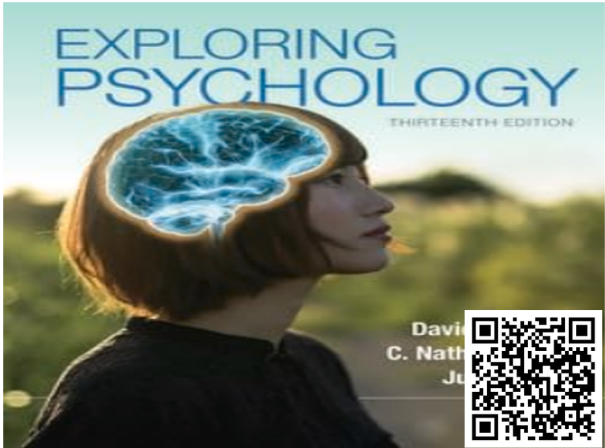


Exploring Psychology 13th Edition PDF

Visit the link below to download the full version of the ebook

[DOWNLOAD NOW](#)



Scan to Download
or Type the Link

ebook.ac/exploring13e

EXPLORING PSYCHOLOGY

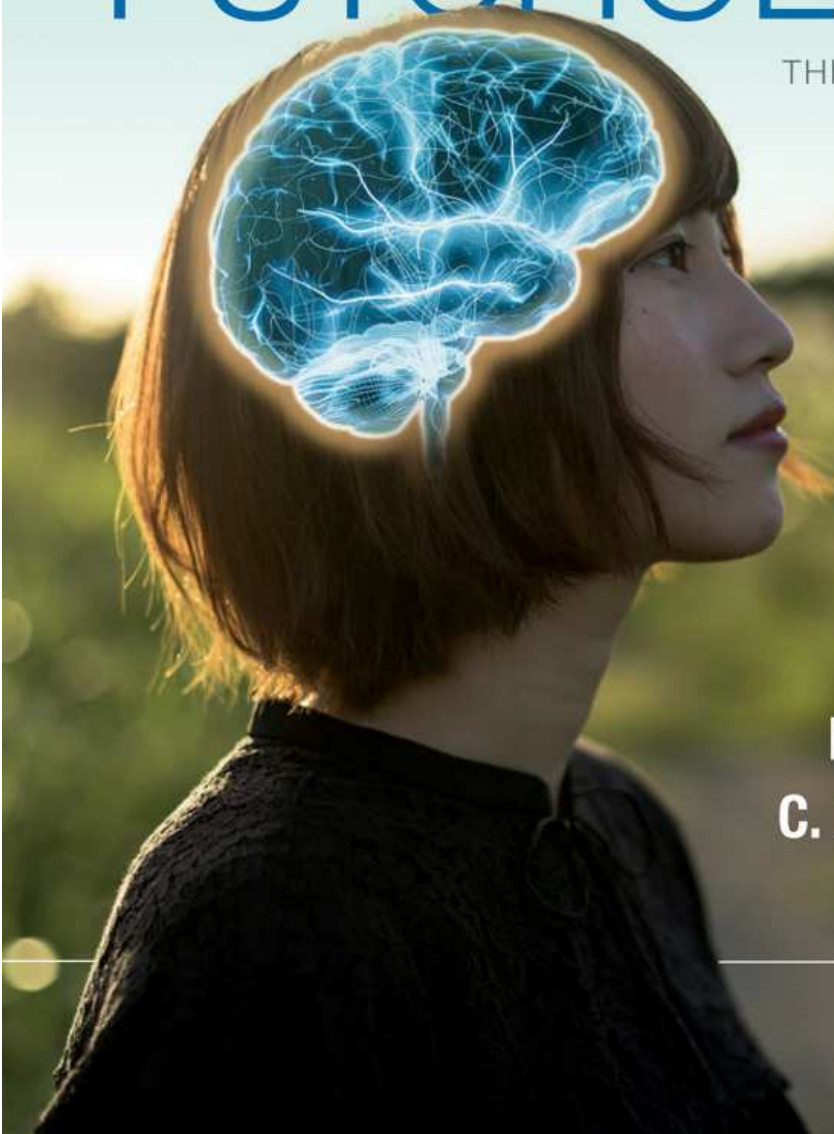
THIRTEENTH EDITION



David G. Myers
C. Nathan DeWall
June Gruber

EXPLORING PSYCHOLOGY

THIRTEENTH EDITION



David G. Myers
C. Nathan DeWall
June Gruber



Accessibility

Macmillan Learning is committed to the goal of providing equal access to all products regardless of an individual's age, ability, or situation and embraces the opportunity to develop services and information technologies that are accessible and usable by all individuals. Accessibility at Macmillan Learning is about extending the power of education to all users. In addition to addressing product compatibility with assistive technologies such as screen reader software, alternative keyboard devices, and voice recognition products, we are working to ensure that the content and platforms we provide are fully accessible.

Our E-books

Macmillan Learning became the first education solutions company to become [Global Certified Accessible](#)[™], providing “born accessible” digital learning (e-book) options for students with disabilities. Books that are born accessible are developed to ensure that all students, no matter their ability, have the same access to information. This is increasingly important for students and instructors, as more than [one out of every ten students](#) who attends college has a disability.

To become Global Certified Accessible, Benetech evaluated Macmillan Learning’s workflow for creating accessible books, as well as many samples of content across the disciplines they publish in, and certified conformance to the accessible EPUB creation guidelines, which are based on [WCAG 2.0 AA+ standards](#) put in place by the international standards organizations and the publishing community. Using a collaborative process, Benetech evaluated and provided feedback on more than one hundred accessibility features. The certification applies to all books created using Macmillan Learning’s updated process, which includes all e-books with a 2019 copyright and beyond.

Extended Descriptions

In this book, extended descriptions are present for complex images and graphs that may be helpful to understanding content. These extended descriptions can be accessed via this icon, either as a link or a dropdown starting with the text “Extended description for”:



Alternative Text

When an image provides important pedagogical information, alternative text (which is also known as alt text) is provided for the image. This text is not visible on the page but can be accessed and

read with screen reader technology and other assistive technologies. Our alt text is written and reviewed by subject matter experts.

Color Contrast

All of our book designs and illustrations are checked to ensure that they meet contrast requirements for [WCAG 2.0 AA](#). Meeting these standards ensures ease of use for users with low vision and color blindness, and can create a more supportive learning environment for users with learning disabilities.

Navigation

E-book navigation is designed to make it easy for users, with or without assistive technology, to discover and learn from content within the textbook. Text reflows when resized so there is no horizontal scrolling on the page, and page numbers are embedded in the book so that students can always find where they are compared to classmates using the print equivalent. Heading structures are clearly marked up so it's easy to see where you are within the book as you work your way through.

Accessibility Help

If you have any questions about the accessibility of this e-book or other Macmillan Learning e-books, please reach out to us at

webaccessibility@macmillan.com. For student resources, visit our [knowledge base](#).



for Psychology

Engaging Every Student. Supporting Every
Instructor. Setting the New Standard for Teaching
and Learning.

Overview

Co-designed with instructors and students to foster engagement, Macmillan Learning's Achieve complements instructors' unique teaching styles and course needs with effective **assessment**, **activities**, and **analytics**. Developed through years of research and continuous improvement, Achieve leads the market in the breadth and quality of its content library for psychology, giving instructors an unparalleled array of teaching tools and the ability to customize them for any course.

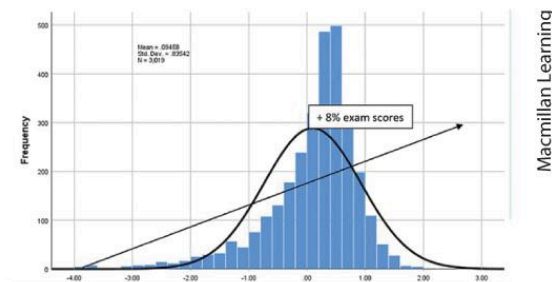
- **Assessment** Assessment is fundamental to Achieve. This course includes a variety of *formative and summative assessment tools*, including our popular adaptive quizzing system *LearningCurve*, and *Practice Quizzes* and *Test Bank* questions—all written for this specific title.

- **Activities** In addition to the full *e-book*, this title features an extensive *video library, immersive learning activities* to help students build their critical and scientific thinking, *skill-building activities* to increase student success and retention (syllabus reading, time management, etc.), *concept tutorials*, and more.
- **Analytics** The *Reports and Insights* area of Achieve tracks students' engagement and performance against course learning objectives. Keep track of your students' activity and monitor their progress on key learning objectives in real time!

All of this exists in a **mobile-friendly interface**, ready for **deep platform integration with your campus LMS**, and built to industry-leading standards of **accessibility** to meet the needs of ALL learners!

Purposeful usage of Achieve is effective.

Students using more of their courses' assignments and having higher grades on those assignments, had higher exam scores. Students with higher grades on their assignments (gradebook average) could expect to be 8 points higher on exams. Students that use or engage with less than the median student in each course can expect to perform 4% to 12% lower on their exams (depending on how much less work the student did), while students that use more than the typical, perform 1.5% to 3% higher on their exams.



Moving from -1 to +1 in assignment grade equates to a 8% difference in course exam score as percent correct. The 8% difference in exam scores represents the unique contribution from assignment grade.

► Extended description for Macmillan Learning's Achieve supports exam success! 

Macmillan Learning's Achieve supports exam success! In a recent study of 3,000 students, increased usage of Achieve was associated with an 8 percent increase in

Macmillan Learning makes Achieve easy to access and implement for your course.

- **Customer Support** Our Achieve Client Success Team—dedicated platform experts—provides collaboration, software expertise, and consulting to tailor each course to fit your instructional goals and student needs. Start with a demo at a time that works for you to learn more about how to set up your customized course. Sign up for a demo or training at go.oncehub.com/AchieveTraining.
- **LMS Integration** Macmillan Learning offers *deep platform integration* of Achieve with all LMS providers, including Canvas, Blackboard, Brightspace, and Moodle. With integration, students can access course content and their grades through one sign-in. And you can pair Achieve with course tools from your LMS, such as discussion boards, chat, and Gradebook functionality. LMS integration is also available with **Inclusive Access**. For more information, visit MacmillanLearning.com/college/us/solutions/LMS-Integration, or talk to your local sales representative.
- **Affordability** Macmillan Learning's Achieve was developed with affordability in mind, in order to *inspire what's possible for every learner!* Pricing and bundling options are available at Store.MacmillanLearning.com.

- **Accessibility** Macmillan Learning builds all of our online products to WCAG 2.0 AA+ compliance standards and has been recognized as Global Certified Accessible by the nonprofit Benetech for providing “born accessible” products. For more information, visit [MacmillanLearning.com/college/us/Our-Story/Accessibility](https://www.macmillanlearning.com/college/us/Our-Story/Accessibility).
- **Inclusion** Macmillan Learning is committed to taking steps that ensure our textbooks and digital courseware consider the backgrounds and needs of our community of learners, with the knowledge that diversity, equity, and inclusion (DEI) landscapes are constantly evolving. That’s why we dedicate so much of our content and product development processes to critical self-reflection, listening, planning, innovation, and collaboration. From the art and photo program, to the presentation of research and perspectives, to the language used in the narrative and assessment, to the accessibility of Achieve, DEI in learning materials matters at Macmillan. For more information, visit [MacmillanLearning.com/college/us/Our-Story/Diversity-and-Inclusion](https://www.macmillanlearning.com/college/us/Our-Story/Diversity-and-Inclusion).

Assessment

LearningCurve Adaptive Quizzing

Based on extensive learning and memory research, and proven effective for millions of students, LearningCurve adaptive quizzing helps students practice core concepts and gives them instant

feedback on their responses. After identifying the student's level of understanding, the system adapts to each student—choosing questions that will challenge them based on their performance. Each question is tied to a learning objective and linked to the appropriate section of the e-book to encourage students to discover the right answer—with no penalty to their grade. LearningCurve has consistently been rated the #1 resource in our collection by instructors and students alike.

- LearningCurve's game-like quizzing promotes retrieval practice through its unique delivery of questions and its point system.
- Students with a firm grasp on the material get plenty of practice but proceed through the activity relatively quickly.
- Students who make incorrect guesses are given more questions, so that they get the practice they need.
- Instructors can adjust the quiz topics and the Target Score, so students have to answer more (or fewer) questions to complete the quiz.
- Instructors can monitor results for each student and the class as a whole to identify areas that may need more coverage in lectures and assignments.

LearningCurve 4b. Infancy and Childhood

Due: Wed, Mar 31

Previewing as a Student

End Preview

Back to Study Plan

Achieve
macmillan learning

Macmillan Learning

Which situation is MOST likely to involve the action of the parasympathetic nervous system?

- ☐ Brooke's finger accidentally grazes the hot iron; she immediately jerks her hand away.
- ☒ After a satisfying evening meal, Callum relaxes in front of the television.
- ☐ Walking toward her car in a deserted parking garage one night, Danica is surprised by a strange man who seems to appear from nowhere.
- ☐ None of these situations reflects the action of the parasympathetic nervous system.

Next question

Take a break

► Extended description for Learning Curve Test Bank.

Test Bank

The Test Bank includes thousands of multiple-choice and essay questions meticulously checked against the updated content of the text, and tagged to content learning objectives. All questions are written and edited according to Macmillan Learning's guidelines for clarity and accuracy, and third-party checked to ensure they meet Macmillan's DEI standards. You can assign out-of-the-box exams or create your own by:

- choosing from thousands of multiple-choice questions (plus additional essay questions) in our database.
- filtering questions by type, topic, difficulty, and Bloom's level.

- customizing questions from the test bank.
- integrating your own questions into the exam.

Exam and quiz results report to a Gradebook that lets you monitor student progress individually and classwide.

Practice Quizzes

Practice Quizzes mirror the experience of a test, with questions that are similar but distinct from those in the Test Bank. Each quiz includes a pool of multiple-choice questions for each of the major sections of the chapter. The system randomly selects three questions from each pool, so each student receives a unique set of questions covering all of the major sections in the chapter. The Practice Quizzes are fully customizable and can be assigned for practice or for credit.

E-book

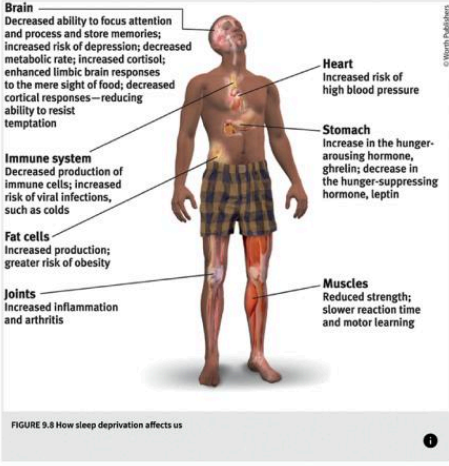
Macmillan Learning's e-book is an interactive version of the textbook built to industry-leading standards of web accessibility. In addition to highlighting, bookmarking, and note-taking capabilities, students can also test themselves with built-in, low-stakes self-assessments. The font resizing options include *OpenDyslexic*, a typeface to help mitigate some of the common reading errors caused by dyslexia. And all of the photos and figures come with alt text that is compatible with screen readers and other assistive

technologies. Students can download the e-book to read offline, or have it read aloud to them.

Psychology 101
MWF 9:00 AM-10:00 AM

E-book NOTEBOOK 109

FIGURE 9.8 summarizes the effects of sleep deprivation. But there is good news! Psychologists have discovered a treatment that strengthens memory, increases concentration, boosts mood, moderates hunger, reduces obesity, fortifies the immune system, improves school performance, and lessens the risk of fatal accidents. Even better news: The treatment feels good, can be self-administered, and is free! If you are a typical college or university student, you might feel trapped in a cycle of sleeplessness. Stress—from school, work, and life generally—might make adequate sleep seem like a luxury. If, for example, you experienced discrimination today, you might struggle to sleep (Fuller-Rowell et al., 2021; Yip et al., 2020). But one night this week, try to add 15 minutes to your sleep. Until you feel more rested and less like a zombie, try adding more sleep as often as you can. For some additional tips on getting better quality sleep, see TABLE 9.1.



Brain
Decreased ability to focus attention and process and store memories; increased risk of depression; decreased metabolic rate; increased cortisol; enhanced limbic brain responses to the mere sight of food; decreased cortical responses—reducing ability to resist temptation

Heart
Increased risk of high blood pressure

Stomach
Increase in the hunger-arousing hormone, ghrelin; decrease in the hunger-suppressing hormone, leptin

Immune system
Decreased production of immune cells; increased risk of viral infections, such as colds

Fat cells
Increased production; greater risk of obesity

Joints
Increased inflammation and arthritis

Muscles
Reduced strength; slower reaction time and motor learning

FIGURE 9.8 How sleep deprivation affects us

Module 9 Sleep and Dreams

Macmillan Learning

► Extended description for E-Book. 

Activities

Macmillan Learning's Achieve is designed to support and encourage active learning in and out of the classroom!

Video Collection for Introductory Psychology

Developed in collaboration with student and faculty advisors, the Video Collection for Introductory Psychology includes over 200 clips—both classic and contemporary—from trusted sources such as ABC News, BBC, CBS News, and TED, as well as original content produced by Macmillan Learning. Available only in Achieve, the clips can be shown in class or assigned as homework activities with their short accompanying quizzes.

The collection covers a broad array of topics, including recent coverage of the Covid-19 pandemic, online dating, racial bias and facial recognition software, the opioid epidemic, the effects of marijuana on health, Zoom fatigue, the effects of social media use, and ways to promote healthy discussions about race. In addition, Professor Garth Neufeld (Cascadia College) hosts a series of eight videos introducing students to APA's new Introductory Psychology Initiative and its key themes. All of our videos are fully accessible with closed-captioning and transcripts. Instructors can review detailed video descriptions, and information on new and retiring clips, in the accompanying Faculty Guide. Macmillan Learning's video collection undergoes regular review to ensure that the content remains relevant and up-to-date.



Immersive Learning Activities

With a focus on student engagement and critical thinking, these immersive learning activities invite students to apply what they are learning to their own lives, or to play the role of researcher—exploring experimental methods, analyzing data, and developing scientific literacy and critical thinking skills.

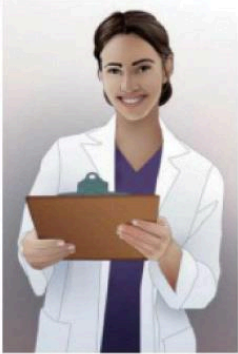
- “How Would You Know?” research activities for each chapter allow students to play the role of researcher as they design and interpret studies. Students consider possible confounding factors and other issues that affect the interpretation of results. Students learn about how key decision points can alter the meaning and value of a psychological study, and they develop scientific literacy skills in the process. Topics include “How Would You Know If People Can Learn to Reduce Anxiety?” and “How Would You Know If Reducing Social Media Use Improves Mental Health?”
- In the “Assess Your Strengths” activities, students apply what they are learning from the text to their own lives and

experiences by considering key “strengths.” Each activity starts with a personalized video introduction from David Myers, Nathan DeWall, or June Gruber. Students then assess themselves on the strength (critical thinking, quality of sleep, self-control, relationship strength, emotional diversity, belonging, hope, and more) using scales developed by researchers. Next, students get tips for nurturing that strength in their own lives, and take a quiz to help solidify their learning. This edition includes two **new** activities, “How Healthy Is Your Emotional Ecosystem?” and “How Much Awe Do You Experience, and How Might You Increase It?” by new co-author, June Gruber (University of Colorado Boulder).

- “Thinking Critically About ...” infographic activities for each chapter teach and reinforce critical thinking skills.
- Five new assignable *How Do We Know Ourselves?* essays (excerpted from David Myers’ new general audience book) are accompanied by assessment.

How Would You Know If There is a "Hot Hand" in Basketball?

Design
Glossary
Start Over



So, how would you know if there is a "hot hand" in basketball? Many people believe that a player is more likely to make a basket after having just made one than after missing one—that players who are doing well have a "hot hand." Is this true? To study this question effectively in your role as researcher, you need to **DESIGN** an appropriate study that will lead to meaningful results, **MEASURE** the hot hand in basketball in your participants, and **INTERPRET** the larger meaning of your results, considering how your findings would apply to the population as a whole.

We will start by choosing the best research design. Of the following options, which would be best for finding out if there is a hot hand in basketball?

☐ A. Case Study design

☐ B. Naturalistic Observation

☐ C. Experimental design

Select the Video Hint button to watch brief animations describing *Case Studies*, *Naturalistic Observation*, and *Experiments*.

Video Hint

Submit

► Extended description for Immersive Learning Activities. 

NEW Skills for Success Activities

We worked with instructors to build a collection of interactive Skills for Success activities to help ***increase student success and retention***, based on survey feedback about the essential skills needed for psychology students. Topics include How to Read a Syllabus, Time

Management, Note Taking, APA Style, and How to Read a Research Paper. These engaging activities guide students through the key elements and include assessment to test student understanding and allow for assignability, so that you don't need to spend precious class time on student preparedness.

Concept Practice Tutorials

Macmillan Learning's Achieve includes dozens of these dynamic, interactive mini-tutorials that teach and reinforce the course's foundational ideas. Each of these brief activities (only 5 minutes to complete) addresses one or two key concepts in a consistent format: review, practice, quiz, and conclusion.

Structures of the Eye

Practice: Exploring the Eye ▾

Select each button to review a brief description of the function of each part of the eye.

7 of 10 [Glossary](#) [Start Over](#)

Macmillan Learning

Cornea

Iris

Pupil

Lens

Retina

✓ Fovea

Optic Nerve

Blind Spot

Brief description of the function of each part of the eye.

Function of the selected part of eye:

1 of 8

Previous Step

Next Step

► Extended description for Concept Practice Tutorials. i

PsychSim6

With a new look, a new format, and updates for accessibility, the PsychSim tutorials immerse students in the world of psychological

research, placing them in the role of scientist or subject in activities that highlight important concepts, processes, and experimental approaches. Each PsychSim activity is paired with a quiz to ensure student understanding.

Instructor Activity Guides

Instructor Activity Guides provide you with a structured plan for using Achieve's active learning opportunities in both face-to-face and online courses. Each guide offers step-by-step instructions—from pre-class reflection to in-class engagement to post-class follow-up. The guides include suggestions for discussion questions, group work, presentations, and simulations, with estimated class time, implementation effort, and Bloom's taxonomy level for each activity. Myers and DeWall have created a new Instructor Activity Guide for each chapter, showcasing some of their own favorite classroom activities.

Macmillan Learning

Application

Instructor Activity Guide: Memory Skills

Best For
Any Class Size

Class Time
20 minutes

Implementation Effort
Low

Bloom's Taxonomy
Apply

Activity Summary

This activity assists students in improving their skills of memorization using vivid imagery. Students are shown how easy it is to use techniques for organizing information in their memories. Ultimately, students create their own "memory room" and use vivid imagery to improve their ability to recall specific information.

Learning Objectives

Analyze the concepts of human memory.

- ↳ Define memory.
- ↳ Analyze the role of retrieval in memory.
- ↳ Explain retrieval (in human memory).

Analyze memory strategies and skills.

- ↳ Explain rehearsal in the context of memory.
- ↳ Define mnemonic device.
- ↳ Explain how mnemonic devices are used.

Resources for this Activity

[Download All Resources](#)

Worksheet: Memory
[Download](#)

Clicker Questions for Memory
[Download](#)

Recommended Tools

iClicker Cloud
Video conferencing software that permits organizing students into groups (if needed)

Pencil and paper

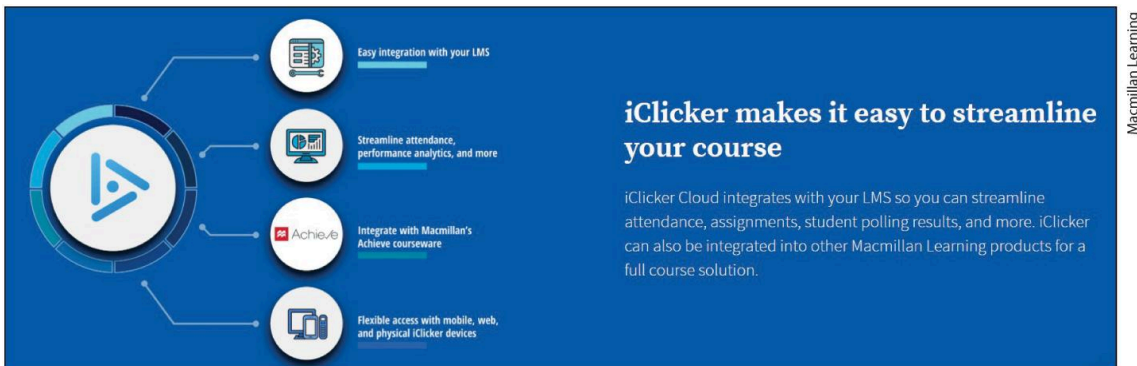
► Extended description for Instructor Activity Guides.

iClicker Classroom Response System

Achieve seamlessly integrates iClicker, Macmillan Learning's highly acclaimed classroom response system. Free with Achieve, iClicker helps you engage, assess, and guide learning.

- iClicker's attendance feature helps you make sure students are actually attending in-person classes.

- Use flexible polling and quizzing options to engage students, check their understanding, and get their feedback in real time.
- iClicker allows students to participate using laptops, mobile devices, or in-class remotes.
- You can easily integrate your existing slides and polling questions without re-entering them.
- Take advantage of the available chapter-specific questions, as well as the questions in our Instructor Activity Guides, to improve opportunities for all students to be active in class.



► Extended description for iClicker features. **i**

Analytics

Reports, Insights, and Goal Setting

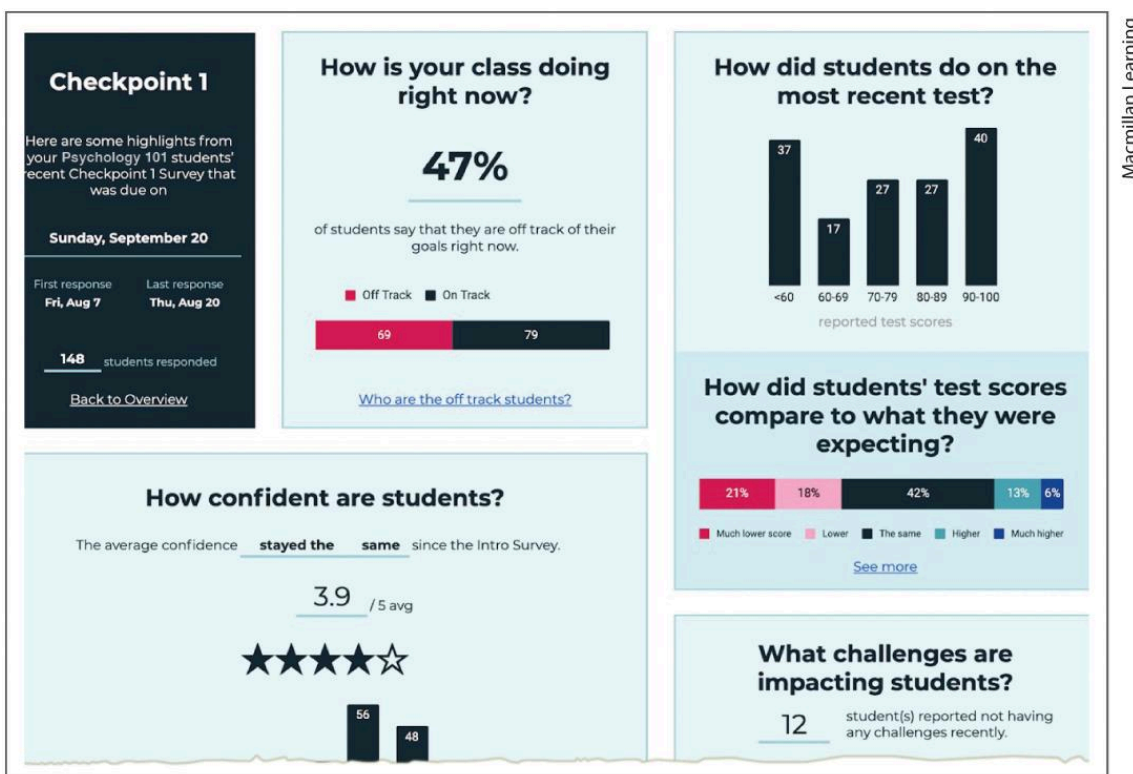
Macmillan Learning's Achieve Reports provide user-friendly data about student activities, assignments, and assessments by unit, APA/IPI guidelines, Learning Objective, or by student, so you can

identify trouble spots and adjust your efforts accordingly. The Achieve Insights allow you to answer such questions as:

- What Learning Objectives and assignments should I review in this unit?
- What is the range of performance on a particular assignment?
- How many students aren't logging in?

Goal-Setting and Reflection surveys help students plan and direct their learning, and provide instructors with an unprecedented view into students' metacognition. These tools help students develop control over their learning and foster a growth mindset to build long-lasting academic success.

- The **Intro Survey** asks students to consider their goals for the class, providing a powerful source of intrinsic motivation. Students then consider how they will manage their time and use learning strategies to achieve their plan.
- **Checkpoint Surveys** ask students to monitor and assess their progress, and prompt them to make changes as needed.
- **Each completed survey generates a report** for the instructor that reveals how the class is progressing—going well beyond the course grades.



► Extended description for Achieve Innovation Lab.

Additional Instructor Resources

Instructor's Resource Manual

Engage your students with an abundance of active learning opportunities, available in downloadable Word files.

Image Slides and Tables

Accessible, downloadable Image Slides contain each chapter's illustrations, photos, and tables, and can be customized to fit your

needs. All images come with alt text embedded for learners using assistive software.

Lecture Slides

Accessible, downloadable Lecture Slides include the chapter illustrations, photos, tables, and embedded alt text, but also provide lecture outlines to support key concepts and themes from the text. Lecture slides can also be customized to fit your needs.

iClicker Questions

Take active learning and student engagement to another level with our iClicker classroom response system, which is fully integrated and free with Macmillan Learning's Achieve. Engaging iClicker **questions** are available for each chapter.

Macmillan Learning's Achieve Read & Practice

Seamlessly integrating with any LMS, Achieve Read & Practice marries Macmillan Learning's mobile-accessible e-book with the acclaimed LearningCurve adaptive quizzing. It is an easy-to-use yet exceptionally powerful teaching and learning option that streamlines the process of increasing student engagement and understanding, and reduces cost. If students struggle with a particular topic, they are encouraged to re-read the material and answer a few short additional questions. Achieve Read & Practice makes it easy to integrate the e-book with assignments in your

campus LMS. See [MacmillanLearning.com/ReadandPractice](https://www.macmillanlearning.com/ReadandPractice) for more information.

THIRTEENTH EDITION

Exploring Psychology

David G. Myers

Hope College
Holland, Michigan

C. Nathan DeWall

University of Kentucky
Lexington, Kentucky

June Gruber

University of Colorado Boulder
Boulder, Colorado



worth publishers
Macmillan Learning
New York

PROGRAM DIRECTOR: Suzanne Jeans
SENIOR EXECUTIVE PROGRAM MANAGER: Carlise Stembridge
EXECUTIVE DEVELOPMENT MANAGER, SOCIAL SCIENCES: Christine Brune
DEVELOPMENT EDITORS: Ann Kirby-Payne and Danielle Slevens
EDITORIAL ASSOCIATE: Kathryn Brownson
ASSOCIATE PROJECT MANAGER, CONTENT DEVELOPMENT: Talia Green
EXECUTIVE MARKETING MANAGER: Katherine Nurre
MARKETING ASSISTANT: Peter Proscia
SENIOR MEDIA EDITOR, PSYCHOLOGY: Karissa Venne
MEDIA ASSISTANT EDITOR: Renee Prvulov
TEST BANK EDITORS: Nick Rizzuti and Danielle Slevens
SENIOR DIRECTOR, CONTENT MANAGEMENT ENHANCEMENT: Tracey Kuehn
EXECUTIVE MANAGING EDITOR: Michael Granger
MANAGER, PUBLISHING SERVICES: Ryan Sullivan
SENIOR LEAD CONTENT PROJECT MANAGER: Won McIntosh
SENIOR WORKFLOW PROJECT MANAGER: Paul Rohloff
PRODUCTION SUPERVISOR: Lawrence Guerra
DIRECTOR OF DESIGN, CONTENT MANAGEMENT: Diana Blume
SENIOR DESIGN SERVICES MANAGER: Natasha A. S. Wolfe
INTERIOR DESIGN: Maureen McCutcheon
SENIOR DESIGN MANAGER, COVER DESIGN: John Callahan
SENIOR ART MANAGER: Matthew McAdams

INTERIOR ILLUSTRATIONS: Shawn Barber, Keith Kasnot, Matthew McAdams, Evelyn Pence, and Don Stewart

SENIOR DIRECTOR OF RIGHTS AND PERMISSIONS: Hilary Newman

EXECUTIVE PERMISSIONS EDITOR: Robin Fadool

SENIOR DIRECTOR, DIGITAL PRODUCTION: Keri deManigold

SENIOR MEDIA PROJECT MANAGER: Sarah O'Connor Kepes

COMPOSITION: Lumina Datamatics, Inc.

Copyright © 2025, 2022, 2019, 2016 by Worth Publishers. All rights reserved. No part of this book may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, except as may be permitted by law or expressly permitted in writing by the Publisher.

ISBN: 978-1-319-56148-2 (EPUB)

Library of Congress Control Number: 2024939878

1 2 3 4 5 6 29 28 27 26 25 24

David Myers' royalties from the sale of this book are assigned to the David and Carol Myers Foundation, which exists to receive and distribute funds to other charitable organizations.

Acknowledgments

Acknowledgments and copyrights appear on the same page as the text and art selections they cover; these acknowledgments and copyrights constitute an extension of the copyright page.

Worth Publishers

120 Broadway

New York, NY 10271

www.macmillanlearning.com

To Danielle Stevens

With gratitude for her years of exceptional editing support, and for
her encouragement and friendship

DM

•

To HoneyLou Bonar

Brilliant, kind, and gifted educator whose positive spirit inspired
thousands of students

ND

•

To Raul Saucedo

For a lifelong journey of curiosity, love, and all else

JG

About the Authors



Photographer Steven Herppich, courtesy of Hope College Public Affairs and Marketing

David Myers received his B.A. in chemistry from Whitworth University, and his psychology Ph.D. from the University of Iowa. He has spent his career at Michigan's Hope College, where he taught dozens of introductory psychology sections. Hope College students have invited him to be their commencement speaker and voted him "outstanding professor." His research and writings have been recognized by the Gordon Allport Intergroup Relations Prize, an Honored Scientist award from the Federation of Associations in Behavioral & Brain Sciences, an Award for Distinguished Service on Behalf of Social-Personality Psychology, a Presidential Citation from APA Division 2, election as an American Association for the Advancement of Science Fellow, and three honorary doctorates.

With support from National Science Foundation grants, Myers' scientific articles have appeared in three dozen scientific periodicals, including *Science*, *American Scientist*, *Psychological Science*, and *American Psychologist*. In addition to his scholarly and textbook writing, he digests psychological science for the general public. His writings have appeared in four dozen magazines, from *Today's Education* to *Scientific American*. He also has authored six general audience books, including, in 2022, *How Do We Know Ourselves? Curiosities and Marvels of the Human Mind*. And he blogs about psychology and life at [TalkPsych.com](https://talkpsych.com).

David Myers has chaired his city's Human Relations Commission, helped found a thriving assistance center for low-income families, and spoken to hundreds of college, community, and professional groups worldwide.

Drawing on his experience of hearing loss, which now includes a cochlear implant, he also has written articles and a book (*A Quiet World*) about hearing loss, and he has advocated a transformation in U.S. assistive listening technology (visit [HearingLoop.org](https://hearingloop.org)). His support of hearing accessibility has been recognized with awards from the American Academy of Audiology, the hearing industry, and the Hearing Loss Association of America.

David and Carol Myers met and married while undergraduates, and have raised sons Peter and Andrew, and a daughter, Laura. They

have one grandchild, Allie ([p. 134](#)).



Nathan DeWall is professor of psychology at the University of Kentucky. He received his bachelor's degree from St. Olaf College, a master's degree in social science from the University of Chicago, and a master's degree and Ph.D. in social psychology from Florida State University. DeWall received the College of Arts and Sciences Outstanding Teaching Award, which recognizes excellence in undergraduate and graduate teaching. The Association for Psychological Science identified DeWall as a "Rising Star" early in his career for "making significant contributions to the field of psychological science." He has been included in the top 1 percent of all cited scientists in psychology and psychiatry on the Institute for Scientific Information list, according to the Web of Science. He is currently serving on the National Science Foundation Social Psychology Program panel.

DeWall conducts research on close relationships, self-control, aggression, the psychology of religion, and intellectual humility.

With funding from the National Institutes of Health, the National Science Foundation, and the John Templeton Foundation, he has published 225 scientific articles and chapters. DeWall's research awards include the SAGE Young Scholars Award from the Foundation for Personality and Social Psychology, the Young Investigator Award from the International Society for Research on Aggression, and the Early Career Award from the International Society for Self and Identity. His research has been covered by numerous media and entertainment outlets, including Good Morning America, *The Wall Street Journal*, *Newsweek*, *The Atlantic Monthly*, *The New York Times*, *The Los Angeles Times*, *Harvard Business Review*, *USA Today*, National Public Radio, *The Guardian*, the BBC, and a Netflix documentary. He has lectured nationally and internationally, including in Hong Kong, China, the Netherlands, England, Greece, Hungary, Sweden, Australia, and France.

Nathan is happily married to Alice DeWall and is the proud father of Beverly "Bevy" and Ellis. He also enjoys taking care of the family dog, Stubbs. As an ultramarathon runner, he completed numerous races, including the Badwater 135 in 2017 (dubbed "the World's toughest foot race"). In his spare time now, he enjoys hiking, attending live concerts, setting up and maintaining aquariums, watching sports, and playing guitar and singing.



June Gruber is an associate professor of psychology and neuroscience at the University of Colorado Boulder, where she directs the Positive Emotion and Psychopathology Laboratory and studies the links between positive emotions and mental health, including the “dark side” of happiness. Gruber was previously an assistant professor of psychology at Yale University. She received her B.A. in psychology and her M.A. and Ph.D. in clinical psychology from the University of California, Berkeley. Gruber has published over 140 articles and chapters, co-authored *Psychology*, Fourteenth Edition (with David Myers and Nathan DeWall), and edited two psychology books—*The Oxford Handbook of Positive Emotion* and *Psychopathology and Positive Emotion: Integrating the Light Sides and Dark Sides* (with Judith Moskowitz). Her research has received several honors, including the Association for Psychological Science’s Rising Star Award, the Janet Taylor Spence Award for Transformative Early Career Contributions, the Society for Research in Psychopathology’s Early Career Award, the NARSAD Young Investigator Award, and Yale University’s Arthur Greer Memorial Prize for Outstanding Junior Faculty. Gruber has served as an

Associate Editor and Interim Editor-in-Chief for *Perspectives on Psychological Science* and is currently an Associate Editor at *Emotion*.

Gruber's passion for teaching psychology and training future generations of scholars extends beyond the classroom. She has created freely available interview series and courses for the general public, including a Coursera #TalkMentalIllness course, an Experts in Emotion Interview Series at Yale University, and an online course in Human Emotion. Gruber has co-written a column for young scientists in ScienceCareers.org (from the journal *Science*) and is currently writing for *Teaching Current Directions in Psychological Science* (along with Myers and DeWall). Her teaching efforts have received several awards, including the President's Teaching Scholars Award, the Boulder Faculty Assembly Excellence in Teaching and Pedagogy Award, the UROP Outstanding Faculty Mentor Award, and the Cogswell Award for Inspirational Instruction at the University of Colorado Boulder. Gruber is deeply invested in supporting and elevating the careers of underrepresented women in the sciences, and leads workshops, publishes papers, and gives talks to raise awareness about gender disparities in the field and to chart a proactive path forward.

Gruber enjoys spending quiet days in the Colorado mountains with her two sons, Ansel and Silvan, and her husband, Raul, whom she met as an undergraduate psychology major. She also enjoys taking

hikes with her dogs Buddy and Eddy, making art projects with her children, traveling, and basking in the nostalgia of 1980s music.

Brief Contents

Instructor Preface

Skills for Student Success: How to Apply Psychology to Live Your Best Life

Chapter 1 Thinking Critically With Psychological Science (Modules 1–2)

- 1 The History and Scope of Psychology
- 2 Research Strategies: How Psychologists Ask and Answer Questions

Chapter 2 The Biology of Behavior (Modules 3–7)

- 3 Neural and Hormonal Systems
- 4 Tools of Discovery: Having Our Head Examined
- 5 Brain Regions and Structures
- 6 Damage Responses and Brain Hemispheres
- 7 Genetics, Evolutionary Psychology, and Behavior

Chapter 3 Consciousness and the Two-Track Mind (Modules 8–10)

- 8 Consciousness: Some Basic Concepts
- 9 Sleep and Dreams
- 10 Drugs and Their Effects

Chapter 4 Developing Through the Life Span (Modules 11–14)

11 Developmental Issues, Prenatal Development, and the Newborn

12 Infancy and Childhood

13 Adolescence and Emerging Adulthood

14 Adulthood

Chapter 5 Sex, Gender, and Sexuality (Modules 15–16)

15 Gender Development

16 Human Sexuality

Chapter 6 Sensation and Perception (Modules 17–19)

17 Basic Concepts of Sensation and Perception

18 Vision: Sensory and Perceptual Processing

19 Hearing, Skin, Chemical, and Body Senses

Chapter 7 Learning (Modules 20–22)

20 Basic Learning Concepts and Classical Conditioning

21 Operant Conditioning

22 Biology, Cognition, and Learning

Chapter 8 Memory (Modules 23–25)

23 Studying and Encoding Memories

24 Storing and Retrieving Memories

25 Forgetting, Memory Construction, and Improving Memory

Chapter 9 Thinking, Language, and Intelligence (Modules 26–29)

26 Thinking

27 Language and Thought

28 Intelligence Assessment and Dynamics

29 Genetic and Environmental Influences on Intelligence

Chapter 10 Motivation and Emotion (Modules 30–33)

30 Basic Motivational Concepts, Affiliation, and Achievement

31 Hunger

32 Theories and Physiology of Emotion

33 Expressing and Experiencing Emotion

Chapter 11 Stress, Health, and Human Flourishing (Modules 34–35)

34 Stress and Illness

35 Health and Happiness

Chapter 12 Social Psychology (Modules 36–38)

36 Social Thinking and Social Influence

37 Antisocial Relations

38 Prosocial Relations

Chapter 13 Personality (Modules 39–40)

39 Classic Perspectives on Personality

40 Contemporary Perspectives on Personality

Chapter 14 Psychological Disorders (Modules 41–46)

41 Basic Concepts of Psychological Disorders

42 Anxiety Disorders, Obsessive-Compulsive and Related Disorders, Trauma- and Stressor-Related Disorders, and Somatic Symptom and Related Disorders

43 Depressive Disorders and Bipolar Disorders

44 Schizophrenia

45 Eating Disorders, Personality Disorders, and Dissociative Disorders

46 Neurodevelopmental Disorders

Chapter 15 Therapy (Modules 47–49)

47 Introduction to Therapy and the Psychological Therapies

48 Evaluating Psychotherapies

49 The Biomedical Therapies and Preventing Psychological Disorders

Appendix A Statistical Reasoning in Everyday Life

Appendix B Psychology at Work

Appendix C The Story of Psychology: A Timeline

Appendix D Career Fields in Psychology

Appendix E Complete Module Reviews

Appendix F Answers to the *Retrieve It* and *Experience the Testing Effect* Questions

Glossary

References

Name Index

Subject Index

Contents

Instructor Preface

Skills for Student Success: How to Apply Psychology to Live Your Best Life

Chapter 1 Thinking Critically With Psychological Science (Modules 1–2)

Module 1 The History and Scope of Psychology

Psychology Is a Science

THINKING CRITICALLY ABOUT: The Scientific Attitude Critical Thinking

Psychological Science Is Born

Psychological Science Matures

Contemporary Psychology

Module 2 Research Strategies: How Psychologists Ask and Answer Questions

The Need for Psychological Science

Combating Misinformation With Psychological Science

The Scientific Method

THINKING CRITICALLY ABOUT: Correlation and Causation

Psychology's Research Ethics

Use Psychology to Become a Stronger Person—and a Better Student

Chapter 2 The Biology of Behavior (Modules 3–7)

Module 3 Neural and Hormonal Systems

Biology, Behavior, and Mind

The Power of Neuroplasticity

Neural Communication

The Nervous System

The Endocrine System

Module 4 Tools of Discovery: Having Our Head

Examined

Module 5 Brain Regions and Structures

The Brainstem

The Thalamus

The Reticular Formation

The Cerebellum

The Limbic System

The Cerebral Cortex

THINKING CRITICALLY ABOUT: Do We Use Only 10

Percent of Our Brain?

Module 6 Damage Responses and Brain Hemispheres

Responses to Damage

The Divided Brain

Module 7 Genetics, Evolutionary Psychology, and

Behavior

Behavior Genetics: Predicting Individual Differences

Evolutionary Psychology: Understanding Human Nature

Chapter 3 Consciousness and the Two-Track Mind (Modules 8–10).

Module 8: Consciousness: Some Basic Concepts

Defining Consciousness

Cognitive Neuroscience

Selective Attention

Dual Processing: The Two-Track Mind

Module 9: Sleep and Dreams

Biological Rhythms and Sleep

Why Do We Sleep?

Sleep Deprivation and Sleep Disorders

Dreams

Module 10: Drugs and Their Effects

Tolerance and Addiction in Substance Use Disorders

THINKING CRITICALLY ABOUT: Tolerance and Addiction

Types of Psychoactive Drugs

Influences on Drug Use

Chapter 4 Developing Through the Life Span (Modules 11–14).

Module 11: Developmental Issues, Prenatal

Development, and the Newborn

Developmental Psychology's Major Issues

Prenatal Development and the Newborn

Module 12: Infancy and Childhood

Physical Development

Cognitive Development

Social Development

THINKING CRITICALLY ABOUT: Parenting Styles

Module 13: Adolescence and Emerging Adulthood

Physical Development

Cognitive Development

Social Development

Emerging Adulthood

Module 14: Adulthood

Physical Development

Cognitive Development

Social Development

Chapter 5 Sex, Gender, and Sexuality (Modules 15–16)

Module 15: Gender Development

Similarities and Differences

THINKING CRITICALLY ABOUT: Gender Bias in the Workplace

The Nature of Gender

The Nurture of Gender

THINKING CRITICALLY ABOUT: Sexual Aggression

Module 16: Human Sexuality

The Physiology of Sex

The Psychology of Sex

Sexual Orientation

An Evolutionary Explanation of Human Sexuality

Sex and Human Relationships

Reflections on the Nature and Nurture of Sex, Gender, and Sexuality

Chapter 6 Sensation and Perception (Modules 17–19)

Module 17 Basic Concepts of Sensation and Perception

Processing Sensations and Perceptions

Transduction

Thresholds

THINKING CRITICALLY ABOUT: Subliminal Stimulation
and Subliminal Persuasion

Sensory Adaptation

Perceptual Set

Context, Motivation, and Emotion

Module 18 Vision: Sensory and Perceptual Processing

Light Energy and Eye Structures

Information Processing in the Eye and Brain

Perceptual Organization

Perceptual Interpretation

Module 19 Hearing, Skin, Chemical, and Body Senses

Hearing

Skin, Chemical, and Body Senses

Sensory Interaction

ESP—Perception Without Sensation?

Chapter 7 Learning (Modules 20–22)

Module 20 Basic Learning Concepts and Classical Conditioning

How Do We Learn?

Classical Conditioning

Module 21 Operant Conditioning

Skinner's Experiments

Skinner's Legacy.

Contrasting Classical and Operant Conditioning

Module 22 Biology, Cognition, and Learning

Biological Constraints on Conditioning

Cognition's Influence on Conditioning

Learning by Observation

THINKING CRITICALLY ABOUT: The Effects of Viewing

Media Violence

Chapter 8 Memory (Modules 23–25)

Module 23 Studying and Encoding Memories

Studying Memory.

Encoding Memories

Module 24 Storing and Retrieving Memories

Memory Storage

Memory Retrieval

Module 25 Forgetting, Memory Construction, and Improving Memory.

Forgetting

Memory Construction Errors

THINKING CRITICALLY ABOUT: Can Memories of

Childhood Sexual Abuse Be Repressed and Then Recovered?

Improving Memory.

Chapter 9 Thinking, Language, and Intelligence (Modules 26–29)

Module 26 Thinking

Concepts

Problem Solving: Strategies and Obstacles

Forming Good (and Bad) Decisions and Judgments

THINKING CRITICALLY ABOUT: The Fear Factor

Thinking Creatively

Do Other Species Share Our Cognitive Skills and Emotions?

Module 27: Language and Thought

Language Structure

Language Acquisition and Development

The Brain and Language

Thinking and Language

Do Other Species Have Language?

Module 28: Intelligence Assessment and Dynamics

What Is Intelligence?

Assessing Intelligence

Intelligence Across the Life Span

THINKING CRITICALLY ABOUT: Cross-Sectional and

Longitudinal Studies

Module 29: Genetic and Environmental Influences on

Intelligence

Heredity and Intelligence

Environment and Intelligence

Gene-Environment Interactions

Group Differences in Intelligence Test Scores

Chapter 10 Motivation and Emotion (Modules 30–33)