Midterm Exam (Take home version)

Due via email to [Frank.Bernieri@oregonstate.edu](mailto:Frank.Bernieri@oregonstate.edu) by 07:59am tomorrow (Thursday) morning.

**Reread the articles for assignments #8 and #10. Summarize and discuss each according to the instructions below. You may write the exam in another document or write the exam at the end of this document. In either case, please make sure you put your name at the top of the exam you email me. Email the exam to** [**frank.bernieri@oregonstate.edu**](mailto:frank.bernieri@oregonstate.edu) **as an attachment. Read the instructions below carefully to be sure you do not leave anything out.**

Article 1: Tversky & Kahneman (1974). Judgment under uncertainty: Heuristics and biases. *Science, 185,* 1124-1132.**This is the same article you read for Assignment #8.**

1. Describe the key points of the article.

The article has 3 main heuristics that they author wanted to point out. Which are:

I. Representativeness: Employed when participants are made to judge the probability that an object or event belongs to another class. (what is the probability that object A belongs to class B) the probabilities are evaluated by the degree to which A is representative of B, it’s called prior probabilities.

II. Availability: Employed when people seek to understand the frequency or probability of events or the class based on the ease of retrieval. Because instances of larger classes are usually recalled better and faster than instances of less frequent classes.

III. Adjustment and Anchoring: employed when people make estimates by starting from an initial value that is adjusted to yield the final answer, it’s a numerical prediction when the relevant starting point is available, the starting point may be suggested by the formulation of the problem, or it may be the result of a partial computation.

1. For each point you have explained, describe the empirical evidence for it (i.e., describe a study and its results that would convince a reasonable person that the point is in fact true). Be sure to explain how the results of the study you describe support and confirm that point.

I. Representativeness, there was a study that the subjects were asked to assess the probability that it belonged to an engineer rather than to a layer based on each description. One condition is that subjects were told that the group from which the descriptions had been drawn consisted of 70 engineers and 30 lawyers. In another condition, subjects were told that the group consists of 30 engineers and 70 lawyers.

In these two conditions, subjects evaluated the likelihood that particular description belonged to an engineer rather than to a lawyer based on the degree to which this description was representative of the two stereotypes. The first group has 0.7/0.3 odd, and the second group has 0.3/0.7 odd.

The experiment supports the point is because this experiment proves that people will use the Representativeness heuristics to predict the probability that object A belongs to class B. In the first condition group subject was told there were 70 engineers and 30 lawyers, and they evaluated the description belongs to engineers and lawyers with a 0.7/0/3 ratio, which proves the subjects used the Representativeness heuristics based on the given prior probabilities.

II. Availability, there was a study, subjects heard a list of well-known personalities of both sexes and were subsequently asked to judge whether the list contained more names of men than of women. Different lists were presented to different groups of subjects. In some of the lists the men were relatively more famous than the women, and in others the women were relatively more famous than the men. In each of the lists, the subjects erroneously judged that the class that had the more famous personalities was the more numerous one.

The experiment supports the point is because the experiment proves that people’s judgement to the frequency of a class or event can be influenced by the ease of retrieval information, which is the availability. Because in those lists, the researchers put more famous people in one sex, then the subjects can retrieval the famous names easier and they thought it must be more people in this sex in the list.

III. Adjustment and Anchoring, there was a study that two groups of high school students to estimate the numerical expression, the first group estimate the expression: 8\*7\*6\*5\*4\*3\*2\*1, the another group estimate the expression: 1\*2\*3\*4\*5\*6\*7\*8. As we can see, this result for those two expressions should be the same, but due to the adjustment and Anchoring, the estimations made by different student groups has huge difference. The median estimate for the first group was 2250, and the median estimate for the second group was 512. The reason is that the students were influenced by the initial value, the first group’s initial value is 8, so the estimation was bigger than the second group starting point was 1. This supports the adjustment and Anchoring heuristics. Different starting point may influence people’s judgement.

3. Discuss how the main thesis of this article relates to, or supports, the positions held by either Greenwald in his “*Totalitarian Ego*” article or Nisbett and Wilson in their “*Telling more than we can know*” article.

The main thesis of this article supports the idea from Greenwald in his “Totalitarian Ego” article that Cognitive Conservatism: Ego as self-Justifying historian, confirmation bias. People manage knowledge in a variety of ways to promote the selective availability of information that confirms judgement already arrived at. This is supported by the Availability Heuristic in this article, the Availability Heuristic states that people’s judgement can be influenced by the ease of retrial as information. if people can easily recall some information in their minds, then this information can be their availability heuristic, they will tend to heavily weight their judgements toward to the information they just easily recalled, which can cause confirmation bias mentioned in the “Totalitarian Ego” article.

Article 2: Ross & Sicoly (1979). Egocentric biases in availability and attribution. *Journal of Personality and Social Psychology, 37*, 322-336. **This is the same article you read for Assignment #10.**

1. In nontechnical terms, describe the objective(s) of the study? What was the research question/hypothesis being tested?

The objective of the study is to prove that Egocentric biases in availability and attribution exist. The hypothesis that biases in availability and attribution exit and are relatively ubiquitous was being tested.

1. Describe *very* briefly the general method (e.g., what did the participants do? What was measured and how? Identify and operationalize the key independent and dependent variables.)

There were 5 experiments:

The first experiment required the 37 married couples to finish a questionnaire about their responsibility of action in their relationship, such as “cleaning house”, “caring for children”. And recorded the extent by putting a slash through a 150-mm straight line. Then the subjects were asked to record their examples of contributions to the activity. The answer of the questionnaire and the written records were being measured, the key independent variable is the egocentric biases in allocations of responsibility existence in married relationship, the dependent variable is the rating they gave in the questionnaire.

The second experiment required the 42 students to read a case study for 10 mins and then their group was asked questions to assess their understanding of the case. After that, in a random one half of the dyads, subjects were led to believe that their group had performed poorly. In the remaining dyads, subjects were told they did well. Last, subjects were asked to write down as much as they can recall of their group discussions. Their recall information about group discussion was being measured. The key independent variable is whether they were told did bad or good, the dependent variable is their recall information is about themselves more or their partners more.

The third experiment asked the 12 basketball teams individually complete a questionnaire in which they were asked to recall an important turning point in their last game and to assess why their team had won or lost. The answers were being measured. The key independent variable is the loss or win the game, the dependent variable is their response about the questions.

The fourth experiment asked the subjects to create a solution for preventing smoking, and subjects were assigned to different conditions, one is self-focus, another one is partner-focus condition. And then subjects were asked to assess their extent who tended to control the course and discussion. The key independent variable is the condition, the dependent variable is the response on the extent measurement.

The fifth experiment asked the subjects to finish a questionnaire about their effort in finishing their BA theses. The answer about their responsibility for the research effort was measured. The independent variable is the condition (supervisor and self-focus), the dependent variable is their response about responsibility for the research effort.

1. Identify and summarize the results relevant to the hypothesis and draw conclusions from them.

From experiment 1, Subjects provide more examples or their own (M=10.9) than of their spouses’ (M=8.1) inputs. From experiment 2, subjects recalled a higher percentage of their own actual statements (M=5.6%) than of their partner’s actual statements (M= 2.6%). From experiment 3, on the average, subjects reported 1.79 reasons for the win or loss that involved their own team and .09 reasons that involved the opposing team. From experiment4, subjects reported that they had exerted more control over the course and content of each segment of the discussion than their partners ascribed to them, 85 vs 68 in solutions stage, 79 vs 70 in evaluation stage, 86 vs 67 in final stage, 89 vs 72 in overall stage. From experiment 5, subjects allocated more responsibility to the supervisor in the supervisor-focus (M=33.3%) than in the self-focus (M=16.5%) condition. According to all the results from the 5 experiments, we can conclude that the egocentric biases in availability and attribution appear to be robust and pervasive. And only “Selective retrieval” is not precluded by any of the data, also it receives the direct support from the findings in experiment 2 and 5. Egocentric attributions of responsibility could be produced by the selective retrieval of information from memory and that retrieval might be guided by the kinds of questions that individuals ask themselves.

1. Describe the hypothesized mechanism for these results if any.

The hypothesized mechanism was that an egocentric bias in availability of information in memory, in turn, could produce biased attributions of responsibility for a joint produce. People use availability “the ease with which relevant instances come to mind” as a basis for estimating frequency. Thus, if self-generated inputs were indeed more available, individuals would be likely to claim more responsibility for a joint product than other participants would attribute to them.

1. Describe a real-life situation where this theory or phenomenon would apply.

A real-life situation could be group work, people always tend to overestimate their attribution in a group work even though probably other partners have done a lot also. People can easily retrieval the information about their part in the group work so that they have egocentric bias to lead them to believe they have done a lot of work.

1. Discuss the relevance of this article to at least two other articles you have read in this class.

This article has strong relevance with the ideas from Norbert “Ease of retrieval as information: another look at availability heuristic”. The two articles both talk about the retrieval, the Ross’s article (this article) more focus on the selective retrieval information can impact the occurrence of egocentric behavior, the Norbert’s article more focus on the ease of retrieval can easily guide people into the bias. Also, this article relates to Anthony’s article “The totalitarian Ego”, they have common idea about the confirmation bias, people’s memory system tends to use the selective availability of information to predict or confirm something is already there. Which caused people to have bias to treat something. Overall, all the articles point out that the way people retrieval information can easily guide people into bias. It can be the difficulty of the retrieval, or it can be the way that people were guided to select their retrieval information. We should always be careful about our memory to retrieval information, because you may have bias to treat something already when you don’t even aware the bias.