

Quiz 6 Review
Psych 105

Explain these concepts to your partner:

1. non-parametric vs. parametric tests
2. interval, nominal, and ordinal data
3. 1xk vs. rxk
4. Hypothesis of Association vs. Difference

Name the correct statistical test for the following:

5. A researcher assumes there will be a difference in the amount of TV viewing by the principal wage earners in high and low socioeconomically placed families. A random sample of families is selected and categorized as having either high or low socioeconomic status. The principal wage earners of all families were contacted and asked for their hours per week of TV viewing. The hours per week for each socioeconomic class were compared.

6. A researcher is interested in if blondes do indeed have more fun. A large random sample of female college students was selected and categorized as to hair color- blonde, brunette, or red. Each subject was then asked to answer yes or no to the question, "For the most part, would you say you've been having fun this semester?"

7. A researcher wished to test the hypothesis that older men sleep less than younger men do. Random samples of 30 year-old men, 50 year-old men, and 70 year-old men were selected. Each subject was brought to a sleep laboratory and measured as to how many hours of sleep per night occurred.

8. A researcher wished to find out whether the perception of a person's height depends on that person's perceived status. A random sample of army inductees was selected and equally divided into four groups. An actor gave a short address to each group separately, extolling the joys of army life. For the first group, the actor was dressed as a private; for the second, a sergeant; for the third, a captain; and finally, for the fourth group, as a colonel. The inductees were asked to fill out a questionnaire evaluating the speech. Among the questions was one asking for an estimate of the lecturer's height.

9. An investigator wished to establish whether a relationship exists between height at age 3 and height at age 21. A random sample of 3 year olds was selected and height measures were taken on each. The researcher then patiently waited 18 years and measured the participants again.

10. Calculate a Chi Square Test and explain the conclusion in words.

11. Calculate a Paired t and explain the conclusion in words. A study was done to determine the effects of practice and fatigue on muscle strength. A random sample of eight recruits on their first day at the police training academy was selected and asked to do as many push-ups as possible (the pre-scores). After a five minute break they were again asked to do as many push-ups as possible (the post-scores).

<u>Subject</u>	<u>Pre</u>	<u>Post</u>
1	11	8
2	15	15
3	16	13
4	14	11
5	10	11
6	15	10
7	6	6
8	11	8