

AP Psychology
FRQ #1

Directions: Answer the following question. It is not enough to answer a question by merely listing facts. You should present a cogent argument based on your critical analysis of the questions posed, using appropriate psychological terminology.

1. Dr. Alimam is studying infants' ability to distinguish shapes. He shows an infant a shape until the infant loses interest in the shape, and then he shows the infant a different shape. If the infant shows interest in the new shape, he determines that the infant recognizes that the new shape is different from the old one. Dr. Alimam expects that getting older will cause the babies to recognize shapes faster. He records how long it takes the infant to show interest in the new shape.

Dr. Alimam conducts the study using a group of 5 three-month infants, 5 six-month infants, and 5 eight month infants recruited from local day-care centers. Because he knows the directors, he does not contact the infants' parents to inform them of the study. Below is a chart that shows the time it took for each infant to show interest in the new shape. Dr. Alimam concludes that eight-month old infants are better at recognizing different shapes than three-month olds or six-month olds.

AGE	Infant 1	Infant 2	Infant 3	Infant 4	Infant 5	
Three Months	15 Seconds	12 Seconds	15 Seconds	20 Seconds	30 Seconds	
Six Months	10 Seconds	7 Seconds	6 Seconds	8 Seconds	10 Seconds	
Eight Months	3 Seconds	2 Seconds	5 Seconds	1 Second	3 Seconds	

- A. Describe how the data illustrate the habituation process.
- B. Identify the mode for three-month-old infants.
- C. Describe the correlation between time and an infant's age.
- D. Identify the dependent variable and independent variable.
- E. Describe how Dr. Alimam could use replication to conduct a better-designed study.
- F. Explain how the data support or do not support the hypothesis (causality).
- G. Suppose Dr. Alimam covered the shape with a towel as the infant was exhibiting interest. Explain what would most likely be a key difference in the way the three-month-old infants would react toward this versus the way the eight-month-old infants would react.
- H. Identify one ethical consideration suggested by this experiment.

