First Name:_____   Last Name:_____

Student ID #: _____

PSC 041   Research Methods in Psychology   WQ 2024
Unit 1 Exam Version D
Research Summary
Please answer the following questions in the space provided. Only write on the lines.

Adapted from: Gino, F., Jeong, M., & Minson, J. A. (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 and coded as including a written statement that agreed to the potential buyer taking the bike on a test drive or not. Allowing a potential buyer to take a bike for a test ride takes quite a lot of trust. They could just ride off with your bike! More owners who received high offers agreed to a test drive (48.5%) than those who received a low offer (30.8%). The owners who had been offered a favorable deal showed more trust, $\chi^2(1, N = 363) = 11.61, p = .002$.
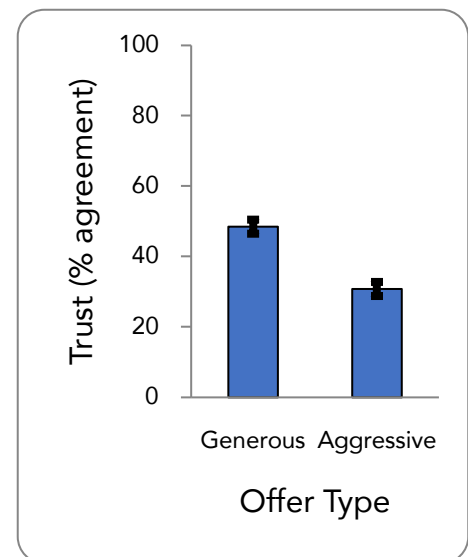
Hypotheses

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

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_____

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10 pts 2. Sketch the null hypothesis:

Trust (% Agreement)

Generous   Aggressive
Offer Type
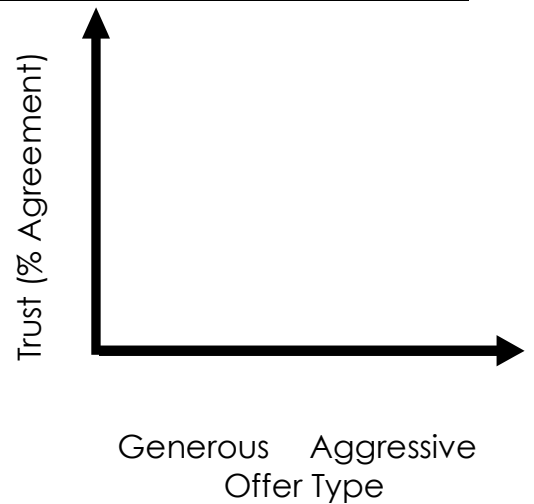
10 pts 3. Write a specific directional research hypothesis for this research (be sure to use the variable names or levels).

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Predictor Variable

10 pts 4. Name the predictor / independent variable

_____

_____

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 sends another email to set a date for the test ride and asks if the seller would feel more comfortable meeting in a public place or at their house. A response indicating a public place was coded as low trust and a private place was coded as high trust.

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 a generous offer was not related to trust." Why or why not?

_____

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Multiple choice/ fill in the blank / short answer.
Select the <u>single best answer</u>. 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. Which of the following is a definition of external 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.

18. Which of the following is the best operational definition for the construct "memory"
   - ☐ Number of pieces of information a person remembers from a video
   - ☐ Brain activity measured by EEG
   - ☐ self-report of how good is your memory (1 = not good to 7 = very good)

19. If you question the internal 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?

20. Nathan Experimenter wants to know what students eat in the dining halls. What is the best method match?
   - ☐ observation
   - ☐ survey
   - ☐ physiological monitoring

21. Natalie Experimenter wants to know if students enjoy sitting with strangers in the dining halls. What is the best method match for enjoyment?
   - ☐ observation
   - ☐ survey
   - ☐ physiological monitoring

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. Temporal precedence refers to...
    - ☐ time. Whether the predictor occurs before the outcome.
    - ☐ temporary. Whether the relationship is permanent or temporary.
    - ☐ natural world. Whether the variables are part of the natural or spiritual world.
    - ☐ the brain. Information that is primarily processed in the temporal lobe.

25. Which of the following characteristics is most indicative of pseudoscience rather than legitimate science?
    - ☐ Rigorous experimental testing and peer-reviewed research
    - ☐ Emphasis on anecdotal evidence and testimonials
    - ☐ Openness to revision based on new empirical findings
    - ☐ Consistent adherence to established scientific theories

26. An important characteristic of science is that it is public. 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. I believe that fairies exist. I believe that fairies are very shy and that they do not show themselves to people.
    Therefore, if fairies do actually exist, you won't see any fairies.
    But also, If fairies do not exist, you won't see any fairies.
    Because these two predictions are the same, which characteristic of science does my belief violate? Write a single word:

    _____

28. A researcher reports that 50% of undergraduate students change their major. What type of claim will the researcher make?
    - ☐ Value claim
    - ☐ Association / correlation claim
    - ☐ Causal claim