

First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_

Student ID #: \_\_\_\_\_

PSC 041

Research Methods in Psychology

WQ 2024

### Unit 1 Exam Version C

#### Research Summary

**Please answer the following questions in the space provided. Only write on the lines.**

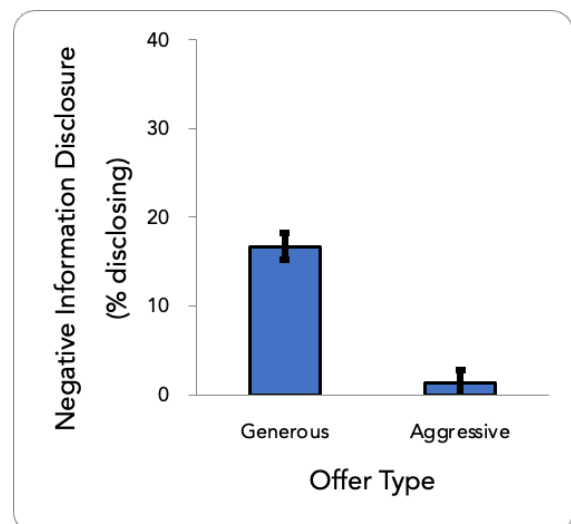
**Adapted from:** Jeong, M., Minson, J. A., & Gino, F. (2020). In Generous Offers I Trust: The Effect of First-Offer Value on Economically Vulnerable Behaviors. *Psychological Science*.

If we want to negotiate the best price, should we start aggressively or start out being generous? A new study finds that starting out with a generous offer might be the best strategy.

The researchers located 500 valuable bicycles listed for sale on Craigslist. The bicycles were all valued at more than \$1000 and listed as 'like new' condition. The researchers contacted the owners and made an initial offer from a gmail account with a gender-neutral name ("Riley"). The initial offer was randomly assigned to be a low offer or high offer. Low offers were 58% of the asking price. High offers were 78% of asking price. Here is the email that was used in all cases.

"Hey there, that's a sweet ride you have. Definitely interested. I can pay \$xxx for it. Would you be ok with me taking it for a test drive first? Also, is there anything I should know about the bike? Have you had any issues or problems with it? Thanks, Riley."

In all, 363 bike owners responded to this email. Of the 250 emails with high offers, 208 sellers responded. Of the 250 emails with low offers, 155 sellers responded. The email responses were read by undergraduate research assistants who coded the emails as either including negative information about the bike or not. Some owners admitted that the bike had been involved in an accident or had a flat tire. More owners who received high offers volunteered negative information about the bike (16.7%) than those who received a low offer (1.3%). The sellers who had been offered a favorable deal were more willing to disclose information that could potentially jeopardize that deal,  $\chi^2(1, N = 363) = 23.75, p = .001$ .



## Hypotheses

10 pts 1. Write a specific null hypothesis for this research (be sure to use the variable names).

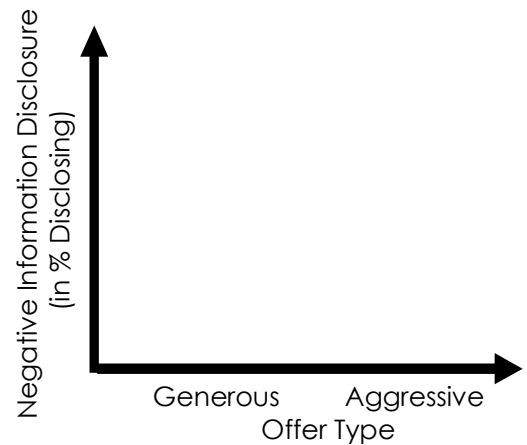
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10 pts 2. Sketch the null hypothesis:



10 pts 3. Write a specific non-directional research hypothesis for this research (be sure to use the variable names or levels)

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## Predictor Variable

10 pts 4. Name the predictor / independent variable

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10 pts 5. How did the researchers operationally define the predictor / independent variable? Describe it using your own words. *Be sure to include the levels or values and indicate how the codes will be interpreted.*

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5 pts 6. The predictor / independent variable is (fill in the box)

- ☐ **Categorical**
- ☐ **Continuous**

5 pts 7. How was the predictor / independent variable measured? (fill in the box)

- ☐ **Observation**
- ☐ **Self-Report**
- ☐ **Physiological**
- ☐ **It was manipulated** (under the experimenter's control)

## Outcome Variable

10 pts

8. Name the outcome / dependent variable

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10 pts

9. How did the researchers operationally define the outcome / dependent variable? Describe it using your own words. *Be sure to include the levels or values and indicate how the codes will be interpreted.*

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5 pts

10. The outcome / dependent variable is (fill in the box)

- ☐ **Categorical**
- ☐ **Continuous**

5 pts

11. How was the outcome / dependent variable measured? (fill in the box)

- ☐ **Observation**
- ☐ **Self-Report**
- ☐ **Physiological**
- ☐ **It was manipulated** (under the experimenter's control)

Use this information just for Q12.

Another researcher wants to extend this finding using different methods to address a similar research question. This researcher counts the number of words in the response emails as an indicator of interest in the sale.

5 pts

12. How was this new outcome / dependent variable measured? (fill in the box)

- ☐ **Observation**
- ☐ **Self-Report**
- ☐ **Physiological**
- ☐ **It was manipulated** (under the experimenter's control)

**Summarize the findings (from the original prompt)**

5 pts

14. Is this a value, causal, or associative claim? (fill in the box)

- ☐ **Value**
- ☐ **Causal**
- ☐ **Associative**

10 pts

15. How do you know? (include specific information from the prompt)

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10 pts

16. Does this interpretation follow from this study: "We found that giving an aggressive offer was not related to disclosure of faults." Why or why not?

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**Multiple choice/ fill in the blank / short answer.**

Select the single best answer. Indicate your choice by filling in the box to the left of your selection. Write short answers in the space provided. 2.5 points each.

17. If you question the construct validity of a study, which of the following questions would you be asking?

- ☐ How well do the results generalize to the overall population?
- ☐ Which statistic should be computed?
- ☐ Were the variables measured accurately?
- ☐ Does the predictor variable cause changes in the outcome variable?

18. Nathan Experimenter wants to know what students think about the food in the dining halls. What is the best method match?

- ☐ observation
- ☐ survey
- ☐ physiological measurement

19. Natalie Experimenter wants to know if students sit closer to strangers or to friends in the dining halls. What is the best method match for sitting distance?

- ☐ observation
- ☐ survey
- ☐ physiological monitoring

20. Which of the following is a definition for internal validity?

- ☐ the degree to which a test or instrument is capable of measuring a concept, trait, or other theoretical entity
- ☐ the degree to which a study or experiment is free from flaws and can therefore be taken to represent the true nature of the phenomenon.
- ☐ the extent to which the results of research or testing can be generalized beyond the sample that generated them.

21. Which of the following is the best operational definition for the construct "Happy"

- ☐ length of time (in seconds) that a person smiles during a 30-minute conversation/interaction
- ☐ average heart rate over a 24-hour period
- ☐ self-report of a participant's opinion about how happy they feel

22. What sort of evidence are testimonials from individuals?

- ☐ rational
- ☐ empirical
- ☐ scientific
- ☐ anecdotal

23. When considering association claims, which of the following of Mill's criteria must be established?
- ☐ Temporal precedence
  - ☐ Covariance
  - ☐ Ability to rule out alternate explanations
24. Covariance refers to
- ☐ two variables changing together.
  - ☐ the amount that two variables vary.
  - ☐ one variable causing a change in another variable.
  - ☐ None of these
25. Which of the following examples is most likely to be legitimate science rather than pseudoscience?
- ☐ Testimonials that herbal supplements make people feel younger
  - ☐ Effectiveness of a vaccine established by a randomized controlled study
  - ☐ Predictions of personality traits based on the position of the sun at a person's birth.
  - ☐ Effectiveness of using crystals to enhance well-being by feeling channeled energy
26. An important characteristic of science is that it is empirical. Which of these statements describes this characteristic?
- ☐ Scientific inquiry has value independent of any economic value that may result from the research
  - ☐ All natural, social, and psychological phenomena are causally determined by preceding events or natural laws
  - ☐ Science is based on objective, reproducible evidence and not on pure reason, emotion, or subjective experience
  - ☐ All scientific knowledge is open to further testing and revision
27. Freud theorized that people have unconscious desires. As they are unconscious, people are unaware of them.
- If Freud was correct, people are not able to identify their unconscious desires. But also, if Freud was not correct, people are not able to identify their unconscious desires.
- Because these two predictions are the same, which characteristic of science does Freud's theory violate? Write a single word:
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28. A researcher wants to know which undergraduates are likely to change their major. They compare STEM majors to arts or humanities majors. What type of claim will the researcher make?
- ☐ Value claim
  - ☐ Association / correlation claim
  - ☐ Causal claim