Module 5 Quiz Nurs 5366

Question 1
5 / 5 pts

A Family Nurse Practitioner believes that he has developed an intervention that can accelerate weight loss in adults with Type II diabetes when administered with a healthy diet. He recruits 25 participants from a local church. He obtains each participant's weight prior to beginning the intervention (of a walking program alternating with resistance training). After a month of the treatment, all of the participants are weighed again. Which statistical test should the researcher select to determine the effect of his intervention on weight loss?

Pearson's correlation coefficient (*r*)

Independent samples *t*-test

Paired *t*-test

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Question 2
5 / 5 pts

A nurse in a cardiovascular ICU developed an intervention that she believes can reduce patient time on the ventilator post-operatively. She recruits study participants from the offices of cardiovascular surgeons. She randomizes the participants to two groups, a treatment group and a control group. She provides a novel teaching intervention along with a spirometer to each participant in the treatment group one week prior to their surgery. Participants in the control group received customary care. After each participant's surgery, the researcher records the number of hours that they are on the ventilator post-operatively. Which statistical test should she select to determine the effects of her intervention on time spent on ventilator post-operatively?

Paired *t*-test

Independent samples *t*-test

Pearson's correlation coefficient (*r*)

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Question 3
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A nurse is reading a journal article on the effects of patient incivility on nursing burn-out. The results of the study were $r = 0.50$, $p = .04$ (with alpha set at .05). The nurse correctly summarizes that:

there is a moderate relationship between patient incivility and nursing burn-out.

there is no relationship between patient incivility and nursing burn-out.

there is a weak relationship between patient incivility and nursing burn-out.

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Question 4
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A pediatric nurse is interested in research on a new medication used to treat seizures in children. She reviews a study of the new drug where researchers randomized 50 children to receive either the new seizure drug (treatment group) or Phenobarbital (control group). The researchers monitored the number of seizures in both groups for three months. They reported that the treatment group had fewer seizures (t = 2.25, p = .045) (with alpha set at .05). The nurse correctly determines that children who received the new drug had significantly fewer seizures than those who received Phenobarbital.

True

False

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Question 5
5 / 5 pts

A researcher wants to examine the relationship between post-partum depression and maternal age. She recruits 50 women who have given birth within the last 3 months

from the WIC (Women, Infants, & Children Food and Nutrition) office. She collects demographic information from each woman (including age, race/ethnicity, and educational achievement) as well as administering a post-partum depression survey. Which of the following statistical tests should she select for her analysis?

Independent samples *t*-test

Chi-square

Pearson's correlation coefficient (*r*)

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Question 6

5 / 5 pts

A group of researchers studied functional impairment scores in a group of 10 patients before and after a new rehabilitation intervention. The researchers set the alpha at 0.05 which meant that the critical *t* value would be 2.26 (9 *df*). Data analysis showed $t(9)=2.84$, $p=.045$. What do these results mean?

There is insufficient information to determine if a significant difference exists between scores.

There was not a statistically significant difference between the functional impairment scores obtained before and after the intervention.

There was a statistically significant difference between the functional impairment scores obtained before and after the intervention.

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Question 7

5 / 5 pts

In a study, a researcher finds that as A increases, B also increases. The analysis shows that the strength of the relationship is 0.78. What type of linear relationship is this?

negative