Applied research	scientific study that aims to solve practical problems.
Basic research	pure science that aims to increase the scientific knowledge base.
Behavioral psychology	the scientific study of observable behavior, and its explanation by principles of learning.
Behaviorism	the view that psychology (1) should be an objective science that (2) studies behavior without reference to mental processes.
Biological psychology (neuroscience)	a branch of psychology concerned with the links between biology and behavior.

Biopsychosocial approach	an integrated approach that incorporates biological, psychological, and social-cultural levels of analysis.
Case study	an observation technique in which one person is studied in depth in the hope of revealing universal principles.
Clinical psychology	a branch of psychology that studies, assesses, and treats people with psychological disorders.
Cognitive psychology	the scientific study of all the mental activities associated with thinking, knowing, remembering, and communicating.
Confidentiality	an ethical principle the research participants' identity and information remain private in any research study.

Confounding (extraneous) variables	a factor other that the independent variable that might produce an effect in an experiment.
Control group	in an experiment, the group that is not exposed to the treatment; contrasts with the experimental group and serves as a comparison for evaluating the effect of the treatment.
Correlation	a measure of the extent to which two factors vary together, and thus of how well either factor predicts the other.
Correlation coefficient	a statistical index of the relationship between two things (from -1 to +1).
Counseling psychology	a branch of psychology that assists people with problems in living (often related to school, work, or marriage) and in achieving greater well-being.

Critical thinking	thinking that does not blindly accept arguments and conclusions. Rather, it examines assumptions, discerns hidden values, evaluates evidence, and assesses conclusions.
Debriefing	the postexperimental explanation of a study, including its purpose and any deceptions, to its participants.
Dependent variable	the outcome factor; the variable that may change in response to manipulations of the independent variable.
Descriptive statistics	a group of procedures that summarize or describe a set of data. These procedures include the measures of central tendency and measures of variability.
Double-blind procedure	in an experiment when neither the participants nor the researchers know who belongs to the control group and who belongs to the experimental group. Only after all the data have been recorded (and in some cases, analyzed) do the researchers learn which individuals are which.

Evolutionary psychology	the study of the roots of behavior and mental processes using the principles of natural selection.
Ex post facto (or quasi-experiments)	a non experimental research technique in which preexisting groups are compared on some dependent variable, it is a type of study that can act as a genuine experiment.
Experiment	a research method in which an investigator manipulates one or more factors (independent variables) to observe the effect on some behavior or mental process (the dependent variable). By random assignment of participants, the experimenter aims to control for other relevant factors.
Experimental group	in an experiment, the group that is exposed to the treatment, that is, to one version of the independent variable.
Functionalism	a school of psychology that focused on how our mental and behavioral process function- how they enable us to adapt, survive, and flourish, introduced by William James

Gestalt psychology	an organized whole. Gestalt psychologists emphasized our tendency to integrate pieces of information into meaningful wholes.
Hawthorne effect	a phenomenon in which participants alter their behavior as a result of being part of an experiment or study.
Hindsight bias	the tendency to believe, after learning an outcome, that one would have foreseen it. (also known as the I-knew-it-all-along phenomenon)
Humanistic psychology	historically significant perspective that emphasized the growth potential of healthy people and the individual's potential for personal growth.
Hypothesis	a testable prediction, often implied by a theory.

Illusory correlation	the perception of a relationship where none exists.
Independent variable	the experimental factor that is manipulated; the variable whose effect is being studied.
Inferential statistics	techniques that allow researchers to make generalizations (or to infer) about the populations from which the samples were drawn.
Informed consent	an ethical principle that research participants be told enough to enable them to choose whether they wish to participate.
Introspection	the process of self-reflection on one's thoughts and feelings

Mean	the arithmetic average of a distribution, obtained by adding the scores then dividing by the number of scores.
Measure of central tendency	a type of descriptive statistic that is a single value that attempts to describe a set of data by identifying the central position within that set of data. These measures include mean, median, and mode.
Measure of variability	refers to how spread apart the scores of the distribution are or how much the scores vary from each other. There are four major measures of variability, including the range, interquartile range, variance, and standard deviation.
Median	the middle score in a distribution, half the scores are above it and half are below it.
Mode	the most frequently occurring score(s) in a distribution.

Natural selection	the principle that, among the range of inherited trait variations, those contributing to reproduction and survival will most likely be passed on to succeeding generations.
Naturalistic observation	observing and recording behavior in naturally occurring situations without trying to manipulate and control the situation.
Nature-nurture issue	the longstanding controversy over the relative contributions that genes and experience make to the development of psychological traits and behaviors. Today's science sees traits and behaviors arising from the interaction of nature and nurture.
Normal distribution	(normal curve) a symmetrical, bell-shaped curve that describes the distribution of many types of data; most scores fall near the mean (68% fall within one standard deviation of it) and fewer and fewer near the extremes.
Null Hypothesis	a statement that is the opposite of the original hypothesis. Research must be compared to the null hypothesis (the opposite scenario) to see if any variance is in fact due to the independent variable.

Operational definition	a statement of procedures (operations) used to define research variables. For example, human intelligence may be operationally defined as what an intelligence test measures. The operational definition must explain how the variable will be measured.
Placebo	a simulated or otherwise medically ineffectual (fake) treatment for a disease or other medical condition intended to deceive the recipient. Often given to the control group in an experiment.
Placebo effect	when patients given a placebo treatment will have a perceived or actual improvement in a medical condition.
Population	all the cases in a group being studied, from which samples may be drawn.
Psychiatry	a branch of medicine dealing with psychological disorders; practiced by physicians who often provide medical (for example, drug) treatments as well as psychological therapy.

Psychoanalysis	Freud's theory of personality and therapeutic techniques that attributes thoughts and actions to unconscious motives and conflicts.
Psychodynamic psychology	a branch of psychology that studies how unconscious drives and conflicts influence behavior, and uses that information to treat people with psychological disorders.
Psychology	the science of behavior and mental processes
Random assignment	assigning participants to experimental and control groups by chance, thus minimizing preexisting differences between those assigned to the different groups.
Random sample	a sample that fairly represents a population because each member has an equal chance of inclusion.

Range	represents the difference between the highest and lowest score in a distribution.
Replication	repeating the essence of a research study, usually with different participants in different situations, to see whether the basic finding extends to other participants and circumstances.
Representative sample	A small group whose characteristics accurately reflect those of the larger population from which it is drawn.
Scatterplot	a graphed cluster of dots, each of which represents the values of two variables. The slope of the points suggests the direction of the relationship between the two variables. The amount of scatter suggests the strength of the correlation (little scatter indicates high correlation).
Single-blind procedure	in an experiment when participants do not know if they are in the experimental or control group; so they do not know what variation of the independent variable they are receiving (the treatment or not).

Skewed distributions	represents a set of scores or numbers that is not equal on both sides. This results from a few scores in a data set falling farther to one end or the other.
Social desirability bias	the tendency of respondents to answer questions in a manner that will be viewed favorably by others. It can take the form of over-reporting good behavior or under-reporting bad behavior. The tendency poses a serious problem with conducting research with self-reports, especially questionnaires.
Social-cultural psychology	the study of how situations and cultures affect our behavior and thinking.
Standard Deviation	a computed measure of how much scores vary around the mean.
Statistical significance	a statistical statement of how likely it is that an obtained result occurred by chance.

Structuralism	an early school of psychology that used introspection to explore the structural elements of the human mind, introduced by Titchener
Survey	a technique for ascertaining the self-reported attitudes or behaviors of a particular group, usually by questioning a representative, random sample of the group.
Theory	an explanation using an integrated set of principles that organizes observations and predicts behaviors or events.
Type I error	precise technical term used in statistics to describe particular flaws in a testing process, where a true null hypothesis was incorrectly rejected.
Type II error	precise technical term used in statistics to describe particular flaws in a testing process, where one fails to reject a false null hypothesis.

Z scores	indicates by how many standard deviations a score is above or below the mean.