**II. Research Methods (8–10%)**

Psychology is an empirical discipline. Psychologists develop knowledge by doing

research. Research provides guidance for psychologists who develop theories to

explain behavior and who apply theories to solve problems in behavior.

*AP students in psychology should be able to do the following:*

• Differentiate types of research (e.g., experiments, correlational studies, survey

research, naturalistic observations, and case studies) with regard to purpose,

strengths, and weaknesses.

• Describe how research design drives the reasonable conclusions that can be

drawn (e.g., experiments are useful for determining cause and effect; the use of

experimental controls reduces alternative explanations).

• Identify independent, dependent, confounding, and control variables in

experimental designs.

• Distinguish between random assignment of participants to conditions in

experiments and random selection of participants, primarily in correlational

studies and surveys.

• Predict the validity of behavioral explanations based on the quality of research

design (e.g., confounding variables limit confidence in research conclusions).

• Distinguish the purposes of descriptive statistics and inferential statistics.

• Apply basic descriptive statistical concepts, including interpreting and

constructing graphs and calculating simple descriptive statistics

(e.g., measures of central tendency, standard deviation).

• Discuss the value of reliance on operational definitions and measurement in

behavioral research.

• Identify how ethical issues inform and constrain research practices.

• Describe how ethical and legal guidelines (e.g., those provided by the American

Psychological Association, federal regulations, local institutional review boards)

protect research participants and promote sound ethical practice.