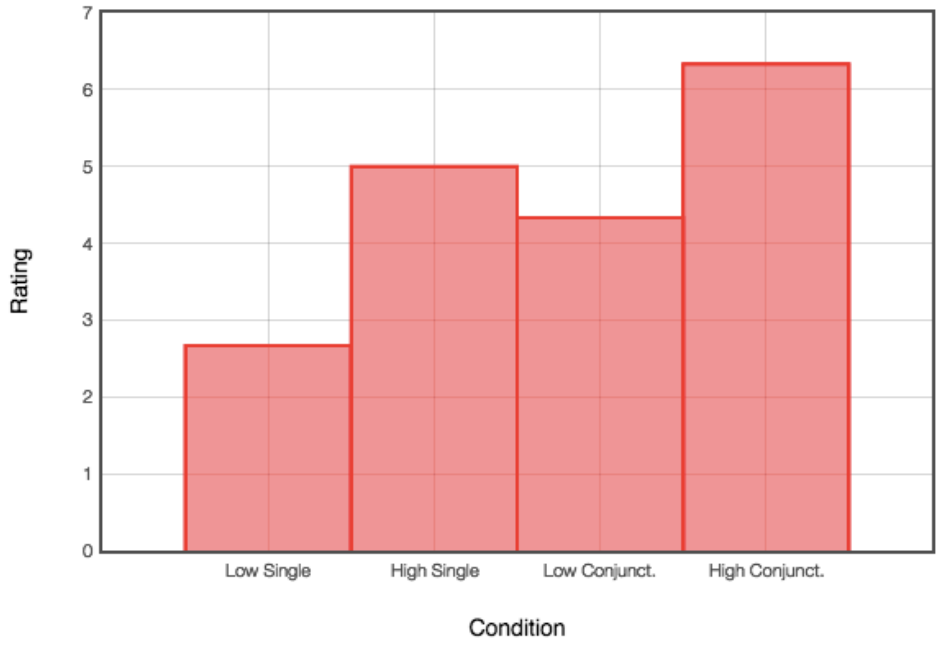
Typical Reasoning Lab Report Questions:

1. **What is an advantage of using heuristics? What is a disadvantage of using heuristics?**

Heuristics are the "rule of thumb" shortcuts that tend to yield correct answers but is not accurate 100% of the time. There are two types of heuristics: availability heuristics and representativeness heuristics. Availability heuristics are the idea that events that are more easily remembered are judged as more probable than events that are less likely to be remembered. Representativeness heuristics state that we can determine the probability of whether a person fits into a group by establishing how many properties the person has that associate positively with that group. There are many advantages and disadvantages to these heuristics. Firstly, heuristics provide quick and inexpensive feedback, and can be used alongside other methodologies. Second, you can use heuristics to further examine a hypothetical issue and suggest the best remedial methods. There are a few disadvantages to heuristics however, including needing extensive knowledge and experience to correctly use the heuristic. Secondly, using heuristics requires multiple experts to combine all results, which can get incredibly expensive. Finally, after spending a huge sum of money to hire an expert, the researcher may only find small issues rather than larger ones. These results are sometimes so minuscule in problem areas that further investigation into the topic is not necessary.

2. **For this demonstration, on average did participants give higher ratings for single events or conjunctions of events? Based on the demonstration results, are participants making their judgments by using objective probabilities? Why or why not?**

On average, people tended to give higher ratings for single events rather than conjunctions of events. For single events, participants were much more likely to rate higher for the typical event than atypical event. For conjunctions, participants were more likely to give higher ratings for typical than for atypical conjunctions. Global data suggests that most participants were relying on objective probabilities, as people rated conjunction ratings less likely than single events. According to the CogLab background, objective probabilities states that the probability of two events occurring has to be less than the probabilities of either of the events happening by themselves. Therefore, single events should be rated much higher in typicality than conjunction events. My data, however, showed a somewhat of a different trend. My results did line up with the Global data in that I rated typical events higher than atypical events for single events and rated higher for typical than atypical in conjunction events. However, my data also suggested that my conjunction events rated significantly higher than my single events, proposing that I was not using objective probabilities to rate typicality. The graph below shows my ratings based on the conditions I was exposed to.



3. **You and two of your co-workers have just interviewed a candidate for a job opening at your law firm. Your boss asks you what inferences you drew about the job candidate during the interview. What can you do to maximize your likelihood of making a correct inference?**

One simple way to make correct inferences is to have more than one interviewer in the room at a time. In this way, each interviewer can take notes on the participant and compare notes post-interview to determine deviances in reviews for the candidate applying for the job. Additionally, the interviewers can come up with a scoring system in which candidates can be given a score based on matches to the job description. Another way to put it, interviewers could use a representative heuristic to compare the candidate to all the job qualifications. Each candidate would then be given a score and compared to all other candidates' scores. The boss would then be able to pick out the highest scoring candidate to hire for the job position. For an example, if the job required good reading comprehension, good communication, a 3.60 GPA or higher, and a bachelors degree in English, interviewers would be able to ask questions that pertain to the job description and assign a score to the answers given. Though heuristics are a good use to determine whether someone is fit for the job, one must question where these heuristics came from in the first place (Lindström et. al, 2018). Who decided what qualities would be the best fit for the law firm and is this heuristic reliable or is it merely a stereotype we have made up based on gender, looks, and grade point average?

4. **What is a stereotype? How do stereotypes relate to the findings of this demonstration?**

A stereotype is a "oversimplified generalization about a group or class of people that often focuses on the negative". The stereotype is even further reinforced, as people tend to focus solely on the behavior that fits in with the stereotype. Stereotypes are often

created about gender, specific cultures, race, and sexual orientation. A few examples of stereotypes include: Irish people are always drunk, girls aren't good at sports, all Asians are good at math and all blonds are unintelligent. In the CogLab, the participant had to make inferences, often incorrect ones, using stereotypes to determine whether a person was likely to have a job or hobby based on their personal makeup. Though these descriptions were only a sentence long, participants were able to quickly categorize the person's preferences. This notion sheds light on the idea that humans are unable to sit with uncategorized items in their mind and must put a label on it for it to make sense.

Summary of Past Research

A study on moral norms described the notion that these overtime and across cultures, moral norms change with the times (Lindström et. al, 2018). However, there is very little research on how and when these changes occur. Researchers define the common is moral heuristics (CIM) as "the tendency to infer the moral value of a social behavior from its relative frequency" (Lindström et. al, 2018). They hypothesized that changes of moral judgments and norms can originate from the CIM heuristic, suggesting that frequency information is used as a baseline for moral judgments (Lindström et. al, 2018). Researchers also hypothesize that CIM heuristics are affected by social influence mechanisms. The researchers conducted 9 independent experiments to test three different theories. These three topics in question included: manipulation of normalcy of observed behaviors to determine whether participants used the CIM heuristic when making a moral judgment, processes involved with CIM heuristic using reaction time analysis, and lastly exploring CIM heuristics to explain endogenous changes in moral norms through using a simulation model of population dynamics (Lindström et. al, 2018). Results showed that

altruistic and selfish behaviors were less deserving of punishment (ie. more moral), when common than when rare (Lindström et. al, 2018). Additionally, participants were computationally more effective, as results showed that judgments of common versus rare behaviors were much faster (Lindström et. al, 2018). Finally, researchers found that the CIM heuristic was able to generate both stability and sudden changes of real moral norms (Lindström et. al, 2018). These results shed light on the idea that commonness contours our morality through behavioral conformity, as we learn that moral norms consistently shift with the times. This is important to the CogLab we completed as it details just how we came to have these heuristics that we set up in our mind. We categorize people into groups based on their personal backgrounds or what they look like and are able to pretty accurately determine whether they would typically be likely to have a certain job or hobby. We need to consistently question how we came up with this heuristic in the first place and not only determine whether it is an accurate heuristic but how the heuristic has evolved over time and culture.

References

Lindström, B., Jangard, S., Selbing, I., & Olsson, A. (2018). The Role of a "Common is Moral' Heuristic in the Stability and Change of Moral Norms. Journal of Experimental Psychology: General, 147(2), 228-242. doi:10.1037/xge0000365.