

Carefully read the description of the experiment below. Be prepared to answer the questions that follow the design description as a class quiz.

After evaluating student attitudes towards drug testing with an instrument called the “ATSDT” (Attitudes Toward High School Drug Testing), a researcher from UNO wants a test to determine if the mean of the students attitude measurements departs from a value of 3, the value that represents for a “neutral attitude”.



The students sampled were high school students between grades 8 and 12 from the metropolitan New Orleans area. A sample of 620 students was used for the study. One question asked of the students was if they believed there was a need for testing for drug use in schools. Opinions were recorded on a 5 point scale (1=strongly disagree, 3=neutral, 5=strongly agree). The sample mean value of the score was 3.23 and the sample standard deviation was 0.68. What type of analysis should this researcher use to determine if this score differs significantly from the neutral score value of 3?

The *Likert scale*, sometimes called a rating scale, is commonly used questionnaires and opinion surveys. By some the scale considered an “ordinal measure” and can be summarized by medians and modes and dispersion assessed by interquartile ranges. Other investigators treat the scale as interval, assuming the respondents perceive the scale elements as equidistant. In this case the scale can be evaluated with parametric analyses using means and standard deviations.

Example statement: **This exercise was easier than most of the daily quizzes.**

Your response (choose one):

1. Strongly disagree
2. Disagree
3. Neither agree nor disagree (neutral)
4. Agree
5. Strongly agree