Between-subjects experiment An experimental design in which two or more independent groups of participants are compared. The focus is on differences in the performance of the various groups rather than the behavior of individual participants.

Control condition A condition in which participants do not receive a training procedure but are treated the same way in all other respects as participants that are trained. Performance in the control condition is compared to performance in the experimental condition in the basic learning experiment.

Evolution Change in a physical or behavioral trait that occurs across successive generations because of differential reproductive success

Experimental condition A condition in which participants receive a training procedure. Performance in the experimental condition is compared to performance in the control condition in the basic learning experiment.

Experimental observation Observation of behavior under conditions specifically designed by an investigator to test particular factors or variables that might influence the learning or performance of the participant.

Fatigue A temporary decrease in behavior caused by repeated or excessive use of the muscles involved to perform the behavior.

Learning An enduring change in the mechanisms of behavior involving specific stimuli and/or responses that results from prior experience with those stimuli and responses.

Maturation A change in behavior caused by physical or physiological development.

Motivation A hypothetical state that increases the probability of a coordinated set of activities or activates a system of behaviors that functions to satisfy a goal such as feeding, predatory defense, infant care, or copulation.

Naturalistic observation Observation of behavior as it occurs under natural conditions, in the absence of interventions or manipulations introduced by the investigator.

Performance An organism's observable behaviors or activities at a particular time.

Practice Repetition of a response or behavior, usually with the intent of improving performance.

Single-subject experiment A type of experiment in which learning is investigated through extensive observation of the behavior of a single individual. The individual's behavior must be sufficiently well understood to permit accurate assumptions about how the participant would have behaved if he had not received the training procedure.

Stimulus-stimulus learning The learning of an association between two stimuli, such that presentation of the first stimulus activates a neural representation of the second one.