

Psychological Science: Introducing the discipline through the persuasion of history

Matthew A. Munro

University of Prince Edward Island

Author Note

Matthew A. Munro. Honours thesis, Department of Psychology, University of Prince Edward Island.

Honours supervisor: Dr. Scott Greer

Contact: sgreer@upei.ca

Abstract

This paper examines the history sections of ten contemporary introductory psychology textbooks. Two major levels of analysis are used to analyze and interpret the material. First, Thematic Analysis (TA) is used to construct common themes from the literature, the results of which are; *Titles of history narratives*, *Liberation from philosophy*, *Wundt and the birth of psychology*, *Scientific schools and pioneers*, *Developing scientific definitions*, and *Acceptance of minority groups*. Second, five perennial questions of historiography, as outlined by Leahy, Greer, LeFrancois, Reiner, Spencer, Wickremasekerall, and Willmarth (2014), are examined in relation to the above themes to contextualize the “types” of history represented in the surveyed literature. The research concludes that the historical narratives from the sample exhibit the features of “old” histories of psychology. As outlined by historians such as Laurel Furumoto, Kurt Danziger, and Benjamin Harris, “old” histories reiterate origin myths regarding psychology’s past and function to validate the status-quo of the discipline. Within the context of introductory psychology, “old” histories function to persuade the reader of a narrow definition of psychological science, which inhibits historical understanding and critical thought.

Psychological Science: Introducing the discipline through the persuasion of history

Introductory Textbooks

The introductory textbook is an important tool for the discipline of psychology. It is both a first attempt by the discipline to give its knowledge to new students, and a first attempt by students to learn about the professional and scientific world of psychology. In a sense it is a gateway for the outside world to be introduced to what takes place within the scientific practices of psychology. The introductory textbook then provides a catalogue of what research areas exist within the field. It sets the epistemological framework, or guideline, for how the student must interpret the discipline, both in terms of what psychological terms to use, and what methods are acceptable.

The study of introductory psychology textbooks could take many forms depending on what goals, theories, and methodologies, are pursued by the researcher. For example, studies use content analyses to survey literature in order to compare and contrast its content, generally regarding its pedagogical value (see Griggs & Marek, 2001; Hofer, Warnick, & Knapp, 2003; Zechmeister & Zechmeister, 2002). Such studies quantify the core concepts, citations, or studies referenced by the texts, by performing keyword searches. The idea is to reduce the text to its core concepts (or whichever criteria chosen) to gain an objective platform for comparison and interpretation of the content. For example, Hofer et al. (2003) provide a list of the key “authorities” (people) cited most often in introductory textbooks to demonstrate who best represents the history of American psychology. These studies, however, provide limited insight beyond the core concepts or figures. Questions regarding *how* the texts are written, what the author’s rhetorical goals are, or what language is used to construct a particular narrative, are less important within these types of content analyses.

To contrast, a more qualitative approach to the study of introductory textbooks can contextualize and shed light on the literature in a manner not described by the “standard” content analysis. *How* something is written can say as much about the content than simply *who* and *what* is being referenced. For example, Morawski (1992) demonstrates a qualitative approach to the study of introductory textbooks. She studies the “unique discursive qualities, narratives, and moral themes” of the texts, with the goal of discussing the “multiple rhetorical strategies” used by authors (1992, p. 164). “Introductory textbooks”, explains Morawski, “are textual artifacts that reveal much about psychologists’ common discourse about the world” (1992, p. 161).

In her research Morawski (1992) points to an interesting, and perhaps unique, theme within introductory psychology textbooks. She says:

...these literary ventures incurred a special *burden of persuasion*: to advocate a scientific world that takes subjectivity to be an object with characteristics comparable to the natural objects of other sciences. Therefore, authors had to address and engage the very subjects whose own subjective experiences were to be radically reinterpreted by the science (p. 164).

This “burden of persuasion” highlights how the authors of introductory textbooks must portray an objective scientific truth regarding the reader’s own subjective psychological understanding. The authors must convince the readers that the psychological “facts”, as presented by the scientific textbook, portray a form of objective truth. This raises questions as to the persuasive nature of introductory psychology, and the potential rhetorical strategies used by authors to portray a “scientific” psychology that is more valid and accurate than other “folk” psychologies.

Historiography of psychology

The second research area of this study looks at the historiography of psychology. The history of psychology, like all of psychology's schools, has seen many methodological changes over the years. A major categorization within the writing of history for psychology is what researchers call "traditional" or "old" histories. Harris (1997) explains that traditional histories maintain psychology's status quo as a science by pursuing a narrow "intellectual" style history that celebrates psychology's scientific achievements and ignores certain ideological and political factors in psychology's formation. Furumoto (1989) explains that traditional histories tended to be written by practitioners of the field who "viewed the history of science as a cumulative linear progression from error to truth" and "tended to write history backwards from the present, concentrating on great men and great ideas" (1989, p. 12). Additionally, Danziger (1979) views the traditional histories of psychology as being "based on the notion of cumulative progress" with an aim to "distinguish science from pre-science" and measure the discipline's success by its "growth" by quantifiable advances (p. 29). Furumoto (1989), with reference to the research of Samelson, explains that traditional histories have created what are called *origin myths*, which are selective elements of psychology's past that are falsely presented to "validate and legitimize present ideas" (p. 14) as an attempt to "build a false sense of continuity into the history of psychology" (p. 16). These myths get passed down from one generation of textbook to the next as they distort student's understanding of the past and ultimately their understanding of present-day psychological theory and practice.

Beginning in the 1960s and 1970s the "new history of psychology" arose to debunk and critique some of the assumptions and biases of the traditional histories (Harris, 1997). Furumoto (1989) explains that this new brand of history was "more contextual, more critical, more archival, more inclusive, and more past-minded" (p. 30). "The result", explains Harris, "is a

history that focuses on social context and political power as much as intellectual discovery and the warring egos of great men” (1997, p. 29).

History within introductory textbooks

This study analyzes the historical content of introductory psychology textbooks. Given the “burden of persuasion” faced by authors of introductory scientific psychology to persuade the reader (the subject) of the objective nature of psychology, and the role history has historically played in validating psychology’s status-quo, we ask what type of history is portrayed within an introductory psychology textbook? To pursue this answer, our study examines what common themes exist between the historical narratives of introductory textbooks and what function does history play for introducing psychological science to new students of the field?

Method

Ten introductory psychology textbooks were selected for analysis for the study. The sample does not represent a “best” sample but rather a mix of texts donated from the University of Prince Edward Island. Professors from the UPEI Psychology department were asked to donate any unused texts to the study. This resulted in a variety of Canadian and American editions, some new and some old, some previously used for courses, and some that were samples issued by publishers. After consideration, the ten newest publications were used as the sample in order for the study to be as current as possible. The publication dates of the sample range from 2010-2012. After informal discussions with faculty members it became clear that some of the textbooks for the sample selected were well established in the field and some were less established and not as well known. In short, the sample represents a variety of textbooks with no particular theory guiding the selection other than they are contemporary introductory texts located at the UPEI Psychology department.

Following the outline of Braun and Clarke (2006), thematic analysis (TA) was used to analyze the historical content of the introductory texts. The procedure of TA begins, as Braun and Clarke (2006) explain, “When the analyst begins to notice, and look for, patterns of meaning and issues of potential interest in the data. The endpoint is the reporting of the content and meaning of patterns (themes) in the data” with the role of the analyst to “interpret various aspects of the research topic” and then discuss the meanings of the patterns in the literature (Braun and Clarke, 2006, p.86). It is important to note the active role of the analyst in this instance. The process is very constructive and the literature is constantly revisited throughout the thematic process in order to provide a contextual and thorough analysis. The themes of the study are presented in the *Results* section.

A preliminary survey of the sample displayed two things. One, each textbook had a defined history section in the introductory chapter of the text, and two, there was historical information provided throughout the textbook in a variety of other sections and chapters, with some texts displaying more historical information than others. The question this raised in regards to the analysis was, where does history stop, and where does it begin? Or, at what point does research become truly historical, being that all the information written in a textbook takes place in the past? For consistency it was decided that the history sections in the Introduction chapter, being that they were the only consistently defined “history section” of the textbooks, would be used for the analysis.

The *Appendix* was the first description of the data, which consists of the *Extended Table of Contents* and the *Descriptions* subsections for each history section(s) of each textbook used in the study. First, the Extended Table of Contents provides the titles of each textbook and author(s), the chapter heading where the history section is located, the title of the history section,

its length, its subheadings, and a description of the content found within each subheading. Here you will find all the major theories, theorists, and publication dates referenced for that particular history section. This was the first attempt to map out the basic content covered by the history narratives.

Next, the Descriptions section of the Appendix details what topics and issues are discussed by the authors by drawing direct quotes from the sample and providing explanations and descriptions regarding the writing and format of the narratives. Questions such as, what language and terms are used to describe psychology, how do the authors introduce certain key topics to the reader, and what is unique or interesting within the particular narratives, were used to guide this process. The metaphors and rhetoric used by authors were documented to highlight how the narratives were being written and how the historical information was being presented to the reader. This was an intermediary step of the analytic and thematic process, a continuation of the extended table of contents, but moving the study in a more qualitative direction. Initial codes were recorded and used to construct primary themes with quotes drawn from the literature that exemplified the thematic features of the texts. After consistent revising the grounded themes were constructed and are presented in the *Results* section.

The first theme of the Results, titled *Titles of history narratives*, outlines the title and author(s) of each history sections, with any repeated terms used between texts underlined. Subsequently the remaining themes of the Results present the grounded themes from the literature and are presented in this order; *The classic themes and debates*, *Liberation from philosophy*, *Wundt and the birth of psychology*, *Scientific schools and pioneers*, *Developing scientific definitions*, and *Acceptance of minority groups*.

The second phase of the analysis takes place in the *Discussion*, where five perennial questions of historiography, as outlined in Leahey et al. (2014), are used to evaluate the history narratives. These questions consider the central methodological and theoretical concerns faced when writing and interpreting historical accounts. The five perennial questions are:

1. Do the history narratives take a *great person* or a *Zeitgeist* approach to history?
2. Are the narratives written from an *internalist* or an *externalist* perspective?
3. Are the narratives written from a *presentist* or *historicist* perspective?
4. Do the narratives stress historical *continuity* or *discontinuity* between past events and theories?
5. Do the narratives reflect a *celebratory*, *revisionist*, or *critical* approach to history?

These questions guide the discussion and explain the historical themes within the framework of the historiography of psychology.

In addition to these questions, the Discussion contains a subsection titled *Prologue and epilogue: Instilling the values of scientific psychology*. The “prologue” and “epilogue” references the introductory material that exists in the introductory chapters which are not directly part of the history sections. Each history section studied (except Schacter et al. which is a full history chapter) is a subsection of the introductory chapter with material that “bookends” each of the history sections. We felt it necessary to reference this material and discuss its content in order to contextualize where the history sections are placed in the textbook. This frames how the history narratives are to be interpreted by the reader and is important when answering, what function does history play when introducing the discipline?

Results

Titles of history narratives

The term “history” is used in *Psychology Then: The History of Psychology*, Ciccarelli, Harrigan, and Fritzley (2010), and, *Psychology in Historical Perspective: What a Long, Strange, Trip It’s Been*, by Lilienfeld, Lynn, Namy, Woolf, Cramer, & Schmaltz (2011). Also from the chapter, *The History and Science of Psychology* in Myers (2010) the history subsection is titled, *The Story of Psychology (Psychology’s Roots)*.

The term “roots” is also used in *Psychology’s Intellectual Roots*, by Passer, Smith, Atkinson, Mitchell, & Muir (2011), and *A Science Evolves (The Roots of Psychology)*, by Psychsmart (2011).

Additionally, the term *evolves*, as seen above, is found in the history chapter titled *Psychology, The Evolution of a Science*, by Schacter, Gilbert, and Wegner (2011).

There are two history sections that use the term “develop”; *How did the Scientific Foundations of Psychology Develop?*, by Gazzaniga, Heatherton, Halpern, and Heine (2012), and *From Speculation to Science: How Psychology Developed*, by Weiten and McCann (2010).

The term past is used in *Psychology’s Past: From the Armchair to the Laboratory*, by Wade, Tavis, Saucier, and Elias (2010) and the term origins is used in *The Origins of Psychology*, by Feist and Rosenberg (2010).

The classic themes and debates

The history sections of the sample summarize what psychology’s classic theoretical themes and debates have been throughout its past. For example, Feist and Rosenberg (2010), have sections titled “Ancient Views”, discussing the Greeks such as Plato and Aristotle, and “Thinking about Mind, Body and Experience”, describing debates such as “nature through nurture”, “mind-body”, and “behavior is evolution”. In reference to dualism they explain that, "dualism, or separation of mind and body, allows for the ideas that a soul survives bodily death,

the mind is separate from the brain, humans are superior to animal – and many other philosophies supported by Western thinking" (p. 24). Feist and Rosenberg (2010) then discuss the influence of empirical theories in section titled, "The philosophy of empiricism", discussing Locke, and the movement of German psychophysics in the section "The psychophysics of human perception" discussing figures such as Hermann von Helmholtz. Passer et al. (2011) discuss how the trend toward more empirical theories has "bolstered the development of modern science" for psychology (p. 12).

In the section "What is Psychology's Historic Big Issue?" Myers (2010) explains that the nature-nurture debate is what has been psychology's big issue, discussing Darwin's natural selection and how it relates to psychological traits and disorders having an evolutionary and biological basis. Lilienfeld et al. (2011) explain that the 20th century was dominated by the belief that "virtually all human behavior was learned," however they say, "the tide is now turning" with "behavior geneticists" who show many traits have a large genetic basis (p. 21).

Lilienfeld et al. continue with the discussion of "free-will and determinism," with reference to B.F. Skinner's denial of free-will, then the "mind-body" debate, explaining how "monists" believe that mind is just the brain, nervous system, and nerve cells, "in action," contrasted with the "dualists" who follow Descartes' view that the mind is "nonmaterial" and "can't be measured" (p. 21). Lilienfeld et al. conclude by stating that although this debate can't be "proven scientifically," most experimentalists assume a monist point of view while conducting research (p. 21).

Liberation from philosophy

The narratives begin by explaining that psychology had its roots in other disciplines, most prominently the field of philosophy, and that the key for psychology's autonomy was its

liberation from this field. For instance, Myers (2010) explains that the Greeks were the first to start ‘thinking about thinking,’ with reference to Aristotle, and that “today we chuckle at some of his guesses” but at least Aristotle began “asking the right questions” (p. 3). Schacter et al. (2011) continue, “In some ways, it is quite amazing that ancient philosophers were able to articulate so many of the important questions in psychology and offer many excellent insights into their answers without any access to scientific evidence” (p. 5). Feist and Rosenberg explain that ultimately, “psychology grew away from philosophy to become a science” (2010, p.16).

Lilienfeld et al. (2011) in their section, *Liberation from philosophy*, explain how philosopher Immanuel Kant “argued psychology shouldn’t even bother to become a science” and further “psychology couldn’t and shouldn’t aspire to be anything remotely like biology, chemistry, or physics” (p. 7). Schacter et al. (2011) say that the early philosophers “usually found it impossible to settle their disputes because their approach provided no means of testing their theories” (p. 5). With scientific testing psychology could find empirical truth and end philosophical debate. Feist and Rosenberg (2010) explain how “philosophers, in contrast to scientists, do not collect data to test their ideas. Only when researchers started to examine and test human sensations and perception using scientific methods did psychology gain its independence from philosophy” (p. 16). Gazzaniga et al. (2012) reference John Stuart Mill, who “declared that psychology should leave the realm of speculation and of philosophy and become a science of observation and of experimentation” (p. 17). Weiten and McCann (2010) summarize that psychology progressed from “philosophical speculations about the mind into a modern science” (p. 5).

Wundt and the birth of Psychology

After psychology's liberation, a consistent theme of the narratives is the introduction of Wilhelm Wundt as the pioneering father of scientific and experimental psychology. Passer et al. (2011) describe psychology as an "infant science" that first "emerged in 1879, when Wilhelm Wundt established the first experimental psychology laboratory" (p. 12). Feist and Rosenberg say "indeed, modern psychological science grew from the marriage of Western philosophy and physiology, with Wundt's laboratory in Leipzig as the first child" (p. 24). Weiten and McCann (2010) describe how Wundt is psychology's true "intellectual parent" because he "mounted a campaign to make psychology an independent discipline rather than a stepchild of philosophy or physiology" (p. 5). Ciccarelli et al. (2010) further explain, "This was really the first attempt by anyone to bring objectivity and measurement to the concept of psychology. This attention to objectivity, together with the establishment of the first true experimental laboratory in psychology, is why Wundt is known as the father of psychology" (p. 7). Feist and Rosenberg (2010) explain that Wundt "is credited with giving psychology its independence from philosophy and physiology" (p. 17). In regards to Kant's earlier skepticisms, Lilienfeld et al. (2011) explain that Wundt "demonstrated that Kant and other doubters were wrong" (p. 8). Myers (2010) goes on to say, "Before long, this new science of psychology became organized into different branches..." (p. 3) and Weiten and McCann (2010) state, "Although psychology was born in Germany, it blossomed into adolescence in America" (p. 5).

Scientific schools and pioneers

After psychology's official "birth" in Germany, the history sections list the schools of "Psychology", the newly formed discipline, and the key figures and theorists who embody each school of thought. The schools are generally listed chronologically. For example, Ciccarelli et al. (2010) include headings such as, "Titchener and Baldwin and Structuralism in North America",

“William James and Functionalism”, “Gestalt Psychology”, “Sigmund Freud’s Psychoanalysis”, and “John B. Watson and Behaviorism”. Some textbooks provide a brief history on more contemporary schools, such as Gazzaniga et al. (2012) sections “Cognition Affects Behavior” and “Social Situations Shape Behavior”, or Schacter et al. (2011) discussing, “The Brain Meets the Mind: The Rise of Cognitive Neuroscience” and “The Adaptive Mind: The Emergence of Evolutionary Psychology”, or “The Emergence of Cultural Psychology”.

Another feature of this theme is that schools are often portrayed as reactionary to the former “status quo” of the field and specifically they react to perceived theoretical and methodological shortcomings of previous schools of thought, claiming that their school will become the dominant theory of behaviour for scientific psychology. Weiten and McCann (2010) include sections such as “The Battle of the “Schools” Begins: Structuralism versus Functionalism”. Gazzaniga et al. (2012) explain that it is true of every science to have different schools of thought dominate at various times, but “as multiple levels of analysis are used to understand psychology, researchers rely on the scientific method to support their theories and to decide what is most likely true” (p. 17).

Developing scientific definitions

What permeates through the discourse as authors present psychology’s schools of thought is a narrative highlighting psychology’s continual quest to become more scientific. Sections such as, “Psychology: From Séance to Science” by Lilienfeld et al. (2011), or “From Speculation to Science” by Weiten and McCann (2010), or “From the Armchair to the Laboratory” in Wade et al. (2010).

Wade et al. (2010) write, “Now that you know what psychology is and what it isn’t, and why studying it requires critical thinking, let us see how psychology developed into a modern

science”, and “unlike modern psychologists, scholars of the past did not rely heavily on empirical evidence. Often, their observations were based simply on anecdotes or descriptions of individual cases” (p. 17). Wade et al. go on to say that these “scholars of the past” were not necessarily wrong in their research, and some theories were later verified, however without empirical methodology they would commit “terrible blunders” such as phrenology (p. 17). They explain that the term psychology originally meant the “study of the soul” however beginning with structuralism, psychology sought more scientific meanings. Psychsmart (2011) also say that structuralism was the “first scientific school”, however, it was found to be “not a truly scientific technique” (p. 9).

In terms of therapy and treatment of disorders, the history narratives explain that before the scientific and medical treatments of disorders, causes were attributed to supernatural forces and were influenced forces of the time, such as “Church dogma”, however, “by the middle of the 20th century, three of the major modern developments in clinical psychology had emerged: psychotherapy, drug therapy, and modern criteria for diagnosing mental disorders” (Feist & Rosenberg, 2010, p. 15). In regard to Freud and psychoanalysis, Passer et al. (2011) explain that Freud’s definition of the unconscious “isn’t accepted” by most scientific psychologists, however there are ways in which his theories fit into more contemporary research, for example how some “aspects of information processing occur outside of awareness” (p. 14). Schacter et al. describe the downfall of Freud’s popularity was due to the fact that psychoanalysis was not “empirically testable” by scientific standards and Freud’s theories did not fit “the spirit of times” (p. 14).

Passer et al. (2011) discuss how the behaviorist movement was huge in America throughout the 1960s because it was in accordance with many who wanted a psychology modeled after the natural sciences. Schacter et al. (2011) explain how behaviorism, in the words

of Watson, wanted to “put a stop to the endless philosophical debates in which psychologists were currently entangled, and it would encourage psychologists to develop practical applications in such areas as business, medicine, law, and education” (p. 16). Behaviorism too was found to be an incomplete science when, as Feist and Rosenberg (2010) explain, during the 1960s and the “cognitive revolution” the term *mental* became redefined as *cognition* (p. 20). Passer et al. (2011) explain that, “a new metaphor developed, the mind as a system that processes, stores, and retrieves information” (p. 17). This metaphor is what allowed psychology to study the mind scientifically again. Myers (2010) says that the modern definition of psychology eventually became “the science of behavior and mental processes” with psychology’s current level of analysis being called the *biopsychosocial* approach (p. 4). He then summarizes, “The key word in psychology’s definition is *science*” (p. 4).

Acceptance of minority groups

Psychology’s growing acceptance of minority groups is a central theme of the narratives, most prominently of women’s groups and also ethnic and cultural groups. For example, in “Women Made Pioneering Contributions to Psychology” (Gazzaniga et al., 2012) or in “Founding Mothers of Psychology” (Psychsmart, 2011) the achievements of Mary Calkins becoming the first female president of the APA and Margaret Washburn the first female PhD in psychology are the main focus. Some textbooks provide the pioneers from ethnic minorities such as Francis Cecil Sumner, first African American to receive a PhD (Schacter et al., 2011). Ciccarelli et al. (2010) say that “psychology has seen an increase in all minorities” since its founding (p. 8), specifically in number of research articles published each year and members of the APA that belong to a minority. Myers (2010) notes the difficulty minorities have faced historically from institutions such as the APA and the major universities, who did not give

accreditation or acceptance for women, then contrasts this blemish with the statistic that women now make up “two-thirds” of new psychology PhDs (p. 3).

In terms of psychology’s cultural acknowledgement, Weiten and McCann (2010) explain psychology’s return to cultural study in “Psychology Broadens Its Horizons: Increased Interest in Cultural Diversity”. Schacter et al. (2011) explain that, “North Americans and Western Europeans are sometimes surprised to realize that most of the people on the planet are members of neither culture” (p. 28). They discuss how psychologists once thought that all psychological principles were universal, but now psychology has become less ethnocentric and more relativistic. Schacter et al. are the only history narrative to mention Wilhelm Wundt as a pioneering cultural psychologist as well as being the father of scientific psychology. They say, “He believed that a complete psychology would have to combine a laboratory approach with a broader cultural perspective” (p. 28).

Discussion

We see that there is continuity between textbooks as to what they call their history section despite the fact not many texts use *history* in their title. Terms such as how psychology *developed*, *evolved*, or psychology’s *roots* are used instead. This may be to foreshadow what type of story will be told, one where psychology “grows” or “evolves” from a subset of philosophy into an autonomous discipline based on the natural sciences. For example, the term “develop” in this case refers to how the discipline of psychology developed throughout history, whereas Developmental Psychology, which is another chapter in each textbook, refers to the psychological changes that occur throughout an individual’s life span. With the latter, development implies a primitive, early stage of an individual progressing to a more mature, or advanced stage.

The developmental metaphor continues with reference of Wundt as the pioneering “father”, in the theme *Wundt and the birth of Psychology*. Psychology is consistently referred to as an “infant science”, or “the first child” with Wundt being the “intellectual parent”. The best example is Weiten and McCann (2010) who use a strong developmental narrative to portray psychology’s journey toward becoming a science, explaining that 1879 has been “christened” as “psychology’s date of birth” and proposing that Wundt “mounted a campaign to make psychology an independent discipline rather than a stepchild of philosophy or physiology” (p. 5). Later they explain, “Although psychology was born in Germany, it blossomed into adolescence in America. Like many adolescents, however, the young science was about to enter a period of turbulence and turmoil” (p. 6). Psychology finally grows into an adult science when, “the pre-war orphan of applied and professional psychology rapidly matured into a robust, powerful adult” (p. 16). This narrative places psychology on a developmental path, equating its journey to become a natural science with that of an orphan moving to America to find new roots, with psychology’s debates between schools acting as its teenage years, and with psychology’s present state representing a “robust adult”.

Great person vs. Zeitgeist

The portrayal of Wundt as this “pioneering father” of the discipline raises our first question of historiography, *great person vs. Zeitgeist*. The great person and Zeitgeist approaches to history place historical significance on either the pioneering figures that created the discipline or the “spirit of the times” that produced the theories and schools respectively (Leahey et al., 2014). Generally, a great person approach would celebrate the individuals as pioneers, would idealize or immortalized their intellectual achievements, and would credit their accomplishments to their internal “drive” or intention. A Zeitgeist approach would propose that it was the social

and cultural historic period which produced the systems of thought and that if the particular “pioneer” had not been credited with the discovery someone else would have been credited with the same discovery eventually.

Wundt’s portrayal in our sample of history narratives very much reflects a great person approach to the writing of history. He is celebrated with mounting the campaign to make psychology independent from philosophy and is credited for bringing objectivity and measurement to the discipline. However, Danziger (1979) explains that Wundt was actually a “strong opponent of the separation of psychology from philosophy” (p. 31). He (Wundt) believed that the two fields were so closely linked that if philosophy were to be separated from psychology it would reduce the psychologist to “an artisan imprisoned by a covert and naïve metaphysics” (p. 31). Arthur Blumenthal, as cited by Furumoto (1989), explains that many scholars agree that, “Wundt as portrayed today in many texts and courses is largely fictional and often bears little resemblance to the actual historical figure” (p. 13). Furumoto (1989) explains this is not a “nit-picking” issue but rather concerns the fundamentals of Wundt’s research being misrepresented. Danziger reiterates his concerns saying, “Wundt is a singularly inappropriate figure to choose as the originator of the modern psychologist’s professional identity” (1979, p. 31).

In addition to Wundt, the great person approach appears to be the dominant focus for the historical narratives, whether it is Titchener bringing psychology to America and creating structuralism, or Mary Calkins being the first president of the APA, or John Watson’s creation of behaviorism, the focus is on the pioneers and their “firsts”. Some context to the “spirit of the times” is provided throughout the surveyed history sections. For instance, Schacter et al (2011) discuss Freud by saying:

In America, the years after World War II were positive, invigorating, and upbeat: Poverty and disease were being conquered by technology, the standard of living of ordinary Americans was on a sharp rise, and people were landing on the moon. The era was characterized by the accomplishments and not the foibles of the human mind, and Freud's viewpoint was out of step with the spirit of the times (p. 14).

Even with some inclusions of social and cultural context, the historical content provided by the introductory textbooks heavily focus on the intellectual accomplishments of an elite group of figures that represent the various schools of thought throughout psychology's past.

Internalist vs. externalist

The next perennial question of historiography asks, from what perspective is the history being written, either internally by psychologists within the field, or externally by professional historians who focus on areas pertaining to psychology? With these perspectives come particular features, or characteristics, regarding the style of history. For instance, the internalist account of history tends to focus on the theoretical and disciplinary controversies that faced psychology at different points in time, and how reactions to these debates and theories forced changes to the status quo e.g. behaviourism vs. cognitive psychology. An externalist account might look at the historical and cultural context from which the discipline emerged, and how the political and social factors of the time influenced the direction of psychology and thus changed its status quos (Leahey et al., 2014).

The history narratives in our survey are written by the psychologists who are writing an introductory scientific textbook, and who use the history section as an introduction before continuing on with the concepts and research areas of psychology. The focus is on the theories and practices that dominated in different eras, focusing on the theoretical "advances" allowing

new schools to rise to prominence, such as “The Battle of the “Schools” Begins: Structuralism versus Functionalism” or “The Humanist Revolt” (Weiten & McCann, 2010). Also in the section “The Search for Objective Measurement: Behaviorism Takes Center Stage” Schacter et al. (2011) explains it was Chomsky’s devastating critique of Skinner which marked the end of the behaviourism as a dominant movement in America, providing an internalist explanation for behaviourism’s “defeat”.

Presentist vs. historicist

The historical narratives of the sample allow the reader to “catch-up” on psychology’s intellectual past, to gain a perspective on the plethora of fields and practices that comprise the present day scientific discipline of psychology. This raises the next perennial question of historiography, which discusses *presentism vs. historicism*. Presentism asks how we arrived at our present state and what events led us to today, whereas historicism avoids our present day interests and wishes to study history on its own terms, or history for history’s sake (Leahey et al., 2014). The narratives from the sample are presentist in part due to the context from which they are found. Their goal, as an introduction for introductory psychology, is to provide a brief background as to how the field of modern psychology emerged, focusing on the various theories that dominated in the past and what elements of those theories are relevant to retain for our present day research. We see a format that begins with ancient or classic psychologies and moves through the various contemporary schools approaching us closer to our present-day psychology (the subject of the rest of the introductory textbook). As we saw with Wade et al. (2010) the goal of the narrative is to display how psychology developed into a “modern science”, and they explain that the “scholars of the past” were not entirely wrong but they committed “terrible blunders” because they did not have the empirical methodology and testing ability that

psychological science now has. Such as Freud, who's definition of the unconscious, explains Passer et al. (2011) "isn't accepted" by most scientific psychologists, however there are ways in which his theories fit into more contemporary research, for example how some "aspects of information processing occur outside of awareness" (p. 14).

Continuity vs. discontinuity

How the historical subject is portrayed in relation to its present-day value also leads to the question of historical *continuity* vs. *discontinuity*. A narrative displaying historical continuity would trace theories across various periods and contexts and explain how they are connected (Leahey et al., 2014). Examples would include explanations of Ancient theorists such as Plato and Aristotle laying the foundation for mind-body and nature-nurture debates and explaining how this led to philosophies of empiricism with figures such as Locke and how the modern trend toward more empirical theories has ultimately "bolstered the development of modern science" for psychology (Passer et al., 2011, p. 12). Or how Charles Darwin's natural selection has led psychology to study how psychological traits have evolutionary and biological bases, developing into modern theories of behavioral genetics (Lilienfeld et al., 2011). A discontinuous take on history would not make connections between various eras and would view a theory or period of history as being separate or unique (Leahey et al., 2014). Discontinuous histories point out that many of our concepts did not exist in ancient times, such as Darwin's natural selection as it was written and understood at the time is quite different from the behavioral genetics and scientific theories that are practiced today.

An example of "continuity" within the introductory textbook history sections is the presumption that despite the different eras, the various theories, and the different practices in the field, the psychological science that was "born" in Germany was fundamentally the same

psychological science that continued to develop in America and has led us to our current status-quo. Wundt is portrayed as laying the foundation and then the American psychologists continued this tradition in America. Danziger (1979) proposes that the psychology that grew in America was fundamentally different than the psychological traditions in Germany. What allows the authors from our sample to convince the reader of this continuity is how the term “scientific” is used to promote psychology’s linear progression toward objective truth. Psychsmart (2011) explain to the reader that what psychologists “do” is they “use scientific methods to find answers that are far more valid and legitimate than those resulting from intuition and speculation, which are often inaccurate” (p. 4) Later Psychsmart notes: “you might find yourself thinking that the discipline lacks cohesion. However, the field is more unified than a first glimpse might suggest” (p. 13). They go on to explain that it is the adherence to the scientific method that unites psychologists and the work they do. This validates the psychology’s scientific method over other forms of inquiry, legitimizing psychology’s “liberation” from other philosophies that weren’t empirically testable, and provides a continuous, and generalized, understanding of the role science played in psychology’s development.

Prologue and epilogue: Instilling the values of scientific psychology

The sense that “science united the discipline” is a theme that exists not only in the history sections but throughout the introductory chapters from which the history sections are found. As discussed in the Methods section the “prologue” and “epilogue” references the introductory material that exists in the introductory chapters which are not directly part of the history sections, but that introduces and concludes the historical narratives from the sample.

The “prologues” of the introductory chapters provide a fairly streamlined and unifying definition of scientific psychology. For example, Myers (2010) defines the discipline as “the

science of behavior and mental processes” (p. 4) and similarly Schacter et al. (2011) define it as “the scientific study of mind and behavior” (p. 1). Yet at the end of the chapters, or the “epilogues”, the reader learns that psychology applies itself to many different areas, with sections such as “What Psychologists Do” (Wade et al., 2010), “Types of Psychological Professionals” (Ciccarelli et al., 2010), or “How Can We Apply Psychological Science?” (Gazzaniga et al., 2012). The reader could begin to wonder, what unifies this field with psychologists working in so many research and professional areas using a number of theories and approaches? The introductory chapter then has a difficult task to explain how psychologists fit under “one roof” while introducing all the different schools of thought. The reader learns that what keeps psychologists unified is the commitment to the scientific approach to psychology. For example, Psychsmart (2011) describe what psychologists “do” this way: “They use scientific methods to find answers that are far more valid and legitimate than those resulting from intuition and speculation, which are often inaccurate” (p. 4).

The textbooks from the sample contrast “valid” scientific psychology with non-scientific, or “invalid,” forms. The portrayal is that the invalid forms of psychology promote misconceptions and errors whereas the valid forms discover accurate psychological truths. For example, Wade et al. (2010) make a clear distinction between psychology and “pseudoscience,” such as “psychobabble,” in the section titled “Psychology, Pseudoscience, and Popular Opinion”. They explain that people generally have natural common sense errors and by taking introductory psychology it will improve the student’s accuracy in this area. They also explain that the popular opinion about what consists of psychological science is often inaccurate and should not be trusted. Lilienfeld et al. (2011) also provide a similar discourse in their section titled, “Science and Pseudoscience in Psychology, Skills for Thinking Scientifically in Everyday Life”. Here

they explore the “dangers” of pop psychology and pseudoscience. However the readers learns that by learning proper scientific techniques from academic psychology courses a student can separate what they call “the wheat from the chaff” and start to think “scientifically” and “critically” about what they are learning (p. 35)

Changing a student’s thought process to make them “scientific thinkers” is an essential element of instilling the scientific values of psychology on the reader. Lilienfeld et al. (2011) explain the goal of the textbook is to “focus on *how* to think, not merely *what* to think” (p. xix) and that “psychologists have found that the best safeguard against human error is scientific thinking—thinking that helps to protect us from our tendencies to make mistakes” (p. xix). Scientific thinking is explained as a way to “safeguard” the reader against their natural propensity to make errors in judgment, where the natural thought processes and natural behaviors are portrayed as inherently flawed and will cause mistakes. Myers (2010) explains that the important part of the “scientific attitude” is “critical thinking,” defined as “smart thinking” which “examines assumptions, discerns hidden values, evaluates evidence, and assesses conclusions” (p. 18).

Within these narratives “critical thinking” is synonymous with accepting a “scientific attitude” toward psychology. Passer et al. (2011) describe critical thinking as “taking an active role in understanding the world around you rather than merely receiving information,” to reflect on what information means, and to become “an informed consumer of the many claims made in the name of psychology” (p. 7). Gazzaniga et al. (2012) in the section, “Psychological Science Requires Critical Thinking”, explain how critical thinking is what allows psychology to advance. Passer et al. (2011) point out though that science may not be the only way we learn about human nature. In fact, things like “family, literature, religious teaching, the Internet, personal

experiences, and wisdom” all do teach us about ourselves (p. 6). However, the issue with these forms of knowledge, according to the text, is that “in everyday life there are many ways in which these sources can end up promoting misconceptions” (p. 6). The subsequent section “Using Science to Minimize Everyday Pitfalls” the reader learns how thinking scientifically will help prevent errors in judgment and errors in your beliefs. The authors go on to explain that “scientists are human too, and they may fall victim to these pitfalls” but that psychologists take “concrete steps” to avoid this from happening (p. 6). These steps are methodological, anything from controlled variables in experiments to the peer reviewing of research. Passer et al. (2011) summarize that “across psychology’s diverse subfields, researchers share a common underlying scientific approach to studying behavior” (p. 6).

The theme is that psychology’s scientific approach unites the discipline, and psychology’s scientific way of thinking will keep you (the subject) from making biases and errors. Psychology’s history then provides the map to show how the discipline progressed toward this objective and scientific method, giving historical legitimacy to the message of the introductory chapter. Passer et al. (2011) write, “At any point in history, scientific knowledge represents a best estimate of how the world operates” (p. 7) and Wade et al. (2010) introduce their history section by saying “now that you know what psychology is and what it isn’t, and why studying it requires critical thinking, let us see how psychology developed into a modern science” (p.17).

Celebratory, revisionist, vs. critical history

“Science” is a loaded term. Depending on the context, the field of study, or the application, it can mean many things. Science has a history, there are philosophies of science, and it is something that is continually changing every day. Before the student knows what

“science” means within the specific context of academic psychology they are instilled with notion to inherently accept this version of science above all other forms of knowledge. This brings us to ask, what role does history play in delivering this message to the reader? Are the histories meant to be neutral or do they have a rhetorical function within the introductory literature?

The final perennial question of historiography embodies elements of the previous historiographic questions outlined above. Following the research of Harris (1997) the features of *celebratory*, *revisionist* and *critical* histories are discussed. A celebratory history marks the progress of the discipline, or theory, with each step taken representing an advance toward our present state (Leahey et al., 2014). This form of history legitimizes the status-quo and views the present state as the highest form of knowledge. Typically a celebratory history is presentist, provides an internalist type debate, assumes continuity between theories, and focuses on the great persons and great ideas from which the discipline developed (Leahey et al., 2014).

To contrast, Harris (1997) explains the development of the revisionist history for psychology, one where historians challenged the assumptions of celebratory history, went back to primary documents of psychology’s past to debunk origin myths and learn about the research from a more historicist perspective. For example revisionist research of Little Albert found that the study actually did not elicit the conditioned fear responses it claimed to prove in psychology textbooks, thus proposing that our idea of little Albert is largely fictional and represents an origin myth (Harris, 1997).

More recent scholarship within the history of psychology has moved toward critical histories. Critical histories use historical research to critique the status-quo by studying the socio-historic contexts rather than internalist debates, using primary sources to evaluate historic

research, and being more past-minded instead of relating history to our present concerns and theories (Leahey et al., 2014). Critical histories also critique the continuous grand narratives that depict scientific pioneers who are searching for truth. Instead it is acknowledged that history is an ongoing interpretation of the past, and as people write history from various perspectives at different points in time different histories will be produced with no “one” true history of the discipline (Leahey et al., 2014).

The history narratives from the introductory psychology textbooks studied in the sample display many characteristics of celebratory history. Although these narratives are not a “celebration” of psychology by any means, as they consistently display the pitfalls and shortcomings of psychology’s past, they are celebratory in so far as they display psychology’s linear quest beyond error and bias and toward truth, functioning to legitimize and validate psychology’s current scientific practices. Additionally, the historical narratives from the study focus on the great pioneers of the field, explain the internalist struggles of the schools, stress continuity between theories from different eras, and display how psychology’s past is relevant from our present perspective, all features associated with celebratory histories of psychology.

Conclusion

Referencing back to the introduction of this study we see how the celebratory histories very much reflect the “old” histories of psychology whereas more revisionist and critical histories of psychology represent “new” histories, as explained through the works of Furumoto (1989), Danziger (1979), and Harris (1997). In so far as the history narratives from the sample embody the “old” accounts of history it is interesting to ask why a contemporary psychology textbook, which itself stresses the importance of methodology, would not reflect the methodological developments in historiography of the past 30 years. And if psychology wants its

students to learn and apply the most critical of thinking, why wouldn't they acknowledge more critical and contextual forms of history to introduce the field to new students?

Lilienfeld et al. (2011) make an interesting insight in their introductory text. They explain that perhaps psychology "has suffered from an unresolved identity crisis" (p. 10). The authors say this may be do to the fact that psychology has never had a unifying theory of behavior and what psychology constitutes as a scientific approach has changed over time (2011). This "identity crisis" could explain the persistent scientific rhetoric used to introduce the textbook. To compare psychology to the other natural sciences one could ask does an introductory biology, chemistry, and physics textbook use such a strong rhetoric to introduce their discipline? Do they have sections clarifying the "misconceptions in biology" or the dangers of "unfounded physics"? And, do these texts use history in the same way?

Another factor regarding the rhetorical use of historical narratives could be Morawski's "burden of persuasion". Again, this burden of persuasion proposes that psychology authors have the difficult task of convincing the reader that objective psychological facts are not only inherently true in nature, but are also true of the reader themselves, as they (the reader) are the subject of the scientific textbook. If the authors feel insecure about this task, it could explain why such strong persuasive writing is used to prove the "scientificness" of the field, and why "traditional" or "old" style histories are used to legitimize the discourse. The "critical" or "new" histories on the other hand would open the door for more externalist perspectives of the field, placing psychology within socio-historic contexts, which could open up the wrong type of critical questioning by the readers regarding the status-quo.

The history narratives of the sample do not allow for contextualized and critical discussion, rather they focus on development and methodological advances and keep critical

discussion confined to internalist debates. Danziger (1979) explains that psychology's history should not simply be defined by new developments in methodology and techniques, rather he considers how the "application of these techniques leads psychology to a monopoly of valid psychological knowledge by a self-conscious and organized community of specialists" (p. 28).

He writes:

What should be noted here is the tacit assumption that the psychology which came to flourish in the United States around 1915 was essentially the same as that which appeared in Germany in the 1880's. The possibility of a fundamental qualitative discontinuity cannot even be considered in this approach, because if psychology is a science its development is by definition linear, cumulative, and continuous. (1979, p. 29).

One could propose that an interpretation of history which does not allow for contextual and critical discussion is taking an ahistorical position. Thomas Kuhn (1970) posits that science texts view their own history from an "unhistorical stereotype", and that subsequently history will not be beneficial if viewed in this way (p. 1). Furumoto (1989), with reference to Samelson, says that a science with no memory of the past is "at the mercy of the forces of the day." Without understanding our historical context we might, and often do, make the same mistakes that have been made throughout history. Although using "old" history functions to legitimize the current status of science, it does not allow for reflection and self-awareness regarding our current practices, which is needed for our discipline to grow and be applied in accurate and helpful ways.

These closing remarks are not meant to conclude that the history narratives of our sample are "wrong" in any objective sense. We must keep in mind another item Morawski (1992) explains, that all researchers in their specific fields would have issues with how their field is summarized and presented by an introductory textbook. A historian could no doubt comb

through the history narratives of introductory texts and find facts that are not entirely true due to the reductive and condensed nature of introductory material. However, the themes and discussion put forth by this study are less to do with the accuracy of historic facts and more to do with how the “old” histories display a form of history void of sociological context and function to persuade the reader of a narrow definition of psychological science, which inhibits historical understanding and critical thought, and perpetuates what Kuhn would call the unhistorical stereotype for the discipline and its students.

References

- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(77-101).
- Ciccarelli, S. K., Harrigan, T., & Fritzley, H. V. (2010). *Psychology* (Cdn. ed.). Toronto, ON: Pearson.
- Danziger, K. (1979). The Social Origins of Modern Psychology. *Psychology in Social Context, 27-45*. New York: Irvington.
- Feist, G. J., & Rosenberg, E. L. (2010). *Psychology: Making Connections*. New York: McGraw-Hill.
- Furumoto, L. (1989). The New History of Psychology. In I. S. Cohen (ed), *G. Stanley Hall Lecture Series, 9*, 5-34. Washington: APA.
- Gazzaniga, M., Heatherton, T., Halpern, D., & Heine, S. (2012). *Psychological Science* (3rd Cdn. ed.). New York: Norton.
- Griggs, R. A., & Marek, P. (2001). Similarity of introductory psychology textbooks: Reality or illusion?. *Teaching of Psychology, 28*(4), 254-256.
- Harris, B. (1997). Repoliticizing the History of Psychology. In D. Fox and I. Prilleltensky (Eds.), *Critical Psychology: An Introduction* (pp. 21-33). London: Sage.
- Hoefler, M., Warnick, E., & Knapp, T. J. (2003). Contributions to the history of psychology: CXVII. Who's who in American psychology: A citation study of introductory psychology textbooks. *Psychological Reports, 93*(1), 186-190.
- Kuhn, T. S. (1970). *The structure of scientific revolutions* (2nd ed.). Chicago, IL: University of Chicago Press.

- Leahey, T., Greer, S., LeFrancois, G., Reiner, T., Spencer, J., Wickremasekerall, I., & Willmarth, E. (2014). *History of Psychology*. San Diego, CA: Bridgepoint Education.
- Lilienfeld, S. O., Lynn, S. J., Namy, L. L., Woolf, N. J., Cramer, K. M., & Schmaltz, R. (2011). *Psychology: From Inquiry to Understanding* (Cdn. ed.). Toronto, ON: Pearson.
- Morawski, J. G. (1992). There is more to our history of giving: The place of introductory textbooks in American psychology. *American Psychologist*, 47(2), 161-169.
- Myers, D. G. (2010) *Psychology: Ninth Edition in Modules*. New York: Worth Publishers.
- Passer, M. W., Smith, R. E., Atkinson, M. L., Mitchell, J. B., & Muir, D. W. (2011). *Psychology: Frontiers and Applications* (4th Cdn. ed.). USA: McGraw-Hill.
- Psychsmart. (2011). New York: McGraw-Hill.
- Schacter, D. L., Gilbert, D. T., & Wegner, D. M. (2011). *Psychology* (2nd ed.). New York: Worth Publishers.
- Wade, C., Tavis, C., Saucier, D., & Elias, L. (2010). *Psychology* (3rd Cdn. ed.). Toronto, ON: Pearson.
- Weiten, W. & McCann, D. (2010) *Psychology: Themes and Variations* (2nd Cdn. ed.). Toronto, ON: Nelson.
- Zechmeister, J. S., & Zechmeister, E. B. (2002). Introductory textbooks and psychology's core concepts. In R. A. Griggs, R. A. Griggs (Eds.). *Handbook for teaching introductory psychology: Vol. 3: With an emphasis on assessment* (pp. 54-60). Mahwah, NJ US: Lawrence Erlbaum Associates Publishers.

Appendix

Psychology. Ciccarelli, Harrigan, & Fritzley (2010)

History section from Chapter 1: *The Science of Psychology*

Extended Table of Contents

Psychology Then: The History of Psychology (p. 6-11)

Sub headings:

“In the Beginning: Wundt, Introspection, and the Laboratory”: Two paragraphs discusses; classic philosophers and pioneers; Aristotle and the soul to body relation in *De Anima*; Plato and dualism; Rene Descartes 17th century dualism; Gustav Fechner’s experimentation in perception in 1860s; Hermann von Helmholtz, 1852 and 1863, work on visual and auditory perception; Wilhelm Wundt, in Leipzig 1879, opened first full psychology laboratory, applied scientific principles to the mind, developed objective introspection, Wundt known as father of psychology.

“Titchener and Baldwin and Structuralism in North America”: Three paragraphs; discusses how Edward Titchener and Mark Baldwin brought psychology to North America; Titchener’s theories studying at Cornell and structuralism; Baldwin’s theories and impact, in 1889 at University of Toronto opened first psychology lab in Canada, inspired Piaget and Kolberg, discusses Baldwin’s role with the APA.

“William James and Functionalism”: Six paragraphs; discusses William James brief bio and teaching history, wrote *Principles in Psychology*, and implemented functionalism, a description functionalism is given; influenced by Charles Darwin and natural selection; Mary Calkins, prominent psychologist, first female president of the APA in 1905; Francis Sumner, 1920, first African American PhD in psychology; Kenneth and Mamie Clark on African American school segregation; Jorge Sanchez, a Hispanic psychologist; functionalism influenced modern educational and industrial psychology.

“Gestalt Psychology”: The whole is greater than the sum of its parts”: Two paragraphs; Max Wertheimer and his theories are discussed, reaction to structuralism, led to the Gestalt tradition in psychology; influenced modern cognitive psychology and gestalt therapy.

“Sigmund Freud’s Psychoanalysis”: Nine paragraphs; discusses Sigmund Freud’s background and the culture in which his theories arose, Victorian era and sexual repression; his work with patients as a physician in Austria, and his psychoanalytic theories and practices are listed i.e. work with women, the unconscious, repression; followers of Freud, Alfred Adler, Carl Jung, and his daughter Anna Freud; Anna Freud’s ego movement and the emergence of Erik Erikson and personality development; major impact on modern psychotherapy.

“John B. Watson and Behaviorism”: Six paragraphs; Discusses Watson’s reaction to the previous schools and that he formed the science of behavior in response; Pavlov’s work on conditioning theories is summarized; contrast of Watson and Freud given; discusses learned phobias and the “Little Albert” study.

Description

Prologue: Ciccarelli, Harrigan, and Fritzley (2010) begin the opening chapter with the section *What is Psychology*, where they provide the reader with their definition of psychology, followed by what psychology's goals are. The aforementioned goals being of: description, explanation, prediction, and control (p. 5). These are research-based goals, specifically methodological or scientific goals (as opposed to the goal of helping people, understanding of oneself, to make people healthier etc...). The final paragraph of this section reads, "These goals have not really changed in the years since psychology's beginnings, but the methods of achieving them certainly have changed. In the next section, we'll take a look at the early pioneers in psychology" (p. 6). This statement introduces the next section of the text, which is the "history" section. It prefaces a methodologically centered history, and establishing to the reader that psychology has always had the same goal (description, explanation, prediction, and control) just various methods.

History Section: *Psychology Then: The History of Psychology*
Ciccarelli et al. (2010) discuss of how philosophers and physiologists studied psychological questions before the field of psychology was in the realm of science. According to the authors, philosophers studied the soul, where the physiologists and physicians studied visual and auditory perception. "It really all started to come together in a laboratory in Leipzig, Germany, in 1879. It was here that Wilhelm Wundt, a physiologist, attempted to apply scientific principles to the study of the human mind" (p. 7).

The reader sees the transformation of where questions of the soul and questions of physiological perception, becomes questions of the scientific study of mind. "This was really the first attempt by anyone to bring objectivity and measurement to the concept of psychology. This attention to objectivity, together with the establishment of the first true experimental laboratory in psychology, is why Wundt is known as the father of psychology" (p. 7). Ciccarelli et al. (2010) continue their history section, discussing the pioneering figures, publications, and schools of thought within the "post Wundt" scientific field of psychology (see appendix).

Of the many "firsts" given for psychology in the history section, they mention the first minority researchers to 'break through' in psychology were women and ethnic groups, and how "psychology has seen an increase in all minorities" since the start of psychology (p. 8). Specifically, there is an increasingly larger quantity of "minority" researchers and publications by "minority" researchers in psychology. These numbers have grown since the founding of the APA and continue to rise.

Epilogue: The next section is *Psychology Now, Modern Perspectives* in which the various perspectives are listed. There is a small amount of historical information provided but mainly the discussion is how these perspectives exist in today's psychology, which leads to the next section, *Types of Psychological Professionals*, what jobs and career are in psychology. *Psychology the Science* and *Ethics of Psychological Research* round out the chapter, cementing psychology's current scientific methodological standards and the ethical considerations when applying these methods to research.

Psychology: Making Connections. Feist & Rosenberg (2010)

History section from Chapter 1: *Introduction to Psychology*

Extended Table of Contents

The Origins of Psychology (p. 12-22)

One paragraph; introduces the section, will discuss the origins of both clinical and scientific psychology.

Sub headings:

“A brief history of the practice of clinical psychology”: One paragraph; introduces the clinical section; discusses how behavioral and mental disorders have existed since the beginning of humanity.

“Prehistoric Views”: Two paragraphs; discusses clinical practices of the Stone Age, shamans, and the technique of trephination.

“Ancient Views”: Two paragraphs; discusses how the Egyptians, Greek, and Chinese were the first ancient cultures to move from supernatural to natural and physical explanations for disorders; Hippocrates diagnosing acrophobia.

“Medieval to Early Modern Views”: Three paragraphs; discusses Europe during the Middle Ages and Renaissance; disorders still attributed to supernatural causes; role of the Church dogma and the techniques to test for witchcraft are explained; discusses the early establishment of asylums in 16th and 17th century Europe; and the moral treatment movement of the 19th century in Europe and America.

“Modern Views”: discusses how disorders began being diagnosed using medical models; the various diagnoses of German Emil Kraepelin, in 1880s and 1890s, are listed; Sigmund Freud, in Austria, developing psychoanalysis, its theories and practices listed; the three modern developments in clinical psychology are then presented and discussed with psychotherapy, drug therapy, and the criteria for diagnosing mental disorders using the DSM.

“A brief history of scientific psychology”: One paragraph; introduces the scientific section; discusses how psychology moved from philosophy to become a science.

“The philosophy of empiricism”: Two paragraphs; discusses what knowledge is with reference to Plato, Aristotle, and 17th century John Locke and his development of empiricism; lists empirical theories; discusses psychology’s move to scientific testing.

“The psychophysics of human perception”: Seven paragraphs; discusses the theories of psychophysics and its use by 1820s researchers in Germany; pioneers Ernst Weber, Gustav Fechner, and Hermann von Helmholtz, respectively each of their theories and research areas are listed; Wilhelm Wundt is credited with first experimental laboratory in psychology, the historical importance of his research is given; pioneers for psychology in America are discussed; G.

Stanley Hall and his “firsts” for psychology are discussed; William James at Harvard is discussed; Francis Cecil Sumner and Mary Whiton Calkins and their “firsts” for psychology are discussed.

“Structuralism and Functionalism”: Three paragraphs; the theories and methodology of both structuralism and functionalism are given; both names coined by Edward Titchener; Wundt proponent of structuralism; Charles Darwin’s influence on functionalism; James’ research and theories for functionalism.

“Behaviorism”: Three paragraphs; the theories of behaviorism are given; pioneered by John Watson and his theories; influenced by John Locke’s blank slate theory; B. F. Skinner and his legacy is noted.

“Humanistic and Positive Psychology”: Two paragraphs; a response to status quo, 1940s and 1950s Abraham Maslow and Carl Rogers and their formation of humanistic psychology and their theories given; influence on 1990s movement by Martin Seligman and Mihaly Csikszentmihalyi of positive psychology and their theories listed.

“Cognitivism”: Four paragraphs; Gestalt psychology is defined; pioneer by German Max Wertheimer 1920s and 1930s; 1950s and 1960s cognitive movement is discussed and theories given; British Frederick Bartlett’s influence is discussed and his theories listed.

“Evolutionary Psychology and Behavioral Neuroscience”: Two paragraphs; movement began in 1980s; the disciplines’ theories and listed; *The Evolutionary Foundation of Culture* pioneering book by John Tooby and Leda Cosmides.

Description

Prologue: Feist & Rosenberg (2010) titled their textbooks “Making Connections”. Their message, that to understand psychology you must understand how all the elements and levels of psychology interconnect. For example, they discuss the nature-nurture debate, and say that not only have previous textbooks set the two sides against each other, and that “even some interactionist views make overly simplistic divisions” (p. xxiii). They wish to focus on “paradigm shifting studies” in different areas or chapters of the text (p. xxv). For example, they discuss how scientists broke the dogma called “no new neurons” in biology. They list their goal to make connections between chapters, within chapters, and also make connections specifically to a student lifestyle. Their example, “how texting a friend during a lecture necessarily prevents students from attending to what the professor is saying” (p. xxvii).

Feist & Rosenberg (2010) open the first chapter with a discussion on the nature of “blogging”. They then define psychology and the sub-disciplines of psychology, discuss why students should study psychology, and they contrast common sense and folk psychologies with scientific psychology. This informs the reader of the importance of scientific values within the discipline. Feist & Rosenberg (2010) say, “what sets scientific psychology apart from popular psychology—known as folk psychology—is the methods used in each” (p. 6). Methodology here is what gives psychology its validity over other forms of knowledge. The authors continue, “yet most people you talk to on the street don’t think of psychology as a science; rather, they probably

think of it only as a clinical practice” (p. 6). The textbook being an introductory text for first year students, they are aware their audience might know nothing about psychology beyond what they hear on the street, and it is important to set the record straight before advancing throughout the course.

History section: *The Origins of Psychology*

Feist and Rosenberg (2010) have “The Origins of Psychology”, which is divided into two categories, the origins of clinical psychology and the science of psychology.

“A brief history of the practice of clinical psychology” discusses shamans, and techniques of trephinations, and contrasts these with the Greeks, Egyptians, and Chinese who moved to more physical and natural explanations (p. 13). They reference the Renaissance having inquisitions searching out witchcraft, and then clinical practices moving to asylums that house the mentally ill in 16th century Europe, progressing to more moral treatments in the 18th century, and to the 19th century, a medical diagnosis of mental illness and therapies. They discuss Freud and psychotherapy, “by the middle of the 20th century, three of the major modern developments in clinical psychology had emerged: psychotherapy, drug therapy, and modern criteria for diagnosing mental disorders” (p. 15). Feist & Rosenberg discuss the disorders of the DSM and how “occasionally” disorders are removed that do not meet the updated criteria for a disorder. Homosexuality is the example given.

The next section, “A brief history of scientific psychology”, they discuss how “psychology grew away from philosophy to become a science” (p. 16). After a brief description on the philosophy of empiricism, they state that, “philosophers, in contrast to scientists, do not collect data to test their ideas. Only when researchers started to examine and test human sensations and perception using scientific methods did psychology gain its independence from philosophy” (p. 16). The narrative is focused on what philosophers don’t do, and what scientists do, illustrating to the reader the progression from philosophers of psychology to scientists of psychology, focusing on German psychology labs in 19th century and psychophysics. “Psychology blossomed into a full-fledged science with the help of Wilhelm Wundt (1832–1920). In 1879 (remember this date!), Wundt set up a psychology laboratory in Leipzig, Germany, now considered the birthplace of experimental psychology. Although others went before Wundt, he is credited with giving psychology its independence from philosophy and physiology” (p. 17). The importance placed for the reader is psychology’s independence and ability to find answers. “Before Wundt, people evaluated the question of how the mind worked only by way of argument, not by scientific investigation” (p. 17). They continue the discussion by listing how the pioneering students of Wundt who took this psychology to other countries, like USA, listing James as the father of American psychology (see appendix).

Feist and Rosenberg (2010) discuss how psychological terms changed meaning throughout the years, specifically how the term *mental* became *cognition* and how psychology was able to study it scientifically once the computer metaphor developed (p. 20) with psychology eventually moving to brain imaging and neuroscience as its modern “status quo”.

Epilogue: Feist and Rosenberg (2010) The next major section is philosophical debates for psychology titled “Thinking About Mind, Body and Experience”. Here Feist and Rosenberg discuss three of the age-old debates for psychology, referencing key figures such as Locke and Descartes. They state that the nature-nurture debate causes a “false dichotomy” and explain it as “nature through nurture” instead (p. 24). The same argument is made for the mind-body debate,

in that it is a false dichotomy forcing an either/or discussion. Focusing on Descartes, "dualism, or separation of mind and body, allows for the ideas that a soul survives bodily death, the mind is separate from the brain, humans are superior to animals—and many other philosophies supported by Western thinking" (p. 24). They contrast that with a reference to eastern philosophies where mind and body are part of one whole. The final age-old debate is "behavior is evolution", discussing how behavior is passed on through evolution and genes, citing Darwin and natural selection. Again we see the discussion ending with biology.

Feist and Rosenberg then wrap up the chapter by stating, "indeed, modern psychological science grew from the marriage of Western philosophy and physiology, with Wundt's laboratory in Leipzig as the first child" (p. 24).

Chapter two (2) is Conducting Research in Psychology and Chapter three (3) The Biology of Behavior. The "common sense and logic" and "limits of our observations" type sections, commonly found in the introduction chapter, are found at the start of Chapter two, introducing the "What is Science" section (p. 38). This introduces the scientific method, contrasts it with pseudoscience, which introduces the reader to Research Methods in Psychology.

Psychological Science. Gazzaniga, Heatherton, Halpern, & Heine (2012)

History section from Chapter 1: *Introduction*

Extended Table of Contents:

How Did the Scientific Foundations of Psychology Develop? (p. 16-24)

Four paragraphs; discusses philosophical origins of psychological questioning, cites; Greek's Plato, Aristotle, Hippocrates, Rome's Galen, China's Confucius, Muslims Al-Kindi and At-Tabari, and respectively each of their individuals contributions; 1800s European influences John Stuart Mill and his theories; James Mark Baldwin and his laboratory; how this led to our schools of thought.

Sub headings:

"Experimental Psychology Begins with Structuralism": Three paragraphs; Wilhelm Wundt's theories and practices are discussed, opening first psychology laboratory in 1879, introspection, psychology's growth to America; Edward Titchener at Cornell pioneering structuralism, his theories and legacy are discussed.

"Functionalism Addresses the Purpose of Behavior": Six paragraphs; Legacy, research, and theories of William James at Harvard are discussed, *Principles of Psychology* 1890, stream of consciousness, development of functionalism; influenced by Charles Darwin; practiced by John Dewey for teaching and education.

"Gestalt Psychology Emphasizes Patterns and Context in Learning": Two paragraphs; reactionary to structuralism, founded by Max Wertheimer 1912, expanded by Wolfgang Kohler; theories of Gestalt given.

“Women Made Pioneering Contributions to Psychology”: Four paragraphs; discusses the role of women psychologists; gives biography of the career of Mary Whiton Calkins, her education in America, controversies at Harvard, work with William James and Hugo Munsterberg, and research and election as first female president of APA in 1905 are all discussed; Margaret Flay Washburn is first PhD in psychology, from Cornell, work with Titchener, and her lasting legacy is discussed; Emma S. Baker, first Canadian female PhD in psychology.

“Freud Emphasized the Power of the Unconscious”: Two paragraphs; discusses Sigmund Freud and his establishment of psychoanalysis, gives brief background of his medical training in Austria, his clinical practices and psychoanalytic theories are discussed, his lasting legacy for contemporary research is noted.

“Most Behavior Can Be Modified by Reward and Punishment”: Four paragraphs; John B. Watson established behaviorism 1913, his behaviorist theories are given; influenced by Ivan Pavlov; continued and popularized by B. F. Skinner, his main theories and controversy of *Beyond Freedom and Dignity* 1971 discussed; behaviorism dominated through 1960s.

“Cognition Affects Behavior”: Two paragraphs; lists psychological research that was reactionary to behaviorism leading to cognitive revolution 1950s; 1920s Gestalt psychology; Wolfgang Kohler and his research on chimpanzees is discussed; Edward Tolman’s animal research; 1957 George A. Miller and colleagues launched cognitive revolution; coined by Ulric Neisser 1967 *Cognitive Psychology*, theories of cognition given; Alan Newell and Herbert Simon applying computer software analogy to mind; influence on 1990s movement cognitive neuroscience discussed.

“Social Situations Shape Behavior”: Three paragraphs; discusses formation of social psychology beginning 20th century, and basic theories listed; pioneering research of Floyd Allport 1920s; strong influence from Nazi research is discussed, story of Adolf Eichmann 1962; 1930s and 1940s research of Kurt Lewin listed.

“Psychological Therapy is Based on Science”: discusses the emergence of scientific study of disorders; Carl Rogers and Abraham Maslow’s 1950s humanist approach is defined; cognitive-behavioral and drug therapies explained; research of Aaron T. Beck noted.

Description

Prologue: Gazzaniga et al. (2012) preface their history section by opening the introductory chapter with a discussion on the “major themes of psychological science” in which they discuss the topics of: empiricism, nature and nurture, brain and mind, the biological revolution, and how the mind is “adaptive” (in an evolutionary sense). They reference key figures such as Rene Descartes and Charles Darwin, and how these theorists influenced aforementioned classic psychological debates. The final discussion (mind is adaptive) looks at the biological revolution for psychology, demonstrating how psychology found biology, and then discussing how the mind is adaptive, with reference to Darwin. By ending this section on these topics it places a present emphasis on biology and evolution for the reader.

History Section: *How Did the Scientific Foundations of Psychology Develop?*

Gazzaniga et al. (2012) begin with a brief introduction listing some of the classic philosophers who influenced psychology (see appendix). They end this section with a statement from John Stuart Mill, who “declared that psychology should leave the realm of speculation and of philosophy and become a science of observation and of experimentation” (p. 17).

Mill’s claim is the bridge to demonstrate how psychology found “science” and how it “developed from a young discipline to a vital field of science and a vibrant profession”, and eventually how it would develop its own scientific “schools of thought” (p. 17). Gazzaniga et al. (2012) explains that it is true of every science to have different schools of thought dominate at various times, and “as multiple levels of analysis are used to understand psychology, researchers rely on the scientific method to support their theories and to decide what is most likely true” (p. 17). The importance here is the common use of the scientific method to unite the researchers of Psychology’s multiple levels of analysis. Gazzaniga et al. then discuss the advent of Experimental Psychology and Structuralism, with the opening of Wilhelm Wundt’s psychology laboratory in Leipzig Germany, 1879. This is described as the “birthing” of modern psychology. Wundt is the key figure here, credited with merging methodology and psychological theories, to set psychology on a scientific trajectory.

The history section from this point forward discusses Psychology’s early schools of thought, with its pioneering theorists, theories, and publications throughout different eras (see appendix). The final subsection is titled “Psychological Therapy is Based on Science”.

Epilogue: The next major section after the history section is *How Can We Apply Psychological Science?* This section introduces the reader to how he or she can apply the science of Psychology professionally, in terms of what jobs and careers are available and how Psychology helps people, how it can be applied to your own life and thoughts and make you become a “critical” thinker, and in turn how the science of Psychology requires critical thinking in order to advance its research, e.g. the subsection “Psychological Science Requires Critical Thinking” (p. 27).

***Psychology: From Inquiry to Understanding.* Lilienfeld, Lynn, Namy, Woolf, Cramer, & Schmaltz (2011)**

History section from Prologue: *How Psychology Became a Science*

Extended Table of Contents

Psychology in Historical Perspective: What a Long, Strange, Trip It’s Been (p. 6-12)

Two paragraphs; psychology has asked questions on human nature since the Greeks, only experimental for 130 years.

Sub headings:

“Psychology: From Séance to Science”: One paragraph, psychology’s road from non-science to science.

“Psychology’s Liberation from Philosophy”: Two paragraphs; psychologists held positions within philosophy departments; Kant said psychology should never become a science; change occurred when Wundt opened laboratory in 1879 in Leipzig studying mental events using introspection; James opened his lab at Harvard.

“Psychology’s Liberation from Spiritualism”: Six paragraphs; in 1800’s psychology associated with spirit mediums, psychics, and channeling the dead, through public interest in the paranormal; James studied spirit mediums; led to Joseph Jastrow studying why people believe in paranormal.

“Psychology Today: Reasons for Both Optimism and Concern”: One paragraph; early 20th century psychology grown to be an active and changing discipline.

“Psychology and Psychologists in the Early Twenty-First Century”: One paragraph; thousands of psychologists in Canada; Canadian Psychological Association founded in 1939 with diverse range of topics studied.

“Psychology and Controversy”: Two paragraphs; controversy over psychotherapy; the scientific-practitioner gap, between scientific evidence and the art of therapy; the gap widened in late 1980s over ‘recovered memories’ debates of patients in therapy.

“The Great Theoretical Frameworks of Psychology”: Two paragraphs; psychology has no unifying theory to explain behavior; lists five pivotal perspectives that shaped contemporary psychology.

“Structuralism: The Elements of the Mind”: Three paragraphs; Edward Titchener founded structuralism at Cornell, making map of consciousness and using introspection; Oswald Kulpe critiqued structuralism, studied imageless consciousness; contribution to scientific psychology its systematic observation.

“Functionalism: Psychology Meets Darwin”: Three paragraphs; William James and others studied functions of thoughts, feelings, behaviors, stream of consciousness; functionalists of 1800s influenced by Charles Darwin, natural selection; contribution to scientific psychology, evolutionary psychology.

“Behaviorism: The Laws of Learning”: Five paragraphs; early 20th century founded by John Watson and observable behavior; look outside organism to see learning principles; consciousness a black box; Watson’s follower B. F. Skinner studied rewards and punishments of environment; contribution to scientific psychology, fundamental laws of learning.

“Cognitivism: Opening the Black Box”: Three paragraphs, in 1950s and 60s reaction to neglect of cognition; thinking affects behavior; Swiss psychologist Jean Piaget suggested that children conceptualize the world differently than adults; Ulric Neisser stressed importance of thinking; focus on interpretations and insight; contribution to scientific psychology, language, problem solving, intelligence, concepts, memory, therapy, and brain functioning.

“Psychoanalysis: The Depths of the Unconscious”: Two paragraphs; behaviorism became dominant in U.S, while psychoanalysis became dominant in Europe; Viennese neurologist Sigmund Freud, unconscious drives especially sexuality and aggression; Freudian slips of the tongue; dreams; early experiences; contribution to scientific psychology, important mental processing outside of consciousness, critics feel the school slowed progress of scientific psychology.

Description

Prologue: Lilienfeld, Lynn, Namy, Woolf, Cramer, & Schmaltz (2011) discusses the history section from its prologue titled “How Psychology Became a Science”. In the preface the authors state the goals of the textbook, which are to “focus on how to think, not merely what to think” and “psychologists have found that the best safeguard against human error is scientific thinking—thinking that helps to protect us from our tendencies to make mistakes” (p. xix). Scientific thinking is described as a “safeguard” and our defense against our own mistakes, and the textbook wishes to help the reader think better, and use scientific ways of thinking to protect us against our natural tendency to make mistakes. The conversation continues with the definition of psychology, how psychology has big questions that are difficult to answer, and lists ten things that makes psychology challenging and fascinating.

The History Section: *Psychology in Historical Perspective: What a Long, Strange, Trip It's Been*

The history section begins with the title “Psychology in Historical Perspective: What a Long, Strange, Trip It's Been”, with the two subsections being, “Psychology: From Séance to Science”, and “Psychology's Liberation from Philosophy” (p. 6). The goal here is to display to the reader the progress from mystical séances to scientific discovery, and institutionally how psychology is now liberated from philosophy. Lilienfeld et al (2011) discuss how psychology was in fact part of philosophy, and according to the text, how the mind was speculated about from the “armchair”. More so, the liberation was not easy, explaining how Kant “argued psychology shouldn't even bother to become a science” and furthermore “psychology couldn't and shouldn't aspire to be anything remotely like biology, chemistry, or physics” (p. 7). The narrative paints bleak picture, however: “the landscape of psychology changed dramatically” when “Wilhelm Wundt developed the first full-fledged psychological laboratory” and “psychology was thereby launched as an experimental science” (p. 8). They say of Wundt that he “demonstrated that Kant and other doubters were wrong” (p. 8) and soon after other psychology labs began to open around the world.

The liberation narrative does not stop here for Lilienfeld et al. (2011) because, “to become a full-fledged and independent discipline, psychology needed to break free not only from philosophy but also from another influence: spiritualism” (p. 8). This paragraph discusses the definition of psychology, which literally meant the study of spirit or soul. Therefore psychology had to liberate itself from that definition as well. Lilienfeld et al. discuss how people in the 19th century were fascinated by “spirit mediums” and would take part in séances to channel the dead and were also fascinated by psychics. In a “fictoid” thought bubble on the left hand side of the page it states “No psychic channeller has ever passed a carefully controlled scientific test” (p. 8) just in case the reader was curious of spiritualism's validity. The text provides an anecdote of two sisters who believed in ghosts, despite all the evidence against it. We see how psychology

moved away from spiritualism in the late 19th century when the discipline started studying “human error” and “self-deception” to understand why people things without evidence. One might call this a very “meta” direction for the discipline.

To finish the section, Lilienfeld et al. discuss what they call “the scientist-practitioner gap”, likening it “canyon” not a gap. They explain how some clinical psychologists want psychotherapy to be based off scientific evidence from controlled studies, where other psychotherapists say it should be based off subjective clinical experiences and intuitions. This juxtaposes the differences between scientist and practitioner, making them appear worlds apart.

The section titled “the great theoretical frameworks of psychology” Lilienfeld et al. (2011) state that psychology “has suffered from an unresolved identity crisis” (p. 10). This, according to the authors is due to not having a unifying theory of behavior, and because what psychology constitutes as a scientific approach has changed over time. The various contemporary schools are discussed, their pioneering figures and theories, and what it contributed to “scientific psychology” (see appendix).

Epilogue: “The Multifaceted World of Modern Psychology” and discusses how diverse psychology has become, the types of psychologists, and how you can see psychology in everyday life e.g. how psychology is used for developing advertising, with reference of Watson inventing the blind taste test. They also discuss how to “give psychology away” and how George Miller’s 1969 APA presidential address stated psychologists “haven’t done a great job of spreading their knowledge to the public” and they haven’t spent enough time “popularizing their discipline” (p. 14). Lilienfeld et al. (2011) say many people, if asked about a famous psychologist would say Sigmund Freud, “yet as we’ve already learned, Sigmund Freud wasn’t even a psychologist (p. 14).

The final section of the prologue, “The Great Debates of Psychology”, discusses the nature-nurture debate, stating that in the twentieth century was dominated by the belief that “virtually all” human behavior was learned, but “the tide is now turning” with behavior geneticists show many traits are heavily based by our genes, leading to a discussion on evolutionary psychology. The free-will and determinism debate, how our legal system presumes free will, however not in the case of mentally ill, Skinner’s denial of free-will, and discuss automatic behaviors, and how many psychology compromise between the two. And the mind-body debate, saying monists believe that mind is just the brain and nervous system in action, no more than its nerve cells working, versus the dualists, who follow Descartes’ view that the mind is more and is nonmaterial and can’t be measured, and state that although the debate can’t be proven scientifically most experimentalists assume a monist point of view while conducting research. This section ends the prologue, and end’s their section on “how modern science of psychology came to be” (p. 21).

The first chapter is titled “Science and Pseudoscience in Psychology, Skills for Thinking Scientifically in Everyday Life”. They discuss pop psychologies, pseudoscience, the dangers and popularity of these, and how to think scientifically and critically to separate “the wheat from the chaff” so to speak (p. 35). Chapter two is Research Methods and Chapter 3 is Biological Psychology.

Psychology: Ninth Edition in Modules. Myers (2010)

Part 1: Introduction to the History and Science of Psychology.

History section from Module 1: *The Story of Psychology*

Extended Table of Contents

Psychology's Roots (p. 3-7)

One paragraph; listing common questions people ask about themselves i.e. who are we?

Sub headings:

“Psychological Science Is Born: When and how did psychological science begin”: Three paragraphs discusses: Aristotle's first philosophical questions; the birth of psychology, credited to Wundt in 1879 opening his laboratory, a description of his experiment is given; how psychology eventually developed into its schools of thought.

“Thinking About the Mind's Structure”: Two paragraphs discusses: Titchener's laboratory and research, he introduced structuralism in 1892 at Cornell.

“Thinking About the Mind's Functions”: Five paragraphs discusses; William James and functionalism, its theories; the influences of Charles Darwin; James' influential writings, *Principles of Psychology*, his teaching at Harvard and his legacy to psychology; Mary Calkins in 1890, her bio is given, first female president of APA in 1905; Margaret Floy Washburn, first female psychology PhD, published *The Animal Mind*.

“How did Psychology continue to develop through the 20's to today?": Nine paragraphs discusses: the important figures for psychology's development, Wundt, Freud, Pavlov, Piaget, Titchener, James, and their backgrounds; the American psychologists from 1920s to 1960s with John B. Watson and B. F. Skinner developing behaviorist psychology and its theories; humanist psychology and its theories, as a reaction to psychoanalysis, pioneered by Carl Rogers and Abraham Maslow; cognitive neuroscience as part of cognitive revolution of the 1960s; the aims of contemporary psychology which are listed and defined.

“Contemporary Psychology”: Two paragraphs discusses: the growth of psychology as listed by its associations/institutions and number of members worldwide.

“What is Psychology's Historic Big Issue?": Four paragraphs discusses: what the historic debates of psychology are, focuses on nature-nurture and natural selection; theories from Plato, Aristotle, John Locke, Rene Descartes, and Charles Darwin; how these classic philosophical debates effect contemporary psychology, specifically the nature-nurture debate and natural selection.

Description

History Section: *Psychology's Roots*

Myers (2010) begins Module 1, *The Story of Psychology*, with a brief discussion on the early philosophers who began asking psychological questions, or, as Myers puts it, started ‘thinking about thinking’. He notes Aristotle and how “today we chuckle at some of his guesses” but says he was at least “asking the right questions” (p. 3). The narrative then turns to the “birth of psychology as we know it” when Myers states, Wundt on a “December day in 1879” conducted experiments with an “apparatus that measured reaction times” and began measuring “the atoms of the mind” (p. 3). Wundt is credited with conducting psychology’s first ever experiment, applying measurement to mental processes, which in this story of psychology made the discipline a science for the first time. Myers then states, “before long, this new science of psychology became organized into different branches...” (p. 3). Myers provides a brief discussion, in one paragraph, taking psychology from its roots in philosophy to the “birth” of the scientific discipline, and the next sections discuss psychology’s early schools structuralism and functionalism, and how psychology developed through the 20th century (see appendix).

Myers (2010) provides some historical content, discussing how psychology spread in America through Titchener and structuralism. Myers compares Titchener to C. S. Lewis in that they both draw on people’s “inside information” about themselves. Myers then contrasts structuralism with James’ functionalism and stream of consciousness with his lasting legacy being his writing publishing *Principles of Psychology*. Myers provides some flavorful quotes from James including that he (James) claimed the first lecture he heard on Psychology was the first he gave. Also he was one of the first professors to administer course evaluations.

Myers (2010) discusses the ‘firsts’ for women in psychology, specifically Calkins and Washburn. Myers notes the difficulty these women faced from institutions such as the APA and the major universities, who did not give accreditation or acceptance for women (or other minorities). Myers contrasts that with today, where he says women make up two-thirds of new Psychology PhDs (p. 3). The reader is shown the growth of psychology by the numbers, through number of institutions and members, e.g. the APA, and through a listing of the “firsts” for psychology accomplishments, and the pioneers who facilitated this growth.

Some historical context is then given when Myers (2010) discusses the language used by psychologists to define their field in different eras. How psychology defined itself helps the reader understand what psychology thought of itself. He states that pre 1920s they were defining the field as “the science of mental life” (p. 4). Then from the 1920s to 1960s the American behaviorists redefined psychology as “the scientific study of observable behavior” (p. 4).

It is interesting because a change in definition for psychology means a change the nature of the subject matter itself. In this case not only “how” it studies something (a change in method, or a new theory) but in essence “what” it is studying (what is valid psychological content). For instance, asking not how it should go about studying the mind, but that it will no longer study the mind at all, and that observable behavior is now the only subject. These two definitions, despite coming after the unifying “birth” of the scientific discipline could not be more opposite to each other. But the commonality in their definition is the term “scientific”.

Myers (2010) continues, after explaining the other important schools of thought in the 20th century, that the modern definition of psychology became “the science of behavior and mental processes” (p. 4). He sums it up by saying: “The key word in psychology’s definition is *science*. Psychology, as I will emphasize throughout this book, is less a set of findings than a way of asking and answering questions. My aim, then, is not merely to report results but also to show you how psychologists play their game. You will see how researchers evaluate conflicting opinions and ideas. And you will learn how all of us, whether scientists or simply curious people,

can think smarter when describing and explaining the events of our lives” (p. 4) and he continues, “the rest of the story of psychology—the subject of this book—develops at many levels. With activities ranging from the study of nerve cell activity to the study of international conflicts, *psychology* is not easily defined.” (p. 4).

The next section is *What is Psychology’s Historic Big Issue*, which in this instance is the nature-nurture debate. Myers (2010) gives special attention to Darwin’s natural selection and how it relates to psychological traits and disorders having an evolutionary and biological basis. He then asks contemporary psychological nature-nurture questions, such as “Are gender differences biologically predisposed or socially constructed?” (p. 6). Myers sets the template for psychological inquiry, with the nature-nurture dualism being the fundamental historic big issue for the science of psychology.

Epilogue: Module 1 concludes with a section listing psychology’s three main levels of analysis; biological, psychological, and socio-cultural influences on behavior and mental processes (p. 8). Myers (2010) defines our contemporary approach to psychology as the *biopsychosocial* approach. He then lists psychology’s current perspectives, and discusses current subfields and research areas in the discipline.

Module 2 is titled *Thinking Critically With Psychological Science* (p. 14) with the sub heading “The need for psychological science”. The reader is presented with differences between unfounded “pop” psychologies, the limits and errors of our human intuitions, our hindsight biases, and how naturally we have overconfidence, which creates errors in thinking and problem solving. This leads Myers (2010) to the section on “The Scientific Attitude” (p. 17) in which we learn the goal of science is to prove factual answers and make predictions, in ways that are not misleading and that display reality. Next is the sections on critical thinking, defined by Myers; “smart thinking, called critical thinking, examines assumptions, discerns hidden values, evaluates evidence, and assesses conclusions” (p. 18).

By discussing our ‘natural errors’ and ‘biases’, then the ‘fundamental attitudes of the scientific approach’, followed by ‘how to be a critical thinker’, the reader is explained the differences between scientific thinking and un-scientific thinking. The theme being that if you adopt a critical scientific attitude, you will overcome, or at least limit, the effects of your natural errors in thinking and judgment.

***Psychology: Frontiers and Applications.* Passer, Smith, Atkinson, Mitchell, & Muir. (2011)**

History section from Chapter 1: *The Science of Behavior*

Extended Table of Contents

Psychology’s Intellectual Roots (p. 12-22)

Four paragraphs; discusses how some early philosophical debates carry over to psychology, mind-body dualism is explained and Rene Descartes’ position is presented; monism is explained and Thomas Hobbes and John Locke are cited, leading to British Empiricism and its importance for psychology; the role that physiology and medicine played is discussed; the role of 1800s German psychophysics; role of Charles Darwin and evolution in leading to the birth of psychology.

“Early Schools: Structuralism and Functionalism”: Four paragraphs; discusses the theories of structuralism and introspection; emerged when Wilhelm Wundt opened first experimental lab in Leipzig, 1879, started first generation of scientific psychologists; August Kirschmann and James Baldwin at U of T; George Humphrey at Queen’s; Edward Titchener at Cornell and his importance in developing structuralism; the theories of functionalism are discussed and a contrast given between the two fields; William James’s impact on the field is listed with his work at Harvard; Mary Whiton Calkins as the first female president of the APA in 1905.

“The Psychodynamic Perspective: The Forces Within”: Seven paragraphs; the basic definition of the perspective is given; under the heading Psychoanalysis Freud’s Great Challenge: beginning in the late 19th century with Freud in Vienna, a brief bio and overview of his practices and theories are given with the eventual forming of psychoanalysis, and his lasting controversies and legacies are discussed; under the heading Modern Psychodynamic Theory: how these theories have evolved and are used in contemporary research areas.

“The Behavioral Perspective: The Power of the Environment”: Seven paragraphs; the basic definition of the perspective is given; under the heading Origins of Behavioral Perspective: discusses John Locke and the mind as a blank slate, then the experiments of Russian Ivan Pavlov in the 1900s, followed by the theories of American Edward Thorndike; under the heading Behaviorism: discusses how it became a formal school of thought, beginning around 1913 with John B. Watson and his theories; then B. F. Skinner his theories and their impact, the formation of behavior modification; the influence behaviorism had in America until the 1970s is considered; under the title Cognitive Behaviorism: discusses the reaction and growth of cognitive behaviorism in the 1960s and 1970s; its theories are presented; pioneered by Albert Bandura and his educational background is given.

“The Humanist Perspective: Self-Actualization and Positive Psychology”: Five paragraphs; discusses the growth of the field in mid-20th century; lists its theories including self-actualization; Abraham Maslow and Carl Rogers are cited; led to today’s positive psychology movement.

“The Cognitive Perspective: The Thinking Human”: Ten paragraphs; the basic definition of the perspective is given; under the heading Origins of the Cognitive Perspective: discusses German Gestalt psychology in 1920s, its theories are given; under the heading Renewed Interest in the Mind: discusses how the study of the mind returned to psychology in the 1950s, World War II, computer science as a new metaphor; Noam Chomsky’s research in language is discussed and his critique of behaviorism; Jean Piaget’s work is discussed; 1960s and 1970s cognitive revolution; under the heading The Modern Cognitive Perspective; examples of how the perspective is used in contemporary psychology are given, focus on cognitive neuroscience.

“The Sociocultural Perspective: The Embedded Human”: Seven paragraphs; begins with basic definition of the perspective; under the heading The Social Psychological Component: discusses what social psychologist study and within and contrasted with other schools; under the heading The Cultural Component: defines what culture and norms are; discusses how through

20th century psychological research ignored non-Western groups; pioneering research of Kenneth and Mamie Clark; development of cultural psychology and what its research areas are.

“The Biological Perspective: The Brain, Genes, and Evolution”: Fourteen paragraphs; begins with the basic definition of the perspective; under the heading Behavioral Neuroscience: gives a more detailed definition; Karl Lashley and Donald Hebb are named as pioneers and their research is discussed; under the heading Behavioral Genetics: discusses behavioral genetic theories and how it applies to psychology; under the heading Evolutionary Psychology: discusses Darwin’s theory of natural selection; explains and discusses the theories of evolutionary psychology and sociobiology.

Description

Prologue: Passer, Smith, Atkinson, Mitchell, and Muir (2011) begin their first chapter with the section *The Nature of Psychology*. Here they define psychology and the general research areas and approaches of the discipline are mapped out for the reader. This leads to the subsection titled “Psychology’s Scientific Approach” (p. 6) where the fundamental scientific attitudes are listed for the reader. The opening line of this section states, “across psychology’s diverse subfields, researchers share a common underlying scientific approach to studying behavior” (p. 6). This statement, at the beginning of the textbook, prefaces for the reader the knowledge that despite diverse subfields all researchers share the same scientific approach. Passer et al. (2011) explain the empirical, observable, and systematic nature of the scientific approach and how this approach fundamentally does not rely on “intuition, pure reasoning, or folk wisdom” (p. 6). The textbook makes a clear distinction between the scientific and the non-scientific for psychology, and therefore what is considered valid and non-valid forms of knowledge within the chapter, the textbook, and the discipline at large.

Interestingly, some credit is given to these “non-scientific” approaches. Passer et al. (2011) point out that science is not the only way we learn about human nature and that things like “family, literature, religious teaching, the Internet, personal experiences, and wisdom” all do teach us about human nature (p. 6). The issue with these forms of knowledge though, according to the text, is that “in everyday life there are many ways in which these sources can end up promoting misconceptions” (p. 6). The next subsection “Using Science to Minimize Everyday Pitfalls”, in which they discuss how thinking scientifically will help prevents these aforementioned errors in judgment or beliefs. The reader is taught that the scientific method, not only can be applied to research of psychology, but because psychology is also the study of yourself, these same methods will minimize your own personal pitfalls. Passer et al. note that “scientists are human too, and they may fall victim to these pitfalls” but that psychologists take concrete steps to avoid this from happening (p. 6). These preventative “steps” are anything from controlled variables in experiments to the peer reviewing of research. Passer et al. explain when new research comes along it alters, dismisses, or even overturns existing beliefs in science. This is considered one of sciences biggest strengths, its self-correcting nature. The point to understand for the reader here is that the methodology’s self-correcting nature will help overcome the biases or misconceptions human’s will naturally have in life, and in research. The author’s state, now bringing in a historical lens, that “at any point in history, scientific knowledge represents a best estimate of how the world operates. As better or more complete information is gathered, that best estimate may continue to be supported or it may need to be changed” (p. 7).

The next section, “Thinking Critically About Behavior”, introduces critical thinking, which Passer et al. (2011) explain as, “taking an active role in understanding the world around you rather than merely receiving information”, to reflect on what information means, and to become “an informed consumer of the many claims made in the name of psychology” (p. 7). The authors give examples of this, e.g. how to analyze jumble word paragraphs, and how people waste their hard earned money to have their personalities analyzed and future’s read by pseudoscientific institutions. They state that the goals of psychological research are to describe, explain and understand, predict, and influence or control behavior for people’s welfare. Passer et al. (2011) then distinguish between “basic” and “applied” research, explain psychology’s levels of analysis, which are biological, psychological, and environmental, and then they provide a brief overview of the mind-body and nature-nurture dualisms.

History Section: *Psychology’s Intellectual Roots*

Here we find “Psychology’s Intellectual Roots” which discusses the “spirit” of Descartes’ mind-body dualism, contrasting this with monism and the British empiricists, who, explain the authors, equated the measurement of the mind with the measurement of the physical brain. Passer et al. (2011) state that these empirical theories “bolstered the development of modern science” (p. 12).

The authors discuss some of the historical climates from which modern psychology emerged. They begin with the late 19th century developments in medicine and physiology, with electronic brain stimulation and studying damage to the brain. Then how German psychometrics was making the connections between the brain, the mental processes, and behavior. Finally, the role of Charles Darwin and evolution for the birth of psychology is discussed. This section of the narrative illustrates to the reader that psychology was rooted the physical and the natural, before it “emerged”.

Passer et al. (2011) open the next paragraphs on psychology’s early schools of thought, Structuralist and Functionalist, stating “the infant science of psychology emerged in 1879, when Wilhelm Wundt established the first experimental psychology laboratory” (p. 12). Within the narrative, after the infant science emerged from Wundt’s lab, psychology’s perspective can be discussed within “Psychology” the established discipline (see appendix).

The text provides some historical context for psychology’s major perspectives. For example, the controversy and reaction to Sigmund Freud’s theories of sexuality and how Freud broadened psychology’s limits especially for treating psychological disorders. Passer et al. (2011) discuss that although Freud’s particular definition of the unconscious “isn’t accepted” by most scientific psychologists, there are ways in which these theories fit into more contemporary research, for example how some “aspects of information processing occur outside of awareness” (p. 14).

Passer et al. explain how the behaviorist movement was huge in America through the 60’s, and how it was in accordance with many in the psychology world who wanted the science modeled after the natural sciences, and then was later replaced by more Cognitive Behavior, Humanist, and Gestalt perspectives reacting to the “status-quo”. The authors describe that these schools didn’t last long as “scientific” schools, despite how they still exist in some capacity currently, such as in therapy or perception theories (just not scientifically).

When discussing the cognitive revolution, Passer et al. (2011) state that “a new metaphor developed-the mind as a system that processes, stores, and retrieves information” (p. 17) which came from infant computer technology post WWII, which then led to our contemporary

cognitive neuroscience. Then social and cultural psychologies are discussed, highlighting how psychology left out minority groups and non-Western ideas but now these areas are accounted for. Finally, the biological perspectives are listed, discussing neurotransmitters and pioneering research of behavioral genetics and natural selection. The narrative provides the “firsts” for scientific schools in psychology up to our most contemporary perspectives.

Epilogue: Passer et al. (2011) finish the chapter with a discussion of how there is multiple level of analysis psychology, and how the environmental, biological, and psychological “levels” interact on our behavior. They list in which domains psychologists’ work, and academic performance enhancing strategies.

Passer et al. (2011) The second chapter is Studying Behaviour Scientifically and third chapter is Biological Foundations of Behaviour.

Psychsmart. (2011)

History section from Chapter 1: Introduction to Psychology

Extended Table of Contents

A Science Evolves (p. 7-13)

Four paragraphs; discusses old spiritual theories of psychology; Descartes’ theories from the 17th century; Franz Joseph Gall’s theories and phrenology in the 18th century.

Sub Headings:

“The Roots of Psychology”: Three paragraphs; formal roots of psychology come from 19th century, Wundt opening his first lab in Leipzig 1879, his theories and the development of structuralism and introspection are discussed.

“Founding Mothers of Psychology”: Three paragraphs; discusses how women’s role in psychology has been overlooked until recently; lists pioneering women, Margaret Floy Washburn, Leta Stetter Holingworth, Mary Calkins, Karen Horney, June Etta Downey, Anna Freud, and Mamie Phipps Clarke are listed with all of their “firsts” for psychology.

“Psychology Today”: Three paragraphs; from the early pioneers came the schools of thought for psychology.

“Neuroscience Perspective”: Two paragraphs; explains the theories of neuroscience.

“Psychodynamic Perspective”: Two paragraphs; explains the theories of psychodynamic theories; credited to Sigmund Freud in Vienna early 20th century and his effects on the field.

“Behavioral Perspective”: Three paragraphs; explains theory of behaviorism; pioneer John B. Watson and his work in America; continued by B. F. Skinner and his work.

“Cognitive Perspective”: Two paragraphs; reaction of cognitive perspective and its theories discussed.

“Humanist Perspective”: Four paragraphs; theories of humanist approach, pioneered by Carl Rogers and Abraham Maslow and their theories discussed.

Descriptions

Psychsmart (2011) is a unique introductory textbook for this study because it has no primary author, just a list of contributors, but it does not list which contributors write each section, and therefore we reference it by the name of the textbook.

Prologue: *Psychsmart* begins its first chapter with a discussions on: what questions psychology asks, their definition of the discipline, the subfields of contemporary psychology, where psychologists work, and what types of psychological education areas there are available to students. In regards to what psychologists do, “they (psychologists) use scientific methods to find answers that are far more valid and legitimate than those resulting from intuition and speculation, which are often inaccurate” (p. 4).

History Section: *A Science Evolves*

Psychsmart (2011) open the section with, “The formal beginning of psychology as a scientific discipline is generally considered to be...when Wilhelm Wundt established the first experimental laboratory devoted to psychological phenomenon” (p. 8). However, the textbook explains that structuralism and introspection were eventually found to be “not a truly scientific technique” (p. 9) and were therefore replaced. Therefore, in the narrative, although psychology had formerly become a scientific discipline its techniques were yet to be truly scientific. The text discusses how the replacement of structuralism happened, with American psychologists such as William James and educator John Dewey, with more functional approaches, and Gestalt psychologies that reacted to the structuralist approach.

In the section “Founding Mothers of Psychology” *Psychsmart* (2011) explain that, like many scientific disciplines there were prejudices against women, then it lists a number of women and what their “firsts” were for psychology. This section gives no historical context, whether it be biographical or socio-cultural, simply who they were.

“Psychology Today” is the next section where we are given the major contemporary perspectives and their pioneers. The opening line *Psychsmart* (2011) sums up the message of the narrative; “The men and women who laid the foundations of psychology shared a common goal: to explain and to understand behavior using scientific methods” (p. 11).

Epilogue: The next section, “Psychology’s Key Issues” reiterates the earlier point by stating, “you might find yourself thinking that the discipline lacks cohesion. However, the field is more unified than a first glimpse might suggest” (p. 13). *Psychsmart* (2011) goes on to explain that psychologists agree upon the key issues and work together to address them. The textbook, introducing and displaying the various schools of psychology to students, would not want to give the reader the impression that the discipline lacks cohesion, although their statements imply they fear this could be the case. The scientific method is the cohesive glue that ensures everyone is on the same page. This section continues with more key issues for psychology, specifically; nature

versus nurture, conscious versus unconscious, observable behavior versus internal mental process, free will versus determinism, and individual differences versus universal principles (p. 14). These key issues provide context to what debates the student should be aware of while beginning their psychological literature.

The final section of the chapter is *The Research Process in Psychology*. The opening subsection, “The Scientific Method”, gives the student the basic guidelines, and fundamental steps, for research in psychology.

Chapter 2 of Psychsmart is *Neuroscience*.

Psychology. Schacter, Gilbert, & Wegner (2011)

History Chapter 1 *Psychology: The Evolution of Science* (p. 2-32).

Extended Table of Contents

Eighteen paragraphs; William James bio, 1860s deciding on a career, eventually found psychology in Europe and brought it to America, taught at Harvard, wrote *Principles of Psychology* 1890; since then psychology has become very diverse, study of mind and behavior; a description of psychological properties; real life examples of cognitive failures and how psychology can explain them.

Sub headings:

“Psychology’s Roots: A Path to a Science of Mind”: One paragraph; for two thousand years before modern psychology people asked psychological questions; eventually psychology broke into schools of thought starting with structuralism and functionalism.

“Psychology’s Ancestors: The Great Philosophers”: Two paragraphs; understanding ourselves started with Greeks; Plato argued for nativism; Aristotle argued for philosophical empiricism and *tabula rasa*; ancient philosophers articulated many debates of modern psychology.

“From the Brain to the Mind: The French Connection”: Six paragraphs; Rene Descartes, mind-body and dualism; Thomas Hobbes, English, mind-body not separate; Joseph Gall, brain size and phrenology; Pierre Flourens removed brain parts from dogs; Paul Broca, 19th century, brain localization.

“Structuralism: Applying Methods from Physiology to Psychology”: Six paragraphs; mid-19th century German physiologists; Hermann von Helmholtz experimented and recorded reaction time, important for 19th century scientists; Wilhelm Wundt 1874 published *Principles of Physiological Psychology*, 1879 in Leipzig opened first psychology lab, official birth of independent psychology, studied consciousness, adopted approach of structuralism, used method of introspection, study consciousness using scientific methods.

“Titchener Brings Structuralism to the United States”: Two paragraphs; Edward Titchener at Cornell, after studying with Wundt for two years, identified elements of consciousness in *An Outline of Psychology* 1896.

“James and the Functional Approach”: Six paragraphs; James taught experimental psychology, disagree with elemental and focused on stream of consciousness, developed functionalism, inspired by Charles Darwin’s *On the Origin of Species by Mean of Natural Selection* 1859, how consciousness developed and functioned in natural environment; G. Stanley Hall first research laboratory in America at John Hopkins 1881, 1887 founded *America Journal of Psychology*, important in development of APA, studied children; by 1920s functionalism dominant in North American psychology.

“The Development of Clinical Psychology”: One paragraph; psychologists also studying in clinic not just laboratory.

“The Path to Freud and Psychoanalytic Theory”: Five paragraphs; Jean-Martin Charcot and Pierre Janet, French physicians, and their findings on hypnosis for relieving hysteria; James believed it was important to study disruptions of the mind to understand normal functioning; Sigmund Freud from Vienna studied with Charcot in Paris 1885 on hysteria, continued research with Joseph Breuer, childhood experiences, unconscious, developed psychoanalytic theory, therapy called psychoanalysis; early 1900s psychoanalytic movement formed, Carl Jung and Alfred Adler; psychoanalysis controversial, especially in America, due to sexuality; Freud came to conference at Clarke in 1909.

“Influence of Psychoanalysis and the Humanistic Response”: Four paragraphs; psychoanalysis influences from literature to history, and politics to art; reaction to dark side of Freud’s theory, post WWII America about growth, humanistic psychology developed; Abraham Maslow and Carl Rogers pioneered; 1960s “flower children” appealed to it.

“The Search for Objective Measurement: Behaviorism Takes Center Stage”: Two paragraphs; reaction to schools of thought studying inner workings of mind, 20th century behaviorism studied objective observable behavior.

“Watson and the Emergence of Behaviorism”: Four paragraphs; John B. Watson, pioneered behaviorism, summary of his beliefs and theories, studied what people do to control and predict behavior; led to animal studies in psychology, Margaret Washburn published *Animal Mind* in 1908; Watson influenced Ivan Pavlov, dog’s saliva and stimulus-response; Watson applied theories to infants, little Albert; Watson’s romance with Rosalie Rayner, eventual scandal and move to advertising; 1920s scientific psychology behaviorism dominant force.

“B. F. Skinner and the Development of Behaviorism”: Five paragraphs; B. F. Skinner’s bio and theories, PhD in psychology at Harvard; theory of learned behavior and reinforcement; Skinner box and teaching machines; controversial books *Beyond Freedom and Dignity* 1971 and *Walden II* 1948, depicting utopian society, questioning free will; Benedict Spinoza’s philosophy; society’ reaction to Skinner and his impact on culture.

“Return of the Mind: Psychology Expands”: Two paragraphs; according to Ulric Neisser from 1930s to 1950s everyone in psychology learned behaviorism; however eventually reaction to its shortcomings.

“The Emergence of Cognitive Psychology”: Five paragraphs; early cognitive theories, illusions; Max Wertheimer, light perception of the whole, led Gestalt psychology and theories; Frederic Bartlett, memory, reaction to German Hermann Ebbinghaus; a contrast of Bartlett’s and Ebbinghaus’ theories and experiments on memory; Swiss psychologist Jean Piaget’s on cognitive errors in children, and his work on developmental psychology; German Kurt Lewin, his work on subjective experience and list of his theories including topology; despite these pioneers psychology ignored cognition until the 1950s when computer technology, information-processing model allowed scientific study of the mind.

“Technology and the Development of Cognitive Psychology”: Five paragraphs; use of cognitive training during World War II gave the field legitimacy, psychologists had important role; British psychologist Donald Broadbent 1958 and his theories on attention and cognitive functioning; American George Miller 1956, mental capacities; a discussion on how computing is analogous with mind; Noam Chomsky’s critique of B.F. Skinner on language; cognitive psychology exploded in the 1960s, Neisser’s *Cognitive Psychology* 1967 provided foundation for its growth.

“The Brain Meets the Mind: The Rise of Cognitive Neuroscience”: Four paragraphs; analogy given, if cognition is the software then neuroscience is the hardware; Karl Lashley’s theories and his surgeries on rats, developing behavioral neuroscience and how it is used on humans; 1980s various noninvasive brain scanning techniques developed; the development of cognitive neuroscience, linking cognition and brain activity.

“The Adaptive Mind: The Emergence of Evolutionary Psychology”: Six paragraphs; discusses roots of evolutionary psychology; in 1960s and 1970s works such as John Garcia showed heredity in rat studies affect behavior; influenced by Charles Darwin; in 1975 E.O. Wilson connected evolution and psychology with *Sociobiology*; various theories, critiques, and applications of the field are provided.

“Beyond the Individual: Social and Cultural Perspectives”: One paragraph; cannot understand individuals without studying social and cultural effects.

“The Development of Social Psychology”: Three paragraphs; study of interpersonal behavior; field traced to Norman Triplett in 1895 and theories of group cyclists; historical events of 1930s created the need for the discipline, noted are the Nazis and Holocaust; Kurt Lewin and Solomon Asch came to America, their theories are listed, first to develop theories of social behavior modeled after natural scientists; Gordon Allport’s theories of stereotyping, prejudice, and racism are discussed.

“The Emergence of Cultural Psychology”: Five paragraphs; cultural effects on individual’s psychological processes; Wundt and the importance of culture; Margaret Mead and Gregory Bateson’s work on various cultures and their theories are discussed; became a strong force in psychology in 1980s and 1990s; theoretical differences between absolutism and relativism are discussed and how it affects contemporary research.

“The Profession of Psychology: Past and Present”: One paragraph; what psychologists do, the origins of psychology’s organizations.

“Psychologists Band Together: The American Psychological Association”: Four paragraphs; in 1892 at G. Stanley Hall lectures the leading American psychologists started discussions on forming an organization; the American Psychological Association was born and its growth is charted and discussed; the growing role of women in the APA is discussed; Mary Calkins, the first president of the APA in 1905, her bio is given; minority groups rise in the APA is discussed; Kenneth Clark first minority group president in 1970 and his research on race; Francis Cecil Sumner first African American to receive a PhD in psychology and his research.

Total: 30 pages.

Description

History Section: *Psychology: The Evolution of Science*

Schacter, Gilbert, & Wegner (2011) (note online textbook, not accurate page numbers as printed book, note, only textbook where entire first chapter is history section) begin the chapter with a discussion of William James. Schacter et al. tell the story of how James found psychology in Europe and brought it back to America. They state, “as William read about psychology and talked with those who were developing it, he began to see that this new field was taking a modern, scientific approach to age-old questions about human nature... questions to which only poets and philosophers had ever before offered answers” (p. 1). Schacter et al. then provide their definition of psychology, being the scientific study of mind and behavior. In this case “mind” being defined as the “ever flowing stream of consciousness” (p. 1), which is a very ‘Jamesian’ definition, once might say in comparison to other texts. Schacter et al. then discuss the mind and subjective experience, and how psychology studies these regions. They discuss how philosophers for thousands of years were pondering how our subjective psychological world related to the objective physical world, equating it to a “magic tunnel”, but now with brain scanning abilities we can see what parts of the brain are active. They reference James who asked how people “acquire complex skills”, but the authors state, “what William James could only ponder, modern psychologists can discover” (p. 1). Now the reader is introduced to the fact that what was once ponderings is now discovery for psychology. The discussion continues on a “Jamesian” course, discussing how the mind functions in the world, what it is “working” for.

The next heading is “Psychology’s Roots” where, as Schacter et al. put it, “modern psychology acknowledges its deep roots in philosophy. We will begin by examining those roots and then describe some of the early attempts to develop a scientific approach to psychology by relating the mind to the brain” (p. 5). They again reference James, discussing how he stated once that the first lecture in psychology he heard was the first he gave, which sets James up as within this narrative as the founder of the discipline. When discussing the ancient philosophers and the nature-nurture argument, Schacter et al. write “In some ways, it is quite amazing that ancient philosophers were able to articulate so many of the important questions in psychology and offer many excellent insights into their answers without any access to scientific evidence” (p. 5). This statement implies a level of surprise in the ability to articulate without science, foreshadowing the reader for the importance of scientific evidence. The authors go on to say that ancient philosophers “usually found it impossible to settle their disputes because their approach provided

no means of testing their theories” (p. 5), thus the narrative resolves this dilemma by way of the “test”.

Schacter et al. (2011) discuss some of psychology’s shortcomings, for example Franz Joseph Gall with phrenology and its “absurd extremes”, and then some of the pioneering researchers that connected the brain and the mind. They give credit to Wundt’s lab, marking it as “the official birth of psychology as an independent field of study” (p. 7). Schacter et al. go into detail of how Titchener then brought the school of structuralism to America and how James continued with a functionalist approach, which became the dominant school by the early 20th century.

In its own section, the “roots of clinical psychology” are discussed in which Freud and psychoanalysis is the primary focus, and the Humanistic response, and their determined canon of influential research and theorists for this area (see appendix). Despite Freud’s widespread cultural influence though, Schacter et al. describes the downfall of Freud’s popularity. One being on the critique that psychoanalysis is not empirically testable by scientific standards, and how, that Freud’s theories did not fit “the spirit of times”. Schacter et al. write:

In America, the years after World War II were positive, invigorating, and upbeat: Poverty and disease were being conquered by technology, the standard of living of ordinary Americans was on a sharp rise, and people were landing on the moon. The era was characterized by the accomplishments and not the foibles of the human mind, and Freud’s viewpoint was out of step with the spirit of the times (p. 14).

Schacter et al. then discuss the rise of humanism, and then behaviorism, and go into detail about the careers of the pioneering behaviorists. They discuss Watson’s later career in advertising, even showing one of his adds for toothpaste. According to the text the move to behaviorism for psychology was, in the words of Watson, to “put a stop to the endless philosophical debates in which psychologists were currently entangled, and it would encourage psychologists to develop practical applications in such areas as business, medicine, law, and education (p. 16). This statement then illustrates how psychology was to be in step with the spirit of the times. We see psychology’s roots in America were to be pragmatic and yield results in the major professions, to depart from philosophical debates (associated with Europe) and focus on methodology and application. Then the reader is given details of Skinner’s research during the rise of behaviorism, followed by the ultimate “devastating” critique by Chomsky, which marked the end of behaviorism’s dominance, according to the text.

The list of psychology’s schools of thought continue throughout the chapter, with cognitive psychology’s rise, and how they studied the “software of the mind” but had little to say about the “hardware of the brain” (p. 24). This segues to the rise of neuroscience and evolutionary psychology, and then leading to newer areas of social and cultural psychology.

In regards to cultural psychology, Schacter et al. (2011) open with the line “North Americans and Western Europeans are sometimes surprised to realize that most of the people on the planet are members of neither culture” (p. 28). They discuss how psychologists once thought that all psychological principles were universal, and then the text contrasts absolutism with relativism. This statement informs the reader of psychology’s ethnocentric history, and American specific roots.

Also worth noting in the first chapter, they are the only history section of any textbook studied to mention Wilhelm Wundt as a pioneering cultural psychologist, citing “he believed that a complete psychology would have to combine a laboratory approach with a broader cultural

perspective" (p. 28). No other textbooks provide this detail in their narrative. There is a discussion on the forming of the APA and APS, and how their numbers have grown so much over the years, specifically with women and minority groups, pointing to the new areas psychology is studying.

Epilogue: Schacter et al. (2011), Chapter two is “Methods in Psychology” and chapter three is “Neuroscience and Behavior”. The methodology chapter (2) gives some historical content when first explaining the principles, referencing the Greeks, Einstein, Galileo, to name a few. When discussing neurons in chapter three (3) discusses how philosophers would poetically describe the brain, and how Santiago Ramón y Cajal stained brain cells and made them visible (p. 78). These chapters provide some historical context to preface the material.

Psychology. Wade, Tavris, Saucier, & Elias (2010)

History section from Chapter 1: *An Introduction to Psychology*

Extended Table of Contents

Psychology’s Past: From the Armchair to the Laboratory (p. 17-24)

Four paragraphs; discusses how psychological questioning took place before it was a discipline; Aristotle and Zoroaster are referenced; the research and theories of Greek Hippocrates and British John Locke are provided; the theories and legacy of phrenology is listed, pioneered by Joseph Gall in the 1800s.

Sub headings:

“The Birth of Modern Psychology”: Three paragraphs; discussed implementation of scientific method for psychology; first laboratory to Wilhelm Wundt in Leipzig 1879, his theories, experimental method, and influence on North American psychology are all discussed; influenced Mark Baldwin opening U of T lab in 1889.

“Three Early Psychologies”: Seven paragraphs; discusses structuralism, functionalism, and psychoanalysis; *Structuralism*: coined by E. B. Titchener; the theories and methods of the school are listed. *Functionalism*: reactionary to structuralism; theories of the school are listed; lead by work of William James; inspired by Charles Darwin’s evolution. *Psychoanalysis*: founded by Sigmund Freud in Austria; his clinical practices and psychoanalytic theories and legacy are listed; *The Interpretation of Dreams* 1900/1953 first book published.

“Psychology’s Present: Behavior, Body, Mind, and Culture”: One paragraph, introduces contemporary lenses of *biological, learning, cognitive, sociocultural, and psychodynamic* psychology.

“The Major Psychological Perspectives”: Eight paragraphs with headings for each lens; *Biological*: the perspective is defined and research areas given with reference to Donald Hebb, 1949, at McGill; defines evolutionary psychology. *Learning*: the perspective is defined and research areas given; defines behaviorism, discusses its role in North America until the 1960s;

social-cognitive theory is defined *Cognitive*: the perspective is defined with research areas given; reference cognitive revolution of 1970s and its impact. *Sociocultural*: the perspective is defined and its research areas explained; defines what social psychologists and cultural psychologists do. *Psychodynamic*: the perspective is defined with reference to Freud; the fields research areas and effect on mainstream psychology.

“Two Influential Movements in Psychology”: Four paragraphs; the reactionary humanist movement of 1960s is listed with the theories of the perspective explained and its influence on positive psychology; the feminist movement of the 1970s is listed, gender inequality in research is discussed; racism in research is discussed with reference to the pioneering work of Robert Guthrie *Even the Rats Was White* 1976.

Descriptions

Prologue: The introductory chapter for Wade et al. (2010) begins with a section on *Psychology, Pseudoscience, and Popular Opinion* (p. 4-7). This sections aims to explain to the reader the differences between the ‘three P’s’ mentioned in the title. For instance the differences between psychobabble and real scientific research are laid out, and they discuss how students have common sense errors and other misunderstandings about human behaviors and by taking introductory Psychology it will improve their accuracy in this area. The next section is *Thinking Critically and Creatively about Psychology* (p. 7-17), where it is explained how to be objective and judge from reason and evidence over emotion or anecdote. Steps are then provided so the reader for how he or she can become a ‘critical thinker’. This gears students to become critical scientific thinkers within the field of Psychology, and to explain to new students’ what constitutes valid knowledge and approaches within the field.

History Section: *Psychology’s Past: From the Armchair to the Laboratory.*

Wade et al. state, “Now that you know what psychology is and what it isn’t, and why studying it requires critical thinking, let us see how psychology developed into a modern science” (p.17). Further, to introduce the history section, Wade et al. explain “...Unlike modern psychologists, scholars of the past did not rely heavily on empirical evidence. Often, their observations were based simply on anecdotes or descriptions of individual cases” (p. 17). Wade et al. go on to say that these “scholars of the past” were not necessarily wrong in their research, and some theories were later verified, however without empirical methodology they would commit “terrible blunders” (p. 17). The example given for one of these terrible blunders that lacked empirical methodology is phrenology.

Under the heading *The Birth of Modern Psychology* the “birth” of the discipline is credited to Wundt’s laboratory in Leipzig, which according to the texts marks the beginning of modern psychology.

The history section then lists the early psychological schools, contemporary psychological perspectives movements, including behaviorism in America and the cognitive revolution’s reaction. Then a separate section, “Two Influential Movements in Psychology”, provides some historical social context to what was taking place for American psychology in the late 20th century. Specifically in regards to the humanist movement and how it led to the positive psychology, and the gender and racial inequalities in America and how this had an impact for the direction of modern psychology research (see appendix).

Epilogue: *What Psychologists Do* is the final section of Chapter 1. It explains psychological research areas, programs, different types of psychologists and psychiatrists, and work done by psychologists in the community.

Psychology: Themes and Variations. Weiten & McCann (2010)

History section from Chapter 1: *The Evolution of Psychology*

Extended Table of Contents

Speculation to Science: How Psychology Developed (p. 5-24)

Four paragraphs discusses; the etymology of the term psychology; how psychology came to be a scientific discipline; Wilhelm Wundt opening the first psychology laboratory in Leipzig 1879; the academic context within Germany at that time.

Sub Headings:

“A New Science Is Born; The Contributions of Wundt and Hall”: Five paragraphs discusses; the theories, research, and academic goals of Wilhelm Wundt; psychology’s growth in North America, as displayed late 19th century laboratories opening; G. Stanley Hall’s influence and his “firsts” for psychology; James Mark Baldwin and James Gibson at U of T.

“The Battle of the “Schools” Begins: Structuralism versus Functionalism”: Six paragraphs discusses; the theories and definition of structuralism and introspection; pioneering work of Edward Titchener at Cornell; contrasts between structuralism and functionalism; the definitions, theories, and practice of functionalism; pioneering work of William James at Harvard, his contributions, *Principles of Psychology* 1890; influence of Charles Darwin and natural selection; James McKeen Cattell and John Dewey, their research; Margaret Floy Washburn, first female PhD, *Animal Mind* 1908; Leta Stetter Hollingworth, her research; Mary Whiton Calkins, first female APA president.

“Watson Alters Psychology’s Course as Behaviorism Makes Its Debut”: Eight paragraphs discusses; the definition of behaviorism, in contrast to previous schools, in early 1900s; its foundation by John B. Watson, his theories; its legacy in psychology; reaction of Gestalt theorists in Germany.

“Freud Brings the Unconscious into the Picture”: Seven paragraphs discusses Sigmund Freud; his research in Austria and treatments for patients; his theories, development of psychoanalysis and the unconscious and their definitions; reactions and legacy of his work in culture; growth in 1920s; followers Alfred Adler and Carl Jung; lectures at Clark University 1909.

“Skinner Questions Free Will as Behaviorism Flourishes”: Ten paragraphs discusses B. F. Skinner; influence of Watson and Pavlov; a brief background to his research; his theories and experiments, impact and influence of his work; *Beyond Freedom and Dignity* 1971, *Walden Two*

1948, and radical behaviorism; public reactions, interpretations, and cultural impacts of his work; behaviorisms success until 1960s.

“The Humanist Revolt”: Three paragraphs discusses; its reaction and critique of mainstream psychology 1950s; its definition and theories; prominent architects Carl Rogers and Abraham Maslow, their theories.

“Psychology in Canada”: Four paragraphs discusses the growth of psychology; formation of laboratories, courses, and CPA; G. Stanley Hall at John Hopkins, first laboratory in America; James Mark Baldwin at U of T first laboratory in Canada; Dalhousie 1838 first course; McGill 1924 first department; CPA formation 1939; growth of women in the field; Brenda Milner at McGill.

“Psychology Comes of Age as a Profession”: Five paragraphs discusses; the definition of applied and clinical psychology; until 1937 clinical small part of APA; the impact of WWII for clinical growth, the new programs and groups formed, reactions; current status of the field.

“Psychology Returns to Its Roots: Renewed Interest in Cognition and Physiology”: Eleven paragraphs discusses; cognitive psychology, its definition and growth in 1960s; Swiss Jean Piaget, Noam Chomsky, and Herbert Simon and their research; the award winning research of James Olds 1956, Roger Sperry 1981, David Hubel and Torsten Wiesel 1962, 1963; Donald Hebb at McGill, his research and academic biography, *The Organization of Behavior: A Neuropsychological Theory* 1949, his legacy; the development and theories of neuroscience; the impact on contemporary research.

“Psychology Broadens Its Horizons: Increased Interest in Cultural Diversity”: Five paragraphs discusses; Western and non-Western research and the importance of culture for psychology; social movements of the 1960s and 1970s; multiculturalism; contemporary research areas of cultural psychologists.

“Psychology Adapts: The Emergence of Evolutionary Psychology”: Four paragraphs discusses; the definition of evolutionary psychology and its research aims; the influence of Darwin and James; research of Silverman at York 2000; 1960s growth of evolutionary biology and 1980s growth of evolutionary psychology; pioneers David Buss, Martin Daly and Marjo Wilson at McMaster; Leda Cosmides and John Tooby and their research; 1990 organizational meetings in Palo Alto, Cali and formation of discipline, legacy, and critics.

“Psychology Moves in a Positive Direction: The Positive Psychology Movement”: Four paragraphs discusses; Martin Seligman, 1997, APA president, his epiphany about psychology and the development of positive psychology, his research and establishing *Journal of Positive Psychology*; pioneers Mihaly Csikszentmihalyi, Christopher Peterson, Barbara Frederickson; definition of the field and its research areas, aims, and critics.

Description

History Section: *From Speculation to Science: How Psychology Developed*

Weiten and McCann begin their history section by discussing psychology's "progress" over time, from "philosophical speculations about the mind into a modern science" (p. 5). Wade et al. discuss the etymology of the term *psychology*, with reference to its Greek origins and how it was originally the study of the soul.

Next, Weiten & McCann begin a narrative discussing how psychology "developed". They discuss how psychology acquired its "intellectual parents" when Wilhelm Wundt "mounted a campaign to make psychology an independent discipline rather than a stepchild of philosophy or physiology" (p. 5). According to the narrative, after opening his lab in 1879 historians have now "christened" that the year of "psychology's date of birth" (p. 5). The narrative likens the growth of psychology to the growth of a human being, by opening the history section with many developmental and parenting metaphors. Weiten & McCann continue the discussion with, "although psychology was born in Germany, it blossomed into adolescence in America. Like many adolescents, however, the young science was about to enter a period of turbulence and turmoil" (p. 6). This statement forecasts the arrival of psychology's various schools of thought, including 'controversial' schools like psychoanalysis and behaviorism. Making psychology analogous with an "adolescent orphan" attempts to give the reader an understanding of how psychology developed in America. Weiten and McCann discuss how the various schools of thought sent psychology in different directions, however psychology eventually found its footing after the Second World War when, "the pre-war orphan of applied and professional psychology rapidly matured into a robust, powerful adult" (p.16). Symbolically, now that psychology is an "adult" it can be considered, according to Weiten and McCann, a proper scientific discipline.

The narrative, with its allusions and metaphors, helps guide the reader through the list of pioneers, theories, and movements, which made psychology what it is today (see appendix). In the section titled *Humanist revolt* they state that the common criticism of the aforementioned theories (behaviorism and psychoanalysis specifically) was that they "suggested that people are not masters of their own destinies" (p. 13). These theories would no longer dominate psychology because the discipline, now an adult, would be master of its domain (no longer influenced by step-parents, or adolescent issues, etc.) Autonomy is the key here, and ability for individuals (and psychology the discipline) to choose its own path.

The section headings that follow all begin with "Psychology..." and then the specific task it was facing at that time/subject in history, in order to represent from that point on in history psychology's autonomy and adulthood, e.g. *Psychology Broadens Its Horizons: Increased Interest in Cultural Diversity* (see full listing in the appendix).

The history section in Weiten and McCann one of the largest sections of all the textbooks analyzed and the authors do give more historic context than most textbooks. For example, they discuss how psychology came to America and how it was mostly a North American and European centered school of thought, admitting that many of its theories were ethnocentric. They also discuss how the Second World War had important influence on psychology's modern formation and application, and how the 1960's liberation movements pushed psychology in new directions. Also the excessive use of parenting and developmental metaphors is very interesting in framing psychology's historic narrative.