Supplemental Material to Information Exchange in Group Decision Making

EC.1. Experimental Instructions for Experiment 2

Overview:

You will be participating in a voting experiment. The instructions are simple and if you follow them closely you may earn a considerable amount of money to be paid to you in cash at the end of the experiment.

There are three candidates running for political office (for example, Governor of Ohio). You will be placed in a group of four people, with each member casting a single vote by secret ballot. (Think of yourself as participating in a small caucus to determine the preferred candidate.) The elected candidate for your group will be the candidate who receives three or more votes. If no candidate receives at least three votes, there will not be a winner of the election. Your payoffs for participating in this experiment will be a function of the candidate chosen by your group.

Candidates:

The three candidates have been given a rating (positive, neutral, or negative) in each of 7 characteristics. This corresponds to your preference for the candidate when it comes to that characteristic. You will never know the actual characteristics, just the ratings you have assigned to the characteristics. For example, you will have a rating for the candidates work experience as positive, negative, or neutral, but not be told what that work experience actually is. Note: you *cannot* change the ratings for any candidate for any characteristic -- whatever ratings you are given are the only possible ratings. The ratings may change from one election to the next, but for a given election they are predetermined by the experimenters.

Procedure:

While seated at your desks you will be given information about all three candidates - one sheet for each election you will participate in. Each information sheet will consist of a table that lists 4 of the candidate's characteristics. Next to each characteristic will be the rating (positive, neutral, or negative) for each of the candidates.

Each of your ratings of a candidate's characteristics is the same. For example, if you rate a candidate's work experience as positive, everyone in your group would rate that characteristic as positive. Each of you is only provided with information about 4 of the 7 characteristics for the candidates. However, if all members of the group pooled the information that they have perfectly, the group would have perfect information about all 7 characteristics. That is, the collective information that the group has about the candidates characteristics is superior to the information that any individual member of the group has. And as we explain below, the payoffs that you will receive are a function of *all 7* of the candidatesô characteristics. Please note that every candidate receives only one rating for each characteristic -- if multiple people receive information that a candidate has a positive rating for a given characteristic, the candidate still gets credit for *only one* positive rating for that characteristic.

In addition to the information sheet about the candidate's characteristics, you will be given a payoff sheet, which can help you determine the payoffs that you will receive. For each election, you will be given 2 minutes to examine your information sheet about the candidate's characteristics. At the end of the 2 minutes, you will be asked to turn over your information sheet and they will be collected. You will then be permitted to fill out a questionnaire, which asks you which candidate you prefer, and also asks you to write down all of the characteristics and ratings you remember about any of the candidates.

Following this you will caucus with the other members of your group in a specified location, and you will have up to five minutes to exchange information about candidates and to debate which candidate has the best set of characteristics. You may talk about anything during this discussion, including for whom you plan to vote. After the discussion period ends, each person in your group will vote for the candidate of his/her choice by secret ballot. To be elected, the candidate must receive three out of four

votes. You will then receive feedback about the candidate your group chose and the payoff you have earned by electing that candidate. Then you will return to your original seat, and a new round will begin.

Payoffs:

The payoffs are determined solely by which candidate your group elects. For every positive characteristic possessed by a candidate, $2.00 will be added to that candidate's value. For every neutral characteristic of a candidate, there will be no change in that candidate's value. For every negative characteristic, $1.00 will be *subtracted* from that candidate's value. So a candidate's total value is given by:

Value = $2.00 * (# of positive characteristics) + 0 * (# of neutral characteristics) - $1.00 * (# of negative characteristics)

Your payoff is the value of the candidate your group elected. However, if no candidate receives three out of four votes, your payoff for that election will be $0.00. At the end of the experiment, you will receive the payoff earned plus a $2.00 participation fee, paid to you in cash. You will make the most money by electing the candidate with the highest value of the characteristics.

In addition to the payout for electing a candidate, you will be given a $0.25 bonus for every correct rating of a candidateôs characteristics that you have written down on your questionnaire of one randomly selected round. However, if you make more than three mistakes in writing down the candidateôs ratings, you will not receive any bonus. This is to discourage rampant guessing. Note that you need both the correct characteristic and rating to receive credit.

The following is a simplified example of the characteristics and your valuation of them for each of the three candidates. Just to make sure you know how the procedures work we will ask you to compute your

earnings for each candidate should he/she be elected. When you are done answering these questions raise your hand and one of us will be by to check your answers.

Payoff Quiz:

Assume that there are four generic characteristics and the candidates have the following ratings for those characteristics:

	Candidate A	Candidate B	Candidate C
Characteristic 1	Neutral	Positive	positive
Characteristic 2	Negative	Positive	negative
Characteristic 3	Positive	Neutral	positive
Characteristic 4	Neutral	Negative	positive

What would be your payoff if your group voted for Candidate A? _____

What would be your payoff if your group voted for Candidate B? _____

What would be your payoff if your group voted for Candidate C? _____

What would be your payoff if your group does not elect a candidate with 3 out of the 4 votes in your group? _____

You will participate in a total of three elections. Although the characteristics of the candidates will remain the same in each election, how you rate these characteristics can (and probably will) change between each election.

Please do not discuss things between yourselves until you get to your caucus group. If you have any questions please feel free to ask one of us. Are there any questions?

EC.2. Sample Information Sheet from Experiment 2

Characteristic	Candidate A	Candidate B	Candidate C
Education	negative	negative	positive
Military Service	positive	positive	negative
Work Experience	positive	neutral	positive
Age	negative	positive	neutral

EC.3. Sample Questionnaire from Experiment 2

1. Which candidate do you prefer? _____

2. Please write down all the information you can recall about the three candidates below.

Characteristic	Candidate A	Candidate B	Candidate C

EC.4. Sample Checklist from Experiment 2

Characteristic	Candidate A	Candidate B	Candidate C
Education			
Military Service			
Previously Held Office			
Age			
Marital Status			
Work Experience			
Public Service			

	Candidate A	Candidate B	Candidate C
# of Categories Positive			
# of Categories Neutral			
# of Categories Negative			
Total Value ($2.00* #Pos - $1.00* #Neg)			

EC.5. Pre-Discussion Distribution in Random Rounds of Experiment 1

Characteristic	Candidate A	Candidate B	Candidate C	Recall by 1	Recall by 2	Recall by 3	Recall by 4
Record on Civil Liberty	positive	negative	neutral	y	y	n	n
Record on Health Care	positive	negative	negative	n	n	n	y
Children	positive	neutral	negative	y	n	n	y
Age	positive	positive	neutral	y	y	y	n
Hometown	positive	neutral	negative	y	n	n	y
Record on Education	positive	neutral	negative	n	y	n	n
Graduate Education	neutral	negative	negative	y	n	y	n
Record on Environment	neutral	neutral	neutral	y	n	y	n
Public Service	neutral	positive	positive	n	y	y	y

Undergraduate Education	neutral	negative	positive	y	n	y	y
Record on Campaign Reform	neutral	positive	neutral	n	y	y	y
Work Experience	neutral	positive	neutral	y	y	n	y
Previously Held Office	neutral	negative	positive	y	y	y	n
Marital Status	neutral	positive	positive	n	y	y	y
Record on Crime	negative	neutral	neutral	n	y	y	y
Military Service	negative	negative	positive	y	y	y	y

Table A1: Distribution of Pre-Discussion Information for Round 1 of Experiment 1

In Table A1, a caucus group consisted of subjects (1, 2, 3, and 4) where caucus member 1ôs pre-discussion information included every characteristic for which a ñyò exists under Recôd by 1, and similarly for caucus members 2, 3, and 4.

Characteristic	Candidate A	Candidate B	Candidate C	Recôd by 1	Recôd by 2	Recôd by 3	Recôd by 4
Public Service	positive	negative	neutral	n	y	n	n
Record on Health Care	positive	positive	negative	y	n	y	y
Children	positive	negative	negative	n	y	n	y
Record on Civil Liberty	positive	positive	neutral	n	y	y	y
Undergraduate Education	positive	neutral	neutral	y	y	n	n
Record on Campaign Reform	positive	negative	negative	y	n	n	y

Record on Crime	positive	neutral	negative	n	n	n	n
Record on Environment	positive	positive	neutral	y	n	y	n
Military Service	positive	negative	positive	n	n	y	y
Graduate Education	neutral	positive	positive	y	y	y	y
Work Experience	negative	negative	neutral	n	y	y	y
Hometown	negative	positive	neutral	y	y	y	n
Record on Education	negative	neutral	positive	y	n	n	y
Previously Held Office	negative	neutral	positive	y	y	y	y
Age	negative	positive	neutral	y	y	y	n
Marital Status	negative	neutral	positive	y	y	y	y

Table A2: Distribution of Pre-Discussion Information for Round 4 of Experiment 1

	Candidate A	Candidate B	Candidate C
Round 1	0.25	0.25	0.50
Round 4	0.00	0.50	0.50

Table A3: Predicted Pre-Discussion Preferences of Rounds 1 and 4 of Experiment 1

Table A4 gives the expected fraction of subjects who would choose each candidate based only on their pre-discussion information. If the subject is indifferent between two candidates, the likelihood that the subject selects either candidate is split equally between the two.

EC.6. Pre-Discussion Distribution in Random Rounds of Experiment 2

Characteristic	Candidate A	Candidate B	Candidate C	Recall by 1	Recall by 2	Recall by 3	Recall by 4
Education	negative	positive	negative	y	y	y	y
Marital Status	positive	negative	positive	y	y	y	y
Previously Held Office	neutral	positive	positive	y	y	y	y
Age	positive	neutral	negative	y	n	n	n
Work Experience	neutral	positive	negative	n	y	n	n
Military Service	neutral	negative	neutral	n	n	y	n
Public Service	positive	neutral	positive	n	n	n	y

Table A4: Distribution of Pre-Discussion Information for Round 1 of Experiment 2

Characteristic	Candidate A	Candidate B	Candidate C	Recall by 1	Recall by 2	Recall by 3	Recall by 4
Previously Held Office	negative	positive	neutral	y	y	y	y
Age	positive	positive	positive	y	y	y	y
Work Experience	neutral	neutral	neutral	y	y	y	y
Marital Status	positive	negative	negative	y	n	n	n
Public Service	positive	neutral	neutral	n	y	n	n
Military Service	negative	neutral	positive	n	n	y	n

Education	positive	neutral	neutral	n	n	n	y

Table A5: Distribution of Pre-Discussion Information for Round 4 of Experiment 2

	Candidate A	Candidate B	Candidate C
Round 1	0.13	0.38	0.50
Round 4	0.13	0.75	0.13

Table A6: Predicted Pre-Discussion Preferences of Rounds 1 and 4 of Experiment 2

In Rounds 1 and 4 of Experiment 2, within every caucus group 3 out of the 4 members should have strictly preferred one of the sub-optimal candidates based on their pre-discussion information. The fourth caucus member should be indifferent between the optimal candidate and another one, thus on the average 0.5 out of 4 caucus members would prefer the optimal candidate, or 12.5%.