Midterm Review Lecture

February 9th, 2015

40 m/c questions
1 hour (lots of time!)

Bring:
Pencil
Calculator

1. What does a strong correlation of .84 mean?
    a. A strong & positive relationship exists between the 2 variables
    b. A moderate & negative relationship exists between the 2 variables
    c. A weak & negative relationship exists between the 2 variables
    d. A strong & negative relationship between the 2 variables
2. Lack of clarity or completeness in the directions is what type of measurement error?
    a. Participation error
    b. Testing error
    c. Scoring error
    d. Instrument error
3. Systematic & meta-analytical reviews guard against publication bias by..
    a. Both published & unpublished reviews
4. When a 3rd variable explains the "what" or "how" between variable x and variable y is referred to as a _____
    a. Descriptor variable
    b. Moderator variable
    c. Mediator variable
    d. Predictor variable
5. Staggering the length of the baseline period is a key feature of what type of single-subject design?
    a. Replicative reversal
    b. Multiple baseline
    c. Alternating treatment
    d. None of the above
6. Which neurotransmitter is often implicated in the explanation of why antidepressants work?
    a. Dopamine
    b. Serotonin
    c. Norepinephrine
    d. Glutamine
7. What does the acronym NICE stand for _____?
    a. National institute for health & clinical excellence
    b. National institute for human & child excellence
    c. National institute for health & clinical experience
    d. National institute of human & child experience

8. Power can be obtained by
   a. Using strong treatments
   b. Administering those treatments consistently
   c. Varying the alpha – remember with a more stringent alpha (eg. .05 to .01) power is reduced, making it more difficult to detect a significant difference
   d. All of the above

9. The NICE clinical significance difference for d between the effects of a drug and placebo is what?
   a. 0.2
   b. 0.3
   c. 0.4
   d. 0.5

question comes from meta-analytic stuff, Kirsch's stuff, difference between clinical significance and other one

taken right from notes

10. The word that best describes mixing "apples and oranges" in meta analysis is…
   a. Homogeneity
   b. Heterogeneity
   c. Tautological
   d. Unequivocal

from meta-analysis

11. The most compelling evidence based knowledge that would support the tenet "reducing the size of soft drinks will lower obesity rates" is
   a. Studies that have shown soft drink consumption is linked to obesity
   b. Studies that have shown sugar in soft drinks affects adiposity more negatively than other sources of sugar
   c. Studies that have shown manipulating the size of soft drink consumption actually reduces adiposity

have to manipulate the size of the drink because that it what it desired in the question

the first two points are associated

12. Bobrovitz and Ottenbacher (1998) showed what percentage of agreement between statistical techniques and visual inspection of single subject design data
   a. 66%
   b. 76%
   c. 86%
   d. 96%

single subject design

often a strong emphasis on visual stimulation for subjects in a single subject design

how is the agreement between visual inspection and statistical procedures compare?

13. If one rejects the null hypothesis and the null hypothesis is true then one has…
   a. Made a type I error
   b. Made a type II error
   c. Made the correct decision

Don't get confused by language, wrap head around terminology

14. R^2 is also known as…
   a. Coefficient of determination

b. Effect size
c. A and B
d. Confidence interval

they all get squared

15. For a t test to reach significance

a. True variance must exceed error variance
b. True variance must be equal to error variance
c. True variance must be less than error variance
d. True variance must exceed total variance

16. Calculate the eta square (n2) from the following ANOVA table below

Source		SS	df	MS	F
Between	72.9	2	36.47	29.57	
Within(error)	14.8	12	1.23		
Total	87.7	14			

a. .83
b. .49
c. .17
d. .30

-true variance over total variance (between) and total variance is total

Answers:
1=D,2=B,3=A,4=B,5=B,6=B,7=A,8=D,9=D,10=B,11=C,12=C,13=A,14=C,15=A,16=A