.

Dissent can sometimes threaten the cohesiveness of a group. When people start expressing ideas that are contrary to the group's views, the group sometimes reacts negatively. Galileo was one of the most famous victims of groupthink in history. He discovered evidence related to the solar system that challenged the prevailing thought of the day. Did he receive high praise and honors? Hardly! He was locked away in prison for being a heretic, a dissenter.

Groups work hard, both consciously and unconsciously, to prevent dissent. Janis identified eight symptoms of groupthink that can exist in a group:

- ✓ **Illusion of invulnerability:** When groups think they are untouchable, they're more likely to squash dissent.
- ✓ **Belief in the group's moral superiority:** When a group thinks it is ultimately moral, it ignores its own immorality.
- ✓ **Rationalization:** A group becomes more closed-minded as it collectively justifies its actions.
- ✓ **Stereotypes regarding the opposition:** When an opponent is viewed in biased or prejudiced terms, his statements that contradict the group's views are easier to ignore.
- ✓ **Conformity pressure:** Strong pressure on individuals to go along with the group's will and to not disagree minimizes dissent; non-conformers are cast out.
- ✓ **Self-censorship:** Group members keep their dissenting opinions to

themselves rather than rock the boat in some cases.

- ✓ **Illusion of unanimity:** Internal dissent can sometimes be kept out of sight and away from the full group's view; therefore, dissent appears not to exist.
- ✓ **Mindguards:** Some group members take an active role in protecting the group from dissent or contrary information. They're like the "thought police" in George Orwell's book *1984*.

Groupthink can cause a lot of problems. Alternatives to the status quo may go unexamined, thus preventing a complete survey of any problem that the group faces. Risks may be ignored. And ultimately, the group makes decisions that can be compromised.



Here are some ways to avoid groupthink:

- ✓ Encourage everyone in a group to express his own opinions and viewpoints.
- ✓ Invite external people into the group to provide alternative viewpoints.
- ✓ Ask individual group members to play the devil's advocate role to work through conflicting ideas.

# Persuading

I often wish I had a bit more power of persuasion. The greatest example of this power comes from the movie franchise, *Star Wars*. Jedi warriors have the ability to influence the thoughts of others by using “The Force” for what’s called the “Jedi mind trick.” In fact, I’m pretty sure that the guy who sold me my last car used the Jedi mind trick on me — the dark side of The Force, I think. But I digress.

*Persuasion* is a powerful force in all social interactions and arrangements. People don’t just use it to sell products. There are two paths to persuasion:

- ✓ **Central route:** The central route occurs when the “persuadee” actively processes the potentially persuasive information. In 1991, Bas Verplanken, a professor of social psychology at the University of Bath, found that when people think deeply about something, any associated change in attitude or opinion is more likely to stay changed.
- ✓ **Peripheral route:** This approach involves getting someone to associate an intended message with certain images, sometimes positive and sometimes negative. It relies on the mind’s natural ability to associate things. Remember classical conditioning? (If not, check out [Chapter 8](#).) Examples of persuasion via the peripheral route include using showing hard-bodied models to sell gym memberships.



Psychologists Petty and Cacioppo warn that if you’re going to try to persuade people, don’t warn them that it’s coming. Distracting the people you hope to persuade helps because they won’t be able to mount a strong counterargument to your claims.

In addition, four key components make up any persuasive argument:

- ✓ **Credibility of communicator:** A message is more likely to be persuasive if someone perceived as credible delivers it.
  - Expertise is often a powerful indicator of credibility. People listen to experts. One thing to keep in mind, though: Just because someone says that she’s an expert doesn’t mean she necessarily is. When in doubt, always check credentials, including education, training, and experience.



- People are more likely to be persuaded by someone seen as trustworthy. Such as an actor in a white doctor's coat pitching an herbal supplement for example.
- Attractive people's messages are more persuasive. The term *attractive* can relate to a person's physical appeal or personality and charisma.
- Similarity plays a role. The more someone is like you, the easier it is for her to persuade you.

✓ **Delivery approach:** Should a persuader appeal to someone's emotion or to reason and critical thinking? Here's a breakdown of these and other message-delivery options:

- *Reasoned approach:* In 1983, John Cacioppo and others found that when trying to persuade highly educated or analytical people, a reasoned approach is best. These individuals seem to like to think things over, analyzing information before making a decision. They're not necessarily smarter, but they are typically more aware of recent information.
- *Emotional approach:* Those who don't have the time or inclination to read every consumer review when going to buy a new car are more likely to trust other people and get swayed by emotional appeals. The thought process is "My sister said she loved her new car. I think I'll get one."
- *Fear factor:* A lot of persuasive messages use fear to scare people away from harmful or unhealthy behaviors (find examples in [Chapter 18](#)). These messages work. Fear-evoking ads are all around — telling you to stop smoking, to avoid abusing drugs, to vote for so-and-so and definitely not the other option, for example. There's only one catch. If you're going to scare people in order to persuade them, you need to provide concrete information on how to deal with or change their behavior; otherwise, the audience may freeze up or fail to act at all in the face of the fear.
- *Two-sided argument:* A two-sided argument is one that acknowledges the other position, giving the impression of fairness and objectivity. Advertisers have been using this technique for years, conducting "taste tests" and other comparative challenges with their rivals. You know

what they're up to!

✓ **Audience engagement:** The best way to present persuasive information is to get your audience to play an active part in processing your argument. Active engagement captures the other person's attention and carries an expectation that he will comprehend the message, remember it, and then take action. As the amount of energy that a person invests in mentally processing a message increases, so does the likelihood that it will stick. Passive reception of a message, like listening to a lecture, is less likely to have an impact.

## Easy as pie

There's a great rock video out by a band named Cake that demonstrates the influence of persuadee participation perfectly. In the video, a man walks around a beach, asking real people to put headphones on and listen to the new song. They're encouraged to comment on the song. This is a much more powerful advertising technique than if the man just walked up with a sign that read, "Check out Cake's new song. In stores now!" The persuadees are participating in their own manipulation. It's beautiful. I don't know whether the video makers were thinking this way, but if they were, they hit on a great persuasion technique!

✓ **Age of audience:** Research has found that older people are less likely to change their attitudes and opinions than people who are younger. The early twenties are years in which people are particularly vulnerable to persuasion. This is a time in many people's lives when choices abound and information is exchanged at a rapid rate. Many people in their early twenties are in college, entering the work force, and expanding their social networks. They're exposed to a whole new world of information, and this can make resisting persuasion more difficult.



Want to know how to resist persuasion? With the daily barrage of persuasive messaging that you may encounter, it helps to know how to stay committed to your own beliefs and attitudes. Psychologist William McGuire proposed that a good way to resist persuasion is through the process of *attitude inoculation*, which involves exposing yourself to weak, or weaker, arguments against your position in order to inoculate, or firm up, your resistance to counterarguments. This process gives you practice and confidence in refutation. It's like warming up before a big game. And if you need to inoculate someone else's attitude or position on an issue, try presenting him with weak opposing arguments.

# Being Mean

Most people probably think of themselves as civilized, but it's hard to ignore all the violence and rage that seems so prevalent in today's world. Some of the most horrific acts of human brutality have been committed in recent years — not in some savage society of the remote past. And, unfortunately, most people have experienced some form of violence and aggression. Mass atrocities affecting whole nations as well as smaller-scale heinous acts among individuals indicate that aggression and violence are unfortunate facts of human life.

Why do people act in a way that harms other people? What triggers a person's violence? Psychologists have searched for answers to these questions by studying *aggression*, a form of violence. *Aggression* can be defined as any behavior that is directed at and intended to hurt another person or persons.

Two types of aggression exist:

- ✓ **Hostile aggression** is driven by anger and is an end in itself.
- ✓ **Instrumental aggression** is used to serve some other purpose, such as intimidation or extortion.

Most of the theories about aggression focus on determining why hostile aggression is committed.

## *Acting naturally*

One idea is that some people are born with a violent instinct and a genetic predisposition to act aggressively. It does seem that some children are naturally more aggressive than others, and research supports the natural-born killer theory:

- ✓ Freud proposed that people are born with aggressive instincts, and genetic studies show that identical twins are more likely to be more equally aggressive than fraternal twins (Rushton and others, 1986).
- ✓ Some research also shows higher levels of the hormone testosterone in both men and women who've been convicted of violent crimes when compared to those convicted on nonviolent crimes (Dabbs, 1988).

The brain may have something to do with it as well. Specific centers in the brain seem to be implicated in producing and inhibiting aggressive behaviors. Individuals with severe damage to the frontal lobes of the brain have long been observed as having more difficulty controlling their aggressive impulses than people without this damage because this inhibition is seen as one of the functions of the frontal lobe. This difficulty with controlling aggression is a disinhibition process.

## *Being frustrated*

Or maybe violent and aggressive people are just frustrated. I'm one of those drivers who gets angry when I'm stuck in traffic and other drivers are rude. Now, I don't curse out my window at people or get into fistfights, but I sure do get frustrated.

In 1989, social psychologist Leonard Berkowitz, known for his research on human aggression, found that sometimes frustration leads to aggression, and sometimes it doesn't. When someone does get frustrated, she can get angry, and when a person feels angry, she's predisposed to act aggressively. It's like the body and the mind are poised, on alert, to act with aggression. This trigger comes from a cognitive evaluation of a situation and usually a conclusion that the person who is ticking you off did so on purpose. This scenario is likely to produce an aggressive response. So if you step on someone's toes, you'd better hope she realizes it was an accident.

## *Doing what's learned*

Maybe the violence comes down to people being a product of their environment. An aggressive person may have learned to act aggressively by watching other people do it.

Albert Bandura, professor emeritus at Stanford University, would agree. *Social learning theory* holds that aggressive behavior is learned by observing others and by seeing aggressive people rewarded for such behavior. Little boys are often rewarded for being "tough." Boxers and MMA (Mixed Martial Arts) fighters are paid big money to beat people up. Some may say that aggressive acts are rewarded on a regular basis in our society, too. What child wouldn't see the benefits of aggression in such an environment?

Violence on television and in video games has come under fire in recent years because of its perceived connection to the dramatic increase in youth violence. Americans watch a lot of TV. American kids, in particular, spend a ton of time in front of different kinds of screens.

Even as far back as 1972, Gallup polls reported that Americans were watching an average of seven hours of TV a day. In 2012, that number was about the same, 6–7 hours per day. Regardless of your opinion on the connection between violence and television, the fact is that there's a lot of violence on the tube.

In 1990, George Gerbner found that seven out of ten programs contain violent scenes, with primetime programming containing five violent acts per hour. No doubt about it, TV doles out a heavy dose of violent images. A United States Senate Committee in 2006 found that an average American child sees 200,000 violent acts and 16,000 murders on TV by age 18.

## Blaming media

I've watched violent television all my life, and I don't consider myself a violent person. Most research concludes that there is a modest positive correlation between exposure to violence in the media (film, television, music, Internet, and video games). That is, the more violent a child's media viewing is, the higher chance a child will engage in aggressive behavior.

The American Academy of Pediatrics states, "Extensive research evidence indicates that media violence can contribute to aggressive behavior, desensitization to violence, nightmares, and fear of being harmed" in children.

My question is, why is there so much violence in our media anyway? Does it offer viewers something valuable? Is it an emotionally arousing persuasion technique used by corporations to sell their goods? I don't know, but it may be worthwhile to examine the reasons behind the inclusion of so much violence in the entertainment industry.



# *Lending a Helping Hand*

I've always marveled at people like Mother Teresa who devote their entire lives to helping others. Mother Teresa's sacrifice was unquestionable. What drives people to help in this way? It certainly wasn't money for the saint. I never saw Mother Teresa driving around in a Rolls-Royce.

A favorite topic among social psychologists is *altruism*, having concern for and helping other people without asking for anything in return. Maybe these psychologists study altruism with such zeal because it's an integral part of everyday life. People are constantly presented with situations in which someone needs help, even if it's a sad, late-night commercial showing starving children in other nations.

I think most people like to see themselves as helpful people. Or, if not particularly helpful, then at least willing to help in certain situations or when the need is severe.

The comedian Louis C. K. has a routine about sitting in first-class on a flight and seeing a war veteran and soldier sitting in coach. He thinks about giving his seat to the soldier but doesn't actually give up his seat. He feels really good about himself for thinking about it, though. In Mr. C. K.'s fantasy, he was a very helpful person. He was proud about being willing to help, even if he did nothing in reality. A great deal of research by social psychologists investigates why, when, and who people actually help. Some of the findings are surprising, even shocking.

In New York City in 1964, a woman named Kitty Genovese was brutally murdered outside of her apartment by a man with a knife. She struggled with the attacker and screamed for help for nearly 35 minutes. No one came to her aid. Later reports by 38 of her neighbors stated that they had witnessed the crime and heard her screams, but they did nothing to help her.

What happened here? Why didn't anyone help? As you're reading this, you may be telling yourself that you would have helped. When I first heard this story, I thought, "What was wrong with those people?" Think about it, though. It's not likely that all 38 people were cold, callous individuals who didn't care about a woman being murdered within earshot. Instead, they were influenced by social psychological principle in which social situations have a

powerful influence on individual behavior. The Kitty Genovese story illustrates the main point of social psychology — the power of a situation is a major factor in determining an individual's behavior.

## Why help?

Before I introduce you to some of the main theories of why people perform altruistic acts, I want to conduct a little test.



The next time you're in a public place, try one of these experiments:

- ✓ **Experiment #1:** Drop five coins on the floor near a group of people and act like you don't notice. Time how long it takes for someone to help you. Try to remember as much about them as you can.
- ✓ **Experiment #2:** Pretend to trip and fall in the public place. Make the same observations. (This may make an interesting YouTube video, but it is not recommended for safety reasons).

If you performed these experiments, what happened? Who helped you? How long did it take to receive help? Do you know why a person decided to help you? I know — it was probably because of your stunning good looks! Actually, believe it or not, attractiveness does make a difference. I cover this later in the chapter.

Theories about why people actually help others are all over the map. Here are some of the popular ones:

- ✓ **Social exchange theory:** Helping is a type of trading process.
- ✓ **Selfishness theory:** Helping someone may lead to rewards.
- ✓ **Genetic theory:** Helping is a genetic impulse.

### ***Exchanging social goods***

Researchers E. B. Foa and U. G. Foa introduced *social-exchange theory*, the idea that helping is part of a reciprocal process of giving and receiving social “goods” such as love, support, and services. Individuals try to minimize personal costs and maximize benefits, just like any good businessperson does. In helping situations, if the benefit of helping is higher than the cost of not helping, a person is more likely to help. This kind of makes sense if you consider that sometimes helping people involves putting ourselves at physical risk or serious inconvenience.

Also supporting this theory is A. W. Gouldner’s *reciprocity norm*, which holds that a cultural norm tells people they should return help to those who help them. You scratch my back, and I’ll scratch yours. In turn, people don’t hurt those who help them out. Never bite the hand that feeds you! There’s only one catch to this theory: Sometimes, people can get offended if you offer them help. If they can’t return the favor, they may feel demeaned by the offer. Reciprocity works best when it’s between equals.

### ***Looking out for number one***

In the 1950s, Ayn Rand wrote *Atlas Shrugged*, a famous philosophical novel that promoted the “virtue of selfishness.” If each person looks out for “numero uno,” all will be well, the theory goes.

Rand was not alone in thinking that selfishness isn’t all that bad. Similar to social-exchange theory, the selfishness theory argues that helping behavior is driven by a person’s *own* best interests. Do you give in order to receive? Some rewards are external, like praise and notoriety, and others are internal, like reducing negative feelings such as guilt.

### ***Motivated by the love inside***

In 1991, social psychologist Daniel Batson came to the rescue of humanity's sense of goodness with his theory that people help others because individuals have a natural *empathy* for other people, especially those they are attached to.

## Empathizing about sympathy

Some people get confused between empathy and sympathy. *Empathy* involves a personal understanding of someone's suffering, and *sympathy* is distant and impersonal concern about another person's suffering. Imagining being in someone else's shoes is a type of empathy, and feeling sorry for a person who's actually wearing uncomfortable shoes is the gig with sympathy.

Psychologist and professor emeritus at New York University Martin Hoffman found that even infants seem to possess a natural ability to “feel for” others. They cry when they hear another baby cry. Are they just crying because the sound of the other baby's crying is hurting their ears? Probably not; it's more likely that they cry because they are in touch with the other baby's pain. People can relate to feeling upset at the sight of another person's misfortune. This natural empathy may encourage helping behavior.

How often do you help those people who stand on the side of the street holding the “Will work for food” signs? Do you feel a responsibility to help them? They're hoping you do. The *norm of social responsibility* holds that people should help others who need it. Bernard Weiner at UCLA in 1980, however, found that people typically apply this norm only in situations in which we perceive the person needing help as not having caused the situation due to her own negligence or fault. If I think that the person only needs help because she “did it to herself,” I am less likely to adhere to the norm of social responsibility.

Do you think that the guy standing with the sign on the side of the street made some bad choices or somehow screwed up? Ask him; you never know until you ask. You may be eschewing your social responsibility if you don't offer some help.

Richard Dawkins also supports the genetic theory in his book *The Selfish Gene* (1976), in which he proposed that people are altruistic because their genes compel them to be. The idea of *kin protection* states that genes promote altruistic behavior toward kin or family in order to ensure the survival of the group's genetic makeup. Following this line of reasoning, I'm much less likely to help someone I don't know. Why would I? They don't share my genes.



The more genetic material I share with someone, the more likely I am to help him or her. That's it. Nothing fancy.

## *When to help?*

One of the most remarkable findings in altruism research is the idea that people are less likely to help when they're in the presence of others than when they're alone. This sounds strange, doesn't it? I may think that the fear of appearing cold and uncaring in front of others may encourage people to help more.

But research shows otherwise. When someone is in a crowd, he is actually less likely to notice that other people need help. In New York City, for example, people are always surrounded by other people. It's a crowded place, and most people can't take the time to notice everything and everyone around them simply because of the sheer volume of information; it's easier to fade into a crowd.

Strangely enough, when others are around, people are also less likely to interpret someone's behavior as indicative of needing help. Bystanders look to others for a sign as to how they should respond in a situation. If the other people don't act alarmed, then an individual typically won't be alarmed (or react) either. If the situation is ambiguous, not a clear-cut helping situation, a person's interpretation of the event in the presence of others is likely to be that intervention is not required. This is especially true if the other people are strangers.

A final problem with helping in the presence of others is called *diffusion of responsibility*. People usually just assume someone else will take care of whatever needs doing. If no one else is around, then I'm the only one left; I've got to help. But if others are around, it's easy to assume they'll do it. What happens when everyone assumes that everyone else is going to offer assistance? Help doesn't happen.

That's exactly what two researchers, psychologists Latane and Darley, found in a 1968 study in which experiment subjects were witness to a victim of a feigned seizure. Persons who were led to believe they were alone reported the emergency to authorities more quickly than those who believed they were just one among other witnesses.

It's not all bad news when it comes to groups, though. Research has found that when someone in a group takes action, others are more likely to jump in. Helpful people in this scenario serve as *prosocial models* and are a strong influence on altruistic behavior. The problem is getting someone to make the first move. Until someone does, the negative forces of the bystander effect are active. The *bystander effect* or *bystander apathy* is the dynamic of not getting involved in a situation when there are too many people standing around; you're likely to just stand there, too. So go ahead and be a hero. Make the first move — someone has to.

## *Who gives and receives help?*

In my personal life sometimes I feel like helping people and sometimes I don't. Sometimes I would rather watch television than help my friend move that new couch. Still others seem to always have help available when they need it (unlike my couch-purchasing friend). Are certain people more helpful or "help-able" than others?

What about how helping affects feelings? I've always wondered about the origins of the tradition of buying cigars for friends when a baby is born. I still don't know where it comes from, but altruism research shows that happy people tend to be more helpful or giving (happy dad, cigar as gift). Does that mean that sad people aren't helpful at all? It actually depends on how rewarding helping others is to the person experiencing sadness. If sad people aren't too self-absorbed and self-focused, altruistic acts can be very rewarding for them. Feeling good, doing good! Feeling bad, doing good! Sounds good, especially if I'm feeling bad.

Pious people are often viewed as helpful. Many nonprofit organizations are operated by religious denominations. But are religious people really more helpful than their non-religious neighbors? Here's what research shows: When people indicate that religion is very important in their lives, they have been found to give 2.5 times as much money to charity as those who indicate that religion is not very important. The verdict — religious individuals are definitely generous, and, in some research findings, they're more generous than non-religious individuals.

Researchers Eagly and Crowley in 1986 found that women get helped more often than men, and attractive women get helped more often than unattractive women. I guess the ugly men out there are out of luck. Luckily for them, similar to the help-seekers to be a factor. The more someone looks like an



similarity to the helper seems to be a factor. The more someone looks like or dresses like me (or you), the more likely I am to help them out. So, you better cross your fingers and hope that the next time you're in of need help, someone thinks you're looking good.

## ***Birds of a Feather . . . or Not***

Airports, particularly international airports, are amazing places, I think. The diversity in these places is amazing. People of all colors, shapes, sizes, cultures, and nationalities all under one roof. But this diversity provides fertile soil for discrimination. Whenever people with differences are together, there is the potential for prejudice.

In this section, I introduce you to prejudice, stereotypes, and discrimination and describe how you can respond to these social dynamics.

## *Finding out about isms*

*Prejudice* is a negative and disrespectful attitude, thought, or belief about a person based on his membership in a particular group. Some law enforcement agencies have been accused of using a prejudicial and controversial practice that's known as *racial profiling* in which officers can assume that certain individuals are potentially involved in criminal activity simply because they belong to a particular "race" or ethnic group.

A well-known example of potential racial profiling has been in play at airport security checkpoints following the terrorist attacks in New York, Washington, and over Pennsylvania on September 11, 2001. As a result of that attack, airport security may be more inclined to stop and more thoroughly and intensely question individuals of perceived Middle Eastern descent. If that's indeed happening, then airport security is guilty of racial profiling.

Psychologist Lynne Jackson proposes that prejudice is, in part, based on *stereotypes*, beliefs that most members of a group possess the same characteristics, traits, and behavioral tendencies. White men can't jump or dance. Arabs are terrorists. Asians can't drive. These blanket statements are offensive, right? That's the point of prejudice based on stereotypes; these conclusions about individuals based on their affiliation to a certain group are disrespectful.

Moreover, people often see what they expect to see. So if a person in the target group happens to perform the behavior our stereotype predicts — boom! Stereotype strengthened. The other people in that same group who don't behave according to our stereotype are often not noticed.

Some common forms of prejudice include the following:

- ✓ **Racism** centers on a person's perceived "race" or ethnicity.
- ✓ **Sexism** is based on a person's gender.
- ✓ **Ageism** focuses on a person's age.
- ✓ **Ableism** is based on a person's disability.
- ✓ **Nationalism** centers on a person's national origin.
- ✓ **Sanism/Mentalism** relates to a person's mental abilities or mental illness.

Religious intolerance (negative attitudes about a person based on his spiritual

beliefs) and homophobia (fear of people with a homosexual orientation) are also common forms of prejudice.

What about *psycholigistophobia*? That irrational fear of a person's occupation being a psychologist and the belief that all psychologists are crazy, have a beard (if they're male), and love to offer free advice at cocktail parties. Okay, I made this one up and I shaved my beard. But psychologists have a rep!

Stereotypes can be conscious or unconscious. I can be aware of my stereotyped beliefs or not. But where do stereotypes and subsequent prejudice come from? From a social learning theory perspective, prejudices may be learned. People can certainly be taught specific beliefs by parents, the community, peer groups, and culture.

Some theorists propose that prejudice is a consequence of human evolution, that the mental process is an inherent part of the human mind that evolved to help humans identify who's part of "their" group and who's not, who poses a danger or is a potential competitor for resources.

Yet many psychologists propose that, ultimately, prejudice is a cognitive evaluation process that's essentially a consequence of the mind's tendency to "chunk" information together for the purpose of making vast amounts of information more manageable. Prejudice is a mental shortcut. Research shows that in situations in which people are distracted, tired, or unmotivated, they are more vulnerable to prejudicial and stereotypical thinking. Lynne Jackson likens this dynamic to a sort of "lazy process" that emerges when people lack the resources to carefully process social information.

## *Understanding discrimination*

The human mind may have a tendency to group people in the form of prejudice, and this is often not an innocuous process. Prejudice can lead to *discrimination* — differential treatment of a person or group based on prejudicial attitudes and beliefs. Prejudice, although perhaps seemingly natural, is often deployed by advantaged groups and individuals against groups and individuals who enjoy lower levels of social advantage.

Here are two common forms of discrimination:

- ✓ **Interpersonal:** Individual acts of discrimination such as not picking the short-statured kid for the basketball team (He may be quite good!)
- ✓ **Institutional:** Policies, procedures, rules, laws — voter ID laws that prohibit the poor or elderly from voting because they don't have proper identification, for example — or a culture within an organization that systematically disadvantages one group in comparison with others

## ***Making contact***

The seemingly automatic bias in human thinking, fortunately, can be addressed through an approach known as *contact*, which was formally studied by the psychologist Gordon Allport. Contact holds that when a group of diverse people get together to collaborate on reaching a common goal or project, positive attitudes toward each other increase and negative attitudes decrease. This does not mean that you can just throw a block party and invite all your diverse and prejudiced friends, and they'll learn to get along. To work, contact encounters must be structured to support equality, cooperation, and safety.

Psychologists Pettigrew and Tropp analyzed hundreds of studies and proposed the following key ingredients of a successful “contact” encounter:

- ✓ **Reduction in anxiety** occurs through exposure to others without threat or harm.
- ✓ **Increased empathy** is a result of learning from and about others.
- ✓ **Increased knowledge** about others decreases stereotypes.

A person can also reduce his stereotypic and prejudicial attitudes simply by having friends and associates who are friends with or associated with people of the other group. This is a vicarious contact situation and works to reduce prejudice and stereotypes because a person you already trust is showing trust in another person, which means you can in turn trust that person as well.

For example, if your best childhood buddy befriends a colleague who belongs to a group you have a prejudice against, you're more likely to become less biased toward that person and group after learning your trusted friend enjoys their company.

Research also suggests that clear, well-communicated cultural and group norms *against* prejudice can have a big impact. Often, prejudice in individuals is the result of group pressure to conform and adopt prejudicial attitudes. Flipping that around, the same pressure to conform can be a powerful influence as well.

# Chapter 14

## Assessing the Problem and Testing the Psyche

---

### *In This Chapter*

- ▶ Taking history notes
- ▶ Making the grade
- ▶ Typing the tests
- ▶ Pulling the wool

People go to a psychologist or other mental health professional usually because they're experiencing strong negative emotions or facing difficulties in their everyday lives. Just like when visiting a general physician, a person goes to a psychologist's office with a complaint, issue, or problem. A lot of times, the individual is looking for answers because he's unsure about what's really going on. The psychologist listens and tries to assess the full extent of the problem, attempting to gain a full sense of the patient's situation. If the psychologist gets the problem wrong, she won't be able to fix it.

It's like this: I recently bought a new computer, took it home, set it up, and everything seemed great. I was excited to get on the Internet and start surfing around. But when I tried to connect, it didn't work. You can imagine my frustration after spending north of a thousand dollars on a brand-new computer that wasn't working right. I spent three frantic days trying to figure out what was wrong, changing cables, calling the Internet service provider, and talking with the store that sold me the computer. Nothing I did and no one I talked to fixed the problem.

Finally, my wife pointed out (three days later) that I had plugged a cord into the wrong jack in the back of the computer. She simply placed the cord where it belonged and connected with ease. I had incorrectly identified the problem and was therefore clueless about how to fix it. I figured that because I was a

scientist I had thoroughly ruled out all possible causes and variables. Boy, was I wrong.

This chapter introduces you to the process and procedures psychologists use in clinical evaluations. Those include taking history and gathering information about the nature of the presenting problems of clients and patients. Psychological assessment and testing, two things psychologists are particularly trained well to do, are discussed, including a review of the different types of tests and evaluations a psychologist conducts.

## ***Naming the Problem***

The first step toward any solution is to recognize and clearly define the problem. Psychologists use specific tools and techniques for that very purpose. Here's how it typically goes: A person visits a psychologist and the conversation begins with an exploration of the patient's *presenting complaint* (the issue that motivated the patient to seek therapy). The discussion then gets into a more thorough information-gathering process:

**Psychologist:** Tell me, Mr. Smith, what seems to be the problem?

**Mr. Smith:** How am I supposed to know? You're the doctor.

The "What's the problem?" question sometimes annoys patients because they often don't know what's going on; they're seeking help from a professional and expect the psychologist to have the answers. But without a thorough investigation of the patient's situation, any mental health professional can only perform expensive guesswork. The two most common approaches to clinical assessment are formal interviews and psychological testing. I describe these processes in this section.

## ***Documenting history***

There may be as many interview techniques in the psychological world as there are individual psychologists out there. Everyone has a different way of getting at the relevant information. So what is the relevant information?

Most shrink-to-patient encounters begin with a discussion of the patient's basic issue, the initial complaint or *presenting problem*. Very few people who come to a psychologist describe their problems according to the criteria

established in the *Diagnostic and Statistical Manual*, the manual published by the American Psychiatric Press that most US psychologists use to diagnose mental disorders. Presenting problems tend to be vague or convoluted.



Early communication problems between the psychologist and the patient are not necessarily because people don't understand themselves. Rather, it's usually more an issue of vocabulary; doctors and patients use different words to describe the same problems. You say to-*may*-to, and I say to-*mah*-to. You may say you can't sleep or stop crying, and I say you're depressed.

To begin exploring a person's psychological problems, a psychologist often gathers information about the patient's family, friends, co-workers, and other major relationships in order to better understand her social, educational, and occupational functioning. Did the patient graduate from high school? Has she been able to stay gainfully employed?

Often, although people begin therapy with a lot to say and get off their chests, they're overwhelmed and sometimes have a hard time knowing exactly how to describe their experiences. Therapy isn't always so cut and dried, but psychologists typically try to structure the first interview with the following steps:

- 1. Clarify the presenting problem.**
- 2. Gather a history of the patient's life.**

Is it an autobiography? In a way it is, except that only specific areas are covered. The most relevant aspect in a psychological interview is the history of the presenting problem. When did it all begin . . . ?

- 3. Explore the patient's physical health.**



An assessment of the patient's physical health and history is always important in the history-taking process mainly because many psychiatric or psychological problems can be an aspect of certain physical illnesses or conditions. That is, a psychological problem may actually be a symptom of an underlying medical condition. For example, a person may think he or she is having a panic attack (psychological) but may in fact be having a heart



attack (medical/physical illness). When was his most recent physical? Does she have any major medical problems? Is he taking any medications? Does (or has) she abused drugs or alcohol? Does he have an altered state of consciousness that requires medical assessment or treatment?

#### **4. Gather a thorough history of any psychological problems.**

A psychologist wants to find out if the patient has ever suffered from depression in the past, attempted suicide, or been treated for a mental disorder in a psychiatric hospital or other type of setting. Do any family members have a history of mental illness? Is he thinking about hurting other people? Certain pieces of information are extremely important to find out if the patient's safety is at risk. A prudent professional always takes the time to assess the most serious aspects of a case first, and no issues are more serious to a psychologist than suicide or a patient's potential for violence.

### ***Examining mental status***

Throughout the initial interview, the psychologist looks for specific behavioral, cognitive, and emotional indicators of psychological disturbance. This is called a *mental status examination (MSE)*. Typically, the psychologist observes these 11 mental status areas:

- ✓ **Appearance:** Grooming, hygiene, physical characteristics, and unusual features are observed. If someone has an unusual appearance — severely underweight, disheveled, or bizarre or inappropriate grooming, for instance — outside of cultural or subcultural norms, it may be worth discussing.
- ✓ **Behavior:** Some of the most striking signs of disturbance come from the way people act.
  - **Body movement:** Body movements such as fidgeting, fast movements, slowed movements, or strange gestures may be relevant. Nervous individuals may fidget a lot. Depressed patients may sit slumped in their chairs. Someone with a paranoid delusion that the CIA is following him may get up and peek out the curtains every five minutes.
  - **Facial expressions:** Facial expressions can sometimes reveal how a person is feeling. A sad, mad, immobile, or frozen expression, for example, can indicate specific moods.
- ✓ **Speech:** Two disorders in particular, schizophrenia and bipolar disorder,

include disturbances in speech:

- **Schizophrenia:** A patient's speech may be disordered, jumbled, or difficult to understand. He may seem to be speaking a foreign language, using words and phrases that don't seem to make sense. For example, I once received an anonymous phone call while volunteering at a homeless shelter. When I asked the caller if I could help him, he replied, "Stick the pin in the cushion. You called me. What do you want? The letters make me crazy . . . light bulb . . . beat the drum . . . stick the pin in the cushion . . . what do you want?" This is an excellent case of disordered speech.
- **Bipolar disorder:** The rate and pace of speech can be abnormal in people with bipolar disorder. Patients in a manic episode, for instance, can speak very fast and act as if they physically need to keep talking. They may jump from one topic to another.

✓ **Mood and affect:** *Mood* describes the predominant emotions being expressed by the patient. Is she sad, happy, angry, euphoric, or anxious? *Affect* refers to the range, intensity, and appropriateness of a patient's emotional behavior. Is she mildly sad or intensely sad? Does she feel anything other than sadness, or does she seem to have a full range of emotions? Another common observation of affect is called *mood lability*. How often and easily does mood change? Is she hot one second and cold the next?

✓ **Thought content:** What people think about is relevant to any clinical evaluation. Bizarre thought content, such as delusions, can be telltale signs of the presence of a mental disorder. Less bizarre but sometimes equally disturbing thoughts, such as obsessive preoccupations and intrusive ideas, can also be signs of severe anxiety. Thoughts of death and violence are relevant to assessing suicidality and violence potential.

✓ **Thought process:** Different ways of thinking can sometimes be clues to a mental disorder.

- **Tangential thinking:** Often a sign of thought disorder, tangential thinking is characterized by a wandering focus and the tendency to go off on tangents that are only minimally related to the topic currently being discussed.
- **Clang associations:** These are serious indicators of thought disorder.

When someone ends a sentence with a word, and the sound of that word triggers another thought, related to the conversation only by the sound of the last word uttered, the thought process is known as a *clang association*. “I came home from work the other day, and the car was in the driveway . . . highway’s are crowded. Loud noises bother me . . . tree.” This type of disordered thought is unorganized and hard to follow; it doesn’t make sense.

- ✓ **Perception:** Perceptual problems consist of hallucinations. Patients can experience auditory hallucinations (voices), visual hallucinations, olfactory hallucinations (smells or odors), gustatory hallucinations (tastes), or somatic hallucinations (strange bodily sensations, such as feeling like bugs are crawling under the skin). A very serious auditory hallucination is when patients hear a voice or voices telling them to hurt themselves or someone else. These are sometimes called command hallucinations.
- ✓ **Intellectual functioning:** This status can be casually observed by paying attention to the patient’s vocabulary, general quantity of knowledge and information, and abstract thinking ability. However, trying to figure out someone’s intellectual functioning based on observation alone is highly subjective and should only be used as a starting point for further assessment.
- ✓ **Attention/concentration and memory:** Pay attention to whether a patient is distracted during the interview and struggling to concentrate on the task at hand. Short-term memory can be checked by asking the individual to remember a few things and checking with her a few minutes later. How well she recalls her history and provides historical information offers a measure of long-term memory. Many disorders present attention problems and memory deficits.
- ✓ **Orientation:** Does the patient know where she is? The season? The time? Ascertaining whether a patient knows where she is in time and space is an important part of the MSE. Many serious medical conditions and neuropsychological disorders manifest signs of disorientation.

## To each his own animal

If you see a middle-aged gentleman wearing a pair of famous mouse ears with a mouse nose, teeth, and whiskers in a coffee shop, you may wonder if he’s mentally ill. It’s a free country,

teeth, and whiskers in a coffee shop, you may wonder if he's mentally ill. It's a free country, but most people would agree that this appearance is unusual. Middle-aged men don't normally dress up like mice. So when someone treats every day like Halloween, it's worth asking about. No judging or jumping to conclusions; it's just worth checking out.

✓ **Insight and judgment:** Does the patient understand that she may be mentally ill? Does she understand the relationship between her behaviors and mental processes and a psychological disturbance? Insight is important for assessing how motivated a patient is going to be during treatment and whether compliance issues are likely to interfere with illness management or recovery. Addressing a patient's judgment involves looking at the soundness of the decisions she makes and the degree of impulsivity and planning that goes on before she takes action. Judgment is especially important when assessing for dangerousness, violence potential, or suicide risk.

## *Checking Under the Hood with Psychological Testing*

These days, any number of different disciplines are involved in the treatment of mental illness and working with people with mental disorders.

Psychological testing, however, is considered the sole domain of psychologists. Although some professionals, such as school counselors and learning disability specialists, conduct psychological testing, their testing is limited in scope and to a specific problem. Psychologists are thoroughly trained in all aspects of psychological testing and are the primary professionals in this area.



Psychological testing is part of the entire psychological assessment process. *Assessment* is a set of scientific procedures used to measure and evaluate an individual's behavior and mental processes. Psychologist Anne Anastasi (1908–2001), a past president of the American Psychological Association and a distinguished researcher in psychological assessment, defines a psychological test as an objective, standardized sample of behavior or mental processes. Tests can

formalize data based on observations. Nearly all topics in psychology can be measured with a test.

Testing formats include surveys, pencil and paper tests, exercises and activities (like putting a puzzle together), interviews, and observation. Testing in psychology is not much different from testing in other fields. A blood test is a means of measuring an individual's T-cell count, for example. A personality test is a way to measure some specific aspect of a person's personality. Psychological testing uses the same idea; it just focuses on the subject matter of psychology, behavior, and mental processes.



A test is objective if it meets acceptable standards in three important areas: standardization, reliability, and validity.

## Standardizing

Anne Anastasi considers a test properly *standardized* if it has a uniform procedure for administering and scoring. Control of extraneous variables allows for maximum accuracy. In other words, if I give a test differently to two different people, then I can't very well trust the results because I've violated the principle of control in science.

Establishing a norm for a test is another step in standardization. A *norm* is a measure of the average performance for a large group of people on any given psychological test. For example, the average score on the Wechsler Adult Intelligence Scale, 4th Edition, is 100. This average score establishes a point of comparison for the test taker's scores to be referenced to. This is called *a norm* and is a standard by which to compare people. Norms are established by administering the test to a large group of people, or several groups, and measuring the average performance and range of performances, something called *variability*. So, if I develop a test to measure problem solving. I would establish a norm or comparison group by going out and giving my test to thousands of people and documenting their performance and the range of performances. This comparison group is used to compare the scores of any individual taking the test to the thousands of other people who took the test and allows me to determine how well or how poorly any one individual test taker did in comparison to all the other people who took the test.

## Reliability on tests

*Reliability* is consistency across different testing occasions, test providers, settings, or circumstances. A reliable test should give the same result regardless of the circumstances. An inconsistent test is not reliable and therefore not very helpful for psychological testing. If I give the same person the same test on two or more occasions, will he get the same or comparable score? If the answer is yes, then the test is reliable. If I test a person, and another psychologist uses the same test on the same person, the results should be comparable; this is called inter-rater reliability. A test needs to prove reliable before being put to use by professionals. In fact, psychologists are ethically bound to use reliable tests and instruments because they are being entrusted to provide accurate and useful information. An unreliable test is not able to deliver in that regard. A psychologist wants to know if a person's test performance is due to their own characteristics and not to the setting, circumstances, or situation. The psychologist would not be measuring what he thinks he is measuring if a test weren't reliable. An example of reliability used in test development is *test-retest reliability*. This involves giving a test and then giving it again later (not too soon, of course, because you don't want practice effects) and then seeing if the scores are close or similar.

When it comes to psychological testing, I've often had patients object that a test was unreliable and that it didn't prove or measure a darn thing. They may have had a point, but only if the test was unreliable.

## ***Trusting tests***

How do you know that a test you're using is really measuring what it claims to measure? You may think that you're measuring intelligence when you're really measuring English-language aptitude. This actually happens quite often when tests are improperly used with people for whom the test has not been *normed* — which means that its statistical properties haven't been established with a large population of individuals similar to the people to whom it will be applied. Tests used with people who were not part of the group the test was normed on are highly suspect and most likely invalid.

When a test measures what it claims to measure, it's considered *valid*. The validity of a test is established by comparing the test with an outside measure of the psychological topic in question. If I have a test that claims to measure depression, I must compare my test findings with an already established measure of depression such as the Beck Depression Inventory.



Keep in mind that many, if not most, psychological tests measure things that are unobservable in the way other factors in other fields are. T-cells can be physically seen and therefore counted under a microscope. But intelligence cannot be viewed in the same manner. Intelligence is presumed to exist as it manifests itself in a measurable form on a psychological test. Therefore, the scientific basis on which psychological testing is formed is of utmost importance.

Psychological testing is a little more sophisticated than asking a few questions and counting up someone's responses. It's a scientific endeavor. Because of the complexity of psychological testing, most professionals argue that use of tests should be controlled — only qualified examiners should use them. The risk for potential oversimplification or misinterpretation is just too high when an untrained administrator attempts to diagnose a person's mental status through testing.

Plus, if the tests are spread around indiscriminately, people may become too familiar with them and be able to manipulate their responses; thus the tests would lose their validity. Instead of measuring someone's intelligence, for example, the psychologist may end up measuring a subject's skill at remembering the test questions and answers that reveal the traits he wants to show.

## *Testing Types*

Numerous types of psychological testing exist. Five of the most common are clinical testing, educational/achievement testing, personality testing, intelligence testing, and neuropsychological testing. Each of these different types of tests looks at a different type of behavior and/or mental process.

### *Clinical testing*

Clinical psychologists (psychologists who work with mental disorders and abnormal behavior) typically use clinical testing as a way to clarify diagnoses and assess the scope and nature of a person's or family's disturbance and dysfunction. Specific tests are designed to assess the extent to which a patient may or may not be experiencing the symptoms of a particular disorder. These



are *diagnostic tests*. A popular example is the Beck Depression Inventory, which is designed to assess a patient's level of depression.

*Behavioral and adaptive functioning* tests are two types of clinical tests that determine how well a person is doing in her everyday life and whether she exhibits specific problem behaviors. A common instrument used with children is the Child Behavior Checklist, which is designed to assess the extent of a child's behavior problems. Another commonly used clinical test is the Conner's Parent Rating Scale, which detects attention deficit/hyperactivity disorder (ADHD) symptoms.

In addition to disorder-specific inventories and tests, a wide variety of tests designed for other purposes lend themselves to the diagnostic process. Intelligence tests are designed to measure intelligence, but they can also show signs of cognitive dysfunction and learning disabilities. Personality tests are designed to measure personality, but they can also provide helpful insight to the types of psychological problems an individual is experiencing.

## ***Educational/achievement testing***

Educational and achievement tests measure an individual's current level of academic competence. Glen Aylward, chair of the Division of Developmental and Behavioral Pediatrics at the Southern Illinois University School of Medicine, identifies three major purposes of this type of testing:

- ✓ Identify students who need special instruction.
- ✓ Identify the nature of a student's difficulties in order to rule out learning disabilities.
- ✓ Assist in educational planning and approach to instruction.

A typical educational/achievement test assesses the most common areas of school activity: reading, mathematics, spelling, and writing skills. Some tests include other areas such as science and social studies. A popular achievement test in wide use today is the Woodcock-Johnson Psychoeducational Battery, Revised. The test consists of nine subtests, measuring the standard areas of instruction but in more detail (mathematics is broken down into calculation and applied problems, for example).

Educational/achievement testing is widely used in the school systems in the United States and Western Europe. When a child or older student is having a hard time in school, it's not unusual for her to take an achievement test to get



...a time in school, it is not unusual for her to take an achievement test to get a closer look at her basic skill level. Sometimes, students have a difficult time because they have a learning disability. Part of identifying a learning disability is assessing the student's achievement level. Other times, a student struggles because of non-academic difficulties such as emotional problems, substance abuse, or family issues. An achievement test sometimes helps to tease out these non-academic problems.

## ***Personality testing***

Personality tests measure many different things, not just personality. Numerous tests are designed to measure emotion, motivation, and interpersonal skills as well as specific aspects of personality, according to the given theory on which a test is based. Most personality tests are known as *self-reports*. With self-reports, the person answering questions about herself, typically in a pencil-and-paper format, provides the information.

Personality tests are usually developed with a particular theory of personality in mind. A test may measure id, ego, or superego issues, for example, if it originates from a Freudian view of personality development.

## ***Getting down with MMPI-2***

Perhaps the most widely used personality test in the United States is the MMPI-2, The Minnesota Multiphasic Personality Inventory, 2nd Edition. Almost all American psychologists are trained to use the MMPI-2, which is considered to be a very reliable and valid instrument. A patient's results from a MMPI-2 test provide rich information about the presence of psychopathology and level of severity, if present. The test's results also reveal information about the emotional, behavioral, and social functioning of the test taker. A lot of psychologists use the MMPI-2 as a way to check the accuracy of their observations and diagnoses.

The MMPI-2 test consists of 567 individual items and produces a score on nine clinical categories or scales. If a score is over a specific cutoff, it usually gets the attention of the psychologist administering the test. Psychologists consider such scores to be of clinical significance. The MMPI-2 covers a wide variety of areas, including depression, physical complaints, anger, social contact, anxiety, and energy level.

## ***Projecting to the deep stuff***

*Projective personality tests* are a unique breed of test. When most people

think of psychological testing, these kinds of tests come readily to mind. The stereotype involves sitting across from a psychologist, looking at a card with smeared ink or a picture of somebody doing something on it, and answering questions like “What do you see here?”

(You can take a free, mock personality test at [www.dummies.com/extras/psychology](http://www.dummies.com/extras/psychology).)



Projective personality tests are unique because they’re based on something called the *projective hypothesis*, which states that when presented with ambiguous stimuli, people will project, and thus reveal, parts of themselves and their psychological functioning that they may not reveal if asked directly. It’s not like these tests are trying to trick people, though. The idea is that a lot of folks can’t exactly put words to or describe what’s going on mentally and emotionally because of psychological defense mechanisms. Some people are not conscious of their feelings. Projective tests are designed to get past the defenses and penetrate the deep recesses of the psyche.

Perhaps the most popular projective personality test and maybe even the most popular psychological test of all time is the Rorschach Inkblot Test (RIT). The RIT consists of ten cards, each with its own standard inkblot figure. None of these inkblots are a picture or representation of anything. They were created by simply pouring ink onto a sheet of paper and folding it in half. The only meaning and structure the cards have are provided by the projections of the test taker himself.

## ***Intelligence testing***

Intelligence tests may be the most frequently administered type of psychological test. They measure a broad range of intellectual and cognitive abilities and often provide a general measure of intelligence, which is sometimes called an *IQ* — intelligence quotient.

Intelligence tests are used in a wide variety of settings and applications. They can be used for diagnostic purposes to identify disabilities and cognitive disorders. They’re commonly used in academic and school settings.

Intelligence tests have been around since the beginning of psychology as an established science, dating back to the work of Wilhelm Wundt in the early

20th century.

The most commonly used tests of intelligence are the Wechsler Adult Intelligence Scale, 4th Edition, (WAIS-IV) for adults and the Wechsler Intelligence Scale for Children, 4th Edition, (WISC-IV) for children. Each of these tests contains several subtests designed to measure specific aspects of intelligence such as attention, general knowledge, visual organization, and comprehension. Both tests provide individual scores for each subtest and an overall score representing overall intelligence. (You can take a free, mock intelligence test at [www.dummies.com/extras/psychology](http://www.dummies.com/extras/psychology).)

## ***Neuropsychological and cognitive testing***

Although not a new field, tests of neuropsychological functioning and cognitive ability, related specifically to brain functioning, are rapidly becoming a standard part of a psychologist's testing toolset.

Neuropsychological tests have traditionally been used to augment neurological exams and brain imaging techniques (such as MRIs, CT scans, and PET scans) but they're being used more widely now in psychoeducational testing and other clinical testing situations.



The technology of scanning techniques picks up on the presence of brain damage, but neuropsychological tests serve as a more precise measure of the actual functional impairments an individual may suffer from. Scans say, “Yep, there’s damage!” Neuropsychological tests say, “. . . and here’s the cognitive problem related to it.”

Neuropsychological testing is used in hospitals, clinics, private practices, and other places where psychologists work with patients who are suspected of neuropsychological impairment. People suffering head trauma, developmental disorder, or other insults to the brain may need a thorough neuropsychological examination.

A popular neuropsychological test is actually not a test at all but a collection of tests called a *test battery*. The Halstead-Reitan Neuropsychological Test Battery includes numerous tests that measure neuropsychological constructs such as memory, attention and concentration, language ability, motor skills, auditory skill, and planning. The battery also includes an MMPI-2 and WAIS-IV test. Completing the battery requires several hours, and it's never

done in one sitting, so going through a neuropsychological evaluation can take several weeks and be costly. However, when conducted by a competent professional, the testing can yield a tremendous amount of helpful information.

Many neuropsychological instruments are available; some are comprehensive, like the Halstead-Reitan, and some are designed to measure a specific function such as language or attention. Whether a neuropsychological evaluation is conducted using a comprehensive instrument or a collection of individual instruments to create a profile of neuropsychological strengths and weaknesses, the following areas of neuropsychological functioning are typically assessed:

- ✓ **Executive Functions:** Focusing, planning, organizing, monitoring, inhibiting, and self-regulating
- ✓ **Communication and Language:** Perceiving, receiving, and expressing self with language and nonverbal communication
- ✓ **Memory:** Auditory memory, visual memory, working memory, and long-term memory
- ✓ **Sensormotor Functions:** Sensory and motor functions, including hearing, touch, smell, and fine and gross muscle movements
- ✓ **Visual-Spatial Functions:** Visual perception, visual motor coordination, visual scanning, and perceptual reasoning.
- ✓ **Speed and Efficiency:** How fast and how efficient thinking is

## *Keeping Them Honest*

An important tip that a psychologist doesn't typically find out about in graduate school is that not everybody coming in for an evaluation or assessment is honest. What? No way! Hard to believe, maybe, but it's true. Unfortunately, some people who seek a psychological assessment and evaluation, or have been ordered to get it, engage in what psychologists call dissimulation and malingering.

*Dissimulation* in assessment occurs when a client conceals, distorts, and alters his true abilities, concerns, and other characteristics for various motives. Dissimulation is deception. Within the assessment context, a person

may dissimulate by concealing or distorting some deficit or disorder by “faking good” or “faking bad.” *Malingering* is a “faking bad” process in which a person deliberately feigns, fakes, or exaggerates symptoms or deficits.

Why would someone want to “fake good” when getting a psychological assessment or evaluation? This most often occurs when the results of the psychological assessment are being used for some sort of selection or screening process such as employment, background check, parenting evaluation in a divorce proceeding, or risk assessment.

When I worked in forensics (see the free online article "Exploring Human Differences: Culture, Gender, and Sexuality" at [www.dummies.com/extras/psychology](http://www.dummies.com/extras/psychology) for details on forensic psychology), one of the duties I performed was to assess the violence risk of prison inmates convicted of serious violent crimes who were approaching a parole evaluation. My job was to estimate how likely it was that an individual would commit more violent crimes or offenses if freed. My evaluation played a big part in whether an inmate was granted parole, so these people had plenty of incentive to present themselves as a low risk and "fake good."

On the other side, why would anybody want to make herself seem to be mentally ill? Plenty of reasons exist for presenting such a picture, but most often it's for money. A common “faking bad” scenario is when a person tries to demonstrate an inability to hold down a job and therefore qualify for compensation without working (such as Social Security benefits) during an employment disability evaluation.

It's not all just about money, though. When someone's arrested and accused of a crime, she can sometimes get away with a lighter punishment — or even be found not guilty — if a mental disorder is to blame. This is a gamble that some accused people are willing to make, and “faking bad” is the road to take.



The bad news for the dissimulators and malingerers out there is that psychologists have tools, methods, and specialized techniques of evaluation and assessment that are specifically designed to sniff out deception, poor effort, exaggeration, and dishonesty. Many test

instruments themselves have built-in components and scales to measure dishonesty factors. Special interview techniques and lines of questioning can help with this as well. In fact, in the business of forensic assessment, there is good money to be made on being an expert in picking out the fakers, and these professionals pride themselves on being able to detect deception.

## **Chapter 16**

# **Changing Behavior, Changing Thinking**

---

## ***In This Chapter***

- ▶ Learning better behaviors
- ▶ Thinking better
- ▶ Combining two approaches
- ▶ Being mindful and accepting yourself
- ▶ Balancing behavioral, cognitive, and mindfulness approaches

There are few things in life that I hate more than shopping for a car. If I'm looking for a blue two-door, compact pickup, the salespeople show me a white four-door model. If I want a sports car with front-wheel drive, they show me the latest, greatest, four-wheel-drive sports utility vehicle. I walk onto the lot thinking I know what I want, but somehow I leave thinking that I want something different.

Now imagine a similar experience in the context of going to a therapist. Mr. Ramirez is having marital problems, and one of his children is acting up at school. He knows that he wants help with his marriage and his child. But, when Mr. Ramirez meets with the therapist, something strange happens. He wants to talk about his marriage, and the therapist wants to talk about his childhood. He wants to talk about his kid, and the therapist wants to talk about his dreams. This guy may walk away from the encounter with “car-shopping disorientation disorder,” not knowing which way is up and what he really came to therapy for.

Jay Haley criticized therapy approaches that seem to ignore a patient's real concerns and insist that her real problem is something else that's related to some underlying or hidden issue waiting to be uncovered and analyzed. Psychoanalysts, for example, may be criticized as seeing the unconscious as the cause of any problem, even if it's fear of flying. “The power of the airplane and your fear of flying represent your father and an unresolved Oedipal complex.” Say what? Do I really need seven years of psychoanalytic therapy to get over my fear of flying? I'd rather take the bus.

This chapter introduces two general classes of therapy that can probably pass the “Haley test.” *Behavior therapy* and *cognitive therapy* and combined iterations of the two are very widely used forms of therapy that have a



simpler (but not simplistic) view of psychological problems. Behavior therapy focuses on behavior. Pretty simple, huh? So, if Mr. Ramirez went to a behavior therapist, the focus would be on the behaviors occurring within his marriage. Cognitive therapy focuses on thoughts, so a cognitive therapist would focus on the thoughts that Mr. Ramirez is having about his marriage and his kid. These approaches take a simpler and less mysterious approach to patients' difficulties than psychoanalysis, for example.

## ***Weeding Out Bad Behavior with Behavior Therapy***

*Behavior therapy* emphasizes the current conditions that maintain a behavior, the conditions that keep it going. This form of therapy focuses on the problem, not on the person. A psychology professor who I once had, Elizabeth Klonoff, likened behavior therapy to a weed-pulling process. She stated that psychoanalysts attempt to pull the weed up by its roots so that it'll never come back, but behavior therapists pluck the weed from the top, and if it grows back, they pluck it again. Of course, this makes behavior therapy sound more inefficient than it actually is. The idea is that in behavior therapy the developmental or childhood origins of a problem are not necessarily as important as the conditions that keep it going. In that sense, if you change the maintaining conditions of a behavior, then you have in essence "uprooted it," as long as those conditions don't recur. For example, who cares how you started smoking? The important part is the factors that keep you smoking.

## Basing therapy on learning theories



All behavior is learned, whether it's healthy or abnormal. Behavior therapy is based on the learning theories of Ivan Pavlov's classical conditioning, B. F. Skinner's operant conditioning, and Albert Bandura's social learning theory. Here's how these theories understand learning (see [Chapter 9](#) for details):

- ✓ In the classical-conditioning sense, *learning* refers to associations formed between events or actions.
- ✓ In the operant-conditioning sense, *learning* refers to the process of increasing the likelihood of a behavior occurring or not occurring based on its consequences.
- ✓ In the social learning theory sense, *learning* refers to discovering things by watching other people.

These days, it's pretty hard to argue that smoking is not bad for a person's health. I think most people now accept the unhealthy aspects of smoking as fact, but some just choose to ignore this information. Smoking is a good example of an unhealthy behavior that is learned. Cigarette advertisements associate sexy people and having fun with smoking (classical conditioning). Nicotine gives a pleasurable, stimulating sensation (operant conditioning). Teenagers sometimes learn to smoke by watching their parents, older siblings, or peers smoke (social learning theory).

## ***Classical conditioning and behavior therapy***

Behavior therapy treats abnormal behavior as learned behavior, and anything that's been learned can be unlearned — theoretically anyway (see [Chapter 13](#) for info on abnormal behavior). A key feature of behavior therapy is the notion that environmental conditions and circumstances can be explored and manipulated to change a person's behavior without having to dig around their mind or psyche and evoke psychological or mental explanations for their issues.

A classic case cited by proponents of behavior therapy to support this approach is the case of *Little Hans*. Little Hans was a boy who was deathly afraid of horses. A lot of children like horses, so his fear seemed at least a little strange. Why was Hans afraid of horses? According to psychoanalysis a mental or psychological explanation was that Hans's fear of horses was a displaced fear of his powerful father. The behaviorists had a simpler explanation.

Hans had recently witnessed a number of extremely frightening events involving horses. On one occasion, he saw a horse die in a carting accident. This event made Hans very upset, and it scared him. The behaviorists proposed that the fear Hans developed from watching the horse die and from witnessing the other frightening, horse-related events had become classically conditioned to horses. He had associated fear with horses.



Remember how classical conditioning works? Here's a little summary, but check out [Chapter 8](#) for details.

Unconditioned Stimulus (Accident) → Unconditioned Response (Fear)

Conditioned Stimulus (Horse) + Unconditioned Stimulus (Accident) → Unconditioned Response (Fear)

Conditioned Stimulus (Horse) → Conditioned Response (Fear)

What do you get? Fear of horses à la classical conditioning. The beauty of this explanation comes from its implications for treating Little Hans's horse phobia. According to behavior therapists, if he learned to be afraid of horses, he could learn how not to be afraid of horses. This type of result can be

accomplished with a behavior therapy technique called *systematic desensitization*, which I cover in the [Exposure-based therapies](#) section later in this chapter.

## ***Operant conditioning and behavior therapy***

What about operant conditioning? What role does it play in behavior therapy? Take a look at anger, for example. If I get my way every time I get angry, I'm being positively reinforced for that behavior; therefore, I'm more likely to keep using anger in this way. This is a common explanation for a child's behavior problems. If a child behaves in a manner that is not acceptable, her parents may be inadvertently reinforcing that behavior by providing attention to her that they may not provide in any other way.

An example of a negatively reinforced behavior is seen when an individual gives in to peer pressure. The ridicule a teenager endures for not going along with the crowd can be hurtful. He may give in to peer pressure just to put a stop to the ridicule (the removal of a painful stimulus).

Having a difficult time being assertive is a great example of a behavior, or the lack of that behavior, that is maintained through punishment. If I live in a home where I'm laughed at or otherwise punished for being assertive and speaking my mind, I'm far less likely to be assertive in other situations. I've been punished for being assertive. Lacking assertiveness can be a serious problem, and it often leads to feelings of victimization and resentment.

Behavior that is reinforced is more likely to happen again and again. If my angry outbursts for a sandwich get rewarded with a sandwich then I'm just going to keep on yelling. If my child's tear-ridden tantrums get him out of homework then I can expect a tantrum each time the books get cracked. If I try to talk about my feelings with my parents and they ignore me, I'm going to keep those feelings to myself. If I'm punished for speaking my mind, then I'll keep those thoughts to myself. Simply put, you get behavior that you reward; you don't get behavior you don't reward (or punish).

## ***Social learning theory and behavior therapy***

Humans learn by watching other people. A common problem in marriages involves fighting over money. This is sometimes a consequence of watching our parents fight over money, engaging in nonproductive, emotionally hurtful, and frustrating exchanges over who's to blame for spending too much or not earning enough, for example. *Modeling* is a form of behavior therapy that is used to teach people new behaviors by showing them how to behave in a healthier way. I may ask the husband begin a conversation with me about money and I can model, or show, the couple how to discuss money in a

healthier manner. This only works, however, if the therapist knows how to model healthy behavior!

## Behavior therapy, behavior modification, and applied behavior analysis

Broadly speaking, therapy conducted using the principles of classical and/or operant conditioning without particular concern for psychological or mental explanations is considered *behavior therapy*. Behavior therapy has also been called *behavior modification (B-Mod)* and is also known as *applied behavior analysis (ABA)*. In many ways B-Mod and ABA are the same exact thing, therapeutic interventions that alter behavior through the application of the principles of classical and operant conditioning.

Honestly, not being a historian or sociologist, I am not exactly sure how the concepts of B-Mod and ABA became known as they did in their separate forms. As both an undergraduate and graduate student in California, I was always taught B-Mod but later on in my career I was exposed to ABA. As far as I can tell, different psychologists, researchers, and therapists in different parts of the country at different times in the 20th century developed different names for essentially the same therapy approach. Keep in mind that hard-core practitioners of ABA may suggest that ABA is a more comprehensive approach to behavior change that includes a specific set of data collection techniques, data recording, and applications beyond clinical psychology such as employee behavior in the workplace. Another thing that may, in fact, set ABA apart is that at its outset, it was specifically concerned with problem behavior such as aggression and self-injurious behavior that you often see in individuals who suffer from developmental disabilities, intellectual disability, or autism (for more on autism see [Chapter 13](#).) Ultimately, however, I believe it really boils down to the old, “You say “to-mah-to,” I say “to-may-to.” So, you say ABA, I say B-Mod.

## Assessing the problem



The simplicity of the behavioral approach to psychological problems is made possible with an equally simplified (but not easy!) set of practices. Behavior therapists put a lot of emphasis on the scientific method and its focus on observable changes and measurement. The therapy techniques and activities are well planned out, highly structured, and systematic. The therapist is viewed less as a holder of some divine truth and more as a collaborative partner in the behavior-change process. The patient is expected to pull his own weight outside of therapy, as well as in the therapy session itself, by completing homework assignments designed to change behavior in the real world and to further the progress made during each session.



In keeping with a systematic and scientifically based approach to psychological disturbance, behavior therapists begin by conducting a thorough assessment of the patient's problem. Here's a simple outline of the basic steps of *behavioral assessment*:

### 1. Identify the target behavior.

Step one involves taking a thorough look at the problem the patient originally presents to the therapist. Behavior therapists use a special technique called an *ABC analysis* to analyze the initial problem. The ABC analysis is an evaluation of the events that happen before, during, and after a *target behavior* (the patient's problem behavior).

**A.** A stands for the *antecedents* of a particular behavior, the things or events that happen just prior to the target behavior. A common problem that behavior therapists encounter involves couples that argue excessively, so it serves as a good example. The particular antecedents of interest in the case of such a couple may be the time, place, and surrounding circumstances that immediately precede each argument.

**Time:** When each of them gets home from work

**Place:** Dinner table

**Circumstances:** Talking about each other's day at work

**B.** *B* stands for behavior, as in the target behavior. In the case of the bickering couple, the target behavior is the act of arguing, itself.

**C.** *C* stands for the *consequences* of the behavior, or the events and general circumstances that occur after and are a direct result of *B*. In the case of the arguing couple, the *Cs* may be that both individuals get mad and stomp off, the man goes out for a drive, or the woman leaves the house to take a long walk.

## **2. Identify the present maintaining conditions.**

Spiegler and Guevremont define the *present maintaining conditions* as those circumstances that contribute to the perpetuation of the behavior.

They identify two specific sources:

- **Environment:** Conditions from the environment include time, setting, reactions from others, and any other external circumstances. This would be the who, what, when, where, and how of our arguing couple.
- **Patient's own behavior:** The patient's contribution includes his or her thoughts, feelings, and actions. This would be what each partner is thinking, feeling, and doing before, during, and after the arguments.



## Exploring functions and outcomes

*Functional Analysis of Behavior (FAB)* is a more formal version of the behavioral assessment process. FAB (or FBA as some people call it) involves a specific approach to ascertaining the *function* of a particular behavior as it relates to the ultimate outcome it accomplishes. A behavior results in something happening and that something is the driving force behind the behavior. A child throws a tantrum because it works in accomplishing something for that child, maybe escape from the dreaded shopping trip with grandma. So the function of the tantrum is to escape the store.

The following are the most typical functions of behavior identified in an FAB:

- ✓ **Access to tangible rewards:** Hitting gets me the toy I want.
- ✓ **Escape or avoidance of aversive stimuli:** Screaming gets me out of doing chores.
- ✓ **Attention from others:** Calling you names gets you to pay attention to me.
- ✓ **Automatic reinforcement:** Scratching my skin relieves the itch.

After the patient and therapist figure out the function of the behavior, the therapist can formulate an intervention that may involve helping a person ascertain the desired function in a more appropriate manner, such as talking quietly instead of screaming.

### 3. Establish the specific goals of therapy in explicit terms.

The original therapy goal may be to stop arguing. However, this description is a little too vague for a behavior therapist's liking. A more precise measure of the target behavior may consist of identifying specific numbers, occurrences, or lengths of time of the arguments. So, instead of the couple simply trying to stop fighting, a more fitting target behavior is to reduce their fighting to once a week.

## *Trying different techniques*

Two of the nice things about behavior therapy for both the patient and the therapist are its clarity and structure. Behavior therapists can use a variety of highly structured treatment techniques to approach their patients' problems. Spiegler and Guevremont identify three classes of behavior therapy techniques: reinforcement-based therapy, decelerating therapy and extinction, and exposure-based therapy.

### *Reinforcement-based therapy*

Reinforcement-based techniques of behavior therapy are based on the principles of operant conditioning, specifically the use of positive reinforcement.



### **Bribing for basic school skills**

I worked with autistic children by using applied behavior analysis, and one of the most challenging aspects of the therapy was finding reinforcers. The treatment consisted of using reinforcement to increase the children's functional behaviors, such as communicating, socializing, playing, and learning basic school skills (recognizing letters, numbers, and colors, for example). The process consisted of teaching the target behaviors and reinforcing the children when they successfully performed them. But if the reinforcers had no reinforcing value, forget it.

Some children liked certain kinds of food or candy, so that's what was used for them. Some liked certain toys or other objects, so those items were used too. If it improved their functioning, it was used. Some days, candy worked; other days it was toys. One child liked it when I pretended to bonk my head on the table, so I used that as a reinforcer. Hey, whatever works, right?

You may be thinking that all of this sounds like bribery. It is in a way. Sure, I bribed the kids to perform the goal behaviors, but think about the alternative. If I didn't use reinforcement, the kids wouldn't have learned these skills that have the power to improve the quality of their lives. I'd choose bribery over neglect any day.

After a thorough behavioral assessment, the therapist and the patient(s) follow these steps when participating in reinforcement-based therapy:

#### **1. Identify a list of reinforcers to be used in the therapy.**

This is a crucial process. Anything that's likely to increase the probability

of a desired behavior occurring again can be used as a reinforcer.

**2. Determine how and when to administer the reinforcers.**

Continuous reinforcement is the best way to get a quick jump on changing a behavior. Continuous reinforcement involves the patient receiving reinforcement every time she performs the target behavior. When the patient begins to consistently perform the new behavior, the reinforcement can be *faded* and only given once in a while, even randomly. This is the best way to keep a behavior going.

**3. Begin shaping.**

*Shaping* is a procedure in which successful approximations of the target behavior are reinforced in order to *shape*, move, or guide the patient toward the desired target behavior.

If the problem is studying and the target behavior has been identified as studying two hours a night without interruption, the student may be reinforced after studying for increasingly longer intervals leading up to the two-hour mark (20 minutes, then 30 minutes, then one hour, and so on) during the shaping process.

**4. Create a formal contract that outlines all of the agreed-upon features of the treatment plan and clarifies when, how, and where the target behavior is to occur.**

**5. Conduct periodic reassessments throughout treatment to monitor the patient's progress toward the goal.**

Adjustments are made, as necessary, in the reinforcement procedures.

**6. End therapy.**

When the patient achieves the target behavior and maintains it for the desired length of time, therapy ends.

## ***Deceleration and extinction therapies***

Never cry wolf — most of us are familiar with this ancient warning. If I yell out for help too many times when I don't need it, I won't get help when I really do need it. But how long does it take for people to realize that I'm full of it? Don't they know that I only keep crying wolf because they keep running to help? Basically, their response reinforces my crying-out behavior. It's all their fault! All they have to do is ignore my pleas and stop running to my aid. That'll get me to stop.

### **Collect your tokens, win a prize!**

One of the more advanced forms of reinforcement-based therapy is the creation of a token economy. A *token economy* is a structured system of reinforcement that uses *tokens*, symbolic reinforcers that represent more tangible reinforcers, to increase the likelihood of a target behavior occurring. The best example of a token is money. Money in and of itself is useless, except maybe for the paper it's printed on. (The paper can start a nice fire or be used as pillow stuffing.) The power of money comes from what it can bring us or what it represents — the ability to purchase tangible goods.

Token economies are often used in situations that require individuals or groups to follow a particular set of instructions or rules. Patients in a psychiatric hospital, for example, are often given points or other tokens for following institutional rules or performing one of their patient-specific target behaviors. In many cases, these tokens can be redeemed once a week at a snack or gift exchange. Some systems use tokens to help patients work toward leaving the hospital on small trips or excursions with the eventual goal of discharge in mind. This form of therapy is an excellent example of shaping.

The process of withholding or eliminating reinforcement, thus eliminating the response, is known as *extinction*. A long time ago, behaviorists figured out that a behavior stops when reinforcement stops.



Spiegler and Guevremont classify treatments that utilize the phenomenon of extinction as *deceleration therapies*. When the reinforcer that maintains a behavior is either withdrawn or withheld, the behavior eventually extinguishes. Deceleration therapy is conducted in much the same way as reinforcement-based therapy: Target behaviors and reinforcing conditions are identified. The main difference between

the therapies is that reinforcers are withheld instead of given.

One of the best-known examples of deceleration therapy is the dreaded *time out*. Time out has become one of the most widely used disciplinary techniques by parents. The idea behind time out is that the undesirable target behavior of a child (or anyone for that matter) is being maintained by either the reinforcing social attention the child receives as a result of the behavior or some other reinforcer inherent in the situation itself, such as getting a toy away from another child.

When little Johnny performs the target behavior, he's taken to a designated time-out area, thus removing him from whatever reinforcers are present in the situation. Also, no potential reinforcers should be present in the time-out area that could provide the child with reinforcement while on time out.



## Time-out tips

I've heard a lot of parents say that time out doesn't work, but I often wonder if they're actually doing it right. Spiegler and Guevremont point out four conditions that help make time out more successful:

- ✓ Time-out time periods should be brief (five minutes or less), and the child should know how long the time period will last. A lot of parents leave their children in time out for too long. Younger children only need about one minute of time out for every year of their age — 4 years old: four minutes. Simple.
- ✓ No reinforcers should be available during the time-out period. Using the playroom as a time-out area is not recommended. That's like suspending a kid who hates school to begin with. Thanks!
- ✓ Time out should end when the time is up and the child is behaving appropriately. If he or she is still acting up, extend time out for another designated time period.
- ✓ Time out shouldn't be used by kids as an escape to get out of doing things that they didn't want to do in the first place. It requires some skill to determine when a child is manipulating the use of time out for this purpose. If children attempt to pull this trick, make them do whatever they were trying to avoid when they get out of time out.

## *Exposure-based therapies*

There are several different types of therapy known as *exposure-based therapies* that involve “exposing” a target behavior to new conditions in order

to reduce its occurrence. *Exposure* is another word for reassociating or relearning a target behavior with another behavior that results in the cessation of the target behavior.



Have you ever tried to smoke a cigarette while in the shower? It's pretty hard to do. I once worked with a guy who managed to come up with a way to pull it off. (Interested? Sorry, I won't support that habit by giving you the details.) Anyway, I'm guessing that most of us find that smoking and water don't mix. These two actions are incompatible. Finding a behavior that interferes with a target behavior is a good way to stop the target behavior from occurring.

There are different therapy techniques that make use of this incompatibility concept. When two behaviors occur at the same time, the stronger behavior prevails. Water always wins over cigarettes. The behavior-therapist jargon for this concept is *reciprocal inhibition* or *counterconditioning*. Therapy that makes use of reciprocal inhibition or counterconditioning is designed to weaken the classically conditioned, negative target behavior. When you expose cigarettes to water, smoking is pretty hard to pull off. *Counterconditioning* is the operative mechanism of all exposure-based therapies.



Perhaps the best way to explain how counterconditioning drives exposure therapy is to talk about one of the most popular forms of exposure therapies, *systematic desensitization (SD)*. SD is most commonly used to treat phobias, like fear of public speaking, social phobia, or some other specific phobia. Therapists have also used it to successfully treat panic disorder accompanied by agoraphobia. There are several types of exposure-based therapies based on the systematic desensitization principle:

✓ **Covert sensitization (imaginal exposure):** The “learning” or associating is only occurring in the patient’s mind and not in real life.

The procedures that Wolpe and Jacobsen developed are very similar. Therapists teach patients how to enter a state of deep relaxation. Then they ask the patients to imagine themselves in the fear-producing, phobic

situation, while maintaining their state of relaxation. When a patient's anxiety level gets too high, the therapist asks the patient to let go of the image and continue to just relax.

When this process is repeated over and over again for several sessions, the fear response to the situation is diminished because the state of relaxation is competing with the original fear of the situation or object. Instead of fear, the patient now associates relaxation with the fear-inducing situation or phobic object.

✓ **Graduated-exposure therapy:** When a patient learns to perform his feared behavior in a real-life situation, he or she is engaging in *in vivo sensitization*. Usually, this form of desensitization is done gradually, hence its name. If I'm afraid of flying, my therapist may start with me watching movies about flying (of course these should be movies about flying that don't include a crash or some kind of airline disaster). Then I'd go to the airport; then I'd sit in the terminal; then go on an airplane. There's a gradual move toward the eventual goal of flying, but not until I've done a lot of preparatory work and discovered how to relax during subsequent stages.

✓ **Flooding:** This form of therapy involves exposing a patient to his or her fear-inducing situation or object for a sustained and prolonged period of time. The patient's anxiety goes through the roof, so this can kind of sound like torture. If you're afraid of snakes, jump into a tank full of them. You'll either die or get over your fear of snakes! There's no gradual exposure here. Just jump into a pit of snakes and get over it already!

It gets better! The patient is not only exposed to his worst fears, but he's prevented from running away, leaving, or engaging in whatever escape behavior he's typically used in the past to avoid the fear. This is called *response prevention*.



Flooding sounds horrible, but it's actually one of the most powerful forms of behavior therapy. If a patient trusts her doctor, it can be a quick way to get over some powerful and debilitating phobias. It may seem cruel, but patients must consent to all treatment, and typically, people aren't forced to go to any kind of therapy, unless it's by the courts. (For

more on the role of therapy in the criminal justice system, see [Chapter 14.](#))



## Getting in good with germs

A good example of flooding (see the [Exposure-based therapies](#) section in this chapter) comes from treating people with germ phobias. Let's say that I was afraid of germs and catching diseases from trash cans. I managed to fill my entire apartment with garbage because I was too afraid to touch the trash in order to take it out. It was getting pretty rank in there, and my landlord was threatening to evict me. Luckily, I found a good behavior therapist in the neighborhood, and he agreed to help me.

When I met the therapist, he told me that he was going to do the therapy in my apartment. I thought that was pretty cool. When the therapist showed up, he explained that he was going to cure me of my germs-from-trash phobia. He pointed out a pile of trash and told me to jump in it. "Say what?" I said. "You heard me," he replied, "jump in it!" The rest is history. I jumped in the pile of trash and began to roll around. After my garbage swim session, the therapist refused to let me take a shower until the next day. I complied, and I no longer fear trash.

Keep in mind that this is not a true story, and it's a pretty extreme example of flooding, but it's not that far from the truth. Therapists who use flooding ask their patients to completely expose themselves to the things they fear the most. Believe it or not, it actually works!

## *Applying Some Soap to Your Mind with Cognitive Therapy*

Alcoholics Anonymous uses the term "stinking thinking" to describe the kinds of thoughts that a recovering alcoholic has when he thinks negatively and contemplates taking a drink. The simplicity of this statement should not be mistaken for a lack of wisdom. The power of thought should never be underestimated.

*Cognitive therapy* is a popular and well-researched form of psychotherapy that emphasizes the power of thought. From the perspective of cognitive therapists, psychological problems such as interpersonal difficulties and emotional disorders are the direct result of "stinking thinking." In other words, maladaptive thought processes or cognitions cause these problems. "Stinking thinking" can have a tremendous impact on our psyche because people analyze and process information about every event that occurs around them and their reactions to all of these events. Maladaptive thinking can go something like this:

**A** (losing my job) → **B** (my thoughts about getting fired) → **C** (my emotions and subsequent and more exaggerated thought processes about the event)



People's reactions are the product of how and what they think about a situation or event. In many situations, such as the experience of loss, an insult, a failure, or encountering something scary, it's only natural to feel some negative emotion. Negative reactions are not necessarily abnormal. It's only when emotional and behavioral reactions become extreme, fixed, and repetitive that people start down the path of psychological disturbance.

## Exploring distorted thinking

Sometimes thinking can be biased or distorted, and this can get people into trouble. Cognitive therapy approaches reality from a relativistic perspective: An individual's reality is the byproduct of how he or she perceives it. However, cognitive therapists don't view psychopathology as simply a consequence of thinking. Instead, it's the result of a certain kind of thinking. Specific errors in thinking produce specific problems.



If you lost your job, it would be natural to think, "I need to find another job." But you would be distorting reality if you thought, "I'm never going to find a new job." This kind of pessimistic thinking is bound to produce a stronger than usual negative emotional reaction. There's a world of difference between "I need a new job" and "I will never get another job."



### Peale is so positive

Norman Vincent Peale's *The Power of Positive Thinking* (Ballantine Books) is now one of the most famous self-help books on the market. Peale's basic idea is that positive thinking produces positive results in people's lives. He believes that our thoughts play a central role in the production and maintenance of behavior.

Aaron Beck identified six specific cognitive distortions that lead to psychological problems:

✓ **Arbitrary inference:** This distortion occurs when someone draws a conclusion based on incomplete or inaccurate information. If a couple of scientists are asked to describe an elephant, but all they can see of the elephant is what's visible through a small hole in a fence, each scientist's elephant description will probably be different. One scientist looks through the hole and sees a tail. Another looks through and sees a trunk. The first scientist describes an elephant as an animal with a tail, and the other says that it's an animal with a trunk. Neither one of them has the

complete picture, but they both think that they know the truth.

- ✓ **Catastrophizing:** My grandmother used to refer to this distortion as “making a mountain out of a molehill.” Beck defined it as seeing something as more significant than it actually is.
- ✓ **Dichotomous thinking:** Most of us know that thinking only in terms of black and white, without considering the gray areas, can get us into trouble. When I categorize events or situations into one of two extremes, I’m thinking dichotomously. While working in prisons, I’ve found that inmates often separate people into two groups — friend or foe. “If you’re not my friend, you’re my enemy.”
- ✓ **Overgeneralization:** “My boyfriend dumped me; no one loves me.” This is an example of overgeneralization — when someone takes one experience or rule and applies it across the board to a larger, unrelated set of circumstances.
- ✓ **Personalization:** One of my favorite movies is *Tempest*, the 1982 movie directed by Paul Mazursky starring John Cassavetes, Gina Rowlands, and Susan Sarandon. Toward the end of the movie, the main character thinks that he summoned a storm that capsized his enemies’ boat. Personalization occurs when someone thinks an event is related to him or her when it actually isn’t.
- ✓ **Selective abstraction:** I once knew a guy in college who believed that women always laughed at him when he walked by them on campus. Little did he know that most of the women probably didn’t notice his existence. They were most likely laughing at a joke or some other funny situation that had nothing to do with him. He arrived at a conclusion by taking their behavior out of context.

The theory underlying cognitive therapy is beautiful in its simplicity. If psychological problems are the products of errors in thinking, therapy should seek to correct that thinking. This is sometimes easier said than done. Fortunately, cognitive therapists have a wide range of techniques and a highly systematic approach at their disposal.

## Changing the way you think

The goal of cognitive therapy is to change biased thinking through logical analysis and behavioral experiments designed to test dysfunctional beliefs. Many thinking errors consist of faulty assumptions about oneself, the world, and others. Cognitive therapy usually goes something like this:

- 1. The therapist and patient perform a thorough assessment of the patient's faulty beliefs and assumptions and how these thoughts connect to specific dysfunctional behaviors and emotions.**



Christine Padesky and Dennis Greenberger, in their book *Mind Over Mood* (Guilford Press, 1995), provide the patient with a system for identifying these thinking errors, which cognitive psychologists commonly call *automatic thoughts* — thoughts that occur automatically as a reaction to a particular situation. The patient is asked to keep track of specific situations that occur between therapy sessions and to identify and describe in detail his reactions to those situations.

- 2. The therapist and patient work together, using the automatic thought record, to identify the cognitive distortions mediating between the situations and her reactions.**

This often-difficult process can take anywhere from several weeks to several months, but at the end of the process, the distortions have been thoroughly identified.

- 3. The therapist and patient work collaboratively to alter the distorted beliefs.**

The therapist and patient collaborate in a process of logical refutation, questioning, challenging, and testing of these faulty conclusions and premises. This effort attempts to make the patient a better thinker and break him of the habit of poor information processing.



## Depressing thoughts

One of the best-known applications of cognitive therapy comes from Aaron Beck's *cognitive*

*therapy of depression.* Beck proposes that depressive symptoms, such as a sad mood and a lack of motivation, are the result of cognitive distortions based on three very specific beliefs that the patient holds about himself, the world, and the future. Beck called these beliefs *depressogenic assumptions*, and they exist in a *cognitive triad*. The cognitive triad of individuals suffering from depression consists of the following basic beliefs:

- ✓ I am inadequate, deserted and abandoned, and worthless.
- ✓ The world is an unfair and harsh place. There's nothing in it for me.
- ✓ There is no hope for the future. My current troubles will never go away.

These beliefs interfere with reasonable and healthy adaptation and information processing concerning events in the patient's life. The challenge for both the patient and therapist is to come up with ways to identify, challenge, and alter these beliefs in order to reduce their impact on the patient's emotions and motivations.

## *Playing Together Nicely: Behavior and Cognitive Therapies*

Albert Ellis was the founder of a combined form of therapy that borrows from both behavior therapy and cognitive therapy. *Rational emotive behavior therapy*, or REBT, is built on the premise that psychological problems are the result of irrational thinking and behavior that supports that irrational thinking; therefore, they can be addressed by increasing a patient's ability to think more rationally and behave in ways that support more rational thought.



Ellis is a charismatic psychologist whose style and personality accentuate the main ideas of REBT. Rational emotive behavior therapists believe that most of our problems are self-generated, and that people upset themselves by clinging to irrational ideas that don't hold up under scrutiny. The trouble lies in the fact that many people don't scrutinize their thoughts very often. People make irrational statements to themselves on a regular basis:

"I can't stand it!"

"This is just too awful!"

"I'm worthless because I can't handle this!"

These are examples of irrational thinking. Rational emotive behavior therapists define these statements as irrational because they argue that people can actually handle or “stand” negative events. These events are rarely, if ever, as bad as people think they are. Also, people often hold themselves to rules of “should” that increase their guilt for being overwhelmed, sad, anxious, and so on. “I shouldn’t get angry.” “I shouldn’t care what she thinks.” “I shouldn’t worry about it.” Ellis used to call this “shoulding all over yourself.” REBT therapists vigorously challenge statements like these.



The challenging posture of REBT should not be taken as harsh or uncaring. REBT emphasizes the same levels of empathy and unconditional acceptance as many other therapies. REBT therapists are not necessarily trying to talk patients out of feeling the way that they feel. They’re trying to help patients experience their emotions in a more attenuated and manageable fashion. There are healthy levels of emotion, and then there are irrational levels of emotion. The goal of therapy is to help the patient learn how to experience her emotions and other situations in this more rational manner.

The behavior-therapy aspects of REBT involve the patient engaging in experiments designed to test the rationality or irrationality of his beliefs. A therapist may ask a patient who is deathly afraid of talking to strangers to approach ten strangers a week and strike up a conversation. If the patient originally thought that he was going to die from embarrassment, the therapist may begin their next session with, “Nice to see you. I guess talking to strangers didn’t kill you after all, did it?”

REBT takes the position that two approaches can bring about changes in thinking — talking with a therapist and rationally disputing irrational ideas, and engaging in behaviors that “prove” irrational ideas wrong. Ellis states that people rarely change their irrational thinking without acting against it. Their thinking won’t change unless their behavior changes.

## ***Being Aware with Acceptance and Mindfulness-Based Therapies***

Therapy is certainly about change. Change your behavior. Change your thinking. Behavior and cognitive therapies are consistent with this. But change is hard, right? I've failed at change and I'm pretty certain you know somebody who has as well. Change is a multibillion dollar industry. Just peruse the "self-help" section of the local bookstore. But what do you do with all this failure to change? How can you change your failure to change? This is exhausting to write about, let alone live with.

Luckily, a group of therapies classified broadly as "acceptance and mindfulness-based" therapies have been developed that put the issue of change front and center. At the core of these therapies is the concept of *acceptance*, defined within the therapies as helping patients stop struggling with the change process and helping them experience their lives, emotions, thoughts, and behavior in a direct, nonjudgmental, open-minded, and accepting manner. Two well-researched and popular forms of acceptance and mindfulness based therapies are *ACT (acceptance and commitment therapy)* and *MBCT (mindfulness-based cognitive therapy)*.

According to these therapies, a patient's lack of acceptance of his life, emotions, history, and so on is part of the problem; it is part of the pathology for which they visited a therapist for in the first place. Rather than change behavior as in behavior modification or thoughts as with cognitive therapy, there is an emphasis on changing the way a patient approaches his behavior, thoughts, and so on. A patient is changing the way he views and interacts with his issues, history, and problems. It's kind of like stepping back, or stepping away for a different perspective, a nonjudgmental perspective.

The *mindfulness* component involves being aware of the real and present moment and staying open to the ongoing thoughts, sensations, and feelings without trying to change, alter, or modify them. Facing these things with acceptance and mindfulness is therapeutic. Stephen Hayes, a key developer of ACT, states that certain aspects of how human language works results in avoidance, rather than acceptance and mindfulness. People "talk" to themselves and about themselves, others, and the environment in ways that lead to avoidance and a lack of acceptance.

But it isn't all about acceptance. A key decision point for therapists is whether and when to help patients accept or change at any given point or with any given situation. This decision is based on evaluating situations or circumstances using two criteria, changeability and justifiability:



✓ **Is the situation changeable?** If something is not changeable, such as the death of a loved one, then focusing on changing that situation would not lead to psychological health. If a situation is changeable, such as whether or not you can stop drinking soda, then it should be a focus of change. Change what can be changed, accept what cannot. Can anyone say *Serenity Prayer*?

✓ **Is the reaction justifiable?** The “justifiable” aspect of a patient’s thinking, emotions, or behavior involves an analysis of whether or not a patient’s reactions are in proportion to and related to an actual event or situation or if they are out of line or overreactions. If a reaction is not justified, then solving the problem that triggered the reaction doesn’t make sense because there was no real problem to solve, just an overreaction. If the situation or circumstance is changeable, then change it; if not, then adopt an accepting attitude toward it. If your reaction is justifiable, then accept your reaction or change your reaction. If it is not a justifiable reaction, then just accept the reaction, nonjudgmentally and mindfully.

## ***You’re Okay, Now Change: Dialectical Behavior Therapy***

*Dialectical behavior therapy*, the brainchild of Dr. Marsha Linehan, is a therapy approach that combines the behavioral, cognitive, and mindfulness approaches. DBT was originally developed for individuals diagnosed with borderline personality disorder who were engaging in self-injurious behavior (such as cutting themselves) and who were at high risk for suicide. Since its inception, however, DBT has been used with a much wider range of problems and patients and is considered one of the most well researched and empirically based therapies in clinical psychology.

DBT is considered a very comprehensive intervention that includes individual therapy and a range of consultative approaches to a client’s problems and skill-building approaches (such as social skills training). In many of its behavior and cognitive approaches, it’s not necessarily all that unique from other behavior and cognitive approaches. One aspect that certainly sets DBT apart, however, is the inclusion and centrality of acceptance and mindfulness components.

A key acceptance and mindfulness feature of DBT is found in the name of the therapy itself, *Dialectic*. Dialectic refers to the broad concept that reality is interconnected, made up of opposing forces and forms, and dynamic and constantly changing. A dialectic view of things would hold that something can be two seemingly contradictory things or in two contradictory states at the same time. A patient can both want to change and not want to change at the same time. The central dialectic in DBT is focused on the opposing forces of acceptance and change. Patients are taught how to change and are expected to change but are also taught how to and are expected to work on acceptance of themselves, their past, and the world.

DBT respects and responds to the all-too-often reality that people coming to therapy can feel pushed too hard to change and as a result will drop out of therapy early. Focusing too much on change may be emotionally overwhelming, feel invalidating, or even feel shaming. It is critical to strike a balance between acceptance and change. This balance is sought and achieved with a variety of techniques including training in mindfulness. Dr. Linehan outlines the following key components of mindfulness:

- ✓ **Observing:** Simply experiencing the present moment, thoughts, emotions, bodily sensations, and so on
- ✓ **Describing:** Describing the present moment without judgment
- ✓ **Participating:** Throwing oneself into an activity without self-consciousness

DBT mindfulness involves paying attention to the current, moment-by-moment reality and in a non-reactive manner, responding to the facts rather than the patients' own thoughts, emotions, or other reactions. This engenders acceptance, facilitates effective problem solving, and reduces avoidance. The patient has to be willing not to resist reality and to resist engaging in "as if" or "it shouldn't be this way" thinking, or insisting something is true or real when in fact it is not. This willingness then facilitates more effective problem solving and reduces reactivity over time.

## Chapter 17

# Being a Person Is Tough: Client-Centered and Existential Therapies

---

### *In This Chapter*

- ▶ Accepting the person
- ▶ Facing death, guilt, anxiety, time, transcendence, and freedom

A 35-year-old woman, I'll call her Mrs. Garcia, had recently attended her mother's funeral and was having a difficult time going back to work and interacting with her family. She went to her family physician for fear that she may be depressed. Instead of putting her on medication, her family physician referred her to a psychologist.

Consider the following opening exchange between Mrs. Garcia and the psychologist:

**Therapist:** Hello, Mrs. Garcia, nice to meet you. Dr. Huang had mentioned that you've been having some trouble going to work and that you recently attended your mother's funeral. Please, sit down.

**Patient:** Thanks. First of all, I want to say that I'm a little uncomfortable with this. I've been through psychoanalysis before, and I didn't like it. My doctor was too impersonal and cold.

**T:** I'm sorry that you had a bad experience. Just so you know, I'm not a psychoanalyst. Would you like to talk about that experience?

**P:** Not really, not now anyway. I've been feeling pretty bad lately, really ever since my mother became ill. I'd go and help my sister take care of her and leave feeling this sense of doom and gloom. But I didn't really feel sad about the fact that she was dying; she had suffered for a long

time, and I accepted that her death would probably be a relief. It was her life, not her death, that seemed to be bothering me.

**T:** Her life was bothering you. You had accepted her death. Tell me more. You did not approve of her lifestyle?

**P:** Kind of. It was like she was living for everyone else, the boss, my father, us children, the grandchildren. I felt really bad about judging her, especially when I began to realize that I was living the exact same life.

**T:** You've been living the same way as your mother?

Mrs. Garcia's feelings and experience are illustrative of the kinds of issues that practitioners of *humanistic* therapies (client-centered and existential) are concerned with. She's questioning her life, her very identity, her sense of self. Who is she really living for? Is she being true to herself? Humanistic therapies approach human difficulties with the core tenets that humans are dignified, have choices, and struggle with life's inevitabilities (death, illness, conflict, and so on), but have the freedom to make changes and address these difficulties with appropriate support.

Although each of them made unique contributions to the theory and practice of psychotherapy, the big names in humanistic therapy such as Carl Rogers, Rollo May, and Irvin Yalom all had one thing in common. Each of them saw great potential in all of us. They believed that all people strive for maximum development of themselves and their potential and take responsibility for their lives.

Many of the forms of psychotherapy I introduce in this book (psychoanalysis in [Chapter 15](#) and behavior and cognitive therapies in [Chapter 16](#)) have been criticized for being too technical, sterile, or out of touch with the real experience of the patient or client. They've been accused of making too little room for the *real person*. The therapies discussed in this chapter all have the *personhood* of the patient seeking help as a central theme.

This section introduces humanistic and existential therapies that focus on the core issues of being a person and how a person struggles with, through, and around these issues.

## *Client-Centered Therapy: Shining in*

*the Spotlight of Humanistic Therapy*

# the Therapist's Spotlight



Take a minute to do a little exercise. Get a piece of paper and a pen and make a list of all the people you admire and hold in a positive light. Who's on the list — teachers, spouses, celebrities, parents? What about yourself? Are you on your list of people you positively regard? Would you be a member of your own fan club?

In this big, chaotic world of billions of people, sometimes it seems like I don't matter, like my individual identity is so small, so insignificant. Yet I walk around with the sense of being an individual. Sometimes I feel so independent that I actually feel lonely and isolated, like no one cares about me. "What about me? Don't I matter?"

Carl Rogers cared. Rogers (1902–1987) is perhaps one of the most famous psychologists of all time, nominated for the Nobel Peace Prize and considered on par with Sigmund Freud. His influence on psychotherapy has been profound. He put the person back into the process, attempting to understand and value each of his patients as unique individuals with real problems and not just as abstract theories and models. You can say one thing for sure about Carl Rogers's *client-centered therapy* — it placed great value on the *humanness* of each and every patient. Rogers believed that all humans inherently strive toward the fullest development of their capacity to maintain an optimal level of survival. It's kind of like the US Army slogan, "Be all you can be."

*Growth* is a big buzzword for client-centered therapists. A patient's personal growth is foremost in the therapist's mind and central to the therapy process. Every time I read something from a client-centered perspective or something that Carl Rogers wrote, I start reflecting and asking myself, "Am I growing?" If you count my waistline, the answer is definitely yes. As far as that personal growth and expanding abilities stuff . . .

What does Carl Rogers's belief in the inherent worth of each of his patients have to do with helping them get better? Are client-centered therapy patients paying for someone to like them, to value them? Maybe, but that would be a gross oversimplification. It's more than an "I'll love you until you can love yourself" therapy or "I'll accept you until you can accept yourself."



The healing or helping mechanism in client-centered therapy is found in the process of the therapist working to understand the patient's unique experiences, thoughts, behaviors, and feelings. As the therapist strives to understand where the patient is coming from, the patient learns to experience herself in a new, and more productive, life-enhancing way.

## ***Understanding theory of the person***

Why would Carl Rogers think that making a genuine connection with his patient and really trying to understand what it's like to be that particular individual has a helping or healing effect? The answer to that question may seem obvious: All of us like to feel understood. (See [Chapter 10](#) for more on the importance of relationships.) Having people get what you're about seems to give you a sense of well-being, a feeling of being more alive and present against the backdrop of a dark and uncaring world.

## ***Wanting to be understood***

Although he's not considered a client-centered therapist, Eric Fromm introduced a concept that attempts to explain why being understood is so important to everyone. Fromm believed that people all make constant attempts to check their perceptions and experiences against the perceptions and experiences of others, particularly people whose opinion is of value. You may have heard of the concept of a *reality check* — like asking someone if she just saw the UFO land in the field next to the highway. "Did you just see what I just saw?" If the other person saw it too, you experience something Fromm called *validation*. Validation is the experience of having someone concur or support your experience of reality. Validation brings a sense of presence; it makes you feel like you *exist*. According to Fromm, without validation, people would feel as if they didn't exist.

Have you ever talked to someone when she wasn't getting what you were trying to say, like she didn't understand you? This type of experience can feel pretty bad. In situations like this and many others, you can feel disconnected and, in extreme cases, isolated.

Why is being understood or understanding others so difficult at times? Rogers believed that each and every person has a unique frame of reference from which he experiences the world. Think about it. Someone else in this world

1 1 . . 11 1 . 11 1 . 11 . 1 .

may look just like you, have the same name, and be exactly like you in almost every other way. Biologically, identical twins even share the same genetic code. But even identical twins are not exactly alike. They are, in fact, two separate people. I like to look at it this way. No other person can occupy the same physical space that I occupy at the same time I occupy it. And they can't occupy the same mental space either! In the abstract, people can "walk a mile in my shoes," but in the literal sense, only when I'm not wearing them.

### ***Developing a sense of self***

You're unique! Our individual experience is specifically separate from others', and as you differentiate your experience from the experiences of others, you begin to develop a sense of self, a sense of who you are. A sense of self depends first, however, on how other people see you and relate to you. As children, experience is intertwined and merged with the experiences of parents, families, and caregivers. They serve as an experiential guide of sorts, providing the first models of understanding and experience in the world. Later, you begin to differentiate your experience from the experiences of others.



This *experience-differentiation process* is only possible, however, within an environment of positive regard and support from those around you. If I see a UFO, and the other person doesn't, he may still support me in my experience by saying that he doesn't see the UFO, but that doesn't mean I didn't see it. If he wasn't supportive, he may say, "You're crazy! You don't see a UFO!" More realistically, I've often witnessed a young child who gets hurt or upset and goes to a parent for comfort only to have the parent say, "You're not hurt. You're okay." This situation is the opposite of validation; it's an *invalidating* experience. The child may get confused, thinking, "I feel hurt, but Daddy says I'm not. Am I really hurt or not?" Pretty confusing stuff for a kid.

### ***Dealing with differences in self-perception***

Rogers called the experience of oneself, as it depends on the views of others, the *conditions of worth*. As long as people continue to meet the conditions of worth set up by others, they'll do fine. But when they don't receive unconditional acceptance, they can get into trouble and experience distress.



They may then start seeking the *conditional acceptance* of others because they've yet to experience their own *unconditional acceptance*.

When seeking conditional acceptance, a person lives a lie of sorts, adopting a confusing and undifferentiated experiential approach to living. If her experiences are different than the experiences of those around her, she may distort her own thinking, feelings, or behavior in order to be in line with those of others. She may walk around with a belief that, if she thinks, feels, and behaves in accordance with the people around her, she'll get the positive regard she is longing for.

Even if people don't receive unconditional acceptance, they still have this underlying sense of individuality and uniqueness. When there's a disconnection or inconsistency between your experience of yourself and your experience of yourself as you distort it to be in line with other's views, you're *incongruent*. This involves having two views of yourself: how you actually are, and how you think others think you are. Rogers believed that what lies at the core of psychological maladjustment is the incongruity between your total experience and your distorted self-concept. This incongruity leads to feeling estranged, disconnected, and not whole. You're then only living out part of your full being and therefore not fulfilling your basic need to experience, enhance, and expand your being.

As a person travels along this compromised path, he may use different defense mechanisms to keep up the act. He may selectively process information about himself, others, and the world so as not to overturn the apple cart of reality. For example, a lot of families have a "black-sheep" member who stands out. At times, this person may deliberately do something that goes against the grain in order to stay in line with his family-derived self and the image that everyone has of him. Sometimes, he can stick to this plan in such a rigid manner that he may actually lose touch with reality.

## ***Reconnecting in therapy***

One of the main goals of client-centered therapy is to help the patient reintegrate different versions of the self: how the patient sees himself and how he thinks others see him. At the center of this process is perhaps Rogers's most important contribution to psychotherapy — *unconditional positive regard*. This involves accepting the patient as a person without judging his experiences, feelings, thoughts, or behaviors in a moral sense.



The therapist does not want to repeat the invalidating experience that the patient probably went through growing up or continues to go through.

Client-centered therapists engage in what Rogers called *reflection* — communicating to the patient that they hear what the patient is saying and that they're trying to understand where the patient's coming from. Rogers emphasized *accurate empathy*. Therapists who adopt this concept stay away from imposing their own understandings and structures on the patient's experience. This helps patients begin to see how they've distorted their own experiences without introducing any new distortions in relation to the therapist's expectations.

The therapist *reflects* you back to yourself by being attentive and describing to you the self that you're presenting to him. During this process, your self-awareness increases, and you start to see yourself in a way that you've never been able to before. The client-centered therapist is kind of like a mirror or a *self-amplifier*.



Another huge contribution Rogers made to psychotherapy was the introduction of his six *necessary and sufficient conditions* that must be in place for therapy to be helpful:

- ✓ A professional, respectful, and accepting relationship formed between the client and therapist.
- ✓ A patient's willingness to be vulnerable and to experience strong feelings, such as anxiety, and the therapist's ability to motivate the patient to seek and stay involved in the therapy relationship.
- ✓ Genuineness — the client is expected to be “freely and deeply” himself, not distorting how he feels or what he thinks.
- ✓ Unconditional positive regard.
- ✓ Accurate empathy.
- ✓ Perception of genuineness — the therapist has to be a real person (with feelings, thoughts, and behaviors of his own), not just a person playing a role, acting, or pretending for the sake of the client.

Rogerian, or client-centered, therapy has been around in one form or another for about 60 years now. The ultimate question for any form of psychotherapy

for about 60 years now. The ultimate question for any form of psychotherapy, psychological intervention, or medication is whether it works or not. Research into the effectiveness of client-centered therapy has typically investigated the specific “necessary and sufficient” conditions.

Most studies, including one conducted by Beutler, Crago, and Arezmendi, have shown that three of the six conditions, empathy, genuineness, and prizing (unconditional positive regard), are valuable but not necessary or sufficient (on their own) to bring about therapeutic change. That is, a therapist doesn’t have to possess or do these things in order to be helpful. Orlinisky and Howard, however, found that warmth, empathy, and genuineness facilitate the therapy process. That is, therapy may go a little better if the therapist creates these conditions. It doesn’t seem to hurt, so why not?

## *Being at Peace with Your Being: Existential Therapy*

In the 1960s, the *Tibetan Book of the Dead* became really popular among members of the counterculture (you know, hippies). The book is a Buddhist instruction manual for what to do when you die — go toward the light, don’t go toward the light, that sort of thing. The book and its subject matter captured a lot of people’s imaginations, as death always seems to do. Death seems to have a profound effect on the quality of our lives. Whether a person is facing death himself or dealing with the loss of someone important to him, the looming presence of death almost invariably stirs up strong emotions.

A group of psychologists from the school of *existential psychology* places death center stage among the most important issues to discuss in psychotherapy. In addition to death, they view some issues (anxiety, freedom, and choice) as very basic to human existence and at the core of much of what is called *psychopathology* (psychological problems). In a way, the existentialists cut straight to the chase concerning therapy by placing ultimate importance on deep philosophical issues such as:

✓ Anxiety

✓ Guilt

- ✓ Death
- ✓ Time
- ✓ Transcendence

Why all this morose fascination? Existential therapists, such as Rollo May (author of the famous book *Love and Will*, published in 1969) and Irvin Yalom, professor emeritus at Stanford University, shared a philosophical perspective that was deeply dissatisfied with the focus of much of psychoanalysis and other forms of therapy. They believed that our most important issues were ignored, or at the very least indirectly addressed, by forms of therapy such as psychoanalysis and cognitive-behavioral therapy. Specifically, they saw behavior therapy (see [Chapter 16](#)) as an overly narrow and technical exercise that didn't respect the struggles that humanity faces. They wanted to do therapy with a real person sitting across from them, examining his or her real concerns and deepest issues. It seems like they didn't want to be distracted by theories and models that dehumanized therapy, which at its heart is a basic human process.



Existential therapy is more of a philosophical position than a specific technique. It does, however, make some unique contributions to technique, as I discuss later in this chapter. At the center of the philosophy is the assumption that all human beings have a core experience of “I am.” This experience is our basic sense of being alive and striving toward being.



If you ever want to take a road trip into hardcore philosophical obscurity concerning the issue of being or not-being, read Jean Paul Sartre's *On Being and Nothingness*. It's like a computer instruction manual for existential philosophy.

## ***Hanging out with your hang-ups: Death, guilt, and anxiety***

People are all striving to realize their truest sense of being, the truest sense of ontological existence. *Ontology* is a branch of philosophy that concerns itself

with determining what is real in our universe. I feel real. Hopefully, you feel real, too. If you and I are both real, there's common ground to speak about the sense of ontological existence and sense of being.

There's always a catch, though. If there's going to be being, there has to be not-being. The ultimate not-being experience is death. When a person faces death, his own or someone else's death, he experiences anxiety over the thought of not-being, of not being around anymore.

### ***Normal and neurotic anxiety***

Existential therapists tend to focus on the differences between a patient's normal or healthy anxiety and what they call neurotic anxiety. *Normal anxiety* comes from striving to be and facing threats to our being. Wait a minute, normal anxiety? Before I started learning about the existential approach, I always thought that anxiety was pretty much a bad thing. It feels pretty bad, and it can get in the way of doing a lot of things.

Healthy anxiety is anxiety that is proportionate to the situation and not out of control. Therefore, healthy anxiety doesn't need to be repressed because it's manageable and realistic. It's also constructive and helpful. If I'm appropriately anxious about my test, I may just sit down and study in order to pass it. My anxiety can motivate me. Many people can relate to anxiety being at the core of a lot of what they do. "No problem," say the existentialists, as long as your anxiety is working for you and it's not overblown.

*Neurotic anxiety* has two qualities that work against our realization of being and cut us off from fully engaging the world around us:

- ✓ **It's disproportionate to the situation at hand.** Fearing that they may fail, a lot of college students get worked up and anxious about taking big exams. For many people, failing an exam is a big deal, but being anxious about the exam is fine, as long as they don't get carried away. Anxiety becomes a problem when it becomes disproportionate to the situation. If you're so anxious that you think you're going to die if you fail, the anxiety has definitely become a problem, and existentially speaking, it's out of whack.
- ✓ **It's destructive.** Staying with the exam example, all that anxiety may make students physically ill. If they're sick, they can't study. If they don't study, they fail. Their anxiety was counterproductive. Neurotic anxiety should be tolerated as it comes up, but it should be eliminated to the

greatest extent possible. People also tend to repress, or “stuff,” neurotic anxiety into their unconscious in an attempt to cope with it. The anxiety is painful, and when something is painful, they try to forget it exists.

### ***Normal and neurotic guilt***

Like anxiety, guilt is a key existential phenomenon. Guilt is an important concept in our society and, probably, in most others as well. The existentialists aren't priests who seek to absolve their patients of guilt; instead, they help their patients focus on issues of guilt as they relate to the full experience of being.

Guilt may be normal or neurotic. *Normal guilt* arises from two situations:

- ✓ **Failing to properly engage in ethical behavior:** This type of guilt comes up when you actually do something wrong according to your own and your social group's ethical and moral standards. Guilt is a normal and healthy emotion.
- ✓ **Failing to live up to our own expectations:** This one is often downplayed in psychotherapy. Individuals often talk about letting other people down. A lot of people actually come to therapy because they've let someone down through infidelity, physical abuse, and so on. But what about your own standards for yourself? How are you supposed to feel when you let yourself down? Guilty!

*Neurotic guilt* is guilt that comes from our fearful fantasies of having done someone harm that actually didn't happen. Are you afraid to tell someone what you really think for fear of hurting her feelings? That's nice. Are you afraid that you've hurt someone's feelings even when you're sure that you didn't? That's a *fantasized transgression* — a created or imagined trespass that never occurred.

### ***Being in the here and now: Time and transcendence***

When I think of the concept of *being*, I always think of smoke-filled coffee shops with beatnik poets sporting goatees, berets, and sunglasses and spouting poetry about the nobility of a cockroach.

*They're alive, man!*

*Their legs are so short that they can't help but be down to earth.*

*They scurry around with zest and zeal, never worrying about money or*

*pride.*

*They're just looking for their next meal.*

Sorry, I couldn't help it, but my little existential poem does illustrate the idea that there's a genuineness in the simplicity of the cockroach. They seem focused on what really matters; to them, it's food. They're not distracted by neurotic guilt or anxiety. They are what the existential therapists call *being-in-the-world*.

Existential therapists try hard to understand the experience of their patients and how they accomplish "being-in-the-world." There are three important levels of this being:

- ✓ **Umwelt:** Being among or within one's environment and the external world of objects and things
- ✓ **Mitwelt:** Being within one's social world
- ✓ **Eigenwelt:** Relating to oneself

Being is maximized when people are in touch with each of these levels to a sufficient degree, engaging with each level without neurotic anxiety or guilt (see the preceding section for details on anxiety and guilt). Remember the cockroach — he ain't guilty, man!

Being-in-the-world includes the experience of time. *Time* is an absolute fact of life. It's an existential given. Time goes on whether or not you try to resist it. The key for the existentialists was for people to learn to live in the present and the immediate future. They shouldn't waste their time worrying about the past. They should commit to the present, realizing that time only moves one closer to his or her inevitable death and that life is what one makes of it. Make life, or it will make you, I guess.

Another important existential issue that serves as background for the actual practice of existential psychotherapy is the concept of transcendence. If you weren't depressed before you started reading this chapter, you may be now. All this talk about death, time, anxiety, and guilt isn't much fun. It's not all hopeless, though. The existentialists see a way out. *Transcendence* involves trying to realize our being. It's the act of living one's life without being overly anxious or ill, and striving to transcend the past and grow toward the future.

## Being flexible with your time

A quick story: My wife and I went to Paris, France, to see some paintings. We went to the Salvador Dalí museum to check out *The Persistence of Memory* and a couple of his other works. When we arrived, it wasn't there! It was in a gallery in St. Petersburg, Florida. We couldn't believe it. St. Petersburg? Come on!

Anyway, my fascination with this painting comes from Dalí's representation of time using flimsy clocks draped over different objects like the way you drape dirty clothes over the back of a chair. I'm no art critic, but I took that to symbolize the flexibility of time — it's not brittle; it doesn't break; it only bends. Time drapes over everything, and nothing escapes it. Well Mr. Dalí, the existentialists would have probably agreed.



The human imagination and the ability to think abstractly are powerful tools in this cosmic struggle. To *abstract* something is to remove it or extract it. A person can take herself beyond the limits of her immediate situation with the ability to think of or imagine herself as outside of these limits. An individual's ability to separate herself by thinking creatively creates a psychological space of sorts. She can envision possibilities. As long as a person is able to imagine alternatives and other possibilities, she can continue to strive toward being. This power is crucial to the existential concept of freedom. It also sounds like hope to me.

### *Facing freedom, isolation, and meaninglessness*

As if addressing anxiety and guilt isn't enough, existential therapy also takes on a patient's struggle with four more existential issues: death, freedom, isolation, and meaninglessness. Just when you thought you've gotten away from a discussion of *death*, it comes right back. I've often wondered if the existentialists were obsessed with death. In therapy, they emphasize that psychopathology and problems in living are the result of a patient's inability to transcend the idea of death. There's no escaping it. You're conflicted — you want to live, but you know you're going to die. Knowing that you are going to die may lead to despair. You may think, "If I'm going to die, why should I even try?" Existential therapy helps patients face the fact of death without despair.





After working in jails and prisons, I've come to really cherish one thing — my freedom. Existential psychologists emphasize the importance of the concept of *freedom* in a patient's life. They don't believe that some absolute structure to the universe is waiting to be discovered. Humanity makes up the structure as it goes along. For some people, freedom feels burdensome. Freedom requires that people take responsibility for all their actions, and it means that they've got nobody but themselves to blame when things go wrong. The good part: They can take full credit when things go right!

Just in case you thought you may catch a break from the existentialists and not have to face every single crappy fact of life, they throw in *isolation* for good measure. A lot of people find shelter from the harshness of the world in companionship. At the core, people realize that they are essentially alone and they'll die alone. Individuals try to overcome this fact by attempting to *merge* with others. When a person seeks a merger in the extreme, he engages in disingenuous relating, using other people as a means to an end (ending isolation). When someone's identity is so dependent on others, he may find himself feeling as if he doesn't exist without the other person. He longs for recognition. "Get over it!" say the existentialists. "You're alone, and there's nothing you can do about it!"

What's the meaning of life? Don't go to an existential psychologist for the answer to this question. Each person is expected to create his own meanings, to construct something out of this meaningless mass of confusion. When someone adaptively and creatively uses his will to build meaning for himself, he's on the right track.

**Patient:** I've wanted to get a new job for a while, but I can't seem to find anything.

**Therapist:** Have you been looking?

**Patient:** Not really.

**Therapist:** Then how can you say that you can't find anything when you're not looking? Do you really want another job badly enough to actually look for one?

**Patient:** I don't know. I think I just want to be treated with more respect



at work.

**Therapist:** Then what you really want is respect, not another job.

**Patient:** Respect is important.

**Therapist:** To whom?

**Patient:** Respect is important to me. I want it.

After the patient becomes aware of what he wants, the therapist helps him remove any obstacles or blocks to action. The therapist also points out that the patient makes decisions every day, even when he doesn't realize it. If you're standing in your own way, move over. Here comes the existential express: I'm a lean, mean, existential fact-facing, decision-making machine.

## *Letting go of defense mechanisms*

When you use defense mechanisms to protect yourself from what can sometimes feel like an abyss of existential truth, you can get into trouble. Sometimes, you can do the following:

- ✓ **Develop an unconscious sense of being special or omnipotent to ward off the unknown:** Irvin Yalom points out that this development may lead to being selfish or even paranoid. I once knew a man who thought he was Jesus Christ. I told him that I had just met Jesus Christ in a previous therapy session with another patient, and I was pretty sure there could be only one. He insisted he was the one. There must have been a lot of emptiness or meaninglessness in this patient's life.
- ✓ **Believe in an ultimate "rescuer":** Too much indulgence in this kind of thinking can lead to dependency. This is a no-no in existential therapy. It's a cop-out and serves as a poor excuse for facing the existential facts. Man, the existentialists won't even let me carry around my almighty teddy bear, Snuggles. Sorry, Snuggles, I guess I'll just have to go it alone. The existentialists take all the fun out of everything.

## *Claiming responsibility*

With all their talk about being, you may begin to wonder if the existential therapists ever do anything but philosophize. Existential therapy incorporates core issues into therapy and uses them to guide the focus of the therapist in treatment. Existential therapists

- ✓ Help their patients to act willfully and responsibly in the face of the existential facts.
- ✓ Listen for existential themes and point them out to patients when they suspect one is lurking underneath a trivial dilemma or psychological symptom.
- ✓ Explore these existential themes and point out the patients' compromised and maladaptive ways of coping with them.
- ✓ Set out to help patients develop more adaptive coping behaviors.
- ✓ Expect patients to create their own lives and worlds through action and choice.
- ✓ Expect patients to exercise their will in making decisions without being too impulsive or compulsive.

Acting impulsively and compulsively are not active approaches to living in an existential sense. Active approaches are thoughtful, deliberate, and responsible actions, and active approaches are what existentialists look for. Existentialists emphasize responsible action without the need to defer to someone around us to make our decisions. Because of this, existential therapists can sometimes be frustrating to a patient because the therapist refuses to get into a caregiver—care receiver interaction.



If you have trouble “owning up” to the circumstances of your life and accepting responsibility for them, existential therapy may help. It includes an expectation of owning one’s experiences, including feelings, thoughts, and behaviors. One way to demonstrate this ownership is for patients to learn how to say *I*, instead of *you*, when talking about their experiences. Check out this example:

**Patient:** There are people in your life who you love, and when they hurt you, it sticks with you.

**Therapist:** I want you to practice saying *I* instead of *you*. For example, instead of saying, “There are people in your life,” try saying, “There are people in my life who I love, and when they hurt me, it sticks with me.”

**Patient:** There are people in my life . . .

**Therapist:** Good. How does that feel?

**Patient:** It kind of makes you feel sad.

**Therapist:** It makes me feel sad?

**Patient:** No, it makes *me* feel sad.

**Therapist:** You feel sad.

**Patient:** Yes.

I hope I haven't painted too bleak of a picture of existential therapy. The truth is that existential therapy is one of the most hopeful therapies out there. It doesn't sound like it at first because it kind of works in reverse. Instead of using hope in external things, such as other people and supernatural forces, it points patients inward, helping them generate hope from small actions. With each step a person takes, she is exercising the hope that the ground will not fall out from under her. It's a leap of faith facilitated through willful action. By taking patients down to the bare bones of existence, the existentialists show them how every thought, feeling, and behavior is an act of will that demonstrates the presence of their being — their striving to exist and survive.

# Chapter 18

## Stress, Illness, Growth, and Strength

---

### *In This Chapter*

- ▶ Living under pressure
- ▶ Keeping it together
- ▶ Getting sick
- ▶ Being healthy
- ▶ Flexing your mental muscle
- ▶ Staying positive

When I was a college I could stay up all night studying, take exams the next day, and then go to work as a busboy in the evening — without even thinking about breaking plans with my friends at night. I could just keep going and going. When I hit the work world, I could work as a jail psychologist during the day, teach community college at night, and do mental disability testing on the weekends. I must have worked more than 100 hours every week. But something changed as I got older. I slowed down. I couldn't pull all-nighters. Working 100 hours a week and holding down five jobs was just no longer possible. With age came additional responsibilities and preferences for how I spent my time.

“Life” was happening around me and to me, and I came to know stress illness, and the challenges of everyday life in new and sometimes-upsetting ways. I found myself looking for sources of energy, strength, replenishment, and inner reserve.

Then it dawned on me that I'm a psychologist, and psychological science probably has something to say about these issues. This field of research studies stress, illness, coping, and resilience. I wish I could report that reading

up on these issues in the psychological literature gave me everything I needed to fix myself, but that's not the case. However, psychological science does offer a great deal of information about these matters.

In this chapter, I introduce the concepts of stress and coping and the growing field of health psychology to describe psychology's approach to stress, illness, coping, and human psychological strength and resilience.

## Stressing Out

Every year around the same time I get sick. It never fails. Come October, I've got a cold. Is it the weather? Is it a cosmic curse? At some point I made a connection between my getting sick and stress. In school, it was the stress of midterms. Now, it's the stress of the holidays. Everyone gets stressed about different stuff, and sometimes the stress makes people become physically ill.

Psychologists have worked hard over the years, trying to figure out what triggers stress. Within the last 20 years or so, they've started to use their knowledge of human behavior and mental processes to learn more about what makes people sick and how people cope with illness.



What is *stress*? When most people talk about stress, they refer to the things or events that cause worry, anxiety, and strain — work, money, bills, kids, bosses, and so on. The strains and pace of modern life seem to get the best of most people at one time or another. Often, even the gadgets that people get to make their lives easier end up complicating things. Stress can be defined as a person's subjective experience of being overwhelmed, burdened, or run down.

### Considering ways to think about stress

Formal definitions of stress range from descriptions of bodily reactions to different ways of thinking about stress. In his 1997 book *Stress and Health: Biological and Psychological Interactions*, William Lavallo defined stress as a bodily or mental tension to something that knocks people off balance, either physically or mentally. Conversely, when a person has *equilibrium*, he's maintaining a balance between the external world and his internal world. Walter Cannon, an American physiologist at Harvard Medical School, in

1939, called this concept *homeostasis*. So basically, people feel stressed when they're out of homeostatic balance.

Hans Selye, an endocrinologist at the Université de Montréal and Nobel Prize nominee, gave one of the most famous theories of stress. His theory was based on something he called the *general adaptation syndrome (GAS)*. The idea is that when someone is confronted with something that threatens either her physical or mental equilibrium, she goes through a series of changes:

- ✓ **Alarm:** The initial reaction to the stressor. The brain and hormones are activated in order to provide the body with the necessary energy to respond to the element causing stress.
- ✓ **Resistance:** The activation of the body system best suited to deal with the stressor. If the stressor requires that you run — if you're being chased by a pack of wild dogs — then your nervous system and hormones make sure that you've got enough blood pumping to your legs to get the job done. Plus, extra energy is provided to your heart so it can pump blood faster. It's a beautifully designed system.
- ✓ **Exhaustion:** The final stage. If the bodily system activated in the resistance stage gets the job done, your trip down GAS lane ends. If the stressor continues, you enter this final stage. When you're exhausted, your body is no longer able to resist the stress, and it becomes vulnerable to disease and breakdown.

The body is not the only thing at work when you're stressed. Numerous cognitive (thinking) and emotional responses are also going on. Arnold Lazarus, a South African psychologist known for his work on behavior therapy, stated that during times of stress, an individual goes through a process of emotional analysis. It's kind of like having a little psychologist inside your head. You ask yourself to determine the current significance of the problem and its importance for the future. How does this stress work? You make two important *appraisals*, or evaluations — known as *primary* and *secondary appraisals*.



In most stressful situations, something important is at stake, or at least you think it is; otherwise, you wouldn't be stressed about it. The evaluation of what is at stake is the primary appraisal of the situation. At

this stage, situations are classified into one of three categories:

- ✓ **Threat:** An example of a threatening situation is a situation that requires a response. If I'm standing in line at the grocery store and someone cuts in front of me, I'm not forced to respond. But if a guy grabs me by the shirt and threatens to kick my butt if I don't let him in front of me, I have to respond in one way or another. Like run!
- ✓ **Harm-loss:** A harm-loss situation may involve getting hurt in some way — physically, mentally, or emotionally. A blow to my pride may be seen as a harm-loss situation. It's relative.
- ✓ **Challenge:** I can also look at a threatening person straight in the eye and see the perceived threat as a challenge. Instead of seeing the situation in dangerous terms, I may see it as an opportunity to try out those judo lessons I've been taking.

After figuring out what's at stake, I take stock of the resources I have available to deal with the situation. This is secondary appraisal. I may take a look at my previous experience with this type of situation. What did I do when this happened before, and how did that turn out? Most people also take a look at how they feel about themselves. If you see yourself as a capable person, then you're likely to become less stressed out than someone who thinks less of their capabilities.

Stress can be viewed as something more than the actual situation; a person's reaction depends on how he looks at the stressor. Stress is not a situation; it's a consequence of how a situation and a person's response to that situation interact. I can react differently to the same situation. For example, If I'm called on to pitch for the final out in the bottom of the ninth inning in the World Series I could get all stressed out because I dread failing, giving up the game losing home run. Or, I could look at the situation with excitement because I have the opportunity to pitch for the last out and the win. The situation didn't change, but my reaction to it did. One leads to the experience of stress, one does not.

Stress can also be a product of how much control a person thinks she has over events and situations. Stress arises when people lack an adequate response to a situation, and the consequences of failure are important. Seeing yourself as having little or no control can have negative psychological and physical consequences.

On the other hand, feeling like the “master of your domain” may help keep stress at bay. I remember a cartoon from my childhood called *He-Man*; He-Man had this phrase that he yelled out when he was getting ready to kick butt: “I have the power!” It would be nice if I could just yell that out and be ready to take on the world. In 1982, George Mandler, professor emeritus at the University of California, San Diego, defined *mastery* as the thought or perception that things in an individual’s environment can be brought under her control. Sounds like He-Man to me.

## ***Stressing to the types***

So, stress isn’t just a situation. It’s the coping process and a result of how you think and feel about a situation. That explains why some stimuli are stressors and some are not, and why some people get stressed out by certain things that don’t affect other people. However, some situations are pretty stressful for nearly everyone. Here are some things that most people find stressful:

- ✓ **Extreme stressors:** Events that occur rarely and that have a severe and dramatic impact on routines and access to normalcy, such as natural disasters, human-made disasters (such as an oil spill), war, terrorism, migration, and watching others get hurt
- ✓ **Developmental and psychosocial stressors:** Events that occur as you grow and change, including marriage, childbirth, raising children, caring for a sick person, and being a teenager
- ✓ **Common stressors:** Things you deal with in daily life — urban living, daily hassles (like driving to work), job pressure, and household chores

Psychologists Holmes and Rahe in 1967 created a list of stressful events called the *social readjustment rating scale*. They took different stressful events and assigned a point value to each of them — the higher the point value, the more stressful the event is. Here are the top five:

| <b><i>Event</i></b>            | <b><i>Point Value</i></b> |
|--------------------------------|---------------------------|
| Death of a spouse              | 100                       |
| Divorce                        | 73                        |
| Marital separation             | 65                        |
| Jail sentence                  | 63                        |
| Death of a close family member | 63                        |



If you're wondering what the bottom-five stressful events are, they are (in descending order of stressfulness): change in number of family get-togethers, change in eating habits, vacation, Christmas, and minor violations of the law.

## *Getting sick of being worried*

I've heard people say that they thrive on stress or that they do their best work when they're under pressure. Yet research shows that this is not true for most people. Stress can have very serious effects on people; and usually, if you *do* work well under stress, you'll do even better when you're not under stress.



As researchers learn more about stress, a psychological and biological phenomenon, the connection between stress and illness — both psychological and physical — has become impossible to deny.

## *Psychological*

One of the most well-known psychological results of exposure to extreme stress is *posttraumatic stress disorder (PTSD)*. PTSD can occur when a person is exposed to a life-threatening situation or a situation that may involve serious injury. War, car accidents, plane crashes, rape, and physical assault are all examples of situations that may cause PTSD. The symptoms include emotional numbing, guilt, insomnia, impaired concentration, avoidance of trauma-related events and memories, and excessive physiological arousal (hyperactivity due to fear). Many Vietnam War and Iraq War veterans returned home with PTSD. During World War I, PTSD was called *shell shock*.

Have you ever wondered what it must be like to be a firefighter, police officer, or emergency physician? I mean, all the death and destruction they see every day has to be stressful. And, according to research, it is. People in very stressful occupations have been found to be at increased risk for *secondary traumatic stress disorder (STSD)*. The symptoms of STSD are exactly like those of PTSD, but instead of the sufferers themselves facing a life-threatening or harmful stressor, people with STSD receive “vicarious exposure” to stressors. In other words, they're around people who are exposed to life-threatening and harmful situations all the time, and it takes a toll. People who witness an event and feel fear, horror, or helplessness may

be at risk for developing STSD.

## **Physical**

Hans Selye looked at the connections between stress, mental problems, difficulties adjusting, physical health problems, and disease. He found that the same things that help people cope with stress sometimes lead to disease. When the body and mind react to stress, the reactions don't diminish right away. In fact, when Selye performed experiments with stressed-out pigeons, he found that a lot of the pigeons died after his stress experiments, even if they coped well when the stressor was active. Selye identified several conditions that he called "diseases of adaptation," including peptic ulcers, high blood pressure, heart incidents, and "nervous disturbances."

Based on the work of Selye and others, it's been discovered that stress can lead to physical health problems or illness in several ways. An indirect link between stress and physical health problems may involve people who engage in potentially physically harmful behaviors as a means to cope with stress. A lot of people drink alcohol when they're stressed. Drinking alcohol can be harmful to your health, especially if you drink and drive. Another dangerous behavior often associated with stress is increased cigarette smoking. I've heard plenty of patients talk about smoking as a way to relax. But it's so unhealthy!



Another link between stress and physical illness comes from the new and exciting field of *psychoneuroimmunology*, the study of the connection between psychology and the immune system. Researchers have long suspected that there's a connection between the two systems, and there actually is. High levels of stress and intense emotions can suppress nervous system functioning. There isn't a clear-cut diagnosis of all the ins and outs, but the suspicion is that the cost of the body's coping reactions to stress is paid in part by the immunity department.

Ever heard of the flight-or-fight response? Walter Cannon showed that exposure to extreme stress causes people to decide whether they're going to take off running or stand their ground and fight. It sounds animalistic, but you can also look at it as a choice between walking away or yelling at someone. Either way, these protective actions require energy. Arguing and running from someone can be tiring! So, the brain sends signals to the heart and the

hormone system that causes blood pressure to increase. The heart races, respiration quickens, and sugar levels in the blood rise. When these changes occur, all of the body's vital resources are devoted to the moment. Resources from other areas are used for the immediate purpose of fighting or fleeing.

The hormones that kick in when you're in fight-or-flight mode are epinephrine and cortisol — both have immunosuppressive effects. If higher-than-normal levels of epinephrine and cortisol are present in the blood stream, then the immune system doesn't work as well. It kind of makes sense, if you think about it. If a bear is chasing you, probably the last thing on your mind is getting the flu. Forget the flu; you can't get the flu if that bear rips your head off! Save the head, and you can deal with the flu later.

You're probably saying, "Yeah, but I haven't been chased by a bear in at least five years, so why does it seem like I still get sick from stress?" You get sick for the same reason that I used to get sick during every midterm-exam week in college. These are stressful times! But it's not the same kind of stress that running from bears every day would produce. Modern stress is typically chronic and low grade. It's always there, constantly gnawing away at the immune system because the fight-or-flight system stays on medium alert most of the time. So instead of going from no alert (relaxed) to high alert (bear attack), most people are on medium alert (daily hassles, work, bills, kids, and so on) all the time. It slowly takes its toll on the immune-system functions.

Relationships between stress and specific diseases seem to exist. Strong negative emotions such as anger, chronic hostility, and anxiety are associated with hypertension, ulcers, rheumatoid arthritis, headaches, and asthma.

## A risk to the heart

People with the *Type A personality* — a personality pattern characterized by an aggressive and persistent struggle to achieve more and more in less and less time — are the real go-getters of the world. They're the corporate executives who build a Fortune 500 company from the bottom up in a matter of years, the millionaire workaholics, and the hyper-competitive college students driven by perfection. Type A people tend to be very impatient and view almost everything as urgent.

You may be thinking, "So what? These people can be very successful, right?" Yes, but they also generally have a higher risk of suffering from *coronary heart disease* — hardening of the arteries, angina, and heart attacks. But before you quit school and make relaxing walks on the

beach your full-time job, remember that the relationship between Type A personalities and developing coronary heart disease is not one-to-one. The research shows an *increase in risk*; developing these health problems is not inevitable.

Risk means that these folks need to take precautions and be aware of contributing factors and warning signs. Read up on coronary heart disease if you're worried; check out *Heart Disease For Dummies* by James M. Rippe, MD (Wiley, 2004). And if you're really worried, go see your family physician.

## Coping Is No Gamble

Stress, stress, stress — everyone's got it. So what can you and I do about it? This question brings me to the concept of *coping*, the response to stressful and upsetting situations. Sometimes a person's coping strategies can make things better (as in getting healthy from exercising) and sometimes they can make things worse (if your way of coping is to blow your paycheck at a casino). There are many different ways of coping with stress; some are good and some are bad.

Even though bad coping skills can lead to problems, having no coping skills can lead to vulnerability and, sometimes, more problems. That's why on occasion, using bad coping techniques is better than not coping at all.

### Discovering how to cope

Most psychologists classify coping behaviors into two big categories, *approach processes* and *avoidance processes*. Approach coping is more active than its avoidance cousin; approach processes resemble a take-charge kind of response to stress.



Common approach coping responses include:

- ✓ **Logical analysis:** Looking at a situation in as realistic terms as possible
- ✓ **Reappraising or reframing:** Looking at a situation from a different perspective and trying to see the positive side of things
- ✓ **Accepting responsibility:** Taking charge of your part in a situation
- ✓ **Seeking guidance and support:** Asking for help (see the next section)

### Finding resources)

- ✓ **Problem solving:** Coming up with alternatives, making a choice, and evaluating outcomes
- ✓ **Information gathering:** Collecting additional information about the stressor so you can more easily cope

Avoidance coping strategies are less active and involve coping in less direct ways. Here are some common avoidance coping strategies:

- ✓ **Denial:** Refusing to admit that a problem exists
- ✓ **Avoidance:** Evading possible sources of stress
- ✓ **Distraction or seeking alternative rewards:** Trying to get satisfaction elsewhere like watching a funny movie when feeling sad or enjoying recreational activities on the weekend to cope with having a bad job
- ✓ **Venting or emotional discharge:** Yelling, getting depressed, worrying
- ✓ **Sedation:** Numbing oneself to the stress through drugs, alcohol, sex, eating binges, and so on

### ***Finding resources***

Coping is more than just the actions that a person takes in response to stress. The way an individual copes also depends on the resources available to him. After all, a billionaire who loses her job may experience a lot less stress than a suddenly unemployed day laborer who makes \$30 a day and has a family of five.

A person's response to stress is a complex reaction that depends on her coping skills, environmental resources, and personal resources. Any life event that a person encounters is influenced by the interaction of the person's ongoing life stressors, social coping resources, demographic characteristics, and personal coping resources. Further, the person's cognitive appraisals of the stressor influence her health and well-being in both positive and negative ways.

An *integrative approach* considers three factors when attempting to predict the health outcome of a particular stressor:

- ✓ The resources an individual possesses prior to encountering a stressor or stressful event

- ✓ The event itself
- ✓ The appraisal of the event

An individual's ability to resist stress is called *resilience* — the outcome of the interaction between an individual's *personal* and *social resources* and his coping efforts. Personal coping resources include stable personality traits, beliefs, and approaches to life that help us cope:

- ✓ **Self-efficacy:** Your belief in yourself and that you can handle a situation based on your experience
- ✓ **Optimism:** Having a positive outlook on the future and expecting positive outcomes
- ✓ **Internal locus of control:** Your belief that certain things are within, not out of, your control



One type of environmental resource that is helpful in coping is *social resources*, which aid in coping by providing support, information, and problem-solving suggestions. Good social resources include family, friends, significant others, religious and spiritual organizations, and sometimes even co-workers and supervisors. Other environmental resources include money, shelter, health services, and transportation. These things can make all the difference in the world when someone's attempting to cope with stress.

## Going Beyond Stress: The Psychology of Health

Psychologists don't stop at the intersection of stress, disease, and coping. They're also attempting to apply what they know about human behavior and mental processes to the problems of health in general. They're looking for ways to keep people physically well and trying to find out how people's behavior contributes to illness. Psychology researchers work in the field of *health psychology*, the psychological study of health and illness.

Health psychologists work in many types of settings, ranging from universities (conducting research) to clinics and hospitals, which involve the

universities (conducting research) to clinics and hospitals, which involve the direct care of patients. Their main activities include preventing illness, helping people and families cope with illness, and developing programs for health-related behavior change and maintaining a healthy lifestyle.

## **Preventing illness**

Health psychologists engage in three types of illness prevention:

- ✓ **Primary:** Preventing an illness from occurring in otherwise healthy people. Examples of primary prevention programs are childhood immunization, condom use, and HIV-awareness campaigns.
- ✓ **Secondary:** Focusing on the early identification and treatment of a developing illness or disease. Secondary prevention programs include breast cancer awareness campaigns and the promotion of self-examinations for testicular cancer.
- ✓ **Tertiary:** Helping people cope with already developed diseases and preventing them from getting worse. Tertiary prevention programs include helping people reduce high blood pressure, quit smoking, and treat obesity.

## **Making changes**



Have you ever kept a New Year's resolution to start doing something healthy — exercise more often, take a yoga class, eat better, get more rest, wear your seat belt? Why not? If you're being honest, I bet you're thinking it was harder than you thought it would be. Take a minute to think about what keeps you from doing what's most healthy?

A common problem with health-related behavior is people not sticking to the course they know is right. Part of this problem falls under the heading of *compliance* — whether or not someone follows through with a physician's recommendations and treatment or his own health-related plans. But what determines whether or not someone engages in health-promoting behavior to begin with? Some people make it look so easy. They go to the gym regularly. They eat right consistently. They don't smoke — ever.

Some people do unhealthy things than others for numerous reasons. For starters, a lot of people won't start or stick with a health-related behavior if



substantial barriers are in the way. It's too easy to give up if something or someone makes it hard. Perhaps you don't go to the gym because it's too expensive, or you don't sleep enough because you don't have a nice set of pajamas. Money is a commonly cited barrier to engaging in healthy behavior. Another reason people don't *just do it* is that the health-related behavior may cut into something more fun or necessary. If I go to the gym, I'll miss my television programs. If I eat right, I'll have to go to the grocery store, and then I'll have to cook, and then I'll never finish any of my other household duties.

Commitment to change is most often brought about when a person believes that he can make a difference. A lot of people have a *fatalistic* attitude toward their physical health — the “you go when you go” philosophy. They don't see their behavior as contributing to their health and, therefore, don't bother to change.



This mind-set is also known as having an *external locus of control* — thinking that control over something rests outside of oneself. Having the belief that the power to change a situation or event resides inside yourself, that it's under your control, is called an *internal locus of control*. When someone feels that he can control something, he's more likely to try and do something about it.

After you've changed, either because of external rewards or because of your belief that you can make a difference, how do you maintain those changes? It's easy to quit smoking, for example, but staying smoke-free is another story. You can maintain a commitment to healthy behavior by first examining the pros and cons of changing and not changing. Your ability to develop an accurate tally depends on having access to reliable information. Confusing or conflicting health messages don't quite do the job.

## Getting the message in the information age

People like to call this period of time the “Information Age.” No question, there's a lot of information out there. At times, the world seems to suffer from an information overload. With all of these facts, figures, and opinions floating about, who and what information do you tend to believe? Do those stop-smoking ad campaigns really work?



Media campaigns usually are only effective when they inform people about something they didn't already know. By now, though, almost everyone knows that smoking is harmful to health. People didn't always know about the health risks associated with smoking, and when that information finally became public knowledge, smoking rates dropped. But a lot of people kept smoking anyway, and many people actually picked up the habit after the warnings were put out there. Then again, many people feel that the mainstream media is not trustworthy. I've even heard people say that the idea that smoking causes cancer is bogus.

A number of factors influence people's tendencies to listen to and believe a particular source of information. Research on *persuasion* — getting somebody to do something he may not do on his own accord — has supplied psychologists with much of their knowledge in the area of source believability. Who do people believe?



For a message to be persuasive, it must grab your attention, be easy to understand, and be acceptable and worthwhile. You also have to be able to remember it. If you don't remember the message, who cares what it said? Persuasive arguments tend to present both sides of an issue, making the arguments look fair and unbiased. Fear-inducing messages work best when attainable steps are mentioned along with the scary stuff.

Decisions to engage or not to engage in healthy behavior are based on many factors, including your beliefs about the behavior and your locus of control. Researchers Hochbaum, Rosenstock, and Kegels, working in the US Public Health Services in the 1950s, came up with the *health belief model* to demonstrate the psychological processes someone goes through when making health-related decisions. The model is based on beliefs about the following:

- ✓ **Severity:** How bad can the illness or disease get if I don't do something about it?
- ✓ **Susceptibility:** How likely am I to get sick if I don't engage in healthy behavior?
- ✓ **Benefits outweighing costs:** What's in it for me, and is it worth it?
- ✓ **Efficacy:** How effective will my attempts at change be? I don't want to work for nothing.

The answers to these questions play a role in determining the likelihood that a

The answers to these questions play a role in determining the likelihood that a person will do the healthy thing. If I arrive at a high severity, high susceptibility, high benefits-over-costs, and high-efficacy conclusion, then the likelihood that I'll choose the healthy option goes up. Otherwise, the healthy path may not seem to be worth the sacrifice and effort.

## Intervening

What's the next step after you decide to do something about your unhealthy lifestyle? What can you actually do to get the ball rolling? A health psychologist or other health professional can design *interventions* that help you change and then maintain that change.



*Behavior modification* is a powerful method of behavior change. The most basic, yet very powerful, form of behavior modification is to use punishments and rewards for either not engaging or engaging in the target behavior. For example, if I schedule myself to run three times a week at 5:30 p.m. and I don't do it, then I have to clean the kitchen and bathroom, and do the laundry that night. If I comply, I get to treat myself to a nice dip in the spa. The trick with this technique is to enlist a partner to keep you from cheating on your rewards and punishments. I may decide to skip the laundry and go in the spa even if I don't run. A partner helps keep you honest.



*Cognitive change* is a process by which I examine the mental messages I give myself that may prevent me from changing a behavior or maintaining a change. Everyone has *automatic thoughts* — thoughts that they don't realize automatically go through their minds in certain situations. I may tell myself that I really want to run three times a week, but I also may be having the automatic thought, "You'll never do it; you never follow through with anything." Well, thanks for the positive reinforcement, me!

The good news is that automatic thoughts can be replaced with positive self-statements. This process takes a lot of practice and encouragement from other people, but the conversion is usually worth the hard work.

This section only begins to scratch the surface of health psychology and

stress-related issues, but I hope this overview of the subject whets your appetite for more knowledge about living a less stressful and healthier life. Remember to relax, believe in yourself, and don't avoid things. And reward yourself when you follow through with this advice!

## ***Harnessing the Power of Positivity***

Some people criticize psychology as “negatively focused” with all its focus on therapy and pathology and learning disabilities; they say it’s always trying to fix people and groups. Well, a group of psychologists in the late 1990s and early 2000s, headed by the well-known psychologists Martin Seligman and [Mihaly Csikszentmihalyi](#), introduced an essentially new branch of psychology known as *positive psychology*. Positive psychology is defined as a science of positive subjective experience, positive individual traits, and positive institutions that improve quality of life and prevents pathologies.

Positive psychology as a science of human strength covers a range of topics:

### ***Emotional intelligence   Creativity***

|           |               |
|-----------|---------------|
| Optimism  | Self-efficacy |
| Wisdom    | Compassion    |
| Gratitude | Altruism      |
| Courage   | Toughness     |
| Meaning   | Humor         |

Since its inception, research programs have taken positive psychology into the realms of business, sports, the military, and stress and illness. The military has sought the help of positive psychologists to alleviate stress and bolster the hardiness of its troops. Patients with terminal illnesses seek help in finding hope and courage in the face of death. Creative professionals want to be more innovative.

A central organizing concept in positive psychology is the idea of optimal living, characterized by two opposing poles of success: *flourishing* and *floundering*.

*Flourishing* (and its opposite, *floundering*) is synonymous with positive mental health as opposed to mental illness or disorder. Imagine going to a

psychologist for a mental health checkup or wellness visit instead of the traditional “what’s wrong with me?” focus. This can happen on a yearly basis the same way some people visit a medical doctor for an annual physical — not because they’re sick but because they want to get a checkup. Call it a *mentacal* (ment-uh-cull). Okay, so I need to work on the name, but you get the point.

Psychologist C. L. M. Keyes, professor of sociology at Emory University in Atlanta, Georgia, identifies the following dimensions of flourishing/mental health:

- ✓ **Positive affect:** Emotional well-being
- ✓ **Avowed quality of life:** Satisfied with life
- ✓ **Self-acceptance:** Positive attitude toward oneself
- ✓ **Personal growth:** Seeking challenges
- ✓ **Purpose in life:** Meaning
- ✓ **Environmental mastery:** The ability to select, manage, and mold one’s environment
- ✓ **Autonomy:** Guided by one’s own standards
- ✓ **Positive relations with others:** Calm, trusting relationships
- ✓ **Social acceptance:** Positive attitude toward others and human differences
- ✓ **Social actualization:** Belief in people’s potential for growth
- ✓ **Social contribution:** Seeing one’s daily activities as useful to others
- ✓ **Social coherence:** Interest in society and social life
- ✓ **Social integration:** Belonging

Flourishing as a concept is used by some psychologists in therapy as a guide in determining broad, more lifestyle-oriented goals for therapy clients or patients as they set goals for themselves in life. It can be used as an informal metric of client well-being, pointing therapist and client toward areas in need of improvement. However, it is not a formal component of therapy and is not considered part of formal diagnosis. That is, therapy focusing on flourishing, as opposed to treating a mental disorder, is not typically reimbursed by third-party payers such as insurance companies. Professional therapy provided by a

psychologist would not necessarily focus on flourishing as a primary goal in therapy but could include, interweave, and use the concept within therapy in providing direction for personal growth to a client in a general manner. This crosses over a bit into the realm of *life coaching* or advice giving, roles that therapists typically do not engage in. However, if a client asks for this service and consents to it, understanding the psychologist's training and expertise in this regard, then what happens between two consenting adults can be considered generally acceptable.

## *Acquiring the Bionic Brain*

Something happens to me nearly every day at around two in the afternoon. After a busy morning of report writing, therapy sessions, e-mails, phone calls, testing, and other doings of a psychologist, I “hit a wall.” That is, I slow way down, have trouble concentrating, and become much less productive. After doing some reading, I realized that maybe my brain glucose levels are lower at this time and my brain isn't firing on all cylinders. I started eating a little protein snack and hydrating a little better, which seems to perk me up. My brain needed a boost, I guess.

Athletes train to get stronger, faster, and more agile. Musicians practice to get more fluid and precise. But what if you want to get mentally quicker, more agile, stronger, more precise, or just plain smarter? This is an area of psychology known as *cognitive* enhancement, defined in 2008 by psychologists Nick Bostrom and Anders Sandberg as the amplification or extension of core capacities of the mind through improvement of external information-processing systems.

Many forms of cognitive enhancement are being researched, and some have been around for a very long time. In essence, education is a form of cognitive enhancement. Other forms include mental training, medications, transcranial magnetic stimulation (TMS), relaxation techniques, neurofeedback, and biofeedback.

Some techniques that are being investigated in animals (not on humans) include genetic and prenatal and perinatal processes such as gene replacement and fetal supplementation in mice.

Before you go out and buy that *Baby Einstein* DVD collection for your

unborn genius, know that there has been absolutely no data to support that any “make your baby smarter” program has ever actually made a baby smarter.

## *Doing smart drugs*

I once had a gig doing learning disability and psychological assessments for a local university, and I witnessed something interesting. A whole bunch of students were actually looking for me to diagnose them with ADHD! It didn’t take me long to figure out why. The doctors over at the university health center would not prescribe a psychostimulant to a student without an official diagnosis of ADHD. Now, these students weren’t looking to get “high” off Ritalin or Strattera, and they weren’t necessarily looking to sell the pills. But they were looking to boost their attention and concentration skills so they could excel academically.



In these modern times, medications and pharmacology are an integral and widely accepted part of life. Medications that are designed and used for cognitive and neuropsychological improvement and/or enhancement are called *nootropics*.

Many ethical and moral objections exist to using drugs to enhance mental performance, and some people see them in the same way they think of using steroids or performance-enhancing drugs in sports; it’s cheating. That’s a huge discussion. But, for a moment, consider that a person with a learning disability, brain injury, or other cognitive deficit could take a medication to improve his mental functioning. Is this any different than taking medicine for other types of ailments?

The fact is, this is already happening — sometimes in overt ways and often in indirect ways. An indirect way of using medication to improve thinking comes from the use of antidepressant medication. Anyone who’s ever been severely depressed can attest that the condition comes with a mental fog of sorts (something professionals call *pseudodementia*) that accompanies the depressed mood and feelings of guilt and lack of pleasure and motivation. Antidepressants help ease this cognitive dullness.

Medications that enhance or otherwise assist in cognitive processes include the following:

- ✓ **Stimulants:** Used for increased attention and short-term memory and includes such drugs as Adderall, Vyvanse, Atomoxetine (Strattera), and good old-fashioned caffeine
- ✓ **Cholinergics:** Used as memory enhancing-drugs; examples are Aricept and medical cannabis
- ✓ **Dopaminergics:** Used to increase attention and alertness and includes such drugs as methylphenidate (Ritalin, Concerta) and modafinil (Provigil)

The list of known or suspected nootropic drugs is much larger and expanding. However, I must point out that the number of prescriptions written for these drugs for actual nootropic purposes is still fairly limited. It would seem that physicians may be somewhat hesitant to go down the rabbit hole of drug-induced or assisted cognitive enhancement.

## *Hitting the limits of the skull*

Just as mental training, neurofeedback, and drugs can enhance cognitive processes, so to can devices such as cochlear implants, computers, smart phones, and even Post-it Notes. The field of technological devices that enhance cognitive processes is known in some circles as *cognitive prosthetics* or *neuroprosthetics*.

Many scientists show incredible interest in the promise and possibility of the field of cognitive prosthetics. Some fairly well-established devices are already available, including *speech production devices*, mobile phone or mobile technology software programs that “talk” for individuals who cannot or do not speak, *memory aide* software programs, and even voice-activated and -prompted GPS route and guidance systems.

Perhaps one of the most interesting approaches to cognitive prosthetics comes from work being done with *brain-computer-interfacing* in which external computer and/or other digital devices are directly wired into the brain and controlled directly by brain activity. Studies reveal that when electrodes are inserted into the brain of a primate or human, even those with fairly profound neurological damage, control of a computer cursor is possible. Doesn't sound like much at first, but think about it; controlling a computer interface by just thinking about it is downright telepathic almost — and pretty cool!





# Chapter 19

## Ten Tips for Maintaining Psychological Health

---

### *In This Chapter*

- ▶ Defining “healthy”
- ▶ Accepting yourself
- ▶ Embracing change

There’s no magic formula — and no standard — for being a psychologically healthy person. Is psychological health simply the absence of mental disease or mental illness? If so, a lot of people are perfectly healthy from a psychological standpoint. Is the absence of physical disease the same thing as being physically healthy? Some people think that there’s more to being healthy than being disease-free. Unfortunately, this chapter doesn’t give you all the answers to these questions. In fact, it probably creates more questions than answers.

Psychologists are not necessarily in the business of deciding the values of a society. A lot of scientists think that values are beyond the scope of science, that values and morals are too subjective and personal to be reduced to scientific analysis. But some psychologists believe that psychological health is as close to a universal value as any. After all, who doesn’t want to be healthy?

Psychology has uncovered a lot about human thinking and behavior over the years, and it would be a waste not to try to apply some of that knowledge to the human quest for well-being, happiness, and health. I agree that psychologists may be overstepping their bounds when they advocate a particular set of values.

But, as a professor of mine once said, “That’s an empirical question, isn’t it?” What he meant is that opinions can be evaluated empirically, and one opinion

can be judged with respect to another as long as agreed-upon criteria for evaluating the opinions are in place. In other words, researchers may actually be able to evaluate the “good life” with psychological science as long as they can all agree upon a definition of what the good life is. For example, I may agree that a good life is one in which my needs are met without much effort and I’m relatively free to do what I please. With that, researchers can scientifically evaluate circumstances, behaviors, and thought processes that lead to such conditions. If researchers can agree upon a standard, they can investigate what contributes to the achievement of that standard.



Because this chapter is providing tips for psychological health, I need to set a standard. So here it is: I define psychological health broadly as *optimal living*. This is a safe position because individuals can tweak the meaning of optimal living to fit their own values.

My use of the term optimal living in this chapter takes a *subjective* view of psychological health. For years, psychologists have studied the concept of *subjective well-being*. This concept refers to my sense of personal well-being and happiness without reference to the views of anyone else. It represents my personal values, and it may or may not be in harmony with others around me.

Some philosophers have argued that it is morally preferable to hold values that correspond with the values of others or, at the very least, to hold values that don’t impinge upon or impact the values of others. Subscribing to a value system that doesn’t impact the values of others is the “different strokes for different folks” approach.

Another definition of psychological health is perhaps more objective. This definition holds that psychological health centers on behaviors and mental processes that lead to the ability to adjust and function well in one’s life. This view can also be subjective to some degree. For example, you may adjust quite well to prison, but this adjustment may involve behaviors that can be considered quite unhealthy in other contexts. But, for most people and societies, the norms for good adjustment and functioning often involve surviving within the typically acceptable rules and boundaries of a community.

At the very least, psychological health involves being happy. I’ve never met a

person who didn't want to be happy, even if being happy to him meant being miserable. You can't escape the desire to be happy. That reminds me of a joke:

“Hit me, hit me!” says the masochist.

“No!” says the sadist.

Enough of the philosophical, let's get down to practical suggestions. The following ten tips for maintaining psychological health are equally important. No one is more important than the others; that's why they are not numbered.

## *Accept Yourself*

A lot of popular psychology and self-help books tell us to “love ourselves.” It's not a bad idea. Severe dislike for oneself is often associated with extreme guilt, shame, and depression. Don't underestimate the power of believing in your abilities and valuing your uniqueness.

Too often, people lead inauthentic lives that are defined by others as they strive for acceptance. Self-acceptance is a crucial ingredient for motivation and positive emotion, and accepting yourself even leads to more acceptance by others. Accepting yourself is not the same as thinking you are perfect.

## *Strive for Self-Determination*

When I feel like the captain of my own ship, I'm more interested in life, more excited about life, and more confident. My motivations are a complex mix of the things I truly want for myself and things I've adopted from significant others over the years.

Feeling as if I have some control over the decisions that affect me is crucial to psychological health. When I'm in controlling, punitive, or dominating environments, my sense of importance and freedom suffers.

Sometimes you need to adapt to the desires and values of others. In these situations, you can still retain a sense of self-determination if you agree even slightly with what you're adapting to. What if you want to paint your house bright purple, but the city won't let you? Well, if the officials can agree to lavender, then you probably don't feel so pushed around. It's rarely (if ever) a good thing for people to feel like they're being told what to do when they

don't agree with the directive.

## *Stay Connected and Nurture Relationships*

Sometimes it seems like modern lives are lonely. Everyone speeds around in their cars or stares into computer screens all day, isolated from other people and busy with the details of their own lives. I've often felt like I have to sacrifice productivity at work in order to socialize. I hear people make similar comments all the time, "I just don't have time for friends and family." Here's a tip: Make time!

In these times of mega-cities and super-suburbs, it can be hard to stay close to friends and family. The age of the small town filled with extended family is all but gone. Small towns are out there, but most people don't live in them. Despite these conditions, there is a benefit in working to maintain closer proximity to people who matter. The huge growth in mobile phone, Internet, and social media use may reflect both the desire to stay connected and an attempt to do so in a fragmented and fast-paced world.

Having friends and family around is nice, but it's only a good thing if the relationships are good. Some people can't wait to get as far away from certain people as possible. Feeling emotionally connected and supported by your relationships is just as important, if not more important, than simple proximity. People need intimate relationships that they can count on when times are hard. They need trustworthy romantic partners who value the same things.

Here are some other helpful hints for maintaining good relationships: Practice forgiveness, be tolerant, communicate honestly, express yourself, balance independence with dependence, and act responsibly toward others — and nurture their values, desires, feelings, and wishes.

## *Lend a Helping Hand*

When you reach out to others in need, you often get a sense of mastery over my own circumstances, and you're working to foster positive social conditions. Lending a helping hand helps the intended beneficiaries, and it

conditions. Sending a helping hand helps the intended beneficiaries, and it also helps the individuals who offer the assistance. I won't mention that there's a nice tax break in it too. Win, win, win.

## ***Find Meaning and Purpose and Work Toward Goals***

Feeling like life is meaningless is a hallmark of depression. One of the drawbacks of modern society is the sense of alienation that can come from working day in and day out with only the next workday or the next paycheck as a reward.

It's crucial to have meaningful personal goals. Research consistently finds that the process of working toward goals is as important as the goals themselves. At times, goals can be too lofty, and people can set themselves up for disappointment because they can't reach them. This defeats the purpose of setting goals in the first place. Realistic and meaningful goals are helpful. Having goals is not the same as being perfectionistic. Perfectionists set themselves up to fail because no one is perfect. Being a little kind to yourself and understanding that you're going to make mistakes in life is part of accepting yourself, and it's good for your psychological health.

## ***Find Hope and Maintain Faith***

Research has consistently shown that having a deep sense of spiritual faith can be a protective measure for dealing with loss, illness, and psychological disorders. When things seem dark, it really helps to have a sense of hope and optimism about the future and a belief that goals can eventually be achieved.

Having a *positivity bias* helps to override fear and maintain motivation. Being biased in this way is kind of like seeing the world through rose-colored glasses. Pessimists may claim that they're more in touch with reality, but a little positive illusion never hurts.

## ***Find Flow and Be Engaged***

Professional athletes talk about "being in the groove" when they've had a

good game. *Flow* is the experience of feeling totally engaged, involved, engrossed, and focused in an activity or experience. Living a happy life is a matter of learning to maximize and control inner experiences in order to feel harmoniously engaged in the activity for its own sake.

I once heard a piece of Buddhist wisdom: If you are thinking about resting while sweeping the floor, you are not truly experiencing life as it exists. When you sweep, sweep. When you rest, rest. Find flow!

## *Enjoy the Beautiful Things in Life*

The ability to appreciate beauty is *aesthetics*. There's a lot of negativity and ugliness in the world — wars, disease, violence, and degradation are all around. Depressing, right? Being able to appreciate the beautiful things is a saving grace in a world that's so often unattractive.

The experience of beauty is personal and one that no one else can define for another person. You may see the beauty in a famous painting or the sun shining through the clouds. When I see a well-executed play in football, it brings tears to my eyes. “That’s beautiful, man!” Sniff, sniff.

Even things that are imperfect and incomplete can be beautiful, particularly if you are a practitioner of the “wabi-sabi” worldview derived from Buddhism. Finally, an excuse not to clean the house!

## *Struggle to Overcome; Learn to Let Go*

Challenge and adversity are undeniable facts of life. Being able to effectively cope with challenges is crucial to maintaining psychological and even physical well-being. Each person has a variety of skills and techniques used to cope with stress and adversity. Here's the best general advice for coping with adversity: Cope actively within situations that you have some measure of control over, and cope passively within situations that you don't have control over.

Active coping involves taking actions to improve a situation such as looking for a job when you're fired instead of just saying, “Oh well, I guess I just wasn't meant to have a job.” In situations that you can control, such as many health-related problems, taking action consistently leads to better outcomes and better psychological functioning.

and better psychological functioning.

Passive coping involves processes of psychological and emotional acceptance. When a person you love dies, you may run yourself ragged trying to shake or diminish the feelings of loss and sadness. But eventually, you have to accept the reality of the situation. Accepting reality when you cannot change it is a good example of passive coping. Forgiveness is another one.

## ***Don't Be Afraid to Change***

Morihei Ueshiba, founder of the martial art aikido, wrote a book called *The Art of Peace*. His secret to living a peaceful life was the core principle of Judo: Go with the flow! When you are rigid and inflexible, you are more likely to experience resistance and strain yourself in trying to maintain your posture. When you are flexible and willing to change a behavior that is not working, you are more adaptable and better adjusted. It takes courage to change your ways, but it is vital for health and well-being.

# About the Author

**Adam Cash** is a practicing psychologist and Clinical Director of Specialized Psychology Solutions, a psychological services clinic in Palm Springs, California. He specializes in child psychology, autism, developmental disorders, learning, cognition, and neurodevelopment. He's taught courses in developmental psychology, methods and statistics, substance abuse treatment, and abnormal psychology. Although Dr. Cash's clinical work focuses primarily on children, he once worked extensively with adults and was a full-time forensic psychologist, specializing in prison psychology, violence risk assessment, and sex offender assessment, and he served as an expert witness in trials related to competency-to-stand-trial and not-guilty-by-reason-of-insanity cases. Dr. Cash has developed a specialty focus on psychotic disorders such as schizophrenia and post-traumatic stress disorder. He is the author of *Wiley Concise Guides to Mental Health: Posttraumatic Stress Disorder* (2006). Dr. Cash has expertise in psychological assessment and has conducted several thousand evaluations. He provides medico-legal evaluations for disability and conducts assessment. He is most proud of his marriage to his beautiful wife, Liyona, and the home and family they've built together.

## Dedication

To my wife, Liyona, and my beautiful children. Thank you for your love and purity. You are the light; may I stay in it always.



# Author's Acknowledgments

I am very grateful to Jenny Brown and Lindsay Lefevere for approaching me to revise the first edition of this book. I would also like go back and thank the team from the first edition as well, Tonya Maddox Cupp and Greg Tubach. Without them, this second edition would not have been possible. Thanks, too, to the children, families, patients, and employees that I work with. I'm grateful for the opportunity to be a part of your lives.

## **Publisher's Acknowledgments**

**Acquisitions Editor:** Lindsay Lefevere **Project Editor:** Jenny Brown **Copy Editor:** Nancy Reinhardt **Technical Editors:** Professor Robert Howard Ingleby Dale, Dr. Sue O'Rourke **Art Coordinator:** Alicia B. South Sr. **Project Coordinator:** Kristie Rees **Cover Image:**  
©iStockphoto.com/cloudnumber9

## Get More and Do More at Dummies.com®



Start with **FREE** Cheat Sheets

Cheat Sheets include

- Checklists
- Charts
- Common Instructions
- And Other Good Stuff!

*To access the cheat sheet specifically for this book, go to [www.dummies.com/cheatsheet/psychology](http://www.dummies.com/cheatsheet/psychology).*

### Get Smart at Dummies.com

Dummies.com makes your life easier with 1,000s of answers on everything from removing wallpaper to using the latest version of Windows.

Check out our

- Videos
- Illustrated Articles
- Step-by-Step Instructions

Plus, each month you can win valuable prizes by entering our Dummies.com sweepstakes.\*

Want a weekly dose of Dummies? Sign up for Newsletters on

- Digital Photography
- Microsoft Windows & Office
- Personal Finance & Investing
- Health & Wellness
- Computing, iPods & Cell Phones
- eBay
- Internet
- Food, Home & Garden



\*Sweepstakes not currently available in all countries; visit Dummies.com for official rules.

*Find out "HOW" at [Dummies.com](http://Dummies.com)*