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## Applying Principles of Psychology to Contemporary Society

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# **Applying Principles of Psychology to Contemporary Society**

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## About the Author

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Dr. Gary J. Burkholder has been a faculty member in psychology and public health and a higher education administrator for more than 15 years. He received his PhD in Experimental Psychology from the University of Rhode Island. The topic of his research was on statistical longitudinal modeling of HIV risk in women. Dr. Burkholder has developed and taught psychology courses at the bachelors, masters, and doctoral levels; he also has experience designing psychology programs from cross-cultural and multicultural perspectives. Dr. Burkholder has been the academic leader for the undergraduate psychology programs at Walden University and the National Hispanic University. His areas of expertise are in social psychology—particularly in the areas of gender, race/ethnicity, and sexuality. He also has expertise in multivariate statistics and social science research design.

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## Introduction

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I have been working and researching in the fields of psychology and public health for many years. With that said, I did not start out with a career in psychology in mind. I actually started out after high school with an interest in wildlife management, and I managed to get accepted to a school that had such a program, which was the only one in California at the time. Within the first year, I switched my major to history and foreign language. And, when I finally got excited again in math and science, I returned to school after a 3-year absence and earned a bachelor's degree in engineering, specifically with a nuclear engineering emphasis. After several years of working, I decided that it was time to shift my career focus to human services; a degree in psychology seemed appropriate. I earned a second bachelor's degree in psychology and then pursued my master's and doctoral degrees.

There are two reasons why my story is important. First, I realize, when reflecting back on my career path, that I made multiple educational and career changes. My multiple career changes appear to be a reflection of what is happening in the United States culture as well—people are increasingly mobile and changing jobs with more frequency (the Bureau of Labor Statistics, in one of its career change publications, indicates that people now will change jobs about every 5 years; <http://www.bls.gov/opus/ooq/2009/summer/art02.pdf>).

Second, I want to reinforce that education and work is a journey, and each new step builds upon the last. One of the things I have loved about learning and teaching psychology is that training in psychology prepares you for so many different kinds of careers choices. One of the purposes of this reader is to give you an introduction to some of the key ideas in psychology that you will see in future coursework (or that you may have already encountered in previous work). Another is to provide some insight into very practical ways that you can apply

psychology to your present life. Psychology is a theoretical discipline, but it is also a highly practical one.

Psychology as a science is about understanding the cause and effect of individual behavior. Psychology is distinct from other social sciences in this regard in that its focus is on the *individual*. Compare the focus of psychology with that of anthropology, which is focused on culture, or sociology, which examines primarily the social unit. The discipline of psychology has been enriched with its influences from anthropology and sociology (and some of the research methods that have come from those fields). However, you, as a psychologist, are interested in how and why people behave the way they do in a variety of situations.

The topics in this reader correspond approximately to some of the key “big ideas” you are likely to encounter in this course. These include:

- Perspectives on culture. Included are some basic definitions of culture and how psychologists view culture in the context of our science.
- The concept of normal and how norms shape cultural expectations
- An overview of some of the key topics in the study of social influence and their applications to modern life
- An introduction to learning and memory
- Media psychology and some of the contemporary issues being discussed, particularly as they relate to the intersections of media and violence
- Heuristics (cognitive shortcuts) and their importance to adjustment
- An introduction to the social media and connectivity and what psychological research is beginning to tell us

Each topic contains only a brief introduction to psychology concepts that can be quite complex. The length is kept short to help you focus on the key information. Embedded in each chapter are a number of questions that will help you to reflect on the topic and how to apply it to your life. You won't have to turn in the answers to these questions; you might, though, want to write out your answers anyway. You might find that they will be helpful to you when engaging with your classmates in discussions.

My goal is that you have enough information to stimulate your interest and to encourage you to explore these topics further. Many of these topics will appear again in future coursework in psychology (or other disciplines in which you may choose to study elective courses). The objective of this reader is to provide you with some of the foundational language that will serve you well in the study of undergraduate psychology.



A note on information literacy: Scholars and the public alike have access to information like never before. As you begin your educational journey, it is important to learn how to evaluate and synthesize information. As you are likely aware, things that you see on the Internet need to be carefully evaluated; “photo shop” techniques and misrepresentation of facts abound. Indeed, if you look carefully, you will see examples of how people use psychology to try to persuade you that their perspectives are correct! As you gather, evaluate the accuracy of, and synthesize data from multiple sources, I encourage you to practice these techniques.

- As long as you keep to trusted sources, I encourage you to explore broadly what the Internet can offer related to topics in psychology. You can generally trust data that come from trusted sources. Generally, these include websites that end in .gov (government sites from which you can gather a lot of statistical data); .edu (educational institutions, colleges, and universities tend to be a source of research as well as reliable and valid information); and .org (these tend to be managed by non-profit entities focused on a particular area of advocacy).
- Wikipedia is a great resource for gaining initial familiarity and insight on a wide variety of topics. In fact, I use Wikipedia regularly when I am exploring an area that is new to me. However, I would never use Wikipedia as a key resource for a paper. Rather, I look at the resources contained at the bottom of the page—these resources identify scholarship that is important to help substantiate claims.
- Evaluate information from multiple sites. Generally, if the information contained in multiple trusted sites leads to the same conclusion, the trustworthiness of that conclusion increases. If you need demonstrations, check out YouTube.com or other social media sites; I find that seeing or hearing something presented in many different ways helps my comprehension of difficult topics.
- Beware of information that appears to be more motivated to convey opinions than science. The Internet is full of “facts” that are indeed not facts. If in doubt, go to trusted sources to verify the information. It is very easy now to go right to the source to verify data. You are learning to be a scientist; good scientists remain very skeptical and demand facts and data as “proof.”

- Here are some sites that you might find helpful as you begin to explore topics (and potential careers) in psychology. This list is not exhaustive; however, these resources can help you to get started on your own search for more information in areas of interest to you.
  - [www.simplypsychology.org/](http://www.simplypsychology.org/). This site provides very basic and easy-to-read articles and information on a variety of topics (as well as famous names) in psychology.
  - <http://psychology.okstate.edu/museum/history/>. This site has a rich variety of resources (and some original writings) on the history of our science and the men and women who shaped its history.
  - [http://www.learner.org/series/discoveringpsychology/history/history\\_nonflash.html](http://www.learner.org/series/discoveringpsychology/history/history_nonflash.html). This site provides an overview of the history of psychology in a timeline format.
  - <http://www.apa.org/topics/index.aspx>. The American Psychological Association is the premier association for psychologists in the United States. At this location, you will find a number of articles and readers on a wide range of topics in psychology.
  - <http://www.apa.org/about/division/index.aspx>. This location contains a list all of divisions of the American Psychological Association. You can find more specific information about each division as well as links to other related information. This information will give you a sense of the kinds of things in which psychologists are interested.

Good luck in the course! If you have any questions, ask your Professor. Let your imagination guide you in your exploration of psychology and the countless ways you can use the principles of psychology to improve your life.

## Chapter 1

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### Perspectives on Culture

A friend has just returned from visiting a major city and talks about the large number of *cultural* influences he or she has experienced. You have just read a book that refers to the Latino *culture*. In the newspaper, you read about the gay and lesbian *culture* and its varying support of same-sex marriage. You see written somewhere that a key part of psychology is the study of multiculturalism, but in the next sentence there is a description of the importance of the study of cross-cultural psychology.

The variations in the use of the term culture can be rather confusing, even to experienced social science researchers. The purpose of this chapter is to provide some basic definitions of *culture* and terms associated with culture. In addition, you will be introduced to the concept of *world view* and the importance of world view in shaping the way you think about yourself and others. As you will see, while there is not one correct definition of culture, the notion of culture is very important in the study of psychology; it is also a concept that serves as a foundation for many of the courses you will complete in your psychology program. As you read this chapter, keep in mind the basic definition of psychology: Psychology is a science that seeks to understand the causes of individual behavior.

#### **Culture**

Culture has been broadly defined, and many authors (for example, Cohen, 2009) have noted that researchers in many fields have proposed their own definitions. Jahoda (2012) noted that the term *culture* originated from the word *cultivate* and that in 19th century France, it started being used as a word used to refer to educated people (p. 290).

The term became a focus of research, particularly in anthropology, in which scientists began to study differences between civilizations; the study of different groups of people, located in different places, created a new view of *culture*. Moodly and Curling (2006) noted that a common definition of culture, which seems to capture the scientific nature of the term, is the “knowledge, beliefs, art, morals, law, custom, and any other capabilities and habits that are acquired by individuals as members of society.” (p. 2). And, as you continue to study the field of psychology, you will see that the term culture is used quite broadly. For example, you probably hear about the term *popular culture*, which refers to the books or media that people read and that influences the way they think and behave (Esposito & Banks, 2009).

*The Guidelines on Multicultural Education, Training, Research, Practice, and Organizational Change for Psychologists—American Psychological Association* (American Psychological Association [APA], 2013) defines culture as “the belief systems and value orientations that influence customs, norms, practices, and social institutions, including psychological processes (language, care taking practices, media, educational systems) and organizations (media, educational systems.” This definition is rather broad in scope; however, it highlights the ways that cultural groups can be distinguished. In addition, the definition focuses on the role of psychology in culture.

While there is no single correct definition of culture, there are some ideas about the word *culture* that appear to be common (Triandis, cited in Cohen, 2009). These include:

- Culture is a result of the interaction between people and their environment. What this means is that groups of people develop customs and ways of living that are a result of their environment. For example, migration can be a key component of culture that results from the need to move periodically to areas where food is plentiful. Stories emerge based on these patterns that become established.
- Culture consists of things or ideas that are shared between people within that culture; these things usually carrying some meaning for the group as well. For example, the Latino culture in the United States is sometimes easily recognizable in the different ways that Latinos view family; family tends to be a stronger guiding principle than in the broader U.S. culture (the strength of impact of family in Latino culture has been broadly demonstrated in the research; for example, see Fuller & Coll, 2010).
- Culture can be transmitted. This means that things and ideas can be shared between cultures but also can be transmitted from one generation to the next. One example is the stories that form the basis of a culture and

are used to share the key concepts of culture with members of the next and subsequent generations.

Thus, these ideas begin to give us a way to think about the term *culture* (as well as how the concept can be extended for the purposes of understanding more about individual behavior). Cohen (2010) wrote, as an example, “take an individual who is Ashkenzic Jewish, middle class, a social psychologist, American, from Philadelphia, and now living in the Southwest. Probably all of these, as well as many other identities, can be fruitfully viewed as cultural identities” (p. 295). Each of these aspects of the person Cohen described may reflect aspects of a particular culture that influence how a person acts.

## Exercise

Think about some kinds of cultures that you have heard about. Some examples might be:

- Latino culture
- Gang culture
- Gay, lesbian, and bisexual culture
- Protestant (or some other religion) culture
- Chinese culture
- Sports culture

Think back to how culture is defined and the key aspects of culture. Does each of the above cultures reflect a) interaction between that group in the environment; b) sharing of ideas and things among members of the group that have meaning to that group; and c) transmission of meaning over time and to other people? What special meanings to things carry within that group that may be different from other groups? Can I, through understanding aspects of the culture, explain how members of that cultural group behave in ways that might be different from those outside of that cultural group? These are the kinds of questions psychologists ask in an attempt to understand the causes of behavior.

## Cross-Cultural and Multicultural

*Cross-cultural* and *multicultural* are two terms frequently used when looking at the influence of culture and the study of different cultures. It is important to understand how psychologists use these terms to describe the influence of culture on behavior. *The Guidelines on Multicultural Education, Training, Research, Practice, and Organizational Change for Psychologists—American Psychological Association* (2013) defines multiculturalism as “the broad scope of

dimensions of race, ethnicity, language, sexual orientation, gender, age, disability, class status, education, religious/spiritual orientation, and other cultural dimensions. All of these are critical aspects of an individual's ethnic/racial and personal identity, and psychologists are encouraged to be cognizant of issues related to all of these dimensions of culture” (p. 5). Thus, a multicultural approach is one that recognizes the importance of multiple cultures that co-exist within a particular nation or country and the ways those different cultures interact. Cross-cultural, on the other hand, tends to be used to understand differences between cultures. For example, cross-cultural psychology focuses on the way people from different cultures and who live in different countries interact. Wallace (2006) wrote that “cross-cultural psychology studies the nature and scope of human diversity at the level of the individual and the reasons for that diversity, yet it also studies that which is universal in the psychology of human beings” (p. 2).

Thus, multiculturalism focuses on the co-existence of multiple cultures within a given nation or country and how those multiple cultures shape the identity and behavior of an individual. Cross-cultural psychology tends to focus more on explaining differences in individual behavior between cultures represented by different nations or countries but also looking at what is universal among them. For example, a psychologist looking at a multicultural perspective within the United States might focus on how a person’s socioeconomic status, race/ethnicity, and sexual orientation influence the way he or she behaves. A cross-cultural psychologist would be interested in understanding the similarities and differences in behavior between a person living in Asia and a person living in South America.

### Exercise

A psychologist is interested in studying bullying behavior among youth. How would he/she study bullying from a multicultural perspective? How would he/she study bullying from a cross-cultural perspective? Why might a psychologist be interested in examining bullying from a multicultural and a cross-cultural perspective?

### Worldview

Very simply, worldview represents the ways that you (and others) see the world and act in the world based on your experience. The experiences a person has are related to the culture(s) in which he or she was raised. Sullivan (2009) defined worldview as “an individual's or a society's philosophy or conception about the world. Worldviews are subjective outlooks influenced by personal

experience, cultural norms, religious beliefs, social philosophies, and political ideologies” (p. 1). Additionally, Domokos-Cheng Ham (2006) wrote, “Worldviews shape the philosophies of a culture and guide a society’s institutional policies.... A worldview is an unspoken but inevitable outcome of the socialization process, yet it is all but invisible: A worldview is a set of conceptual lenses through which to view the surrounding environment without “seeing” itself”. (p. 1). Domokos-Cheng Ham continued to describe a fundamental difference between a worldview and a culture: In essence, a culture can be readily observed through its objects, ideas, and actions in which individuals engage. She described worldviews, on the other hand, as being invisible; they guide the way people behave and are influenced greatly by culture and by experience.

## Conclusion

Culture is a complex concept, and as social scientists, we need to be careful that we understand what it means and that we use it (and related) terms correctly. We can integrate the concepts of culture and worldview in the following way. The United States is a very multicultural society. People’s experiences are greatly influenced by their gender, sexual orientation, race/ethnicity, socioeconomic status, religion, and a number of other factors. These experiences help define aspects of culture and influence the way we behave. These experiences, particularly those that we have during our earliest developmental years, help us to identify with a number of different cultures. Culture, then, shapes the way we think about the world. The result of cultural influence is that each of us has a worldview that guides the way we interpret experiences. Understanding behavior is very complex; the goal of the psychologist/social scientist is to attempt to understand all aspects of the situation objectively. The difficulty that typically occurs is when the behaviors of one individual or group are at odds with one’s worldview.

## Suggested Activities

- Try to identify the cultures with which you identify and write down 2–3 aspects unique to your culture that make you different from members of a different culture. How would you want someone from outside of your cultural group to understand you?
- In a paragraph or two, write down aspects of your worldview. Think about how you see the world and what you believe. Then, pick 2–3 key aspects and think about how they originated.

- Ruhl (2007) wrote, “[Cultural relativism] is a theory and a tool used by anthropologists and social scientists for recognizing the natural tendency to judge other cultures in comparison to their own and for adequately collecting and analyzing information about other cultures, without this bias” (p. 1). While there are many examples of cultural relativism in action, one typical example occurs when trying to understand the generation gap. Common statements you might hear are, “the young people of today are spoiled” or “the kids of today don’t have any manners” or “teenagers just don’t appreciate the value of hard work.” As a psychologist, how might you use the principles of culture, world view, and cultural relativism to accurately understand and describe the behavior of youth (or, in the broader case, any behaviors you see that are not consistent with those of your own cultural group/world view)?



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## Chapter 2

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### Norms, “Normal,” and Culture

Consider these three situations:

- You are walking with a friend on a typical spring day—it is in the northern United States, and it is about 45 degrees with a chilly wind. During the conversation, you tell her about how you have been feeling rather “down” for a few weeks and you cannot figure out why. She says that you seem pretty normal to her, and she is surprised you have been feeling that way (she has not noticed anything different).
- For those of you who have traveled outside of your own country, you will probably notice many things that are different from what you expect as part of your own culture. For example, when I first traveled to the United Kingdom, I immediately noticed that people drive on the opposite side of the road; this apparent reversal of the side of the road on which to drive created a bit of a problem for me when I went to cross the street. In the United States, I normally would look left when crossing the road; in the United Kingdom, I had to think to look right before crossing. However, every time I went to cross the road I looked left and risked serious injury. (Thank goodness for the signs painted on the street that tell you which way to look!)
- The generation gap refers to the differences in beliefs, values, and attitudes that exist across generations. These beliefs, values, and attitudes are shaped by the times in which people develop into adults. The differences can be rather dramatic when there are gaps of two or more generations. For example, your grandparents lived during a time when there were no cell phones or computers; the reliance on technology that has become a part of normal behavior for young people is not so normal

for older adults who did not grow up with the same technology capacity or access to technology.

Each of these situations describes various aspects of *normal*. In common usage, *normal* refers to that which is typical or occurs with regularity. If we look at the clear night sky, it will be filled with stars. Suddenly, a large bright light flashes. What has been a normal and expected view is disrupted by an event that is abnormal—it is unexpected and does not fit the typical (your clear sky view).

Growing up as children, we came to develop a sense of what is normal for us. Normal may have been going to church regularly and being surrounded by church-going families; normal might have been that your family spent a lot of time together in activities. On the other hand, one or more of your parents may have suffered from alcoholism that created a sense of unpredictability and emotional aloofness; this situation represents a different normal. We also are exposed to ideas of normal from the media (television and movies, for example). For those who grew up in the 1960s, *Leave It to Beaver* was a model of the normal family. Television today portrays different family structures in which kids and parents alike are connected by technology—again, presenting one view of normal. All of these are examples of how we develop a sense of normal: the typical that we come to expect.

However, social scientists have a different conception of the term normal. The purpose of this reading is to help you to more clearly understand the similarities and differences between scientific and non-scientific uses of the term normal. As part of this discussion, you will be introduced to the concept of *norm* and how behavior becomes normalized within a particular cultural context.

Let's examine a number of different definitions for normal (these are excerpted directly from the Oxford English Dictionary Online (OED Online, 2013); note that what is presented below is a subset of the definitions provided in the dictionary.

- Constituting or conforming to a type or standard; regular, usual, typical; ordinary, conventional. (The usual sense.)
- Of a person: physically and mentally sound; free from any disorder; healthy.
- Heterosexual. Cf. sense.
- Standing, positioned, or directed at right angles (*to*); perpendicular (*to*).

What should be readily apparent is that there are many ways the word normal is used in both scientific and non-scientific conversation. You can see right away that it is used to refer to what is typical or standard. The next definition connects it to a mental health status—a person is normal if he or she is without

mental disorder. Note even that it refers to the majority sexual orientation! Mathematics, chemistry, and physics also have very precise definitions of normal.

I want to provide you with the psychological research definition of normal (Lewis-Beck, Bryman, & Liao, 2004). Scientists refer to the normal distribution. In the normal distribution, 68% of the population is average and the remaining 32% are either above or below the average. One easy example that most people recognize is intelligence quotient (IQ). When we say that the average or normal IQ is between 85 and 115, we are saying that 68% of the population has an IQ that is between 85 and 115. Actually, 14% have an IQ between 115 and 130, and 2% of the population are above 115 (these would be above average or above typical). On the other end, 14% of the people in the population have an IQ between 70 and 85, and 2% have an IQ lower than 70. These people would be said to have an IQ that is lower than average or typical. Therefore, the point is that when scientists refer to normal, they refer to behavior or characteristics observed in 68% of the population. Thus, they really refer to the average characteristics that are found in the population. Another way to understand normal is that someone with an IQ of 150 is as *abnormal (non-normal)* as someone who has an IQ of 50.

What has happened over time is that normal (in the statistical sense) has been confused with normal (in a qualitative sense). For example, following the definition provided above, a heterosexual orientation would be considered normal in the population (about 90% of the population, depending on which statistics you read), and gay, lesbian, bisexual, and transgender would not be normal (typical) behavior. What tends to happen is that normal is treated synonymously with good or preferred, mostly because that is what is represented by the majority of the population.

## Exercise

The purpose of this thought exercise is to get you to separate the qualitative (subjective) and quantitative (objective) components of *normal* and thus to sensitize you to the importance of being precise in how you use the word. United States culture is characterized by a high level of diversity. For example, in many cities, Latinos and/or Blacks make up a larger percentage of the population than Caucasian/non-Hispanic White residents. You are a student teacher who is observing a mathematics classroom for the first time in this district. You notice that the teacher is teaching in both Spanish and English.

Ask yourself the following questions and see what answers you give:

- What are your beliefs regarding teaching in multiple languages?
  - Is what you see the teacher doing normal behavior?
  - Under what circumstances would someone consider this to be normal behavior (in the scientific sense)?
  - How might a psychologist answer the second question (“Is this normal behavior”)?
- 

## Norms

*Norms*, which stems from the word *normal*, is an important concept in the social and behavioral sciences. Here are some definitions of norm:

- Norms are rules of conduct that specify appropriate behaviors in particular social contexts based on general values. More generally, a norm is a model of what should exist or be followed, or an average of what currently does exist. Norms are a key aspect of culture; they organize and regulate our behavioral and social worlds (Kruger, 2005, p. 1).
- In the statistical sense, the norm is the average. In the ideal sense, however, a norm prescribes or expresses an ideal pattern or standard of behavior in a given social group or social context to which conformity is expected. Confusion between these two kinds of norms should be avoided. Under certain circumstances, it may be normal in the statistical sense to transgress norms of an ideal nature (Siegetsleitner, 2006, p. 1).

And finally, a definition of group norms:

- Group norms are beliefs and habits shared in common among members of a group, and they include spoken and unspoken rules of conduct members expect one another to follow as well as shared perceptions. Norms are a group's normal ways of behaving and interacting, and

prescribe to members what they ought to do in certain situations (Seat & Sundstrom, 2004, p. 1).

The definitions are chosen to represent a number of different disciplines—psychology, anthropology, and health care—to demonstrate similarities of the definitions. If we look at the key points in all three, the commonality is that norms are shared beliefs, behaviors, and perceptions held by a group of people. What is important to note is that Siegetsleitner (2006) cautions against confusing statistical norm (described in detail at the beginning of the reading) and the norm that represents the expected behavior of an individual in a particular group. Seat and Sundstrom (2004) also note that norms consist both of spoken and *unspoken* rules of behavior. Unspoken rules of behavior can be just as important to group functioning. Personal space is an example of a rule that tends to be unspoken (and that varies by culture). Different cultures have their own norms around acceptable personal space (how close you get to the person with whom you are talking). In the United States, for example, we do not feel comfortable when people get too close in proximity to us; we can usually tell right away when someone is violating that norm (for example, people will tend to move away when someone gets too physically close to them).

Psychologists study norms quite extensively. For example, psychologists are interested in both conformity to feminine norms (Parent & Moradi, 2011); the psychological effects of adhering to traditional masculine norms (Reilly, Rochlen, & Awad, 2013); and the effect of perceived norms regarding alcohol use on actual alcohol use (Wardell & Read, 2013). These are just examples of why norms (and perceived norms)—what we believe to be the rules guiding behavior—are so important in understanding actual behavior. Parent and Moradi (2011) actually developed a scale—a number of items that people answer—to measure how much women adhere to traditional feminine behavior norms.

## Conclusion

As a new psychologist, you need to be very careful about the way you use language; words you may use, like *normal*, can have different meanings than they do when you are talking with your friends and when you are talking with other scientists. An important goal is to learn the language of psychology (and you will by the end of the program!). In this reading, we focused on normal and the distinction between statistical (or numerical) normal and the more subjective normal that reflects behavior that might be considered. You also gained a brief introduction to norms, what they are, and some examples of ways psychologists study norms (and perceived norms) to gain insight into behavior.

## Suggested Activities

- Think about a time when you visited a city, country, or other location that was different from the one in which you were raised. It might be good to write down some of the characteristics of the place you were raised. Identify one thing that appears to be normal in that location that is different than where you were raised. What can you conclude about the relationship between normal behavior and culture?
- Think about the family in which you were raised. Identify two spoken/overt/written norms and two unspoken/covert norms. How did you know when you were behaving in a way that is consistent with the norm? How did you know when you were behaving in a way that appeared to “break the rule” associated with the covert norm?
- Why do you think it is that norms can be such a strong influence on behavior? Why is the study of norms such an important area of psychological research?
- McIntosh (1988) wrote an intriguing article that helps the White majority (in the United States) to critically examine White privilege. This can be retrieved from: <http://www.nymbp.org/reference/WhitePrivilege.pdf>. After reading the document, what can you say about perceived norms related to race/ethnicity?

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## Chapter 3

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### Social Influence, Conformity, and Obedience

Have you ever wondered about the following?

- Why do companies spend millions of dollars every year on advertising?
- Why are salespeople generally successful in the work they do?
- Why did so many people in Germany prior to and during World War II seem to readily follow Adolf Hitler in his quest to dominate Europe?
- Why, in general, do people tend to get along with each other?

Social psychology is an important area of study in psychology. Social psychology is the study of how the actual (or implied) presence of others influences individual behavior. An underlying assumption is that individuals do not live in isolation; rather, they behave in a social context and are, thus, influenced by a number of factors present in the social environment. Asche (1955) wrote, “That social influences shape every person’s practices, judgments, and beliefs is a truism to which anyone will readily assent” (p. 31). Researchers since then have overwhelmingly confirmed the validity of the social influence on behavior.

As you will read, researchers have shown that people behave, in the presence of others, in ways that might be different from what you would expect. In a striking example of the influence of the situation on behavior, Zimbardo (1972; 1973) and Haney, Banks, and Zimbardo (1973) found, in a study in which young college students were randomly assigned to the role of prisoner or of guard in an experiment, that people quickly adopted the roles expected of each. It is interesting to note that Zimbardo had to stop the experiment because both prisoners and guards were going too far. If you are interested in reading more about this very intriguing study, visit <http://www.prisonexp.org/>.

In this reading, you will be introduced to some of the fundamental ways our behavior is influenced by social interaction. This will include an introduction to the very important area of research on conformity and obedience. In addition, you will be introduced to the fundamental attribution error; the fundamental attribution error is very important in terms of how we judge the behavior of others in relation to our own. One thing that you probably will notice right away is how much the principles in social psychology can be readily applied to your own lives!

Cialdini (2009) provides one of the best summaries of the psychological research related to persuasion, and I highly encourage you to read his easy-to-understand and engaging book if you are interested in the psychology of persuasion. Provided here is just a very brief summary of the six principles he describes in his text (with my own examples of how each can be used to understand behavior). These principles are: 1) Reciprocation; 2) Commitment and Consistency; 3) Social Proof; 4) Liking; 5) Authority; and 6) Scarcity.

## **Reciprocation**

The principle of reciprocation says that if you do something for someone, it is likely that that person will do something for you. Cialdini (2009) described reciprocation as a fundamental reason why societies tend to function as harmoniously as they do; we depend upon mutual cooperation. One very common example of how reciprocation can be used is by companies that would like to get information from you in the form of a survey. Many of you may have received an envelope in the mail with a small amount of money (the ones I used to get had \$1.00–\$4.00 inside) with a request to complete a survey. There was no obligation to return the survey; however, the company was banking on the fact that, if a small token of appreciation was provided in advance, that you would be more likely to complete the survey. Another example that used to be very common was the annual envelope containing return address labels with a request to make a donation. Research supports that the tactic is effective in increasing compliance. A simpler example of reciprocation happens between friends; if you loan a friend something—maybe your iPod or your bike—you have just increased the chances that your friend will do something nice for you (if that person does not, you may want to reconsider the friendship!)

## **Commitment and Consistency**

People have a surprisingly strong desire to demonstrate consistency in their thoughts and behaviors. If someone says he or she will do something, that person will tend to behave in ways that are consistent with what they said. This is

a particularly powerful principle recognized by those of us who have tried to change our own behavior. For example, when I decided that I wanted to lose weight, I posted my plan and goal on Facebook, a social networking site. Each week, I updated my progress. Putting my goals out to the public helped me to maintain behavior consistent with the goal (more exercise and less food intake).

## **Social Proof**

The principle of social proof says essentially that in times of uncertainty we tend to look around us and follow the behavior of others. There are many examples of social proof. Those who have had the opportunity to travel to a foreign country know that it is not always easy to understand how to act in a variety of situations; the best solution is to watch what others are doing and emulate it. “Groupthink” is another example; in groupthink, members of a group tend to make a decision that may be very different from one they would make on their own. Some of you may remember that, in 1978, several hundred people died in a mass murder–suicide (those interested can search the Internet for a number of newspaper descriptions of this event; for example, see <http://www.cnn.com/2008/US/11/12/jonestown.factsheet/>). This example highlights how people in situations that are uncertain can behave in ways we would not ordinarily expect.

## **Liking**

The principle of liking says that you are more likely to agree with (or comply with) requests from people you like. There are a lot of examples of applications of the principle of liking. Advertisers use this tactic frequently when marketing products to specific audiences. They may have the key spokesperson be someone from the target audience. I am reminded of some rather humorous commercials for Axe body products—a young man uses some Axe deodorant or body wash and becomes instantly desirable to beautiful women. Axe is a hugely successful enterprise, partly because the products advertised are appealing to people with whom we identify, like, or would like to emulate. One very powerful consequence of the principle of liking is that people tend to be attracted to people who are most like themselves in appearance, thought, and behavior. In case you were wondering, the adage “opposites attract” tends to not be supported by research.

## Authority

We are more likely to be persuaded by those we consider to be authorities on a topic. In general, people in the United States revere doctors as authority figures; you can observe the principle of authority being used in the large number of commercials and print advertisements that feature doctors wearing lab coats and describing the virtue of some product. For example, you may recall seeing toothpaste advertisements that contain something like, “3 out of 4 dentists prefer...”. One very profound example of how authority works was demonstrated by Stanley Milgram, a psychologist. Milgram (1963) found that people, when in the presence of an authority figure (in his basic experiment, a scientist wearing a lab coat), were more likely to administer electric shocks (the participants were not administering actual electrical shocks, but they thought they were) to people who make errors on a test.

## Scarcity

The principle of scarcity says that when there is little of something people will want to acquire it. In fact, people may be more easily persuaded that they need something they really did not want in the first place. There are several examples of the principle of scarcity. Retailers sometimes mark something down slightly and may put up a sign that reads something like, “Not many left at this price.”

## Exercises

For each of the six key aspects of influence described, come up with one example that is relevant to you or to the culture in which you live. Describe the tactic and why it works (or does not work!).

For each of the six key aspects of influence described, think about how you might prevent yourself from becoming a victim of someone trying to influence you in each of the ways described.

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## The Fundamental Attribution Error

One of the enduring questions in psychology is the extent to which social and biological/genetic factors influence behavior. You might have seen this debate framed as *heritability factors* (for example, the extent to which a person’s behavior results from genetics) and *sociability factors* (the notion of *tabula rasa*, that people are born an empty slate and are formed as a product of their

experiences). For the most part, research tends to support that behavior is the result of a combination of heritable and social factors.

One interesting and related matter is how we attribute the causes of actions. The fundamental attribution error states that in a context of minimal information people tend to overestimate the role of personality factors when explaining other people's behavior and over-emphasize contextual (external or social) influences as the cause of their own behavior. One simple example of the fundamental attribution error in action occurs frequently while driving. A driver cuts out in front of you. The typical automatic response is that the other driver is stupid or unobservant. However, if you do the same thing, you are likely to take the context into account and attribute the cause of your behavior to a number of things not under your control. This reinforces the role of uncertainty and lack of information on attribution of cause.

It is also interesting to understand fundamental attribution error from a cross-cultural context. Researchers such as Miller (1984) have found that in cultures that are more collectivist in orientation people tend to commit the fundamental attribution error less (which would make sense because in individualist cultures the focus is on the self, and in collectivist cultures the focus is on family or some other larger social unit).

The fundamental attribution error is common (at least in western, more individualist cultures). However, there are ways to help overcome this bias. The key is to always gather as much information about a situation as possible, or think about why you would react in a similar way in a similar situation. Also, reflect on how much you tend (or tend not) to describe the causes for (particularly undesirable) behavior in others on personality factors.

Here is a practical example. I was running to class one day and the outside temperature was 95 degrees. When I got to the building I decided to take the elevator to the second floor, where my class was. When I pressed 2, I saw that this guy was giving me a look like I was being lazy. I then justified my behavior as the results of things in the environment (it was hot outside and I ran all the way here to my next class in 12 minutes and needed the break). However, a couple days later I was getting on the elevator to go to the 20th floor in another building and the person in the elevator pushed 2. I immediately thought, "Why can't he just walk to the second floor? He must be lazy." In the first example, you had much more information about what was going on inside and outside of you that might cause the behavior. In the second case, you had much less information; with little information, we assume (in western culture, anyway) that there is something related to personality that is the cause.

## Suggested Activities

- You are interested in changing a behavior (for example, you think you want to quit smoking or to begin exercising more). Using the examples provided, and any additional reading you might have done, list 2–3 specific tactics you would use to optimize your success. Try to use as many of the different influence strategies as you can!
- You encounter a homeless woman and her child on the street asking for money.
  - What things could the mother do to optimize her success in gathering donations?
  - Think about your very first reaction to why she is on the street asking for money. Then, systematically evaluate the matter. What was your first reaction? Why did you think that way? Write a list of some of the context factors that may be contributing to her homeless situation. What would you do in a similar situation? In what ways can you recognize aspects of the fundamental attribution error in action?

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## Chapter 4

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### Learning and Memory

How people learn has been an important area of speculation and (since the advent of the scientific revolution) research. For example, Aristotle assumed that people commit ideas to memory due to the association of two or more events. Thus, if you recall one of the aspects of the paired event, you will remember the other idea associated with it. Descartes, a mathematician and philosopher, viewed the body as a machine; something from the outside that stimulates the body triggers some kind of motor response. He saw this type of learning as a form of memory.

In the late 19th century, as psychology was beginning to mature as a science, the interest in memory grew. There were essentially two approaches to the study of memory that would form the basis for American approaches to memory. The first was called structuralism. The Oxford English Dictionary defines structuralism as “a method, especially connected with the American psychologist E. B. Titchener (1867-1927), of investigating the structure of consciousness through the introspective analysis of simple forms of sensation, thought, images, etc.” (Oxford English Dictionary [OED] Online, 2013a, para. 1). Researchers using a structural approach were interested in the internal workings of the mind and how the mind learned and recalled information. This school of thought served as the beginnings of cognitive science and psychology that were to dominate American research on the mind in the mid-20th century. The second approach was functionalism. The Oxford English Dictionary defines functionalism as “the method of studying, or the theory of, the functional interactions and adaptations of particular phenomena within a given framework or structure” (OED Online, 2013b). The focus of functionalism, then, is on the way an organism adapts to its environment. Functionalism was to become the philosophic basis for



behaviorism, which dominated research in learning in America for the first half of the 20th century.

For the purposes of the science of psychology, there are key distinctions between the two approaches. Structuralism is focused on the structural aspects of the mind. Functionalists, on the other hand, are less interested in the internal workings but in how learning occurs in relation to the environment. Both are important antecedents to cognitive psychology (the former) and behaviorism (the latter) that form the key approaches to learning and memory. Skinner, one of the most important psychologists of the 20th century, noted that psychology should only be concerned with what is directly observable (functionalism); what happens inside the mind (structuralism), and thus what cannot be seen directly is of no use to psychologists. However, as you will see in a future course on the psychology of learning, cognitive psychology, the roots of which are in structuralism, tends to be the key contemporary approach to understanding the mind, learning, and memory (Hergenhahn, 2008).

## Classical Conditioning

Early in the 20th century, Pavlov (1927) demonstrated learning in animals through a stimulus-response mechanism. In his research, he was able to train dogs to salivate at the sound of a bell that had been previously associated with food. When the food was taken away, but the dog salivated anyway upon ringing the bell, Pavlov had demonstrated learning. He was able to scientifically describe the process of learning referred to today as *classical conditioning*. Two terms that are important to conditioning are *stimulus*, the environmental cue or trigger, and *response*, the organism's behavior in reaction to the stimulus. (Just as an aside, it is interesting that he was studying digestive systems and kind of stumbled by accident onto this idea of conditioning that would become such a powerful influence on pragmatic psychology as it developed in the United States.)

The most famous behaviorist is Skinner (1948), and he was an important theorist in learning, specifically related to what is known as *operant conditioning*. Operant conditioning is learning that is based on reactions to observable consequences. Some examples are provided below; however, the difference between the two is the types of behavior that is learned. Classical conditioning is learning that involves reflex-type behaviors (for example, in the Pavlov experiments, salivation is a reflex); in operant conditioning, behavior is changed based on reaction to consequences. For those who are interested in learning more about B. F. Skinner, applications of conditioning to learning, and further

references related to his life and philosophy, please visit:

<http://www.bfskinner.org/bfskinner/Home.html>.

Let's look at some examples of operant and classical conditioning.

- Reinforcement. In reinforcement, behavior is rewarded to increase its occurrence. There are two kinds of reinforcement that you may have heard about.
  - Negative reinforcement: Most cars now (none used to!) have a rather annoying beeping signal to let you know that your seat belt is not fastened. Over time, you associate the bell with fastening the seat belt, and you are more likely to buckle up before driving. Thus, you engage in the positive behavior that results in removing a negative stimulus.
  - Positive reinforcement: You train your dog to sit on command. If the dog sits, you reward your dog with a treat. The dog begins to associate the voluntary behavior (sitting) with food. Over time, you can remove the treat because the dog will have learned the sitting behavior.
- Punishment. In punishment, some kind of action is taken resulting in a decrease in negative behavior. For example, corporal punishment (for example, spanking children) is done on the premise that punishment will cause negative behaviors to decrease in frequency.
- Systematic desensitization, which is used with some success to deal with phobias, allows people to slowly become desensitized to something toward which they exhibit fear. For example, virtual reality-like situations are sometimes used to help people, in a safe way, “experience” increasingly higher elevations to help systematically remove the fear that heights evoke.
- Aversive therapies are used to help patients eliminate a negative behavior. One common aversive therapy is antabuse, a drug used in the treatment of alcoholism. Antabuse causes aversive reactions when combined with alcohol (for example, nausea). The negative (aversive) reaction is paired with the behavior, and the behavior should extinguish over time. (This is actually an example of classical conditioning, as symptoms of nausea are usually automatic and not under control of the person.)

## Exercise

Think about a bad habit that you would like to break (or a good habit you would like to initiate). How would you use the principles of classical and/or operant conditioning to make the change? What steps would you take? Would you use a reward or a punishment strategy? Why?

## Social Learning Approaches

Social learning theory describes the processes by which people adopt behaviors by observing the actions of others. Bandura (1977) is most clearly associated with social learning theory. Probably the easiest example of social learning is the development children undergo. You probably recognize these kinds of activities:

- Imitation: In imitation, the baby copies what the parent does and, thus, learns the behavior. For example, when mom laughs, the baby laughs; thus, the baby learns laughing/smiling behavior. This process happens in both physical and verbal imitation (copying sounds).
- As evidence for social learning, Bandura and his research team conducted a study in which he had children watch pictures of people hitting an inflatable (bobo) doll (Bandura, Ross, D., & Ross, S. A., 1961). The research team found that children were more likely to act aggressively toward the inflatable doll when they observed an adult engaging in similar behavior.
- In modeling, people perform behaviors based on demonstration by someone. There are many examples of modeling. Teachers typically are very careful to model appropriate classroom behavior so that children can learn correct classroom behaviors. Good leaders model leadership qualities to the people over whom they are responsible. Political leaders model (ideally) citizenship qualities.
- Bandura (1997) articulated the concept of self-efficacy. Self-efficacy is the extent to which a person feels he or she is capable of achieving a goal. For example, people are successful in mathematics to the extent to which they feel capable of doing well in math. Bandura (2003) wrote that, “Unless people believe they can produce desired outcomes by their actions, they have little incentive to act, or to persevere in the face of difficulties. Whatever other factors serve as motivators, they are rooted in the core belief that one has the power to accomplish things by one’s actions.” (p. 1) For example, self-efficacy is widely studied in health

psychology and is a core concept for many theories of health behavior change.

## Exercise

A topic that you will read more about in the upcoming weeks is related to television and violence. Based on social learning theory, would you expect that television causes violent behavior? Why or why not? What are other plausible explanations from social learning theory that can describe how violent behavior is learned?

## Cognitive Approaches to Learning

Cognitive approaches to learning are more structural in nature; those approaches tend to focus on the brain as a means of taking in, processing, storing, and recalling information. Cognitive approaches began to gain popularity for two primary reasons. First, while behaviorist approaches were scientifically verifiable and sound, it was becoming clear that these approaches could not explain more complex tasks, such as reading and grammar comprehension. Second, in the 1950s computers began to be developed that processed information and performed complex calculations. The computer as metaphor for the functioning of the human brain became very appealing. Indeed, while behaviorist approaches are still commonly used in educational and therapeutic settings, it is cognitive psychology and cognitive science that has helped us to make large advances in understanding how the brain works and how information is transmitted within the nervous system.

Piaget is a very well-known person in cognitive psychology and developed a theory of cognitive development. He wrote that people developed schemas, which are mental representations. For example, one schema that a child would learn early is how to behave in a school setting (learning classroom behavior typically starts in preschool). First, children might learn that once they go to class, they need to sit in their seats and raise their hand. As they learn new expectations, they *assimilate* them into their existing schemas. In this way, schemas (mental representations) become more complex (and represent cognitive maturity). For example, children learn when it is appropriate to talk to other children in their classroom. Accommodation occurs when schemas are adjusted. One example of accommodation might occur during the transition to junior high school, when many children in the United States experience a shift from the single classroom to moving to different classrooms with different teachers.

Schemas are important for memory (it is easier to remember when you can attach new information to an existing schema). They also help simplify our experience; for example, we don't have to make sense of a classroom every time we go into one, because we have a schema for the *classroom*.

### Exercise

Review the information on the website <http://dsc.discovery.com/tv-shows/curiosity/topics/10-ways-to-improve-memory.htm>. Select one of the top 10 ways to improve memory, and describe how you can implement your chosen technique to improve learning.

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### Suggested Activities

- You have a major paper to write for your class. From what you have learned from the class so far, describe at least two learning strategies you can use to optimize your performance on the paper.
- Researchers, particularly those who are more aligned to cognitive approaches to learning, have suggested that behaviorism (classical and operant conditioning) does not explain very well how children acquire language. Think about how babies first develop language. Try to explain language development from a purely behaviorist point of view. As part of that explanation, attempt to articulate why a behaviorist explanation might be limited.

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## Chapter 5

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### Violence and Its Implications

Understanding the causes of violent behavior is of great interest to psychologists. According to the United Nations Office on Drugs and Crime (UNODC; <http://www.unodc.org/unodc/en/data-and-analysis/statistics/data.html>), while the levels of violence (for example, homicides per 100,000 population) in the United States is not high compared to some parts of the world, the level in 2010 was 4.8, compared to an average of around 1.0 for most European countries (you can review the detailed statistics at the UNODC on your own for some very interesting discoveries).

Violence manifests in a variety of forms. For example, there is great worldwide interest in bullying and its effects. The mass shootings that have occurred in the United States and other areas of the world have led to a lot of speculation about psychological causes. Worldwide, terrorism is a threat, and researchers have indicated that the reasons for the violence are very complex. Complicating the issue is speculation on the role the media plays in encouraging violent behavior. In this reading, I present examples of theories social psychologists have proposed to explain violence. Following the description of these theories will be some examples of what we know about violence and, in particular, its relationship to the media.

#### Theories of Violence

There have been a large number of theories developed representing a range of perspectives on violence. Please visit <http://www.children.gov.on.ca/htdocs/English/topics/youthandthelaw/roots/volume5/index.aspx> for an excellent analysis of the research on violence. Wortley et al. (2008) provided an overview of theories of violence from multiple disciplines;

here, I will focus on key perspectives that have been used extensively by psychologists to explain violent behavior.

- Biosocial theories—these propose that there is a biological (genetic, or chemical, such as hormonal or diet-related) basis to violence. The authors, in their analysis, suggest that the evidence for a biosocial basis for violence is very limited (due to small sample sizes, which limit the ability to say that the results can apply more widely; and that the theories do not adequately explain variations in violent behavior by regions within the same country).
- Psychodynamic theories—these are based primarily on the writings of Freud. In his theory of development, Freud suggested that aggression is a fundamental characteristic; during normal development, people learn to control their aggression. Those who do not learn to control it (for example, those who may have suffered some kind of experience in childhood that did not allow for control of aggression) would be more likely to be aggressive in adulthood. Psychoanalytic approaches have been problematic because there has really been no way to test using research whether they are correct.
- Behaviorist theories—behaviorists assume that violence is a behavior that is learned through interaction with the environment. We described social learning theory; a social learning theorist would probably suggest that children learn violent behavior by seeing it modeled by others.
- Cognitive theories—cognitive theorists look to cognitive development as a basis for violence. For example, those who study moral development would suggest that those who are violent failed in some way to achieve the higher stages of moral development.
- Connections between mental illness and violence—these researchers focus on mental illness, which is believed to be acquired through a combination of genetic and social factors. It is believed that there are some mental illness factors that contribute to violent behavior.
- Cultural and political factors—Moghaddam (2005) presents a compelling psychological explanation for terrorism. He theorizes that people who join terrorist organizations are not necessarily psychologically different from others. Rather, these individuals, due to restricted economic and political circumstances, see their options as limited and are encouraged to focus their anger and aggression on members/countries outside of the terrorist group.

What is interesting in the review of psychological causes is the large number of “suspects” that involved combinations of genetic and environmental factors.



These include modeling/observation; cognitive development; personality; psychopathy (similar to antisocial personality disorder); intelligence (IQ); and substance abuse. It is the role of science to test theories to see if there is evidence to support what they propose. One thing that is clear is that there is no single cause of violent behavior, and it is likely that it is a complex interaction of many different causes. Thus, when you see an example of violence on the news, you should be careful not to jump to conclusions (in fact, it is very common for commentators on the news to speculate on causes that include problems in childhood or exposure to media violence).

## Media and Violence

There has been a lot of interest in the relationship between media and violence. The term *media* is broadly used to include things like television, video games, and violent movies. Here is some information from the research on the connection between media and aggression. For more information and reading in the topic of media and violence, the American Psychological Association has an excellent site with a number of suggested readings (<http://www.apa.org/divisions/div46/articles.html>).

- A meta-analysis study (which reviews a significant number of research studies in a particular area) shows a significant increase in the strength of the association between media and aggression beginning around 1995, news reports have been in the opposite direction (that is, the news has tended to portray a lower connection between media and aggressive behavior) (Bushman & Anderson, 2001). In fact, when the strength of the effect determined in scientific studies is plotted against what the media reported, these numbers diverge starting in about 1970 (meaning that, while science was showing an increasing relationship between violent media and aggression, news reports were reporting it as becoming lower over time).
- In a recent longitudinal study (longitudinal studies are preferred because they look at effects systematically over time), researchers found no effect of violent media exposure on aggression (Ferguson, San Miguel, Garza, & Jerabeck, 2012). Other factors, such as depression, exposure to family violence, and peer influences were more related to aggression.
- Huesmann, Moise-Titus, Podolski, and Eron (2003) found in a 15-year follow-up longitudinal study that exposure to TV violence between the ages of 6 and 10 predicted aggressive behavior in adulthood for males and females.

These are just some examples of what research has shown regarding the relationship between media and violence. What is important is 1) to be very careful about the conclusions that you draw regarding this relationship; as you can see, researchers are not in agreement on this topic either, and, more importantly, 2) violence is the result of a number of factors that interact in very complex ways. These factors include genetics/biology, environmental influences, and those related to personality.

### **Suggested Activities**

- Go to trusted sites (such as the United Nations Office on Drugs and Crime, the Office of the Federal Bureau of Investigation) and review the statistics on various kinds of violence. What do the statistics tell you? How does the United States (or your own country if you live outside of the U.S.) compare internationally on various levels of violence? How does what you found compare to what you have seen in the media?
- Read the article by Moghaddam (2005). What did you learn as another way to explain the causes of terrorism? If you are interested in the topic of social psychological explanations of terrorism, there is a movie called *The Terrorist* (released in 1999; Indian with English subtitles) that presents some of these ideas and presents very clearly how social causes can play a large role in behavior.
- Search the Internet for any stories related to a particular mass homicide or some other kind of violence activity. Review the articles carefully.
  - How did the media/news reporters tend to describe the reasons or causes for the violence?
  - Given what you know about psychology, what are some of the factors that could have lead to the violence and that are supported by the research?

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## Chapter 6

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### **Heuristics, Biases, and Their Implications on Decision-Making and Memory**

“Memory is the ability to encode, process, and retrieve information. As a skill, it is inseparable from intellectual functioning and learning. Individuals deficient in memory skills would be expected to have difficulty on a number of academic and cognitive tasks” (Swanson, 2005). As such, memory is a key aspect of learning. What we learn must somehow be encoded, stored, and retrieved at a later time; these are the important functions of memory. Memory is generally believed to consist of two broad components: short-term memory and long-term memory. Here are some examples of what research has shown about memory.

- There is a limit to short-term memory. Miller (1957) found that short-term memory has a capacity of about seven items—plus or minus two items—at any given time (one of the rationales for the seven-digit phone number). While other researchers believe the actual number of pieces of information may be lower, one can use the seven-digit rule as a basis for strategies for optimizing short-term memory (sometimes referred to as working memory) recall. One such strategy that has been successfully used is chunking, in which items are collected into a single group. To remember a 12-digit code, for example, it would be helpful to chunk the digits into four distinct groups that may then be within the capacity of our short-term memory.
- Repetition enhances our ability to recall from long-term memory. For example, we can remember phone numbers for many years because we have rehearsed/repeated/practiced the number so many times.
- Healthy diet and exercise can have positive impact on memory (Small et al., 2006).

Tversky and Kahneman (1974) introduced psychology to the concept of heuristics and the associated biases in thinking that can result. Daniel Kahneman actually won the Nobel Peace Prize for Economics in 2002 for the work he and Amos Tversky did relative to understanding decision making and its influence in economics. Kuhn (2007) defined heuristics as "... rules of thumb, that generally produce reasonable and quick results but that can also lead to systematic patterns of error" (p. 1). Heuristics help us to make decisions quickly, particularly in cases where there is little information.

Below is a description of some of the more common heuristics as well as biases that can result in error. This is not an exhaustive list; rather, it is meant to provide you with examples that have been scientifically verified of how these biases can affect the decisions we make. These also help to show why it is so important to have a scientific method—it helps us to review information systematically to overcome some of these biases based on heuristics that we use.

- Representativeness heuristic. An example of the representativeness heuristic happens when people are asked to select the criminal in a series of photos. People generally have a picture in their minds (a stereotype) of what a criminal looks like, and they will generally select the picture that appears most like that mental picture. Thus, people will make a choice based on how representative that choice is to a stereotyped view.
- Availability. People make decisions about an outcome based on the readiness to which they can recall similar circumstances. One example of availability occurs when we think about changes in the weather. It is common for people to make conclusions, such as "we have been having colder than normal weather," when the real reason for such a conclusion is based more on recent memory than on longer patterns of statistical data. This is particularly salient now with the debate on climate change. Climate change is detectable by looking at long patterns of temperature change over centuries. However, we tend to recall the most recent patterns in the weather when drawing conclusions. This kind of recall is related to an effect called recency, which means that we tend to remember information that was most recently presented. Presenters use knowledge of the recency effect to their benefit when they want to make sure an audience remembers the most important parts of their presentations.
- Anchoring. Our final decisions tend to be affected by initial judgments. One common example of anchoring is the first impression. Our estimation of people or situations tends to be consistent with first impressions, even if

those impressions are not correct. Our decision, then, is *anchored* on our first impression.

There are a number of biases that occur as a result of heuristics.

- **Confirmatory bias.** We tend to pay more attention to information that is consistent with what we believe. This happens quite frequently. One example is in the debate over gun control. It is more likely that you will absorb information that confirms your beliefs about this controversial issue and not pay attention to (“scroll past”) information that is not consistent with your beliefs. This is one reason why you are learning how to be a social scientist. Scientists systematically collect all data and intentionally make sure data representing multiple viewpoints and factual sources are collected.
- **Hindsight bias.** We tend to believe that we know more about the causes of a given event after the event has taken place. One example of hindsight bias occurs in commentary about people who engage in violent acts. The media tends to examine the pasts of these individuals and present them in ways that make it seem like we should have been able to predict the outcome (that somehow we could have prevented the act from occurring).

These heuristics and biases exert a tremendous influence on behavior. For example, stereotyping can be seen as a result of the way our brains process information: In situations of uncertainty, we make decisions based on schemas—stereotypes—of individuals and situations.

## **Fallibility of Memory**

The research by Loftus (1975) was instrumental in our understanding of memory and how memories can be altered. In this seminal research work, Loftus verified through experiments that 1) the way we store memories is connected to the more permanent information about similar objects in our long-term memories (recall the previous discussion of schemas), and 2) when questioned about an incident after the fact, and when both correct and incorrect information is provided by the questioner, the person being questioned is likely to adjust the memory (create a new representation) based on the new information from the interrogator. This research has clear implications for eyewitness testimony. We have seen in recent years the relatively large numbers of cases that have been overturned due to DNA tests (the linking of genetic material from the victim to the alleged perpetrator).

Related to her work on eyewitness testimony is another area of research of interest to Loftus: the introduction of false memories. Loftus has been at the

center of the debate on recovered memories—the recall of memories of a traumatic nature, specifically those involving childhood sexual abuse. I encourage you to visit her page at <http://faculty.washington.edu/eloftus/Articles/sciam.htm>. Here, she describes the line of research in which she has been engaged. She and her colleagues have provided evidence that memory recall can be unduly influenced by others and that others—such as therapists or family members—exercise great power over the content of those memories.

## Conclusion

It is clear that memory is fallible. While we arguably have the best intentions, our own cognitive structures result in fallibility of memory. Tversky and Kahneman have shown (and whose results have been repeated in other studies) that we tend to make decisions, particularly in situations in which we are uncertain, that can lead to errors in thinking. Elizabeth Loftus conducted groundbreaking research on the fallibility of memory as it relates to eyewitness testimony. In addition, she has become a rather controversial figure in the area of recovered memories. As with other areas of psychology, I encourage you to relate these findings to your own lives. Read more about memory and the fallibility of memory if these topics interest you.

## Suggested Activities

- Examine each of the heuristics and biases presented and identify one example which is directly applicable to you. What are some ways you can minimize the effect of that bias?
- Choose a group of people with which you are not very familiar. Some examples include people who live in a different country from you; members of punk or goth youth cultures; people who are of a different race. What are some of the mental pictures and beliefs you carry about individuals in these groups? How accurate do you think they are? Where do those pictures and beliefs come from? This is an important exercise to help you better understand how stereotypes operate and how they can lead people to make errors in judgment.
- Memory loss is one of the consequences of normal aging. However, many more adults are being diagnosed with Alzheimer's disease. Review the web for sites related to memory loss. Remember, search out sites that have .org, .gov, or .edu extensions; information on these sites tends to be more research based. After reviewing several sites, what are the key

themes for slowing memory loss? What would you suggest to an older adult who may ask you about how to improve memory as he or she ages?

- Review the web page of Elizabeth Loftus: (<http://faculty.washington.edu/eloftus/Articles/sciam.htm>). Try to find 1–2 articles written by researchers who have found contradictory evidence (that memories can truly be recovered). What conclusion did you make?



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## Chapter 7

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### Communicating and Connecting

Many of you use some kind of social networking sites, such as Facebook and Myspace, to maintain connections with others. Our children are texting regularly with their friends; we know the “buzz” signal and the furious typing that follows! Communication that use to occur through parties and telephone calls is now (and can be) instantaneous and continuous. We not only have instant and immediate access to information in real time, we also have similar access to our friends and families. What are the implications for behavior? I have heard people say something to the effect that, “people don’t talk on the phone or connect in person anymore; people have forgotten how to really communicate.” Is there validity to that? What does the research say about interpersonal connection and our increasing reliance on technology?

Psychology is the science of the causes of individual behavior. However, we know that individual behavior occurs in a social context; as we have seen, what happens in the environment can have a significant impact on our actions. Connections with friends and family have incredible influence on behavior. One type of connection is interpersonal attraction/love, an area that has been rather extensively studied by psychologists. In this week’s reading, I will introduce you to some of what theorists say about the importance of interpersonal relationships and what the research tells us about attraction.

#### Interpersonal Attraction

While there are many theories of love, one that is widely recognized is that by Sternberg (1986). He proposed the triangular theory of love that described three components: 1) Intimacy, which describes the level of attachment and

closeness; 2) Passion, which describes the level of sexual attraction and romance; and 3) Commitment, which describes the willingness to stay together.

Other theorists have expanded on the triangular theory of love. In a recent review of the literature on interpersonal attraction, Fitness, Fletcher, and Overall (2007) wrote that “what attracts one person to another is partly a function of socially shared norms, along with idiosyncratic preferences derived from people's learning histories” (p. 5). They proposed a theory of interpersonal attraction that included aspects of cognitive, emotional, and evolutionary theories (expanding somewhat on Sternberg's approach). In the Fitness et al. (2007) review, they provided some key findings from their analysis.

- There is very little evidence that supports the adage that “opposites attract;” higher perceptions of relationship quality tend to be associated with more perceived similarities.
- Several perceived similarities have been found to be causes for attraction and include similarities in physical appearance, attitudes, and sociocultural backgrounds.
- Physical appearance is probably one of the strongest and most consistent predictors of attraction. Physically attractive people tend to be perceived to be the most popular and most successful.
- The concept of romantic love is most likely a cross-cultural phenomenon; in addition, the meaning of commitment and love appear to be nearly universal.

### **The Benefits of Interpersonal Connection and Relationship**

There is other evidence that points to the potential benefits of interpersonal connection. A Health and Human Services report (HHS; 2007) found that, while the research is inconsistent in some areas, those who are married tend to enjoy better health outcomes. The authors wrote, “These studies find, for example, that marriage improves certain mental health outcomes, reduces the use of some high-cost health services (such as nursing home care), and increases the likelihood of having health insurance coverage and suggests that growing up with married parents is associated with better health as an adult” (p. 1). In a longitudinal study of men and women from early adulthood into older age, Vaillant (2002) found that one of the strongest predictors of happiness in older age was the existence of social connections, the ability to maintain contact and intimacy with existing friends (or new ones as members of the social network pass on). These are just two examples of studies that point to the importance of interpersonal contact and connection.

## Online Social Networking

Consider this statement from a study by Crosier, Webster, and Dillon (2012): “With the advent of technology that promotes these connections, our innate propensity to connect at a large scale is changing the way we live. From mundane communication to meeting the love of one’s life to inciting political revolutions, network ties are the conduits by which information and resources are spread” (p. 230). Evolutionary psychology is concerned with the causes of behavior that have to do with our genetic adaptation to the environment (that is, our behavior is shaped in ways that have promoted survival). These authors are saying that, from an evolutionary perspective, we are “wired” with a need and desire for interpersonal connection, and the Internet allows us a way to maximize this need. The authors go on to write, “The major motivation behind interacting online is the opportunity to engage directly in communication, and thus the exchange of resources, there is a strong secondary enticement of being able to monitor the behavior of others that are of special interest. Offspring; past, current, or future romantic partners; friends; rivals; and siblings all fit within this category” (p. 235). The authors suggest there are many benefits to communication online, including new perspectives on behavior that can lead us to greater depth of insight into those with whom we share connection.

Manago, Taylor, and Greenfield (2012) found in a study of college students that students’ use of Facebook had positive benefits. For example, the researchers found that larger networks were associated with increased life satisfaction. They also found that status updates were important as a form of disclosure from and to their Facebook friends (the connection of this kind of disclosure to emotional intimacy was made). Espinoza (2012) found that teens were using online social networking sites primarily to strengthen offline relationships with friends. Thus, while it is recognized that research on social networking is still new, the evidence to date suggests strengths of online relationship sites in facilitating intimacy and connection.

## Conclusion

There has been rapid growth in access to information and to relationships via technology. There is nothing that happens that we do not have instant access to, whether it’s a meal that a friend just ate or live footage from the uprisings in the Middle East’s “Arab Spring.” The Internet, by its nature, has changed the way we connect with others. Social networking is a new area of research, but what seems to be emerging is that interpersonal connection is a very important part of

our lives; and the Internet has provided opportunities in many ways to strengthen existing connections (and building new ones).

### **Suggested Activities**

- Suppose that you are seeking a relationship. Placing a personal ad is one alternative. Answer the following questions.
  - Would you place any kind of ad? Why or why not?
  - What means would you use to post a personal ad (newspaper, Internet, or other media) and why would you choose it?
  - How would you craft your ad to maximize response by others?
- At the beginning of this reading, I wrote that I have heard people say something to the effect that “people don’t talk on the phone or connect in person anymore; people have forgotten how to really communicate.” Do you agree with this statement? What evidence would you suggest to confirm or refute what is being communicated in this statement?
- Suppose that your supervisor in the place you work (or a place you used to work) approached you and asked you to do a presentation. How would you use the principles from this reading to maximize likelihood of success? Think about this in terms of the following:
  - How could you establish a connection with your audience?
  - What things might you do to get your audience to like you?
- Do you belong to a social networking site? Supposed that you were approached by someone who has never used a social networking site . . . maybe your parent or grandparent. Using what you have learned from research, how would you describe the benefits of the Internet to them?

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## Final Thoughts

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I hope you found this information useful. The purpose of this reader was not to provide thorough reviews of the literature; in many of the courses that you take in psychology (and in other disciplines), you will have the opportunity to read more about the research in these areas. You also will have opportunities to explore the research in these areas further, increase the depth of your understanding, and apply these concepts to your own life.

Remember that you are entering the discipline of psychology. Education in psychology means that you learn how to:

- Use the large number of resources that are available to you;
- Be discriminating about which sources are reliable and which are not;
- Go to trusted sites to verify the validity of the information;
- Synthesize what you read and hear into a logical, evidence-based argument (you will find that there are a wide variety of opinions but also findings from research studies that appear to contradict each other).

I hope you can apply this information, as well as information you are exposed to in other courses, in order to bring greater success to your own life.