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Final Exam

PS 306, Spring 2004

Well, it's been a pleasure! Thanks for the seriousness with which you've approached this course. It's made my life much more pleasant. This final exam is intended to assess the current state of your knowledge of the course material, given the fact that your average performance on the previous two exams was outstanding. So, keep doing whatever it was that you did on the prior exams. Read each question carefully and answer it completely, showing all your work. The Skidmore Honor Code is in effect, as always, and you'll attest to that fact at the end of the exam. Have a wonderful summer!

1. What do the APA Ethical guidelines say about deception? What role does debriefing play in offsetting deception? (Pay particular attention to the Ross et al. article in answering the second question.) [10 pts]

2. How seriously do people take product reviews? Chaiken and Maheswaran (1992) conducted an interesting experiment in which they varied the credibility of the review source and the general message of the review. They asked college students to read a review of a new telephone answering machine. The researchers told half the participants that the review came from a flyer printed by the discount store Kmart (low credibility) or from the magazine Consumer Reports (high credibility). Each participant then read one of three types of review, an unambiguous strong review, an ambiguous review (the answering machine was better than some machines but not as good as others), or an unambiguous weak review. The researchers then asked the participants to rate on a 10-point scale their willingness to buy the answering machine for \$50 (10 = very willing to buy). The results of their study are replicated below. Complete the analysis and interpret the results of this study as completely as you can (as in a Discussion section). [10 pts] [Pittenger]

ANOVA Table for Rating

	DF	Sum of Squares	Mean Square	F-Value	P-Value	Lambda	Power
Source Credibility				.05	.8143	.056	.056
Endorsement				33.6	<.0001	67.235	1.000
Source Credibility * Endorsement				24.3	<.0001	48.678	1.000
Residual			1.2				

Means Table for Rating

Effect: Source Credibility * Endorsement

	Count	Mean	Std. Dev.	Std. Err.
High, Ambiguous	10	8.000	1.155	.365
High, Strong	10	5.900	1.101	.348
High, Weak	10	3.000	1.155	.365
Low, Ambiguous	10	5.400	.699	.221
Low, Strong	10	6.600	1.174	.371
Low, Weak	10	5.100	1.197	.379

3. A scientist tests two drugs for their effects on insomnia. A sample of insomniacs is pre-tested with a placebo before bedtime, and the latency to onset of sleep is measured to serve as a baseline. A week later, the participants receive the first drug (Drug A) before bedtime, and the time that lapses between drug administration and sleep onset is measured again. Finally, a week later the second drug (Drug B) is tested in the same fashion. The latency to sleep onset in minutes is measured for each participant on every test. Complete the StatView output for this study and then interpret the results as completely as you can. [10 pts]

ANOVA Table for Drug

	DF	Sum of Squares	Mean Square	F-Value	P-Value	Lambda	Power
Subject			2458.8				
Category for Drug				49.00	<.0001	98.001	1.000
Category for Drug * Subject			412.4				

Means Table for Drug

Effect: Category for Drug

	Count	Mean	Std. Dev.	Std. Err.
Placebo	11	219.091	39.104	11.790
Drug A	11	164.545	31.738	9.569
Drug B	11	134.545	27.336	8.242

4. Dr. Tori Ador was interested in studying the impact of cape color on instigating movement in bulls. She has a professional bullfighter use one of five cape colors (red, green, blue, black, and white). The DV is the time (in seconds) between waving the cape and the bull's movement toward the bullfighter. Complete the analyses below and interpret the results as completely as you can, with careful consideration to the advice you'd give Dr. Ador based on these results. [10 pts]

ANOVA Table for Time to Charge

	DF	Sum of Squares	Mean Square	F-Value	P-Value	Lambda	Power
Cape Color		.560			.9207	.903	.089
Residual		12.400					

Means Table for Time to Charge

Effect: Cape Color

	Count	Mean	Std. Dev.	Std. Err.
Black	5	2.000	.707	.316
Blue	5	2.200	.837	.374
Green	5	2.000	.707	.316
Red	5	2.200	.837	.374
White	5	1.800	.837	.374

5. The social psychology of the experiment is quite interesting. From the experimenter's perspective, describe several studies that support the notion of experimenter expectancy effects (Rosenthal). From the participant's perspective, describe demand characteristics. [10 pts]

6. What is the relationship between power and effect size? That is, when you are considering a research design in which there is a large effect size, what are the implications for power? When you are considering a research design in which there is a small effect size, what are the implications for power? How would you typically add power to a study? [10 pts]