Factorial Designs Exercise

Answer Key

- 1. Consider the following data from a factorial-design experiment. The DV was "% of participants who offered help to a stranger in distress."
 - a. What is the design of this study? 2(number of bystanders) X 2 (gender) betweensubjects design.
 - b. Gender two levels (male/female); Number of bystanders two levels (0/10)







d. Main Effects

- i. Fewer people helped when there were more bystanders. More people helped when there were fewer bystanders.
- ii. Females were more likely to help than males.
- iii. There does seem to be an interaction. Females were much more likely to help when there were no bystanders but males were only slightly more likely to help when there were no bystanders.

2. In the factorial design experiment summarized below, the dependent variable was "Average number of hallucinations."



a. What is the design of this study? 2(type of drug) X 3(dose of drug) design.





c. Main Effect for Type of Drug: There were more hallucinations for LSD than for Marijuana.

Main Effect for Dose of Drug: As dosage increased, hallucinations went up.

d. Yes, there appears to be an interaction. There was not much of a difference in hallucinations for LSD and Marijuana at the low and medium doses. However, at the high dose, LSD resulted in quite a few more hallucinations.