Side panel Saylor University History of Psychology Back to '1.2: History of Psychology\' Completion requirements This text describes the progression of psychological thought: from its early beginnings in the laboratory of Wilhelm Wundt (1832–1920) in Leipzig, Germany, to its importation to the United States, to the series of theories that dominated the mid-20th century. What aspects of psychology were those who follow the behaviorist approach reacting to? What are some ethical concerns associated with Stanley Milgram's (1933–1984) research on obedience? 15 15 Listen to this content Ready to play. Arabic ~26 min listen Speed 1× Preparing transcript... Audio narration is AI-generated. The voice you hear is synthetic, not a real person. Psychology is a relatively young science with its experimental roots in the 19th century, compared, for example, to human physiology, which dates much earlier. As mentioned, anyone interested in exploring issues related to the mind generally did so in a philosophical context prior to the 19th century. Two 19th century scholars, Wilhelm Wundt and William James, are generally credited as being the founders of psychology as a science and academic discipline that was distinct from philosophy. This section will provide an overview of the shifts in paradigms that have influenced psychology from Wundt and James through today. Wundt and Structuralism Wilhelm Wundt (1832–1920) was a German scientist who was the first person to be referred to as a psychologist. His famous book entitled Principles of Physiological Psychology was published in 1873. Wundt viewed psychology as a scientific study of conscious experience, and he believed that the goal of psychology was to identify components of consciousness and how those components combined to result in our conscious experience. Wundt used introspection (he called it "internal perception"), a process by which someone examines their own conscious experience as objectively as possible, making the human mind like any other aspect of nature that a scientist observed. He believed in the notion of voluntarism – that people have free will and should know the intentions of a psychological experiment if they were participating. Wundt considered his version experimental introspection; he used instruments such as those that measured reaction time. He also wrote Volkerpsychologie in 1904 in which he suggested that psychology should include the study of culture, as it involves the study of people. Edward Titchener, one of his students, went on to develop structuralism. Its focus was on the contents of mental processes rather than their function. Wundt established his psychology laboratory at the University at Leipzig in 1879 (Figure 1.2). In this laboratory, Wundt and his students conducted experiments on, for example, reaction times. A subject, sometimes in a room isolated from the scientist, would receive a stimulus such as a light, image, or sound. The subject's reaction to the stimulus would be to push a button, and an apparatus would record the time to reaction. Wundt could measure reaction time to one-thousandth of a second. Photograph A shows Wilhelm Wundt. Photograph B shows Wundt and five other people gathered around a desk with equipment on top Figure 1.2 (a) Wilhelm Wundt is credited as one of the founders of psychology. He created the first laboratory for psychological research. (b) This photo shows him seated and surrounded by fellow researchers and equipment in his laboratory in Germany. However, despite his efforts to train individuals in the process of introspection, this process remained highly subjective, and there was very little agreement between individuals. Functionalism William James, John Dewey, and Charles Sanders Peirce helped establish functional psychology (Figure 1.3). They accepted Darwin's theory of evolution by natural selection and viewed this theory as an explanation of an

organism's characteristics. Key to that theory is the idea that natural selection leads to organisms that are adapted to their environment, including their behavior. Adaptation means that a trait of an organism has a function for the survival and reproduction of the individual, because it has been naturally selected. As James saw it, psychology's purpose was to study the function of behavior in the world, and as such, his perspective was known as functionalism. Functionalism focused on how mental activities helped an organism fit into its environment. Functionalism has a second, more subtle meaning in that functionalists were more interested in the operation of the whole mind rather than of its individual parts, which were the focus of structuralism. Like Wundt, James believed that introspection could serve as one means by which someone might study mental activities, but James also relied on more objective measures, including the use of various recording devices, and examinations of concrete products of mental activities and of anatomy and physiology. A drawing depicts the William James. Figure 1.3 William James, shown here in a self–portrait, was the first American psychologist. Freud and Psychoanalytic Theory Perhaps one of the most influential and well–known figures in psychology's history was Sigmund Freud (Figure 1.4). Freud (1856–1939) was an Austrian neurologist who was fascinated by patients suffering from "hysteria" and neurosis. Hysteria was an ancient diagnosis for disorders, primarily of women with a wide variety of symptoms, including physical symptoms and emotional disturbances, none of which had an apparent physical cause. Freud theorized that many of his patients' problems arose from the unconscious mind. In Freud's view, the unconscious mind was a repository of feelings and urges of which we have no awareness. Gaining access to the unconscious, then, was crucial to the successful resolution of the patient's problems. According to Freud, the unconscious mind could be accessed through dream analysis, by examinations of the first words that came to people's minds, and through seemingly innocent slips of the tongue. Psychoanalytic theory focuses on the role of a person's unconscious, as well as early childhood experiences, and this particular perspective dominated clinical psychology for several decades. Photograph A shows Sigmund Freud. Image B shows the title page of his book, A General Introduction to Psychoanalysis. Figure 1.4 (a) Sigmund Freud was a highly influential figure in the history of psychology. (b) One of his many books, A General Introduction to Psychoanalysis, shared his ideas about psychoanalytical therapy; it was published in 1922. Freud's ideas were influential, and you will learn more about them when you study lifespan development, personality, and therapy. For instance, many therapists believe strongly in the unconscious and the impact of early childhood experiences on the rest of a person's life. The method of psychoanalysis, which involves the patient talking about their experiences and selves, while not invented by Freud, was certainly popularized by him and is still used today. Many of Freud's other ideas, however, are controversial. Drew Westen (1998) argues that many of the criticisms of Freud's ideas are misplaced, in that they attack his older ideas without taking into account later writings. Westen also argues that critics fail to consider the success of the broad ideas that Freud introduced or developed, such as the importance of childhood experiences in adult motivations, the role of unconscious versus conscious motivations in driving our behavior, the fact that motivations can cause conflicts that affect behavior, the effects of mental representations of ourselves and others in guiding our interactions, and the development of personality over time. Westen identifies subsequent research support for all of these

ideas. More modern iterations of Freud's clinical approach have been empirically demonstrated to be effective (Knekt et al., 2008; Shedler, 2010). Some current practices in psychotherapy involve examining unconscious aspects of the self and relationships, often through the relationship between the therapist and the client. Freud's historical significance and contributions to clinical practice merit his inclusion in a discussion of the historical movements within psychology. Wertheimer, Koffka, Köhler, and Gestalt Psychology Max Wertheimer (1880–1943), Kurt Koffka (1886–1941), and Wolfgang Köhler (1887–1967) were three German psychologists who immigrated to the United States in the early 20th century to escape Nazi Germany. These scholars are credited with introducing psychologists in the United States to various Gestalt principles. The word Gestalt roughly translates to "whole;" a major emphasis of Gestalt psychology deals with the fact that although a sensory experience can be broken down into individual parts, how those parts relate to each other as a whole is often what the individual responds to in perception. For example, a song may be made up of individual notes played by different instruments, but the real nature of the song is perceived in the combinations of these notes as they form the melody, rhythm, and harmony. In many ways, this particular perspective would have directly contradicted Wundt's ideas of structuralism. Unfortunately, in moving to the United States, these scientists were forced to abandon much of their work and were unable to continue to conduct research on a large scale. These factors along with the rise of behaviorism (described next) in the United States prevented principles of Gestalt psychology from being as influential in the United States as they had been in their native Germany. Despite these issues, several Gestalt principles are still very influential today. Considering the human individual as a whole rather than as a sum of individually measured parts became an important foundation in humanistic theory late in the century. The ideas of Gestalt have continued to influence research on sensation and perception. Structuralism, Freud, and the Gestalt psychologists were all concerned in one way or another with describing and understanding inner experience. But other researchers had concerns that inner experience could be a legitimate subject of scientific inquiry and chose instead to exclusively study behavior, the objectively observable outcome of mental processes. Pavlov, Watson, Skinner, and Behaviorism Early work in the field of behavior was conducted by the Russian physiologist Ivan Pavlov (1849–1936). Pavlov studied a form of learning behavior called a conditioned reflex, in which an animal or human produced a reflex (unconscious) response to a stimulus and, over time, was conditioned to produce the response to a different stimulus that the experimenter associated with the original stimulus. The reflex Pavlov worked with was salivation in response to the presence of food. The salivation reflex could be elicited using a second stimulus, such as a specific sound, that was presented in association with the initial food stimulus several times. Once the response to the second stimulus was "learned," the food stimulus could be omitted. Pavlov's "classical conditioning" is only one form of learning behavior studied by behaviorists. John B. Watson (1878–1958) was an influential American psychologist whose most famous work occurred during the early 20th century at Johns Hopkins University (Figure 1.5). While Wundt and James were concerned with understanding conscious experience, Watson thought that the study of consciousness was flawed. Because he believed that objective analysis of the mind was impossible, Watson preferred to focus directly on observable behavior and try to bring that behavior under control. Watson was a major proponent of

shifting the focus of psychology from the mind to behavior, and this approach of observing and controlling behavior came to be known as behaviorism. A major object of study by behaviorists was learned behavior and its interaction with inborn qualities of the organism. Behaviorism commonly used animals in experiments under the assumption that what was learned using animal models could, to some degree, be applied to human behavior. Indeed, Tolman (1938) stated, "I believe that everything important in psychology (except ... such matters as involve society and words) can be investigated in essence through the continued experimental and theoretical analysis of the determiners of rat behavior at a choice-point in a maze." A photograph shows John B. Watson. Figure 1.5 John B. Watson is known as the father of behaviorism within psychology. Behaviorism dominated experimental psychology for several decades, and its influence can still be felt today. Behaviorism is largely responsible for establishing psychology as a scientific discipline through its objective methods and especially experimentation. In addition, it is used in behavioral and cognitive-behavioral therapy. Behavior modification is commonly used in classroom settings. Behaviorism has also led to research on environmental influences on human behavior. B. F. Skinner (1904–1990) was an American psychologist (Figure 1.6). Like Watson, Skinner was a behaviorist, and he concentrated on how behavior was affected by its consequences. Therefore, Skinner spoke of reinforcement and punishment as major factors in driving behavior. As a part of his research, Skinner developed a chamber that allowed the careful study of the principles of modifying behavior through reinforcement and punishment. This device, known as an operant conditioning chamber (or more familiarly, a Skinner box), has remained a crucial resource for researchers studying behavior. Photograph A shows B.F. Skinner. Illustration B shows a rat in a Skinner box: a chamber with a speaker, lights, a lever, and Figure 1.6 (a) B. F. Skinner is famous for his research on operant conditioning. (b) Modified versions of the operant conditioning chamber, or Skinner box, are still widely used in research settings today. The Skinner box is a chamber that isolates the subject from the external environment and has a behavior indicator such as a lever or a button. When the animal pushes the button or lever, the box is able to deliver a positive reinforcement of the behavior (such as food) or a punishment (such as a noise). Skinner's focus on positive and negative reinforcement of learned behaviors had a lasting influence in psychology that has waned somewhat since the growth of research in cognitive psychology. Despite this, conditioned learning is still used in human behavioral modification. Maslow, Rogers, and Humanism During the early 20th century, American psychology was dominated by behaviorism and psychoanalysis. However, some psychologists were uncomfortable with what they viewed as limited perspectives being so influential to the field. They objected to the pessimism and determinism (all actions driven by the unconscious) of Freud. They also disliked the reductionism, or simplifying nature, of behaviorism. Behaviorism is also deterministic at its core, because it sees human behavior as entirely determined by a combination of genetics and environment. Some psychologists began to form their own ideas that emphasized personal control, intentionality, and a true predisposition for "good" as important for our self-concept and our behavior. Thus, humanism emerged. Humanism is a perspective within psychology that emphasizes the potential for good that is innate to all humans. Two of the most well-known proponents of humanistic psychology are Abraham Maslow and Carl Rogers. Abraham Maslow (1908–1970) was an American psychologist who is best known for proposing a

hierarchy of human needs in motivating behavior (Figure 1.7). Although this concept will be discussed in more detail in a later chapter, a brief overview will be provided here. Maslow asserted that so long as basic needs necessary for survival were met (e.g., food, water, shelter), higher-level needs (e.g., social needs) would begin to motivate behavior. According to Maslow, the highest-level needs relate to self-actualization, a process by which we achieve our full potential. Obviously, the focus on the positive aspects of human nature that are characteristic of the humanistic perspective is evident. Humanistic psychologists rejected, on principle, the research approach based on reductionist experimentation in the tradition of the physical and biological sciences, because it missed the "whole" human being. Beginning with Maslow and Rogers, there was an insistence on a humanistic research program. This program has been largely qualitative (not measurement-based), but there exist a number of quantitative research strains within humanistic psychology, including research on happiness, self-concept, meditation, and the outcomes of humanistic psychotherapy. A triangle is divided vertically into five sections with corresponding labels inside and outside of the triangle for each sec Figure 1.7 Maslow's hierarchy of needs is shown. Carl Rogers (1902–1987) was also an American psychologist who, like Maslow, emphasized the potential for good that exists within all people (Figure 1.8). Rogers used a therapeutic technique known as client-centered therapy in helping his clients deal with problematic issues that resulted in their seeking psychotherapy. Unlike a psychoanalytic approach in which the therapist plays an important role in interpreting what conscious behavior reveals about the unconscious mind, client-centered therapy involves the patient taking a lead role in the therapy session. Rogers believed that a therapist needed to display three features to maximize the effectiveness of this particular approach: unconditional positive regard, genuineness, and empathy. Unconditional positive regard refers to the fact that the therapist accepts their client for who they are, no matter what they might say. Provided these factors, Rogers believed that people were more than capable of dealing with and working through their own issues. A drawing depicts Carl Rogers. Figure 1.8 Carl Rogers, shown in this portrait, developed a client-centered therapy method that has been influential in clinical settings. Humanism has been influential to psychology as a whole. Both Maslow and Rogers are well-known names among students of psychology (you will read more about both later in this text), and their ideas have influenced many scholars. Furthermore, Rogers' client-centered approach to therapy is still commonly used in psychotherapeutic settings today. The Cognitive Revolution Behaviorism's emphasis on objectivity and focus on external behavior had pulled psychologists' attention away from the mind for a prolonged period of time. The early work of the humanistic psychologists redirected attention to the individual human as a whole, and as a conscious and self-aware being. By the 1950s, new disciplinary perspectives in linguistics, neuroscience, and computer science were emerging, and these areas revived interest in the mind as a focus of scientific inquiry. This particular perspective has come to be known as the cognitive revolution. By 1967, Ulric Neisser published the first textbook entitled Cognitive Psychology, which served as a core text in cognitive psychology courses around the country. Although no one person is entirely responsible for starting the cognitive revolution, Noam Chomsky was very influential in the early days of this movement (Figure 1.9). Chomsky (1928–), an American linguist, was dissatisfied with the influence that behaviorism had had on psychology. He believed that psychology's focus on behavior was

short-sighted and that the field had to re-incorporate mental functioning into its purview if it were to offer any meaningful contributions to understanding behavior. A photograph shows a mural on the side of a building. The mural includes Chomsky's face, along with some newspapers, televisi Figure 1.9 Noam Chomsky was very influential in beginning the cognitive revolution. In 2010, this mural honoring him was put up in Philadelphia, Pennsylvania. European psychology had never really been as influenced by behaviorism as had American psychology; and thus, the cognitive revolution helped reestablish lines of communication between European psychologists and their American counterparts. Furthermore, psychologists began to cooperate with scientists in other fields, like anthropology, linguistics, computer science, and neuroscience, among others. This interdisciplinary approach often was referred to as the cognitive sciences, and the influence and prominence of this particular perspective resonates in modern-day psychology. Dig Deeper: Feminist Psychology The science of psychology has had an impact on human wellbeing, both positive and negative. The dominant influence of Western, White, and male academics in the early history of psychology meant that psychology developed with the biases inherent in those individuals, which often had negative consequences for members of society who were not White or male. Women, members of ethnic minorities in both the United States and other countries, and individuals with sexual orientations other than straight had difficulties entering the field of psychology and therefore influencing its development. They also suffered from the attitudes of White male psychologists who were not immune to the nonscientific attitudes prevalent in the society in which they developed and worked. Until the 1960s, the science of psychology was largely a "womanless" psychology, meaning that few women were able to practice psychology, so they had little influence on what was studied. In addition, the experimental subjects of psychology were mostly men, which resulted from underlying assumptions that gender had no influence on psychology and that women were not of sufficient interest to study. An article by Naomi Weisstein, first published in 1968, stimulated a feminist revolution in psychology by presenting a critique of psychology as a science. She also specifically criticized male psychologists for constructing the psychology of women entirely out of their own cultural biases and without careful experimental tests to verify any of their characterizations of women. Weisstein used, as examples, statements by prominent psychologists in the 1960s, such as this quote by Bruno Bettleheim: "We must start with the realization that, as much as women want to be good scientists or engineers, they want first and foremost to be womanly companions of men and to be mothers". Weisstein's critique formed the foundation for the subsequent development of a feminist psychology that attempted to be free of the influence of male cultural biases on our knowledge of the psychology of women. Crawford & Marecek (1989) identify several feminist approaches to psychology that can be described as feminist psychology. These include re-evaluating and discovering the contributions of women to the history of psychology, studying psychological gender differences, and questioning the male bias present across the practice of the scientific approach to knowledge. Multicultural and Cross-Cultural Psychology Culture impacts individuals, groups, and society. An ongoing issue researchers are trying to correct is that certain populations have been over-studied and the results of these studies have been applied to other populations. For example, Henrich, Heine, and Norenzayan discuss how WEIRD societies have been overstudied and the results have been wrongly applied to non-WEIRD societies

(2010). WEIRD stands for western, educated, industrialized, rich, and democratic. Henrich, Heine, and Norenzayan found that there are many differences between people in the WEIRD group and people in less industrialized, less urban, and non-Western societies. These differences occur in a variety of areas, including perception, cooperation, and moral reasoning. That is, people vary depending on their culture and environment. Multicultural psychologists develop theories and conduct research with diverse populations, typically within one country. Cross-cultural psychologists compare populations across countries, such as participants from the United States compared to participants from China. In 1920, Francis Cecil Sumner was the first African American to receive a PhD in psychology in the United States. Sumner established a psychology degree program at Howard University, leading to the education of a new generation of African American psychologists. Much of the work of early psychologists from diverse backgrounds was dedicated to challenging intelligence testing and promoting innovative educational methods for children. George I. Sanchez contested such testing with Mexican American children. As a psychologist of Mexican heritage, he pointed out that the language and cultural barriers in testing were keeping children from equal opportunities. By 1940, he was teaching with his doctoral degree at University of Texas at Austin and challenging segregated educational practices. Two famous African American researchers and psychologists are Mamie Phipps Clark and her husband, Kenneth Clark. They are best known for their studies conducted on African American children and doll preference, research that was instrumental in the Brown v. Board of Education Supreme Court desegregation case. The Clarks applied their research to social services and opened the first child guidance center in Harlem. The American Psychological Association has several ethnically based organizations for professional psychologists that facilitate interactions among members. Since psychologists belonging to specific ethnic groups or cultures have the most interest in studying the psychology of their communities, these organizations provide an opportunity for the growth of research on the interplay between culture and psychology. Women in Psychology Although rarely given credit, women have been contributing to psychology since its inception as a field of study. In 1894, Margaret Floy Washburn was the first woman awarded the doctoral degree in psychology. She wrote The Animal Mind: A Textbook of Comparative Psychology, and it was the standard in the field for over 20 years. In the mid 1890s, Mary Whiton Calkins completed all requirements toward the PhD in psychology, but Harvard University refused to award her that degree because she was a woman. She had been taught and mentored by William James, who tried and failed to convince Harvard to award her the doctoral degree. Her memory research studied primacy and recency, and she also wrote about how structuralism and functionalism both explained self-psychology. Another influential woman, Mary Cover Jones, conducted a study she considered to be a sequel to John B. Watson's study of Little Albert. Jones unconditioned fear in Little Peter, who had been afraid of rabbits. Ethnic minority women contributing to the field of psychology include Martha Bernal and Inez Beverly Prosser; their studies were related to education. Bernal, the first Latina to earn her doctoral degree in psychology (1962) conducted much of her research with Mexican American children. Prosser was the first African American woman awarded the PhD in 1933 at the University of Cincinnati.