

## UNITS 1-2 FRQ PRACTICE – HISTORY, APPROACHES AND RESEARCH METHODS

Directions:

- Read each question
- Outline the answer
- Identify names, concepts, and studies that could be used to support the answer
- Remember about READ-DO-DEFINE-APPLY
- Divide answers and remember context
- DO NOT contradict – DO demonstrate knowledge of concepts

### Research Design and Memory

1. Design and describe an experiment to measure the relationship between rehearsal/ repetition of a list of words and later recall of that same list of words. In your answer you should formulate a hypothesis and include a description of each of the following.
  - A. Population
  - B. Subject selection
  - C. Independent variable
  - D. Dependent variable
  - E. Experimental group
  - F. Control group
  - G. Potential confounding variable
  - H. A method of reducing experimental bias

### Scientific Research Design

2. Design an experiment to determine whether a new drug that is supposed to reduce hyperactivity in children actually does. Your essay should include an identification and description of all the components of your experimental design, including sampling, independent and dependent variables, controls, and the method that you would employ to evaluate the outcome.

### Scientific Research and Social Psychology

3. Compare and contrast the experimental method and the survey method in terms of their suitability for investigating the hypothesis that frustration leads to aggressive behavior

In comparing and contrasting the two methods, be sure to identify and discuss each of the following.

- A. Independent variable
- B. Dependent variable
- C. Control
- D. Experimental and response bias
- E. Ethical issues

### Research Design and Motivation

4. Professor Jackson believes that frustration increases the need for achievement. She decides to test her hypothesis with her introductory psychology class of about 100 students. The first 50 students who arrive for class one day are taken to a separate room and given a series of easy puzzles to complete. Professor Jackson then asks each student about his or her professional goals. She rates the statement of each on a 7-point scale for strength of achievement motivation.

When they arrive, the remaining students are taken to another room and given a series of difficult puzzles by Professor Jackson's teaching assistant Jim. Jim also asks each student about his or her professional goals and, like Professor Jackson, then rates the statement of each on a 7-point scale.

The group given the difficult puzzles has, on average, higher achievement motivation scores than the group given easy puzzles. Professor Jackson concludes that her hypothesis is supported.

Show how each of the following aspects of Professor Jackson's experimental design is flawed. Indicate how you would correct each problem.

- A. Sampling
- B. Assignment of participants
- C. Dependent variable
- D. Control for experimental bias
- E. Control of confounding variables (You need cite only one)

### Research Design

5. The police chief of New City states publicly that she sees a direct relationship between teenage arrests in New City for violent crimes and the popularity among New City teens of especially violent television shows.

Design a correlational study to research this claimed relationship, being sure to address how each of the following design elements would apply to your study.

- Operational definition of variables
- Selection of participants
- Generalizability
- Two ethical considerations

The police chief concludes that watching violent television shows leads to teens' committing violent crimes in New City. Do you support her conclusion? Explain your response.

### Perspectives (explanations) and Psychotherapy

6. A. Discuss the cause of anxiety from each of the following perspectives.
- Behavioral
  - Psychoanalytic/psychodynamic
  - Biological
  - Cognitive
- B. Discuss a specific treatment technique for reducing anxiety used by professionals representing each of the four perspectives.

### Data Collection and Statistics

7. Dr. Franklin investigated the relationship between stress and physical illness. She persuaded a high school principal to require all female athletes in the school to participate in her study. She explained the purpose of her research to the athletes and asked them to use a standard form to rate the severity of their stress over the last six months. More than 250 athletes completed the form. Then Dr. Franklin analyzed the forms returned by the first 100 athletes. She requested the attendance records from the nurse's office for each of those athletes to verify the number of days absent due to illness during the same six-month period. In the debriefing summary that Dr. Franklin sent to the 100 athletes after she completed the study, she stated that athletes who reported more stress also experienced more frequent illness. Dr. Franklin concluded that stress causes physical illness.
- Identify the research method used by Dr. Franklin.
  - Describe the operational definitions of the TWO key variables that Dr. Franklin used in the study.
  - Based on the information provided, describe ONE appropriate and ONE inappropriate ethical feature of the study.
  - Identify ONE statistical technique that Dr. Franklin could use to represent the relationship between the variables in the study.
  - Describe TWO aspects of the research design that weakens the validity of Dr. Franklin's conclusions that stress causes physical illness.

SOME HINTS FOR THE TEST...

#### Unit 1 areas of focus

- Subfields and Theories in Psych
- Famous names in the history of psych
- Introspection
- Cognitive neuroscience
- Difference between industrial and human factors psych

#### Unit 2 areas of focus

- Methods of experimentation
- Pros and Cons of each method
- Ethics
- Standard deviation
- Mean, mode, median
- Range
- Experimentation
- Correlation
- Sampling