

Midterm #1

37 points (+1 point BONUS)
worth 16% of your final grade

No notes Do not cheat

Put your name on every page
Maximum Time: 1.5 hours

Note: attempt every question – tell me what you do know

1. DEFINE, and produce an EXAMPLE of, each of the following technical terms:

(4 points)

Dependent Variable:

Predictor Variable:

Confounding Variable:

Participant Variable:

2. As discussed in class, what are the four GOALS of Psychological Research?

(2 points)

i.)

ii.)

iii.)

iv.)

3. What are the three basic ethical principles that come from the Belmont Report? **(3 points)**

ETHICAL PRINCIPLE	DEFINITION
i.)	
ii.)	
iii.)	

4. *LIST and DEFINE* the three types of reliability discussed in class and in the Cozby text: **(3 point)**

TYPE OF RELIABILITY	DEFINITION
i.)	
ii.)	
iii.)	

5. Using a ruler to measure distance would produce: **(1 point)**

- a. A Ratio measure
- b. An Interval measure
- c. An Ordinal measure
- d. A Nominal measure

6. 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 “citation search” in PsycInfo
- c. Expert judgment about suitability for publication
- d. Changes in responding that occur as a result of measurement

7. 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)**

8. The textbook and lecture discussed alternatives to deception; what are they? Identify and define each **(1.5 points)**

	ALTERNATIVE	DEFINITION
[1]		
[2]		
[3]		

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

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

10. 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

11. Write the reference to this PSYCINFO abstract (as would be appropriate for a manuscript subscription according to the 6th edition of the APA publication manual). For the purposes of this question, please use underlining instead of *italics*. **(3 points)**

Title: Alcohol-induced impairment of behavioral control: Differential effects on engaging vs. disengaging responses.

Authors: [Marczinski, Cecile A.](#), Department of Psychology, University of Kentucky, Lexington, KY, US, [Abroms, Ben D.](#), Department of Psychology, University of Kentucky, Lexington, KY, US, [Van Selst, Mark](#), Department of Psychology, San Jose State University, San Jose, CA, US, [Fillmore, Mark T.](#), Department of Psychology, University of Kentucky, Lexington, KY, US,

Address: Fillmore, Mark T., Department of Psychology, University of Kentucky, Lexington, KY, US, 40506-0044, mtfill2@uky.edu

Source: [Psychopharmacology](#), Vol 182(3), Nov, 2005. pp. 452-459.

Publisher: Germany: Springer.

ISSN: 0033-3158 (Print), 1432-2072 (Electronic)

Language: English

Keywords: alcohol; behavioral control; response inhibition

Abstract: Rationale: Model-based assessments of behavioral control have been used to study the acute effects of alcohol on the ability to execute and inhibit behavioral responses. Response inhibition appears more vulnerable to the impairing effects of alcohol than response execution. Current information processing models have yet to account for this observation. Objectives: The present study used a reductionist approach to determine if the particular vulnerability of response inhibition to the effects of alcohol occurs at the level of the action (motor program). The study examined the effects of alcohol on the ability to execute and inhibit behavior in a context in which preliminary information signaled the likelihood that a response should be executed or suppressed. The engagement and disengagement of responses were directly compared under alcohol. Methods: Adults (N=24) performed a cued go/no-go task that required quick responses to go targets and suppression of responses to no-go targets. Response requirements were manipulated by varying the nature of the action required whereby half of the participants made key press responses (response engagement) and the other half released ongoing key presses (response disengagement). Performance was tested under three doses of alcohol: 0.00, 0.45, and 0.65 g/kg. Results: Dose-dependent increases in commission errors were only observed with response engagement and not with response disengagement. Reaction times were faster for response engagement than response disengagement. Conclusions: Response disengagement affords some protection against alcohol-induced impairment of inhibition, indicating that not all aspects of motor processing requiring inhibition are equally impaired by alcohol. (PsycINFO Database Record (c) 2009 APA, all rights reserved) (from the journal abstract)

Subjects: [*Behavioral Assessment](#); [*Ethanol](#); [*Response Inhibition](#)

Classification: Psychopharmacology (2580)

Population: Human (10), Male (30), Female (40)

Location: US

Age Group: Adulthood (18 yrs & older) (300), Young Adulthood (18-29 yrs) (320), Thirties (30-39 yrs) (340)

Tests & Measures: Short-Michigan Alcoholism Screening Test, Personal Drinking Habits Questionnaire, Beverage-Rating Scale, Subjective Effect Ratings

Methodology: Empirical Study; Quantitative Study

Format Availability: Electronic; Print

Format Covered: Print

Publication Type: Journal; Peer Reviewed Journal

Document Type: Journal Article

Release Date: 20060123

Digital Object Identifier: 10.1007/s00213-005-0116-2

Accession Number: 2005-14578-016

12. 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

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]* **(4 points)**

1, 2, 3, 4, 5, 5, 4, 4, 7, 1, 2, 3, 2, 5, 2

i.) PRODUCE A FREQUENCY TABLE

ii.) Produce the appropriate graphical display to illustrate the distribution (do not bin; you do not need to use a ruler; be sure to tell me what type of graph it is; use appropriate labels for the axes)

iii.) COMPUTE THE FOLLOWING

Mean = _____; Median = _____; Mode = _____

14. Define each of the following terms:

(3 points)

- i. **Confound**
- ii. **Third-variable problem**
- iii. **Descriptive Statistics**

15. What is a “field experiment” ? (define the term)

(1 point)

16. Identify (and define) the four **basic** types of validity as described in Chapter 4 of the text? (do NOT give me different types of reliability).

(4 points)

- i.
- ii.
- iii.
- iv.

17. Any measure consists of which three theoretical components?

(1.5 point)

MEASURED SCORE = _____ SCORE + _____ ERROR + _____ ERROR

18. 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

i. _____

ii. _____

BONUS (1 point)

19. 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 covered in class but was not otherwise tested on this exam (i.e., what else did you study?).

(1 point)