## **Psychology:** Journey Toward Self-Knowledge

## **Teacher Edition**



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## Teacher Edition Introduction

This Oak Meadow course, *Psychology: Journey Toward Self-Knowledge*, is designed to introduce students to fundamental principles of psychology, relevant research studies, and prominent theorists who expanded our understanding of human functioning. Throughout the course, students are encouraged to engage with the content through self-referencing activities so their understanding of themselves can deepen and grow as they master the concepts. The topics covered in this course were chosen with care and intention; each facilitates self-knowledge, growing awareness, and identity formation—the central concerns for the developing adolescent.

As a social science, the study of psychology bridges the disciplines of philosophy and biology in its quest to comprehend human thought and behavior. The course is designed to engage the students in both aspects of the inquiry, facilitated by a focus on four unifying themes:

- Everything psychological is simultaneously biological
- Nature via nurture
- The impact of evolution on thoughts and behavior
- The unconscious mind

Students will examine these themes throughout the course.

In this teacher edition, answers are seen in **orange**. You will also find the full content of the course and instructions for all activities.

When assessing student work, if a student misunderstands a factual question, you can share the correct answer with them to clarify any misconceptions. If they answer many of the factual questions incorrectly, encourage them to review the reading assignment or associated videos for better comprehension.

Clearly, it is best not to share this teacher edition with your student, as they are expected to produce original work. Any indication of plagiarism needs to be taken seriously. Make sure your student is familiar with when and how to attribute sources. These conventions are explained fully in the appendix. Although high school students should be fully aware of the importance of academic integrity, you are encouraged to review its significance with your student at the start of the course (information on this is also found in the appendix). We encourage you to join your student in discussing the material in this course. Taking a special interest in your student's work can result in greater engagement and effort. The study of human thought and behavior is not only fascinating, it is also naturally relevant to our healthy functioning in an ever-changing world.

## A Note About the Workload

Students vary greatly in terms of reading speed, reading comprehension, and writing ability. Some may find the reading in this course takes longer than expected; others may find the writing assignments take a great deal of time. In general, students can expect to spend about five hours on each lesson (or ten hours for a double lesson). Students who need more time to complete the work might modify some lessons to focus on fewer assignments or opt to complete some of the written assignments orally. Modifications like these can allow students to produce work that is of a higher quality than if they were rushing to get everything done. Each lesson in this course can be customized to suit your student's needs.

Keep an eye on the workload as your student progresses through the course, and make adjustments so they have time for meaningful learning experiences.



## Coursebook Introduction

"Do the difficult things while they are easy and do the great things while they are small. A journey of a thousand miles must begin with a single step."

Lao Tzu

Many people are motivated to study psychology because they want to understand themselves better. Perhaps you feel the same way. You might also want to gain a more precise grasp of your relationships with your friends, family members, and your more extensive social network. Maybe you would like to gather knowledge about the psychological pitfalls of human nature to avoid them, or perhaps you are motivated by a desire to effect positive change in the world on a community or global level. Whatever your objectives might be, as your journey toward deeper self-knowledge gains momentum, you will come to understand others better as well.

A journey of this sort may be the most essential journey an individual can take in life. The quest for self-knowledge begins when a child is old enough to notice they are different from other people around them, and they start to wonder why. At some point in your life, perhaps you began to pay attention to how your unique personality traits are expressed in different situations: on the play-ground, in a social environment, or at home with your family. Maybe you noticed the many ways your traits have been influenced by the context in which you were raised. Perhaps you observed the way you make choices, navigate the effects of stress in your life, or feel drawn to spend time playing music, sports, or video games. And maybe you began to ponder the complex factors that make each of us who we are.

The journey toward self-knowledge lasts an entire lifetime. As we pass through the evolving stages of the life cycle, our identity as human beings continues to shift and change. Each stage inevitably leads us to encounter a wide range of circumstances, opportunities, losses, gains, and setbacks. For most of us, the better we know and understand ourselves at each step along the path, the easier it becomes to navigate our way through the challenging terrain that is part of the human condition.

So get ready—your journey is about to experience a significant jump-start! This course will provide you with a deeper understanding of the many complex mechanisms that influence human thought and behavior (your own included) and will guide you as you strive to create a full and meaningful life.

## The Unifying Themes of This Course

As you move through the course material, you will notice that psychologists investigate thought and behavior from several different domains, such as cognitive, social, developmental, biological, and environmental, to name a few. Although the textbook divides the study into various topics, perspectives, and chapters, the human psyche is not divided; all parts interact to influence the whole.

To help us appreciate the connections between the various perspectives and topics we will encounter throughout our study, we will hold within our focus four unifying themes:

- Everything psychological is simultaneously biological
- Nature via nurture
- The impact of evolution on thoughts and behavior
- The unconscious mind

These themes will show up throughout the course, and we'll take a closer look at each in the early lessons.

## **Your Textbook and Online Sources**

The following textbook is used in this course:

Exploring Psychology in Modules 12th Edition by David Myers and Nathan DeWall (MacMillan 2022)

The textbook topics are divided into modules so that the information can be more easily accessed and remembered. The textbook is designed to accommodate several learning styles. You might have noticed that you learn best by listening or by visual input, such as the written word, pictures, or videos. Or maybe you learn most efficiently by engaging in hands-on projects. *Neurodiversity* is a term that recognizes different brains process information in unique ways that fall within a wide range of functionality. You will get a chance to explore your personal learning style in lesson 1.

When you read the textbook, first look through the module for topic headings, interesting diagrams and pictures, and key terms. As you do the reading, pay attention to the diagrams, information, and even the cartoons and jokes presented in the margins. Always look up the definition of any word that is unfamiliar to you. Keep an ongoing list of your new vocabulary words as you proceed through the course. This practice will help you to develop your language and writing skills while it supports your comprehension of the material.

This single-semester course will not cover all the topics in the textbook. It will skip around from place to place to include the modules that are particularly relevant to the theme of the curriculum: a journey toward self-knowledge.

In addition to the textbook, this course uses many online resources, which can be accessed at www .oakmeadow.com/curriculum-links. Find and bookmark the curriculum links page for this course now so you can easily access it throughout the course.

### How the Course Is Set Up

This course is designed to be completed in 18 weeks. When you begin each lesson, scan the entire lesson first. Take a quick look at the number of assignments and amount of reading. Having a sense of the whole lesson before you begin will help you manage your time effectively.

The lessons include the following sections to facilitate your mastery and memory of the material:

An **Assignment Checklist** at the beginning of each lesson shows you what is required and lets you check off assignments as you complete each one. Assignments are fully explained in the lesson.

**Learning Objectives** outline the main goals of the lesson and give you an idea of what to expect.

A Lesson Introduction will provide a brief overview of the topic.

In **Before You Begin**, you will be asked to reflect on your ideas about some aspect of a topic before you read the textbook, exploring your thoughts in a freewriting exercise. You can set a timer for 10 or 15 minutes and write without concern for grammar, spelling, and other writing conventions.

**Reading** sections list what you will be reading in each lesson. You are encouraged to read carefully and take notes.

Watch and Reflect includes videos and written reflections to help you understand the material better; the videos add valuable information to what you've already learned in the textbook.

Assignments are designed to help you understand key concepts and apply your knowledge.

**Activities** allow you to engage with the material in a way that works best for your learning style and your interests.

**Investigate, Reflect, and Apply** asks you to carefully look at one or two of the salient concepts presented in the chapter, reflect on how they appear in your life, and then apply this knowledge to further your understanding of yourself or the world around you.

In the **Four Themes Analysis**, you will create an outline, graphic organizer, or another design of your choice to help you identify the unifying course themes within the lesson content. As you are reading, keep the themes in mind; you will be asked to provide examples and note the connections between the ideas.

**Share Your Work** provides reminders and information for students who are enrolled in school and submitting work to their teacher.

The **Appendix** contains important material that you will be expected to read and incorporate into your work throughout the year. Take some time to familiarize yourself with the information in the appendix. You will find academic expectations, original work guidelines, information about how to avoid accidental plagiarism, and details on locating and citing sources and images.

This course is designed for independent learning, so hopefully you will find it easy to navigate. However, it is assumed you will have an adult supervising your work and providing support and feedback. If you have a question about your work, please ask for help!

## A Note About the Workload

Students vary greatly in terms of reading speed, reading comprehension, and writing ability. Some may find the reading in this course takes less time than expected; others may find the writing assignments take a great deal of time. In general, you can expect to spend about five to seven hours on each weekly lesson.

Keep an eye on the workload as you progress through the course. If you find you are struggling to complete the work, contact your teacher to discuss your options. Your teacher might modify lessons depending on particular learning goals or challenges you are facing.



## The History of Psychology

## **Learning Objectives**

In this lesson, you will:

- Become familiar with the evolution of the field of psychology and the prominent theorists who influenced its development.
- Learn about levels of analysis and theoretical perspectives employed by contemporary psychologists.
- Encounter various subfields of psychology and their application to our understanding of the world.

## **Lesson Introduction**

"What lies behind us and what lies before us are small matters compared to what lies within us."

**Ralph Waldo Emerson** 

Consider the following questions:

- Why do people tend to remember certain things and forget others?
- Is it mostly environmental or genetic factors that make one person different from another?
- What experiences or temperamental qualities lead an individual to become aggressive or peaceful?
- How can we best bounce back from tragedy or traumatic events?
- How do our brains and emotions develop and change over a lifetime?
- What makes people smarter or happier?

#### **ASSIGNMENT CHECKLIST**

- Write about what interests you about the study of psychology.
- In your textbook, read the Student Preface and Module 1.
- ☐ Watch the video "Intro to Psychology: Crash Course Psychology #1" and write a reflection.
- Create a time line of the field of psychology.
- Match theoretic perspectives to behavior and motivation.
- Activity: Who Are You?
- Complete a learning style survey, and write a reflection.

Throughout the ages, human beings have pondered such questions about the mystery of our existence, our place within the universe, and why we think and behave the way we do. For thousands of years these questions remained within the domain of philosophy and religion. Then came a significant breakthrough on the stage of human evolution. In 1879 at the University of Leipzig, Germany, professor Wilhelm Wundt designed an experiment to measure mental processes. In doing so, he facilitated a union between the domain of philosophers and the discipline of science, and thus, the new science of psychology was born. As this young field of study developed and became popular in other universities around the world, it underwent several changes that reflected the goals and concerns of varying theorists.

The early schools of psychology were primarily led by European and American men, perhaps unsurprising as they dominated most professional and academic fields during that time. The focus of their studies and the interpretation of their findings were subject to the biases inherent in their cultures and positions of power; as such, their work has been met with some skepticism and criticism in contemporary times. Nevertheless, there were several pioneering women, such as Mary Calkins, Margaret Washburn, and Rosalie Rayner, who excelled in the field of psychology and contributed notable theories, ideas, and leadership in the early days, despite the odds against them because of their gender.

As time progressed, social and cultural attitudes evolved, educational opportunities increased, and the field of psychology became more culturally and gender diverse. Currently, women make up more than 53% of the psychology workforce and more than 75% of the new doctoral candidates. While there remains a need for increased cultural diversification in the field, the American Psychological Association is striving to expand the educational opportunities offered to minority populations and mandates multicultural competence training for all current psychologists. In 2013, the APA adopted a Diversity Implementation Plan. As the mission statement explains,

Diversity involves including, understanding, and valuing differences in individual and group characteristics such as race, religion, ethnicity, gender, gender identity and expression, socioeconomic status, age, (dis)ability status, and sexual orientation. Differences in these characteristics have resulted in marginalization, which refers to overt and covert trends within societies whereby those who are different in some way from the group norm tend to be excluded by the wider society and ostracized as undesirable.

The contemporary Biopsychosocial Approach employed by current psychologists highlights the significance of gender and cultural influences. This broad view incorporates various levels of analysis to arrive at a more complete picture of any psychological phenomenon.

## **Before You Begin**

Spend a few minutes flipping through your textbook. Notice the chapter headings in the table of contents, as well as the pictures, cartoons, and graphs spread throughout the book. What intrigues you and captures your attention? What do you already know? What topics would you like to learn more about? What sparks your curiosity?

Set a timer for 15 minutes, and explore these questions in a freewriting exercise. The "no rules" format of freewriting is a great way to explore how topics relate to one another and connect to your previous

knowledge and experiences. You do not have to write in complete sentences or be concerned with correct grammar or spelling. Just let your thoughts go, allow your pen to move, and see what emerges from the process.

## Reading

In your textbook, read the following:

- Student Preface
- Module 1, "The History and Scope of Psychology"

As you read, pay special attention to the key terms in bold print (and defined in the margins), as well as the images, cartoons, graphs, and questions in the chapter. Take notes that you can refer to when you work on the activities and assignments.

Many psychologists encourage students to take notes in outline form because outlines hierarchically organize ideas, with the main principles as major headings and the supporting ideas listed below. This method facilitates deeper cognitive processing and leads to easier recall of the material. However, you may have developed a personal practice of note-taking that supports your learning style efficiently, and you should feel free to use it. Perhaps you like to draw diagrams or color code the concepts that relate to one another. You are encouraged to experiment with new forms of note-taking as you become more aware of your unique style of cognitive processing.

Research indicates that handwritten notes are more effective than typewritten notes because they lead to enhanced cognition, more in-depth processing, and better recall. To explore this concept further, read the brief articles below that explain why this is so.

"A Learning Secret: Don't Take Notes with a Laptop"

"10 Benefits of Writing Notes by Hand"

### Watch and Reflect

For a lively review of the material presented in your textbook, watch this Crash Course video:

"Intro to Psychology: Crash Course Psychology #1"

This video and all other online resources can be accessed at www.oakmeadow.com/curriculum-links.

If you have never seen a Crash Course video, brace yourself: the narrator is a fast-talking guy! Although we will only assign a few Crash Course videos, you can use any episode in the series at any time to review and clarify the material you read about in your textbook. However, do not rely on them to replace your reading—they do not cover all the material provided in your textbook. After viewing Crash Course Psychology #1, write a brief reflection on the most memorable concepts you learned. Mention the concepts that might be confusing to you and pose any questions you have regarding them.

### Assignments

To help you understand the evolution of psychology, your first assignment will be to create a
time line from 1879 to current times. Create your time line by hand (rather than in digital form).
At each significant date on your time line, enter the names of the famous psychologists you read
about in addition to their primary area of focus. You can color code your time line to indicate
the prominent years of the differing schools of thought, such as structuralism, functionalism,
behaviorism, etc. If you like, you can find images of the famous researchers and glue them onto
your time line near their names.

The time line should include the prominent theorists and schools of thought. The inside front and back covers of the textbook contain a time line that is much more extensive than this assignment requires. You can use it for reference.

2. Have you ever heard the joke, "Why did the chicken cross the road?" In this assignment, you'll look at the chicken's behavior through different psychological lenses.

There are several different perspectives that psychologists use to investigate and analyze a topic of interest. For example, a behaviorist will look at a problem through the lens of environmental conditioning, noticing how we learn from our associations and are shaped by the rewards or punishments we receive following certain behaviors. In contrast, a psychodynamic theorist will consider the role of unconscious motives and desires when assessing thoughts and actions.

Before you begin the following activity, review the seven major contemporary theoretical perspectives in your textbook:

- Behavior genetics
- Neuroscience
- Behavioral
- Evolutionary
- Psychodynamic
- Cognitive
- Social-cultural

#### Now it's time to apply these theoretical perspectives:

The chicken crossed the road (behavior), but why?

Choose the correct theoretical perspective from the list above to explain the chicken's behavior.



Why did the chicken cross the road? (Image credit: tdlucas5000)

a. The chicken was performing her traditional mating ritual.

#### social-cultural

b. The most nutritious chicken feed was on the other side of the road.

#### evolutionary

- c. The chicken was trying to solve the problem of how to reach the other side. **cognitive**
- d. The chicken had been rewarded for crossing the road in the past.

#### behavioral

e. The chicken's mom was a big risk-taker and liked to dodge passing trucks. This chicken liked to do that too.

#### **behavior genetics**

- f. The chicken's motor cortex was activated by messages from its hypothalamus.
   neuroscience
- g. The chicken has an unconscious desire to expand its territory and find a mate.
   psychodynamic

h. Now it's your turn. Think about a specific behavior and come up with seven reasons to explain it, each one reflective of a different contemporary theoretical perspective. Be sure that your explanations highlight the essential points of each view.

The student should explain their chosen behavior from each of the perspectives by including the key elements of the theoretical perspective in the explanation. Below is a brief description of each perspective.

Behavior:	
Theoretical perspective	Reason
Behavior genetics	genes and environment interact to influence personal traits
Neuroscience	the physical body (in particular, the brain) influences and controls emotions and other experiences
Behavioral	learned responses can alter behavior
Evolutionary	the natural selection of traits over time has a survival basis
Psychodynamic	unconscious drives influence behavior
Cognitive	the way information is processed, stored, and retrieved affects memory, critical thinking, and other mental processes
Social-cultural	cultural and social influences impact behavior and thinking

### Activities

Complete the activity below.

#### Activity: Who Are You?

Create a collage, painting, or drawing that represents you and the significant aspects of your life: your interests, values, talents, hopes, dreams, challenges, and sources of joy. You can draw this by hand, or use images from magazines, photos, found objects, or any other materials that suit your ideas for creative expression. As this is the beginning of your journey toward self-knowledge, use this activity to reflect on yourself at this point in your life.

You do not have to be an accomplished artist to engage in this activity; feel free to approach it in whatever creative way you choose. At the end of the semester, you will have the opportunity to create another self-portrait that will be paired with this one to create a diptych (two related pieces of art joined together to create a cohesive whole).

This activity is offered as a vehicle to begin the focus on self-knowledge in connection with the psychological concepts the student will encounter in the course. They can choose to express

the aspects of their personality in any way, as long as they address each component to some degree: interests, values, talents, hopes, dreams, challenges, and sources of joy.

## Investigate, Reflect, and Apply

Examine your learning style by taking the inventory below:

"Diablo Valley College Learning Style Survey"

Reflect on your results in relation to your perception of yourself. Remember that sometimes inventories can catch you in a certain mood, energy level, or time of day that might affect the outcome. Keep that in mind if your scores do not seem to represent what you know to be true about yourself. Write a few sentences about your experience.

#### **SHARE YOUR WORK**

When you have completed this lesson, please share your work with your teacher. If you have any questions about the lesson assignments or how to share your work, let your teacher know. If you would like to modify any of the assignments or activities (now or in the future), please consult with your teacher first.

## Lesson

## Psychological Research Methods

## **Learning Objectives**

In this lesson, you will:

- Examine the strengths and limitations of psychological research methods.
- Become familiar with the significance of operational definitions and ethical considerations.

## **Lesson Introduction**

In this lesson, you'll explore the research methods used by psychologists. While your knowledge about the scientific method from previous courses will support your comprehension of these research methods, please pay special attention to the unique concerns, both practical and ethical, faced by the many researchers in the field of psychology today. In this way, you will become a skilled critical thinker regarding the many studies you read and hear about in the news and other media.

## Reading

In your textbook, read the following:

• Module 2, "Research Strategies: How Psychologists Ask and Answer Questions"

## Watch and Reflect

Watch the following video:

"Psychological Research: Crash Course Psychology #2"

#### **ASSIGNMENT CHECKLIST**

- In your textbook, read Module 2.
- Watch the video
   "Psychological Research: Crash Course Psychology #2" and write a reflection.
- Identify advantages and disadvantages of different research methods.
- Formulate questions best suited to each research method.
- Identify dependent and independent variables, and write operational definitions.
- Choose one activity:
  - Activity A: Create an Experiment
  - Activity B: Psyche and Eros
  - Activity C: Be a Smart Consumer (of Information)
- Project: Successful Studying

(All online resources can be found at www.oakmeadow.com/curriculum-links.)

Afterward, write a reflection that comments on the most memorable concepts you learned. Mention the concepts that might be confusing to you, and pose any questions you have regarding them.

### Assignments

 Psychologists use a variety of research methods to find the answers they seek, including the survey method, naturalistic observations, case studies, and experimentation. Each method has benefits and limitations. Review the practices in your textbook, and complete the chart below by providing an advantage and a disadvantage for each method.

Below are some pros and cons for each method. The student might also think of others that are appropriate.

Method	Advantage	Disadvantage
Survey	Can gather a large amount of data easily	Self-report bias hinders the accuracy of data
	Can find out information otherwise difficult to ascertain like political perspectives or sexual attitudes	Random samples are imperative and can be hard to generate
Naturalistic	Relatively easy to conduct a study	Does not explain behavior
Observation	Technology aids can increase the size of the study	Does not control for variables
	Descriptions of behavior can lead to further studies	
Case Study	Provides in-depth information for understanding specific conditions	Findings are difficult to generalize
	Relatively simple to conduct	Results are subject to experimenter bias
		Does not explain behavior or establish cause and effect relationships
		Can be expensive to conduct
Experiment	Provides cause and effect relationship	Findings in a lab do not always represent actuality
	Explains behavior	Must be ethical
		Must be carefully designed to control variables

2. Think of a question that can be investigated best by each research method. For example, if you want to know how people intend to vote in the next election, it would be efficient to use a survey because you can gather a large amount of data at a minimal cost and time. But, if you want to find out if conjoined twins are at risk for alcoholism, you would probably use the case study method because you will need to take an in-depth look at a few exceptional cases. Considering the pros and cons you listed in the chart above, generate a question for each method, and write it in the space below.

Method	Question
Survey	
Naturalistic Observation	
Case Study	
Experiment	

## The student should generate four appropriate questions, one for each method. The questions should relate to the strength and capability of the method.

3. In all areas of science, researchers need to consider their operational definitions carefully. Operational definitions are carefully worded statements of the exact procedures used in a research study. They are particularly important in psychological research because many of the concepts psychologists wish to understand are abstract rather than concrete. For example, if researchers want to know if regular exercise leads to a greater sense of happiness, how can they define happiness in a specific way so that it can be measured scientifically? And what do they mean by regular exercise?

Research studies must be designed in a way that ensures they can be replicated in future studies, so the exact procedures and measurements must be clear. In our example of the influence of exercise on happiness, perhaps happiness will be scientifically measured by the number of times a person smiles over a two-hour period while socially engaged or the number of times a person laughs while watching a comedy movie. Regular exercise might be defined operationally as 30 minutes of aerobic activity per day for three weeks. There are many ways a variable can be defined operationally, and researchers must be creative and practical when they design their studies.

To solidify your understanding of these ideas, carefully read each of the hypotheses below. Provide your own operational definitions for the independent and dependent variables. If you are unclear about the meaning of independent and dependent variables, keep this fact in mind: the experiment is the only research method that provides a cause and effect relationship. It would help if you thought of the cause as the independent variable. It is the condition that the experimenter wants to assess and thus manipulates. The effect is the dependent variable or what happens as a result of the manipulation of the independent variable. (Review the section on independent and dependent variables in your textbook if these terms are still confusing to you.)

As you design your operational definitions, remember that you are the creator here, so you can be inventive with your procedures as long as you make sure they are practical and ethical.

Here is an example:

Hypothesis: If children watch violent movies, they will act more aggressively.

Independent variable (IV): exposure to violent movies

Operational definition (OD): Children (age 8) will watch one hour of violent film per day for two weeks.

Dependent variable (DV): level of aggressive behavior

Operational definition (OD): After two weeks of watching violent movies, the children will be put in a frustrating situation; their toys will be taken from them. Their levels of aggression will be observed and measured counting the number of instances of verbal aggression, physical aggression, or both.

Now it's your turn.

For each of the hypotheses below, there are many different ways an operational definition can be formulated. The key element is that the definition must be specific and measurable. Examples are given for each, but student answers will vary.

Hypothesis A: If people exercise more, it will make them smarter.

Independent variable (IV) exercise

Operational definition (OD) **Example: Subjects will perform 30 minutes of aerobic exercise per day for 14 days in a row.** 

Dependent variable (DV) **increased intelligence** 

Operational definition (OD) **Example: Changes in memory skills will be demonstrated** by administering and comparing a pretest and a posttest.

Hypothesis B: If children eat sweet food, they will feel happier in school.

Independent variable (IV) eating sweet food

Operational definition (OD) **Example: Subjects will consume 600 grams of sugar per day for 5 days.** 

Dependent variable (DV) happiness level

Operational definition (OD) **Example: The number of times the subject smiles in a period of one hour of classroom time will be recorded.** 

Hypothesis C: If people spend a lot of time on social media, they will be more likely to feel insecure.

Independent variable (IV) time on social media

Operational definition (OD) **Example: Subjects will spend six hours per day on social media.** 

Dependent variable (DV) feelings of insecurity

Operational definition (OD) **Example: Level of insecurity will be measured by a survey pertaining to self-esteem.** 

Hypothesis D: If babies are fed breast milk, they will have higher intelligence.

Independent variable (IV) consuming breast milk

Operational definition (OD) **Example: The experimental group will be fed only breast** milk, and the control group will be fed only formula.

Dependent variable (DV) level of intelligence

Operational definition (OD) **Example: Tests measuring IQ levels will be administered at 10-year intervals for 30 years. (Note: The student should indicate this would be a longitudinal study.)** 

Hypothesis E: If students listen to Spanish music while sleeping, they will do better in Spanish class.

Independent variable (IV) listening to Spanish music

Operational definition (OD) **Example: Subjects will play a two-hour recording of Spanish songs when they go to bed for six nights in a row.** 

Dependent variable (DV) improved work in Spanish class

Operational definition (OD) **Example: Scores on tests administered in Spanish class before the experiment will be compared with those after the experiment.** 

## Activities

Choose one of the following activities to complete:

- Activity A: Create an Experiment
- Activity B: Psyche and Eros
- Activity C: Be a Smart Consumer (of Information)

#### **Activity A: Create an Experiment**

Now that you've had some practice with operational definitions and independent and dependent variables, create your own experiment! If possible, choose a question that you included in your freewriting exercise in lesson 1, or choose another topic that you are motivated to investigate. Imagine you are a psychological researcher determined to uncover the answer in an experimental design.

For your experiment, you should:

- Generate a hypothesis.
- Identify a control group and an experimental group.
- Identify the independent and dependent variables and their associated operational definitions.
- Describe your procedures.
- Attempt to identify all the confounding variables that might influence your results. Review the American Psychological Association Guidelines for Ethical Research on pages 30–31 of your textbook, and make sure that your experiment would meet the approval of an independent review board.
- Safeguard against possible flaws like experimenter bias and the placebo effect.

The student's experiment should address the criteria listed above. Students are often confused about the independent and dependent variables; some may need coaching to find ways to control the variables. They should offer specific operational definitions.

#### Activity B: Psyche and Eros

The term *psychology* is derived from the Greek words *psyche* and *logos*. *Psyche* is often translated as *soul*, and it is represented as a butterfly, while *ology* denotes scientific study. Are you familiar with the myth of Psyche and Eros? If not, you can read it online or in a book of mythology. Here is one version:

#### "The Story of Psyche and Eros"

Think deeply about the myth. Although one would probably define the soul as the immaterial part of the individual that remains immortal, the tale of Psyche and Eros provides a more complex interpretation. Do you think the themes of the myth bear relevance to the true meaning of the word *psychology* and the goals of the discipline? If so, in what way? Write a reflection that describes your ideas about this question; there are no right or wrong answers to this question! Write approximately one page.

## The student will offer ideas that reflect on the myth, especially the trials and challenges that Psyche needs to resolve to reunite with Eros and become a goddess.

#### Activity C: Be a Smart Consumer (of Information)

Advertisers frequently present correlational studies with the intent of convincing the public that the relationship between the two variables implies causation. For example, if an advertisement said that

studies indicate that people who floss regularly have less risk of heart disease, a person might think that flossing will ensure a healthy heart and therefore buy a lot of dental floss at a high price. In reality, many other factors may contribute to the correlative relationship. For instance, people who floss regularly might also engage in other health-promoting activities like daily exercise and a healthy diet. Another study might indicate that there is a correlation between a high-fat diet and happiness so that an unsuspecting consumer might load up with high-fat ice cream and bacon when, in reality, many other factors might contribute to the relationship, such as income level, temperament, availability of desired food, age, gender, etc. Critical thinkers are always aware that they must consider multiple factors when they assess the relationship between two variables, and that correlation does not prove causation.

For this activity, find four advertisements that present correlational studies. You can look for them in magazines, newspapers, and on the internet. Analyze the message they attempt to offer and then think of the many other variables that warrant consideration in the evaluation of the relationship.

Write up your findings along with your ideas regarding the unreported variables.

There are many correlational studies the student can analyze. Special attention should be given to considering all the other variables that might contribute to the relationship of the correlates. This activity helps students understand that correlation does not prove causation.

## Investigate, Reflect, and Apply

#### **Project: Successful Studying**

Some of the most relevant applications of psychological research focus on ways to help students improve their study and time-management skills. The authors of your textbook have researched strategies that support academic success, woven those strategies into the presentation of the material in the book, and described them in the Student Preface and at the end of Module 2. These guidelines will support your mastery and retention of the many concepts you will learn throughout the semester. Don't forget to try the SQ3R method presented in your textbook (survey, question, read, retrieve, review) as you proceed through the course.

This project focuses on improving your study skills.

 Begin by assessing your current study habits. What are your strengths, and what are your challenges? Think about the ways you would like to improve, especially keeping in mind the strategies that support your personal learning style and the obstacles that prevent you from reaching your goals.

As you consider your current study habits and the ways you organize your time, reflect again on the principles you read about in the textbook to determine which ones might be of particular use to you.

2. Create an action plan to put into practice specific strategies for academic success.

- 3. Evaluate the efficacy of each strategy at weekly increments during the next month or until you reach your goals.
- 4. Generate a chart with your target behaviors and incremental goals to help you keep track of your progress. Limit yourself to two or three goals so you don't get overwhelmed.

For example, perhaps you noticed that it would be beneficial for you to spend less time on social media and more time with your studies. And maybe you want to increase the number of hours you sleep so that your cognitive processes and your ability to stay focused will increase. You would first determine how many minutes per day you will need to reallocate each week, and then you would keep track of your progress as the weeks progress. Below are sample charts for these goals.

Your chart will identify your own current and target behaviors.

<b>Current behavior:</b> 3 hours of social media/1 hour studying			
Target be	Target behavior: 1 hour of social media/3 hours studying		
	Goal	Progress	Notes (what worked, what didn't)
Week 1	2.75 hrs. social media		
	1.25 hrs. study		
Week 2	2.5 hrs. social media		
	1.5 hrs. study		
Week 3	2.25 hrs. social media		
	1.75 hrs. study		
Week 4	2 hrs. social media		
	2 hrs. study		
etc.			

Current behavior: 6 hours of sleep per night Target behavior: 9 hours of sleep per night				
	Goal         Progress         Notes (what worked, what didn't			
Week 1	30-minute increase			
Week 2	45-minute increase			
Week 3	60-minute increase			
etc.				

Encourage students to start with simple and attainable goals for this project. They should establish a systematic method for self-assessment. Students may want to incorporate a system of rewards in addition to the intrinsic rewards for enhanced study skills. They will learn more about this in the chapter on learning and conditioning.

#### **SHARE YOUR WORK**

When you have completed this lesson, please share your work with your teacher. Include a copy of your chart for your goals related to studying, even though you will continue working on your goals for several weeks.

If you have any questions about the lesson assignments or how to share your work, let your teacher know.

## Lesson 6 B

## The Biology of Behavior

## **Learning Objectives**

In this lesson, you will:

- Match behavioral symptoms to areas of brain function.
- Demonstrate an understanding of emotional intelligence.

## Assignments

 Imagine a group of superheroes decided to take a psychology class together so they could learn about the ins and outs of human thought and behavior to use them for their superhero

#### **ASSIGNMENT CHECKLIST**

- Identify damage to the brain based on behavioral symptoms.
- Project: Emotional Intelligence
- Complete the Four Themes Analysis.

purposes—some beneficial and some nefarious! (They all relinquished their powers for the semester so they could fit in with the other high school students and remain inconspicuous.) During a field trip to visit the lab at a nearby medical school to dissect a cadaver's brain, their bus crashed. Luckily, everyone survived the horrible accident, but all the students were injured.

Using the description of each person's behavioral symptoms, determine the probable location of the brain damage, and then explain the function of that area. Note that some of the brain injuries might involve more than one region. Try to think of as many regions as you can for each injury and justify your rationale.

Behavioral Symptoms	Area(s) of Damage	Function of the Area(s)
Wonder Woman kept falling asleep at odd times and in unusual places.	pons or reticular formation	sleep and arousal
Captain America had problems coordinating his movements and keeping his balance.	cerebellum	coordination and balance
Spider-Man suffered from an impaired ability to initiate, plan, and make ethical judgments.	prefrontal cortex	executive functions

Behavioral Symptoms	Area(s) of Damage	Function of the Area(s)
The Hulk often flew into a rage and started picking fights.	amygdala, hypothalamus, or prefrontal cortex	the amygdala and hypothalamus are directly involved in fear, anger, and fight or flight; the prefrontal cortex retrains the impulses
Iron Man suffered from an inability to form new memories.	hippocampus	learning and memory consolidation
Batman experienced difficulty with analytical thinking, science, and math reasoning.	prefrontal cortex, left hemisphere	analytical thinking, science, and math reasoning
Thor's speech was choppy, slow, and a grammatical mess.	Broca's area	language production and articulation
Black Widow seemed to be continually experiencing a "runner's high."	hypothalamus/medial forebrain	dopamine releasing neurons, endorphins
Superman lost all interest in food and sex.	hypothalamus	hunger and satisfaction
Raven could no longer feel her sweetie's kiss on her lips.	somatosensory cortex	sensations of touch
Captain Marvel discovered she could hear colors and see music.	thalamus	relay station for sensory processing
The Flash tried to flee from the bus, but he couldn't get his right leg to move.	primary motor cortex, left hemisphere	voluntary movement
Aquaman discovered he couldn't remember how to swim.	cerebellum	procedural memory
Black Panther heard a joke and couldn't stop laughing for hours.	prefrontal cortex damage	mediation of impulsive behaviors
Hawkeye started shoplifting and cheating on all his tests.	prefrontal cortex damage	mediation of impulsive behaviors, decision-making, and judgment
Catwoman couldn't stop eating. She gained 15 pounds in the two weeks following the accident.	hypothalamus	hunger and satisfaction
El Chicano had trouble swallowing and chewing his food, so he lost seven pounds in one week.	primary motor cortex	voluntary movement

Behavioral Symptoms	Area(s) of Damage	Function of the Area(s)
When given instructions to call the police, Green Lantern could not understand what he heard.	Wernicke's area	language comprehension

## Investigate, Reflect, and Apply

#### Project: Emotional Intelligence

Now that you have become familiar with the regions of the brain, their functions, and how they interact, we'll turn our attention to the concepts of emotional intelligence (EQ).

Renowned psychologist Daniel Goleman and his colleagues believe that emotional intelligence is as critical to human flourishing as intellectual intelligence. But what exactly is emotional intelligence, and how can it be better developed? What are the factors that hinder EQ? What exactly happens when a person loses control and experiences an emotional hijacking? Perhaps you have experienced this yourself if you have ever "flown off the handle," "freaked out," or "lost it" during a heated argument or in another anxiety-provoking situation and later regretted what you said or did.

In this project, you will explore the many facets of emotional intelligence, and create a plan to adopt strategies for a healthier EQ. Get ready for a transformative journey ahead!

1. Read the following article:

"Amygdala Hijack and the Fight or Flight Response"

Write a brief reflection that comments on your own experience of an occurrence such as this. What provoked you? What was the underlying threat? What did you feel like during the event and afterward? Although these experiences often lead us to feel embarrassed about our reactions or regretful about their outcomes, it's important to remember that they are universal. While it may be difficult to remember them and write about them, the first steps in the process of growth are awareness and understanding so that one can avoid future hijackings. If you have never experienced an amygdala hijacking, describe one you have witnessed or one from a book or movie.

2. Take the three inventories listed below:

"Test Your Emotional Intelligence"

"How Emotionally Intelligent Are You?"

"Test Your Emotional Intelligence with Our Free EQ Quiz"

Write a brief analysis of each inventory and discuss the following:

- What is measured?
- What does your score mean?

- Does it accurately reflect your perception of yourself? Why or why not?
- Why does exploring your emotional intelligence matter?
- How does your EQ relate to the connections between the limbic system and the prefrontal cortex?

Remember that self-report inventories are not always foolproof, and our perceptions of ourselves are not always accurate. It is essential to think critically about the relationship between the two, especially if they vary, so that we can move toward greater clarity.

3. Watch the TED Talk below. Take notes on the concepts presented and how they relate to what you have learned about the brain and yourself.

"You Aren't at the Mercy of Your Emotions—Your Brain Creates Them"

4. Think about why it might be beneficial for you to increase your emotional intelligence. What areas of your social or emotional life could improve with a greater awareness of emotions? For example, are you less patient than you would like to be or prone to impulsive reactions?

Using what you've learned, create a plan to expand your emotional intelligence. Start with just one or two strategies that appeal to you. Be specific about the steps you will take and see if you can put them into practice right away. Keep a daily journal of what you are doing to meet your goals, and write a summary of your progress after two weeks. Feel free to continue with this project beyond two weeks if it is meaningful and helpful for you.

This project should demonstrate comprehension of the concepts presented in the article on the amygdala hijacking and include a functional analysis of their own profile of emotional intelligence (EQ). Students should identify a few strategies to apply for increased awareness and EQ functioning. Encourage students to use only one or two specific strategies and to monitor their progress.

### **Four Themes Analysis**

Think about how the four overarching themes are reflected in the material you've learned about brain functioning.

- 1. Everything psychological is simultaneously biological
- 2. Nature via nurture
- 3. The impact of evolution on thoughts and behavior
- 4. The unconscious mind

Consider how these themes are often interconnected. Clearly, the first theme—everything psychological is simultaneously biological—has the most apparent relationship with the topic of biopsychology, but the other three also have significance.

As you did in lesson 4, create an outline or a graphic organizer that demonstrates your understanding of how the themes relate to the concepts and biological processes you have learned about in the past two lessons. Provide an example for each topic to substantiate your ideas. Your examples might come from relevant research studies, the material you read in the textbook, or information gained from the videos.

Remember to show how the themes relate to one another. Use the same style of graphic organizer you used before or try another design.

There are many possible examples of the themes. Here are a few possibilities the student might mention:

Everything psychological is simultaneously biological.

- Amygdala hijackings
- Phineas Gage's behavioral changes following his brain injury
- Split-brain surgery resulting in differences in perception and functioning
- **Fight or flight response**

#### Nature via nurture

Einstein's brain, especially the protrusion on the somatosensory cortex due to violin playing

Brain plasticity, London cab drivers, David Kish

The impact of evolution on thoughts and behavior

- Fight, flight, or freeze response
- Amygdala hijackings

#### The unconscious mind

- Amygdala hijackings
- **Capgras delusion**
- Blindsight

#### **SHARE YOUR WORK**

When you have completed this lesson, please share lessons 5 and 6 with your teacher.

# Lesson 14

## Social Psychology, Part 2

## **Learning Objectives**

In this lesson, you will:

- Explain the concepts related to social thinking, social influence, and relationship dynamics.
- Explore the effects of implicit association.

## Assignments

 Imagine you are a new student at the college of your dreams. While you are trying to adjust to your new social environment, you see many of the concepts you learned in social psychology come to life in the situations you encounter. You will see these social situations listed below.

Write an essay about the social psychology concepts at play in each of these situations. Mention the research, notable experiments, and famous psychologists who shed light on each important concept you discuss. Your essay should include at least one paragraph for each of the six situations. Write clearly and succinctly. Substantiate your ideas with facts. Include an introductory and concluding paragraph for your essay.

#### **ASSIGNMENT CHECKLIST**

- Write an essay explaining social psychology concepts found in realworld examples.
- Choose one activity:
  - Activity A: Deindividuation Survey
  - Activity B: Violate a Social Norm
  - Activity C: Acts of Altruism
- Project: Implicit Association
- Complete the Four Themes Analysis.

Examples will vary. Listed below are a few possibilities for each scenario. The examples should be linked to the research studies whenever possible.

Situation 1: You are at a party, and two boys who are both interested in the same girl get in a fight. It takes a long time for someone to step in to stop them. (two concepts)
 bystander effect

frustration aggression principle male gender roles influence aggressive behavior • Situation 2: You notice that some of the older students are not helpful to the young new students who are struggling to find their way around the big campus and even ignore them when they ask for directions.

role-playing of the dominant group in-group/out-group bias ageism

• Situation 3: You are in a lecture, and the professor says something you know is wrong. You want to raise your hand to point out the error, but you do not. (two concepts)

conformity to social norms obedience to authority figures normative social influence

• **Situation 4:** Your roommate is displaying a lot of challenging behaviors. You remember some of the social psychology concepts related to person perception that help you make sense of their behavior as well as your perceptions of them. This knowledge helps you find a way to get along. (two concepts)

fundamental attribution error

actor/observer bias

situational as opposed to dispositional factors

• **Situation 5:** Your close friend has gotten involved in an internet chatroom, and you notice he is adopting more and more behaviors and attitudes reflecting white supremacy. (two concepts)

group polarization racism and prejudice conformity

deindividuation

• Situation 6: There is a massive traffic jam on the way to campus; it is delaying people for hours in the sweltering heat. You see the man and woman in the car in front of you are starting to have a fight, which soon escalates into a physical brawl. The woman is crying, and it looks like the man might be punching her. (two concepts).

temperature (heat) influences on aggressive behavior male/female gender roles foot-in-the-door escalation of a fight frustration aggression principle

### Activities

Choose one of the following activities to complete:

- Activity A: Deindividuation Survey
- Activity B: Violate a Social Norm
- Activity C: Acts of Altruism

#### **Activity A: Deindividuation Survey**

Ask 10 to 15 people the following question, and record their responses: "If you could do anything humanly possible with complete assurance that you would not be detected or held responsible, what would you do?"

Reread the section on deindividuation in your textbook on page 430. Reflect on the responses you received. Do they exemplify deindividuation? Record the number of responses that fall into the following categories: antisocial, neutral, and prosocial. Think of the many other ways deindividuation presents itself in the social environment. Don't forget to consider the internet! Write a reflection on what you discovered from this activity.

This reflection should examine the responses of the people interviewed to understand them in light of deindividuation. It should provide other examples of the concept, such as internet postings, the KKK, mob behavior, etc.

#### Activity B: Violate a Social Norm

For this activity, you will violate a social norm of your choice (that is, act in a way that would be appropriate under some situations, but do it in a context in which it would not be considered appropriate). Complete your norm violation in a public location where strangers can see you doing it, and observe their reactions (if any). Then write about your experience in a reflection, explaining the norm you chose to violate, what you did (and where), how you felt doing it, how many people could see you, and what reactions you observed.

#### Restrictions

- You may NOT do anything that involves direct interaction with a stranger. That is, don't get strangers engaged in what you're doing, other than to observe you. This activity is not about pull-ing pranks on other people (e.g., do not stop strangers on the street to ask directions to Egypt)—it's about you doing something counter-normative.
- Do NOT do anything that might cause other people harm, discomfort, or embarrassment (e.g., do not swear in front of young children).
- Do NOT do anything unsafe, illegal, or expressly prohibited (e.g., do not walk across the park while nude).
- Do NOT do anything disruptive (e.g., do not play guitar during a town council meeting).

#### Examples of acceptable norm violations

- Ride a crowded elevator facing the wrong way (better still, face the entire crowd).
- In an uncrowded bus or reading room, sit directly next to another patron.
- Go to a casual event dressed in evening wear, beachwear, sleepwear, or a Halloween costume.
- Bring a weird object with you to a restaurant or public space (e.g., a brick, an old rotary telephone, a large potted plant, several rolls of toilet paper, jumper cables, a lawn chair, etc.).



(Image credit: Pikrepo)

- Walk down the sidewalk backward, or with your hands above your head, or hopping on one foot.
- Sing, dance, or play solitaire in a public restroom.
- Browse a store wearing formal clothes, a surgical mask, or swim goggles.

Feel free to be creative and have fun with this, but adhere to the restrictions above. You may work with a partner if it facilitates the norm violation or if it makes you feel more comfortable with the project.

Your report and analysis of your findings should be as scientific and specific as possible. When assessing responses to your norm violation, designate categories of responses, for example, looking at you oddly, saying something, walking away, laughing, etc.

If you attempt to do your chosen norm violation but can't bring yourself to do it, try choosing something less embarrassing. Don't falsify your entry—the actual experience is essential. If you find that completing this activity would cause you undue distress, choose a different activity. It is not unusual to experience anxiety when you feel excluded from a social situation or do not conform to a social norm. Only do this activity if it will be enjoyable for you.

While this activity is often fun and enjoyable for students, the report and analysis should be as scientific and specific as possible. When assessing responses to their norm violations, they should designate categories of responses and keep a tally.

#### Activity C: Acts of Altruism

The concept of ethical egoism concludes that moral choices are frequently made to support the wellbeing (or survival) of an individual and their close circle of family and friends. This strategy would certainly reinforce the evolutionary impact on thoughts and behaviors. But, do you think an individual can prioritize the safety and well-being of others before their own? What circumstances will lead a person to respond in an altruistic way? Watch this short video on Wesley Autrey:

"New York Subway Hero"

Then watch the full-length film discussed in your textbook, *Hotel Rwanda*. You can find it on Amazon Prime Video or borrow it from your local library.

After viewing the film, write an essay explaining Paul Rusesabagina's actions at the Hotel des Mille Collines during the genocide in Rwanda. Describe how his ethical decision-making evolved through the course of events. Discuss how his motivation changed from the beginning to the end of the film. In your essay, address the following:

- At what points in the film did you consider him to be an ethical egoist?
- At what points in the film did you consider him to be an altruist?
- What circumstances caused his actions and thoughts to shift or transform?
- How does his story relate to the other psychological concepts of moral judgment and decisionmaking you read about in the textbook, such as role playing, foot-in-the-door phenomenon, or cognitive dissonance?
- Compare Paul Rusesabagina's actions to those of Wesley Autrey. What similarities and what differences compelled their decision-making strategies?
- Can you see any evolutionary reason for altruistic behaviors?

Write an introduction and a conclusion to your essay.

The analysis of the film and the investigation of the concept of altruism invite students to think about the counterintuitive drive to put others' safety and well-being before one's own. This assignment encourages critical consideration of the concepts as they relate to Paul Rusesabagina's decisions during the genocide in Rwanda. Look for students to be thorough in their investigation and appraisal of the events.

### Investigate, Reflect, and Apply

#### **Project: Implicit Association**

1. Watch the two short videos below, and comment on material that highlights the forces of nature and nurture in the appraisal process.

"Born Good? Babies Help Unlock the Origins of Morality"

"POV Implicit Bias Peanut Butter Jelly and Racism for Slides"

2. The Implicit Association Test (IAT) is an online tool developed by researchers at Harvard University. The analyses focus on implicit associations, which is how you have been conditioned below your conscious awareness as opposed to how you intentionally or consciously feel and behave. Take three Implicit Association Tests (found at the link below). They take about 10 minutes each.

Project Implicit

Take the quiz on race, take one of the tests on gender or sexuality (there are two on gender and one on sexuality), and take one other of your choice. If your scores are surprising to you, remember to interpret them as a learning experience that demonstrates the extent of the conditioning you did not invite.

3. Comment on your experience with each test of the IAT. Note your results, explain what they mean, and describe how you feel about them and what sorts of conditions (media influence, family, friends, religious affiliation, culture, etc.) have been the influencing factors as far as you can tell.

Add any other comments you wish to share, especially regarding the forces of nature and nurture in your own experience and what you have learned from this project. Reflect on how you might go forward with this information regarding implicit bias.

Students are often disappointed and defensive about their IAT scores, and they find fault with the text. If this is true for your student, encourage them to interpret the scores as a reflection of conditioning they did not invite or choose. Remind them that much conditioning occurs below conscious awareness, and all people are vulnerable to it, especially in a media-saturated culture.

The student's reflection should comment on the sources of their conditioning and offer other comments about their experience with the process of taking the tests and analyzing the scores.

### **Four Themes Analysis**

Review the four overarching themes of this course:

- 1. Everything psychological is simultaneously biological
- 2. Nature via nurture
- 3. The impact of evolution on thoughts and behavior
- 4. The unconscious mind

Consider how the salient concepts of social psychology encompass the themes. Create an outline or a graphic organizer that demonstrates your understanding of the themes and their relationship to social psychology. Provide examples and highlight the connections between the themes within the topic.

**Everything psychological is simultaneously biological** 

Mirror neurons as the neurological footprint of empathy Implicit bias Cognitive dissonance Nature via nurture

**Role-playing effects on behavior and attitudes** 

Deindividuation

**Group polarization** 

The power of the situation

The impact of evolution on thoughts and behavior

The evolutionary underpinnings of in-group bias

The evolutionary needs for conformity

The evolutionary drive for altruism

The unconscious mind

**Implicit bias** 

**Cognitive dissonance** 

#### **SHARE YOUR WORK**

When you have completed this lesson, please share lessons 13 and 14 with your teacher.



## Appendix

Academic Expectations
<b>Original Work Guidelines</b>
Finding Reputable Sources
Citing Your Sources
Elements of Good Writing
The Writing Process144Prewriting activitiesWriting the rough draftRevisingEditingEditingProofreadingPublishing, submitting, or sharing your workFive-paragraph essayComparative essayMultimedia presentations