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ABSTRACT

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 (Author)

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EFFECTS OF TEXTBOOK AND TEACHER DEFINITIONS ON STUDENT

DEFINITIONS OF PSYCHOLOGY

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Abstract

Two teachers gathered psychology definitions from 1000 college students enrolled in introductory psychology classes on the first and last days of class during two successive fall terms at the University of Tennessee. A word analysis of first-day definitions suggested three major themes: behavior, mind/brain, and environment. These themes showed that the conventional wisdom of these students about how psychology is defined remained consistent, in most ways, with actual textbook definitions. Last-day definitions revealed very close agreement with definitions contained in the text and used by the teacher in the introductory psychology class. Introductory textbook authors and teachers of introductory classes should understand prevailing, conventional definitions of psychology and be aware of the influence a textbook definition and the definition teachers use in class have on the students' view of psychology.

EFFECTS OF TEXTBOOK AND TEACHER DEFINITIONS ON STUDENT
DEFINITIONS OF PSYCHOLOGY

Defining psychology for students presents no easy task. A moment of reflection suggests that a multiplicity of definitions have existed and exist today. This fact becomes evident in the metatheoretical articles of journals like American Psychologist (cf. Hebb, 1974; Kimble, 1984; Lapointe, 1970; Peterson, 1976; Piaget & Kamii, 1978; Rogers, 1973; Russell, 1970; Skinner, 1975, 1987), or American Scientist (Kessen & Cahan, 1986). Another source that attests to the change and variance in definitions comes from a look at introductory textbooks. An exploration of these texts reveals changing trends in the way they define psychology.

Henley, Johnson, Jones, and Herzog (1989), reported that a finite set of definitional categories emerged from an analysis of such texts, but, over time, textbook definitions showed Kuhnian-paradigmatic trends and shifts. These shifts included the return of mentalism and the stabilizing of "behavior" in current definitions of psychology. Beyond that, specific terms involved in the field of psychology during any certain period of time frequently ended up in textbook definitions after a "paradigm shift." According to Kuhn, "Textbooks, however, being the pedagogic vehicles for the perpetuation of normal science, have to be rewritten in whole or in part whenever the language, problem-structure, or standards of normal science change. In short they have to be rewritten in the aftermath of each scientific revolution" (p. 137).

Against this general backdrop of how psychologists define psychology, we were curious to see how college students, with little or no previous exposure to psychology, would define the field. Further, we wanted to compare these

results with trends suggested from textbook analyses. This study investigates the effects of textbook and teacher-used definitions on student definitions of psychology. Would naive student definitions correspond to textbook definitions; and, if so, would the correspondence be with older or more recent texts? How closely will students' definitions at the end of a school term reflect the definition used in their textbook or by their teacher?

Method

The study sample included 1000 students enrolled in two fall terms of an introductory psychology course at the University of Tennessee, 800 in the first term and 207 in the second term. Early in the hour of the first and last class meetings, teachers asked these subjects to write a definition of psychology. No other demand characteristics were provided. The textbooks used were Understanding Human Behavior, 5th Ed. (McConnell, 1986), during the first fall term, and Psychology: An Introduction, 3rd Ed. (Lahey, 1989), during the second fall term. The teacher presenting the first term class spoke of a psychology definition in general terms, but constantly used a similar set of phrases. Throughout the second term, the teacher consistently used the textbook definition. Although we collected no demographics; previous in-house demographic surveys describe the Introductory Psychology course composition as predominantly first and second-year college students having no previous exposure to psychology in high school or college.

From our requests, we received 1074 readable definitions: (657) first day, first term; (136) last day, first term; (165) first day, second term; and (116) last day, second term. Some students did not turn in definitions and a few submitted illegible definitions. We then carefully reviewed all definitions several times, recording and counting all key words (i.e. all

descriptive nouns, verbs, adverbs, and adjectives) that directly developed the definition of psychology. Word analysis consisted of frequency counts, percentages, theme and function categorization, and structural pattern recognition.

Understanding Human Behavior is the title of the McConnell text used in the first-term class. It did not contain a set definition of psychology, however, the teacher-used definition included such phrases as: "study of human behavior; social, biological, and environmental influences; and from different points of view." The Lahey text, used during the second term, provided a definition of psychology on page seven, "The science of behavior and mental processes." The teacher consistently used this definition throughout the term.

RESULTS

Preliminary results of the word analysis on 657 first-day, first-term definitions showed three topic themes as central to over 98% of the definitions. These themes emerged as "behavior," "mind/brain," and "environment/society" and were also prominent in the 165 student definitions received on the first day of the second term. The three central themes appropriately categorized 96% of the second-term, first-day definitions. These three themes and their combinations differentiated all first-day, student definitions except for nine definitions in the first term and seven in the second term. Table one shows our categorization of first-day definitions by the three central themes.

Insert Table 1 about here

We performed the word analysis on the 252 definitions received from students on the last day of classes. (136 "first-term" 116 "second-term") Again, we had made no reference to the text, nor had we mentioned a teacher definition. The teacher requested that students write a definition of psychology and turn it in. The word analysis revealed that the same three central themes emerged in 98% of the first and 96% of the second-term definitions. We could logically categorize by these themes all but two definitions from the first term and four from the second term. Table two shows our definition sort by the central themes and their combinations, including, as in table one, the number and percentage of definitions contained in each category.

Insert Table 2 about here

In the total of 1074 readable definitions we received, students defined psychology in terms of "behavior" 31% of the time, with the definition "psychology is the study of human/individual behavior" occurring 138 times. Psychology was defined as "mind," "mental activity," or "brains" in 13% of the responses and as "environment" or "society" 1% of the time. Most students used combinations of these categories with "mind/brain" and "behavior" occurring in 28% of the cases, "behavior" and "environment/society" in 15%, "mind/brain" and "environment/society" in 3%, and all three of these categories combined in 6% of the definitions. Only 22 definitions received could not be placed in one of the above categories.

Our word analysis of the first-day definitions revealed that students frequently used "the study of human behavior" as a common word pattern or

phrase to define psychology. This exact phrase existed in 58 of the 657 first-day, first-term definitions and in 20 out of 165 of the first-day, second-term student definitions. Other commonly-found word patterns combined key words into definitions and revealed what function or role the words played in the definition, for example: the discipline, how/method, how and why, about what/subject/concerns, who, relation to, biological, etc. (see Tables 3 and 4) Tables five and six show key word lists by their function in the student psychology definitions submitted the last day of class.

Insert Tables 3 - 6 about here

These categories also revealed similar structure for student definitions of psychology. The sort for common phrases lead to the discovery that the "last-day" definitions showed much less variability of phrases and word patterns that students used to define psychology. Table seven includes the widely-used sentence structures and phrases presented in "first-day" student definitions from both the first and second terms of introductory psychology classes and table eight reflects definitional structure from "last-day" student submissions.

Insert Tables 7 and 8 about here

Use of the phrase "the study of human behavior" increased from 9% to 25% in one term and from 12% to 16% in the other term. The phrase shows a similarity to Understanding Human Behavior, the title of the McConnell text

Fifty-two

used in the first-term class. [REDACTED] student definitions from the first term reflected phrases the teacher used to describe and define psychology: ("study of human behavior; social, biological, and environmental influences; and from different points of view."). Phrases equivalent to the second-term text and teacher definition of psychology showed up in 42 out of the 112 definitions from the second term class. ("The science of behavior and mental processes." Lahey, p. 7) Student "last-day" definitions received from the class using the Lahey book identically matched the definition used by the text and the teacher in 24 of the total 112 submitted definitions.

The words "study" and "science," almost exclusively, identified psychology as a discipline in student definitions. "Study" classified the description of psychology in 594 of the 657 definitions from the first-day, first-term sample; while, in the same sample, "science" identified psychology's description in 57 of the 657 definitions. By the last-day sample of the first term, 121 out of 136 definitions submitted contained "study," and 19 of the 136 contained "science." During the second term, students used "study" in 130 of the 165 definitions from the first day and in 80 out of the 116 received on the last day; while "science" appeared in 7 definitions out of the 165 collected the first day and in 26 of the 116 from the last day. (see Table 9)

Insert Table 9 about here

After analysis of student definitions, we compared the results with textbook definitions gathered, analyzed, and presented in "Definitions of Psychology", (Henley, Johnson, and Jones, 1989). (see Table 10) Student

definitions consistently showed close similarity to textbook definitions, varying only in the specific words used, whether compared with definitions in either past or more recent textbooks. The high percentage of student definitions using the exact phrase "Psychology is the study/science of..." compares very consistently with the finding that this same phrase appeared in about 80% of the textbooks! We discuss later the comparison of particular word usage: "study," "science," "environment" and "mind." The common words and phrases, and often very similar word patterns, used in student definitions closely reflect the words, phrases and patterns found in psychology textbooks' definitions for over 100 years.

Insert Table 10 about here

DISCUSSION

Many students used the same words to define psychology. A simple word analysis easily categorized these words by three central themes. Functions, served by the words within the psychology definitions, emerged during a sort of the key word lists gleaned from the definitions. The words, themes, and their functions quickly revealed similar structures students used for forming the definitions. Definitions reflect great similarity to each other and those of textbooks and teachers.

Student definitions revolved around three central themes; "behavior," "mind/brain," and "environment/society." "Behavior" for the students included, not only, behavior per se, but also, "doings" and "actions" as well. Examples are: "Psychology is the study of human behavior and why people behave in this way," and "Psychology is the science that studies people and how they

act." The category "mind/brain" was extended to include all unseen processes, and was referred to often as "thinking" or "reasoning." Examples are:

"Psychology is the study of the human mind, and how and why it works the way it does," and "Psychology is the study of people and their thinking." The "environment/society" category included situations, conditions, and the influence of other people. Examples illustrating this category are:

"Psychology is the study of man and the different aspects of life that affect him," and "Psychology is usually dictated by definition to be the study of human nature as it relates to society. I prefer to add as it relates to the individual and the responses it gets. How individuals act in different situations."

Students view psychology as either a "study" or "science" "discipline" with "study" being the most popular. Within a definition, after identifying psychology as a discipline, students described what they believed to be the "methods" of, or the "how and why" of psychology. About ten words seemed to fulfill this descriptive category and usually included "observing," "exploration," "understanding," and "tries to figure out." The "subject" or "what" of psychology followed in the definition and included a wide range of topics and variables within each topic. Students mentioned "humans," "behavior," and "mind," or aspects of these topics, most frequently as "concerns" of psychology. Students further explained "how" these psychological concerns were "related to" a person's "surroundings," "situations," "environment" and "society," i.e. "helping," "influenced by," "treatment," "affects"/"effects," etc. Of course, many other individual interests such as "motivation," "emotion," "attitudes," and "personality" served more than once in the definitions. Many "biological" words played roles in the definitions, usually referencing concepts like "heredity" and "development." "Brain" holds

a special place in the definition and could be categorized with both "mind" and the biological terms! That plays right into the age old controversy of what is and/or where is the mind and does it exist at all?! "Self awareness," also a topic of much controversy, surfaced in student interpretations of psychology as their definitions contained "self," "we," "us," "conscious," and "ourselves," etc. quite regularly. Defining "units" of psychology occurred by using a few terms such as "characteristics," "traits," "factors," "theories," "aspects," and "variables."

The standard phrasing of "psychology is the study/science of (human) behavior and/or mental processes and/or [one of the other topics mentioned]" or "psychology (attempts to understand) [one of the topics] and (tries to) (influence) (society/environment) or (find out how) (we) (develop)" remains constant across all four sampling conditions. Students managed closure on a definition of psychology with a surprisingly finite set of words, phrases and sentence structure.

We found quite revealing the similarity in structures among student definitions and between their definitions and those used in textbooks and by teachers. Psychology definitions presented on the first day of class reflect the conventional wisdom in today's world context as passed on through textbook definitions to the students' own personal experience. The definitions from the "last-day" also mirror the textbook and teacher definitions of psychology as assimilated within the Introductory Psychology course.

How did student psychology definitions compare to those in past and recent textbooks? In our article previously mentioned, we analyzed 233 textbooks covering a 100-year period (1887-1987). Student definitions differed significantly from definitions used in recent texts (1980 to date) with respect to the use of the terms "science" and "study" to describe

psychology. In more recent textbooks, slightly over 50% define psychology as a science and just over 40% refer to psychology as a study. Student definitions used "study" 86% and "science" 10% of the time, i.e. 925 definitions described psychology as a study, while 109 referred to psychology as a science. The use of the key words "environment" and "mind" provided two major distinguishing factors between textbook and students' definitions. Neither term is foreign to the texts; but both were most popular in psychology definitions long before these students were born.

"Environment," at its height, appeared in only three to seven percent of the textbook definitions, and usually in conjunction with "behavior." "Environment" was not part of any definitions found in the textbooks since 1970. "Mind," on the other hand, has had a roller coaster career in textbook definitions of psychology. The earliest definitions, those before 1930, were predominantly mentalistic. Then, following something of a Kuhnian paradigm shift (Kuhn, 1962), reference to "mind" all but disappeared from textbook definitions from 1930 to 1970. In texts of more recent years, "mind" and "mental activity" returned to definitions of psychology. "Mind and behavior" and "behavior and mental activity" account for 27% of the textbook definitions of the 1980s. The general pattern of using "behavior" most frequently in psychology definitions with "mind and behavior" coming in second consistently relates recent textbooks and the students for whom they are written.

"Kuhn himself was aware that textbooks as the primary vehicle of early education played both a key role in the propagation of a science and that his own views could be reflected in a close analysis of changing trends in such textbooks." (Henley, Johnson, Jones, and Herzog, p. 145) We believe authors writing introductory psychology textbooks should know historical psychology definitions as described by past textbooks. The authors should also ascertain

prevailing, conventional definitions commonly used by people both inside and outside of the field of psychology before including a definition of psychology in their text. The textbook authors need to use this knowledge in determining the point at which to begin defining psychology. Where do they want to guide student perceptions about present-day psychology. "As American psychologists we should have at least some awareness of the discipline's evolution within this country and century." (Henley, Johnson, Jones, and Herzog, p. 143)

Teachers, also, must be aware of their students and what conventional wisdom about psychology students bring to class. At any point in time, students initially possess a view of psychology constructed from knowledge accumulated by parents, teachers, society, or etc. These significant people in the students' lives collected that knowledge from textbooks and news reports of earlier times. Those views most probably formed under very different world paradigms of learning, science, and psychology. "Indeed the biases or theoretical bents reflected within a general psychology textbook definition portray much of the mood of that time" (Henley, Johnson, Jones, and Herzog, p. 144).

Teachers must also be aware that "The definitions we give the naive (i.e., beginning students), such as those found in introductory textbooks, cannot be assumed free of our biases either." (Henley, Johnson, Jones, and Herzog, p. 144) They must remember the strong influence a textbook definition and their own definition of psychology will have on the students' perception of psychology. They should use a definition and pick a text wisely for their students' "introduction to psychology."

We believe this study reaffirms that whatever definition of psychology a text offers to a college, introductory-psychology class does create or at least influences the definition of psychology that the students take away with

them. The introductory text definition of psychology and the definition used by the teacher may be the only one ever studied by the students and the one they will use in the future. Therefore, it is important for textbook authors and teachers to become aware of past, present, and future psychology definitions. What we pass along develops the psychology of today and tomorrow. Historical psychology shifts to prevailing, conventional psychology through definitions. Authors describe the "new," current psychology with their textbook definition. We as teachers translate psychology, projecting it into the future by defining psychology for our students, a vital responsibility.

Table 1

First-day Student Definitions Sorted by Central Themes

	<u>First-term</u>		<u>Second-term</u>	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Behavior	196	30%	61	37%
Mind/Brain	80	12%	39	24%
Environment/Society	8	1%	7	4%
Behavior and Mind/Brain	170	26%	39	24%
Behavior and Environment/Society	119	18%	7	4%
Mind/Brain and Environment/Society	27	4%	3	2%
All Three Central Themes	48	7%	2	1%
Other	9	1%	7	4%

The themes categorize 99% of first-term and 96% of second-term definitions.

First-term N = 657 definitions turned in out of 800 students enrolled

Second-term N = 165 definitions turned in out of 207 students enrolled

Table 2

Last-day Student Definitions Sorted by Central Themes

	<u>First-term</u>		<u>Second-term</u>	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Behavior	40	29%	33	29%
Mind/Brain	10	7%	9	8%
Environment/Society	0	0%	1	-%
Behavior and Mind/Brain	32	24%	56	*50%
Behavior and Environment/Society	32	24%	4	4%
Mind/Brain and Environment/Society	5	4%	2	2%
All Three Central Themes	12	9%	3	3%
Other	2	1%	4	4%

The themes categorize 98% of first-term and 96% of second-term definitions.

First-term N = 136 definitions turned in out of 800 students enrolled

Second-term N = 116 definitions turned in out of 207 enrolled

* This category would contain the textbook definition!

Table 3

Key Words by Function in Student Definitions: First-day, First-term

Discipline: study(ing)(ies) [594/657] science/scientific [57/657]

How/Method, How and Why: method, theories, understand, experiments, observation, watching, research, learning

About what/subject/concerns:

Who: [humans, person, (503)], individual, unique people, animals (70), living beings, organism, species

[Behavior: (500)] react(ions) (106), do, act(ions) (138), interactions, response

[Mind: (293)] thoughts, reasoning, mental processes, configuration, problem solving, functions

Also: attitudes, [moods, emotions, feelings (53)], habit, normal, personality, perception experience motivation, life, memory, needs, values, wants, beliefs, adaptation, communicate(tion), deviation, mentally ill, abnormal

Relation to: social, society, others, groups [69/657]; environment, conditions, nature, situations [155/657]

How relate/Way: control of, predict, evaluate, decision making, causes of/reasons for [175/657]

Biological: nervous system, body, biological, physical, senses, heart/vital organs, heredity, genetic, genes, development, origin, brain and its activity [47/657]

Self awareness: self, (sub)conscious, soul, intrapsychic, psyche, psychoanalytic

Units: variables, traits, characteristics, stimuli, wholeness

N = 657 definitions turned in out of 800 students enrolled

Table 4

Key Words by Function in Student Definitions: Last-day, First-term

Discipline: study [126/136] science/scientific [19/136]

How/Method, How and Why: analyze(ing), attempting, explain, understand, effort, try, determine, find out, experiment, watch, observe, learned, knowledge, theories

About What/Subject/Concerns:

Who: humans, people, individual, unique person(al), animals, being, organism

Behavior(s): behave [125/136], actions, act, do, react(ions), respond/response

Mind: reasoning, cognition(tive), inner, mental process(es), thoughts, think, function(s), workings

Also: attitudes, personality, motivation, emotion, needs, desires, abnormal, deviation, problem, likes/dislikes, moods, feelings, normal, living/life, patterns, perception/perceive

Relation to: environment, situations, conditions, nature, society, surrounding, social, others, group(s), each other, their, they

How Relate: interaction, relation(s)(ship), relate (to), with respect to, based on, causes, reasons for, why, makes us, shape, leads to, due to, originate, effect, affect, influence (by), with regards to, remedies, treatment, treating, help, therapy, predict, justify, way, manner

Biological: heredity, genes/genetic, innate, physical, body, physiology, development, (brain and brain activity)

Self Awareness: self, (sub)(un)conscious, us, we, our, one's, intrapsychic

Units: characteristics, traits, facts, aspects, factors, area, field, phenomenon, state, variable, question, parts, kinds, types, stimulate, means, involves, looks at, deals with, associated with encompasses, covers, takes into account, includes, discusses, made up of, whole, complete, entire, all

Approaches/Viewpoint: holistic, biological, social/behavioral, intrapsychic]

N = 136 definitions turned in out of 800 students enrolled

Table 5

Key Words by Function in Student Definitions: First-day Second-term

Discipline: study(ing)(ies) [130/165] science [7/165]

How/Method, How and Why: observation, theories, looks(s)(ing), understand(ing), learning, try(ing), attempting, analysis, classification, discovering, experiments, explain, finding

About What/Subject/Concerns:

Who: human(s) [75/165], people(s) [56/165], man, person(s), individual(s)(ly), being(s), animals, creatures

Behavior(s)(al): behave, act(ions), do(es), react(ions), response(es)

Mind(s): mental(ly), thought(s), think(ing), problems, process(es), activity, function(s), work(s)(ing)

Also: emotion(s)(al), feel(s)(ings), ability, attitudes, personality(lities), beliefs, habits, moods, morals, needs, life/live/living, illness, abnormalities, normal

Relate to: environment, group, nature, others, relate(tions)(ship), society, situations(s), surroundings

How Relate: affect, effect(s)(ed), influence, cause(s), changed, control, dictated, interpretation, reasons, treatment, way(s)

Biological: physical(ly), physiological, body, development, innate, brain(s), adolescence, adulthood, birth, childhood, death, old age, middle age

Self Awareness: self, us, we, ourselves, psyche

Units: aspects, characteristics, complexities, concept, factors pattern(s), traits, whole

N = 165 definitions turned in out of 207 students enrolled

Table 6

Key Words by Function in Student Definitions: Last-day Second-term

Discipline: study(ing)(ies) [80/116], science [26/116]

How/Method or How/Why: research, exploration, assessed, watching others, observational, looks at, systematic, tries to figure out, understanding, learning, express, perform

About What/Subject/Concerns:

Who: human(s), people(s), man, person, individual

Behavior(s): do, act(ing)(ion), behave(s), react(ing)(ion), interact(ion), relate to

Mind: mental, thoughts, think(ing), ideas, reason(ing), logic behind, cognitive, activity in the mind, process(es), functions, how work(ing)

also: abilities, personlity(lities), attitudes, emotion(s)(al), feel(ing)(s), abnormalities and disturb(ed)(ances), problems

Relation to: social, society, environment, surrounding

How/Way Relate: help(ing) by, affects, effects, influence(ed) by, nurturing, positive sense, better

Biological: physical maturation/maturing, development(al)(ed), heredity, physiological, brain

Self Awareness: self thought/recognition, us, we, themselves, yourself, each other, (sub)conscious

Units: theories, characteristics, aspects, combined, total, encompass

N = 116 definitions turned in out of 207 students enrolled

Table 7

Structure of Student Definitions First-day

	<u>First-term</u>	
	<u>n</u>	<u>%</u>
"the study of human behavior"	58	9%
study or studies, etc.	594	90%
science	57	9%
used two aspects to define	316	48%
used three aspects to define	48	7%
used "mind," "environment," or "behavior" and added in various other things such as: attitudes, moods, desires, needs, etc.	18	3%

N = 657 definitions turned in out of 800 students enrolled

	<u>Second term</u>	
	<u>n</u>	<u>%</u>
"the study of human behavior"	20	12%
study, studies, etc.	130	79%
science	7	4%
the study of the human mind	56	34%
the science of human behavior	5	3%
the study of human behavior plus other things such as: mood, attitude, desire, needs, etc.	13	8%

N = 165 definitions turned in out of 207 students enrolled

Table 8

Structure of Last-day Student Definitions

	First-term	
	n	%
"study" used in	110	81%
"science" used in	8	6%
[both] "science" and "study(ies)" in	11	8%
[neither] used	5	4%
"study of human behavior"	8	6%
study of (human/individual) behavior	34	25%
study of the (human) mind	9	7%
[contained both the above phrases]	15	11%
[a "behavior" phrase plus something else]	10	7%
both mentioned plus something else	4	3%
"science" + behavior	15	11%

McConnell text title is Understanding Human Behavior

N = 136 definitions turned in out of 800 students enrolled

	Second-term	
	n	%
"study(ing)(ies)" used in	80	69%
"science" used in	26	22%
"study of (human) behavior"	18	13%
(process of) study(ing) of (human/people's) behavior and(their) mental process(es)/(activity) [or](workings of the mind)	*18	13%
science of behavior and mental process(es)	**24	18%

N = 116 definitions turned in out of 207 students enrolled

* some slight variation in word use, but almost the exact "idea"
** almost no variation and identical to the Lahey text definition

() parentheses indicate slight word variation among very similar definitions

Table 9

Use of "Study" and "Science"

	<u>STUDY</u>		<u>SCIENCE</u>	
	<u>First term</u>	<u>Second term</u>	<u>First term</u>	<u>Second term</u>
First day	90%	79%	9%	4%
Last day	89%	69%	14%	22%

(always rounded up the rounding errors)

First-term, First-day N=657 definitions turned in from 800 students enrolled
 First-term, Last-day N=136 definitions turned in from 800 students enrolled
 Second-term, First-day N=165 definitions turned in from 207 students enrolled
 Second-term, Last-day N=116 definitions turned in from 207 students enrolled

Table 10

Textbook Definitions

From Henley, T. B., Johnson, M. G., Herzog, H. A. & Jones, E. M. (1989).
 Definitions of psychology. *Psychological Record*, 39, 143-152.

Time Period and Sample Size	Definition	Number of Occurrences	Percentage
1980 - 1987 N = 76	Behavior	31	41%
	Behavior and its Causes/Applications	5	06%
	Behavior and Mental Processes/ Mental Activity	16	21%
	Behavior and Experience	4	05%
	Mind and Behavior	5	06%
	People/Human Conduct/ Human Nature	3	04%
	Other	5	06%
	No definition	7	09%
1970 - 1979 N = 84	Behavior	42	50%
	Behavior and its Causes/Application	1	01%
	Behavior and Mental Processes/Mental Activity	8	10%
	Behavior and Experience	2	02%
	Mind and Behavior	1	01%
	Mind	1	01%
	Mental Life/Mental States	1	01%
	People/Human Conduct/Human Nature	2	02%
	Other	7	08%
No definition	19	22%	
1950 - 1969 N = 40	Behavior	24	60%
	Behavior and Experience	2	05%
	Behavior in Environment	1	03%
	People/Human Conduct/Human Nature	5	12%
	Other	5	12%
	Mind	3	08%
No definition	0	.	
1930 - 1949 N = 18	Behavior	5	27%
	Experience and Behavior	3	17%
	Behavior and its Causes/Applications	1	05%
	Behavior in Environment	1	05%
	Physical and Mental Activities in Environment	1	05%
	Activity	2	11%
	People/Human Conduct/Human Nature	2	11%
	Other	2	11%
	No definition	1	05%
1887 - 1929 N = 15	Intelligent Behavior	1	07%
	Mind and Behavior	1	07%
	Experience	1	07%
	Mind	3	20%
	Mind and Nervous System	1	07%
	Consciousness/Conscious Processes	2	13%
	Mental Life/Mental States	2	13%
	Reaction to Environment	1	07%
	Phenomena of Self	1	07%
	Soul	1	07%
	No definition	0	.

Note: Total N = 233. These should be understood as being of the form "Psychology is the science/study of . . ."

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