

Midterm #1

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|----------|---|--------------|
| No notes | 20 points (+1/2 point BONUS) worth 15% of your final grade | Do not cheat |
| | Put your name on every page Maximum Time: 1.5 hours | |
| | Note: try every question – tell me what you do know | |

1. DEFINE Independent Variable & Dependent Variable **(1 point)**

Independent Variable:

Dependent Variable:

2. As discussed in class, what are the four GOALS of Psychological Research? **(1 point)**

i.)

ii.)

iii.)

iv.)

3. What is the central concern that we (as psychologists) have with the conduct of the Tuskegee Study and MK-ULTRA? (from text) **(1 point)**

4. *The ABSCISSA is:* **(1 point)**

- a. The X-axis
- b. The Y-axis
- c. Order data (e.g., rank)
- d. A type of survey measure

5. The height of an object is an example of **(1 point)**
- a. Ratio measurement
 - b. Interval measurement
 - c. Ordinal measurement
 - d. Nominal measurement
6. DRAW A PICTURE that illustrates the process of scientific progress (i.e., the process of hypothesis generation & testing)? **(1 point)**
7. In the film *Junk Science*, “peer review” was introduced. Peer Review is: **(1 point)**
- a. Aspects of the research methodology that may produce confounding
 - b. The same as “RAI” in PsycInfo
 - c. Expert judgment about suitability for publication
 - d. Changes in responding that occur as a result of measurement
8. If I say that something is “an empirical issue”... What am I trying to say? What does “it is an empirical issue” mean? **(1 point)**

9. What are the three major approaches to research (as presented in class)? Identify and define each **(1 point)**

| | TERM | DEFINITION |
|-----|------|------------|
| [1] | | |
| [2] | | |
| [3] | | |

10. Write a reference **to this abstract** (as would be appropriate for a manuscript subscription according to the 5th edition of the APA publication manual). For the purposes of this question, please use underlining instead of *italics*. **(1 point)**

AN: 2002-06535-014
DT: Journal-Article
AU: [Fillmore,-Mark-T](#); [Van-Selst,-Mark](#)
AF: Fillmore, Mark T: U Kentucky, Dept of Psychology, Lexington, KY, US
Van Selst, Mark: San Jose State U, Dept of Psychology, San Jose, CA, US
TI: **Constraints on information processing under alcohol in the context of response execution and response suppression.**
PY: 2002
SO: [Experimental-and-Clinical-Psychopharmacology](#). 2002 Nov; Vol 10(4): 417-424.
PB: US: American Psychological Assn.
IS: 1064-1297
LA: English
AB: This study tested the degree that alcohol restricts information processing on tasks requiring response execution and response suppression. A dual task required 12 participants to respond to 2 task stimuli (Tasks 1 and 2) presented in close succession. The task was performed before and after receiving 3 alcohol doses (placebo, 0.45 g/kg, and 0.65 g/kg) administered on separate days in a counterbalanced order. Alcohol increased task interference, as evidenced by increased time to respond to Task 2. Impairment was comparable regardless of whether Task 1 required a response to be executed or suppressed. The evidence supports a resource limitation account that argues that alcohol reduces capacity to process information required for execution and suppression of responses. (PsycINFO Database Record (c) 2002 APA, all rights reserved)(journal abstract)
KC: information processing restrictions; alcohol; dual task performance; capacity reduction
MJ: *[Ethanol-](#); *[Human-Channel-Capacity](#); *[Perceptual-Motor-Processes](#); *[Performance-](#)
MN: [Response-Parameters](#); [Responses-](#)
CC: 2580-Psychopharmacology; 2580; 25
PT: Empirical-Study

11. In the research described above, alcohol is most likely: **(1 point)**

- a. an outcome variable
- b. a predictor variable
- c. a dependent variable
- d. an independent variable

12. As identified in class and in the text, complete this list of three characteristics of a good theory **(1 point)**

- i. FALSIFIABLE
- ii. _____
- iii. _____

13. Consider several measures of the central tendency of the following distribution of number of social events attended (within the last three weeks) by a sample of students from a research methods class: *[please keep one decimal place for all computed values]* **(1 point)**

1, 1, 1, 1, 2, 3, 4, 8, 7, 1, 2, 3, 6, 6, 2

- The mean = _____
- The median = _____
- The mode = _____

14. Produce the Frequency Table and draw a graphical representation which provides the Frequency Distribution for the above data (do not bin; you do not need to use a ruler): **(1 point)**

15. Define each of the following terms: **(1 point)**

- i. **Constructive replication**
- ii. **Inductive reasoning**
- iii. **Inferential Statistics**

16. "Criterion validity" refers to **(1 point)**

- a. The scope of the measured variable vis-à-vis the concept of interest
- b. Generalizes beyond the current set of data
- c. Derives predictions through deduction from existing theories
- d. Examines the relation between self-report and behavior

17. Define a TYPE I error. Include a discussion of the role of p-values and alpha-levels. **(1 point)**

18. What is the process through which a conceptual variable becomes a measured variable? **(1 point)**

- a. Qualitative measurement
- b. Conceptual realization
- c. Converging operations
- d. Operational definition

19. Any measure consists of which three theoretical components? **(1 point)**

MEASURED SCORE = _____ SCORE + _____ ERROR + _____ ERROR

20. Imagine that I want to run a study that will investigate the relationship between physical fitness and personality. Consider the topic of "INFORMED CONSENT". Identify TWO MORE aspects of informed consent that should be alluded to or included within the participant consent form.

(1 point)

Written consent
Participation is voluntary
Risks & Benefits
Compensation

1)

2)

| |
|-------------------|
| BONUS (1/2 point) |
|-------------------|

21. Write a four-alternative multiple-choice question (complete with correct answer indicated), of equivalent difficulty to those presented in this test, which would assess student knowledge on an appropriate research methods topic that was not otherwise tested on this exam (i.e., what else did you study?).

(1/2 point)