#### **Appendix**

Protocol and questionnaire for "Heterogeneous preferences for altruism: gender and personality, social status, giving and taking," Michael S. Visser and Matthew R. Roelofs, March 2011

| ID Number |
|-----------|
|-----------|

#### Quiz

Please take a few moments to answer the quiz. If you do not know an answer please give your best guess. When you have completed the quiz, please turn it over and we will come around to collect it. Your score on the quiz determines to which one of two groups you will be assigned for the decision making part of the study. At the end of the experiment you will receive \$5 for completing the quiz.

- 1. How many days are there in a non-leap year?
- 2. How many degrees Fahrenheit correspond to 0 degrees Celsius?
- 3. How many red stripes are there in the American flag?
- 4. How many days are there in the month of February during a leap year?
- 5. How many members are there of the U.S. Senate?
- 6. How many floors are there in the Jean and Charles M. Schulz Information Center?
- 7. What year was Sonoma State University founded?
- 8. What are the costs of sending a one-ounce first-class letter within the United States?
- 9. How many acres is the main campus of the Sonoma State University?
- 10. How many millions of dollars did Sonoma State University receive in research money from California Department of Education for fiscal years 2004/2005 and 2005/2006?

#### Instructions

#### Welcome

This is an experiment about decision making. You will be paid for participating, and the amount of money you earn depends on the decisions that you and the other participants make. If you make good decisions, you stand to earn a considerable amount of money.

The entire experiment should be complete within an hour. At the end of the experiment you will be paid privately and in cash for your decisions. A research foundation has provided the funds for this experiment.

#### **Your Identity**

You will never be asked to reveal your identity to anyone during the course of the experiment. Your name will never be recorded by anyone. Neither the experimenters nor the other subjects will be able to link you to any of your decisions.

In order to keep your decisions private, please do not reveal your choices to any other participant.

#### **Your Role**

There are twenty<sup>1</sup> people in this room participating in the experiment. Your answers on the quiz determine whether you are in the Star Group or not. Ten participants will be in the Star Group, the other ten will not. Your role will be the same throughout the experiment. It will take a few moments to check answers on the quiz, so please be patient.

[Distribute Trivia Quiz. Allow maybe five minutes, then collect to be scored in view of all.]

[Experimenter: While the quiz answers are being checked we will go over the instructions for the rest of the experiment.]

#### **Claim Check**

At the top of this page is a number on a yellow piece of paper. This number is your Claim Check Number. Each participant has a different number. You should write your Claim Check Number on all of the pages you use in this experiment.

You will present your Claim Check to an assistant at the end of the experiment to receive your cash payment.

Please remove your claim check now and put it in a safe place.

#### The Experiment:

<sup>&</sup>lt;sup>1</sup> The number of subjects per session varied with each session and the actual number was reported to subjects for each respective session.

In this experiment you are asked to make a series of choices about how to divide a set of tokens between yourself and one other subject in the room. You and the other subject will be paired randomly, and you will not be told each other's identity.

As you divide the tokens, you and the other subject will each earn points. Every point that subjects earn will be worth 20 cents. For example, if you earn 58 points you will make \$10.60 in the experiment.

Each choice you make is similar to the following:

| Example: Divide 50 tokens | s: Hold _ | @ 1 point | each, and Pass _ | @ 2 points each. |
|---------------------------|-----------|-----------|------------------|------------------|
|---------------------------|-----------|-----------|------------------|------------------|

In this choice you must divide 50 tokens. You can keep all the tokens, keep some and pass some, or pass all the tokens. In this example, you will receive 1 point for every token you hold, and the other player will receive 2 points for every token you pass. For example, if you hold 50 and pass 0 tokens, you will receive 50 points, or  $50 \times 0.20 = 10.00$ , and the other person will receive no points and  $0.100 \times 0.20 = 10.00$ . However, you could choose any number between 0 and 50 to hold. For instance, you could choose to hold 29 tokens and pass 21. In this case you would earn 29 points, or 0.20 =

Here is another example:

| Example: | Divide 40 tokens: | Hold | @ 3 | points each, and Pass | @ 1 point each. |
|----------|-------------------|------|-----|-----------------------|-----------------|
|----------|-------------------|------|-----|-----------------------|-----------------|

In this example every token you hold earns you 3 points, and every token you pass earns the other subject 1 point. Again, each point you earn is worth \$0.20 to you, and each point the other subject earns is worth \$0.20 to the other subject.

Important note: In all cases you can choose any number to hold and any number to pass, but the number of tokens you hold plus the number of tokens you pass <u>must</u> equal the total number of tokens to divide.

Please feel free to use your calculator to calculate points and to assure that all of the tokens have been allocated.

### **Earning Money:**

You will be asked to make 20 different allocation decisions like the examples we just discussed. There are four different scenarios that we want you to make choices for.

- 1) the other player is in the Star Group and has the tokens,
- 2) the other player is not in the Star Group and has the tokens.
- 3) the other player is in the Star Group and you have the tokens.
- 4) and the other player is not in the Star Group and you have the tokens.

In each scenario you will make 5 choices, all of which will be listed on the same page, which we call a Decision Sheet. You will mark your choice by writing in the number of tokens to Hold and the number of tokens to Pass. In the scenarios where the other player starts with the tokens (1 and 2 above), you will choose how many tokens, if

any, to take from the other player. In the scenarios where you start with the tokens, you will choose how many tokens, if any, to give to the other player. In each scenario there are five choice sheets.

After all choices have been made, we will randomly determine which scenario will be implemented for the purpose of calculating your cash payment. We will flip a coin to determine who has the tokens. If the coin comes up Heads, then you have the tokens; if the coin comes up Tails, then the other player has the tokens. Next, we will pick a random number from 1 to 5, by having another participant draw a card from this deck of 5 cards. [Show them the deck.] The Ace will stand for 1. The card will determine which decision within the scenario counts.

We will then collect all the stapled packets from all of the players and place them in a single stack. We will shuffle the stack at least 5 times, so that the packets are in random order. Next we will divide the stack in two.

The player whose packet is on the top of Pile 1 will be matched with the player whose packet is on the top of Pile 2. We will look at whether the packet from Pile 2 belongs to a player in the Star Group. Based on this observation, as well as the coin flip, we will turn the packet from Pile 1 to the appropriate scenario Decision Sheet.

For example: if the packet from Pile 2 belongs to a player in the Star Group, the third choice is to be implemented, and the coin flip is Tails, then we will turn the packet from Pile 1 to the scenario where the other player is in the Star Group and starts with the tokens, and arrange cash payments for both players using the third choice on this scenario's Decision Sheet.

We will put the appropriate amount of cash in these two players' payment envelopes, as indicated by choice that the first player has made. The second player's choice will not be used.

Then we will match the next players in each stack. We will put the appropriate amount of cash in these two players' payment envelopes. We will proceed through the stacks until we are done.

Note that you don't know which of your 20 decisions will count, if any, or which other player you will be matched with. These will be determined purely by chance. So the best thing for you do to is to treat every choice sheet as if it will count, and make the choice on that sheet that you most prefer.

[Experimenter: The following people have earned a position in the Star Group. (Call out names). Please come up as we call your name and receive your star. You will wear your star for the rest of the exercise. Please remain standing at the front of the room until all stars are distributed. Let's give the Star Group a round of applause!]

Now we are ready to begin the experiment. The people in the Star Group may take a seat in the front of the room. Everyone else may sit in the back.

#### Summary

The rules of the experiment are as follows:

- 1. If you received a star for your answers on the quiz you in the Star Group, if you did not receive a star you are not in the Star Group.
  - a. You will be making 20 decisions, one of which will be randomly chosen to count.
  - b. Each player is anonymously paired with another player.
  - c. Everyone makes choices as if they know their decision will be used to calculate earnings.
- 2. After round 20 the experiment ends and each participant is paid his or her earnings from the experiment, plus \$5 for completing the quiz.
- 3. While payments are being prepared, each participant is asked to complete a brief survey.
- 4. Payments are made in private and in cash.

#### **QUESTIONNAIRE**

| Claim Check Number : |  |  |
|----------------------|--|--|
|                      |  |  |

While we are preparing your payment, please answer the following questions. Your careful and honest answers will be very helpful in our research, but if a question makes you uncomfortable, feel free to leave it blank.

Remember, we will not keep any record of your decisions or answers to these questions that could ever be matched with your name.

Thank you very much!

### Respond to the following statements on a scale of 1 to 7. (1=Disagree, 7=Agree)

- 1. I considered the star group to be more powerful. 1 2 3 4 5 6 7
- 2. I considered the star group to be more clever. 1 2 3 4 5 6 7
- 3. The star group was more fair. 1 2 3 4 5 6 7
- 4. The star group was more deserving. 1 2 3 4 5 6 7
- 5. My side was more powerful. 1 2 3 4 5 6 7
- 6. My side was more clever. 1 2 3 4 5 6 7
- 7. My side was more fair. 1 2 3 4 5 6 7
- 8. My side was more deserving. 1 2 3 4 5 6 7
- 9. My side was generally better. 1 2 3 4 5 6 7
- 10. My side performed better. 1 2 3 4 5 6 7
- 11. Method to allocate stars was fair. 1 2 3 4 5 6 7
- 12. The method to allocate stars reflects ability. 1 2 3 4 5 6 7
- 13. The star group had an unfair advantage. 1 2 3 4 5 6 7
- 14. I am satisfied with my performance. 1 2 3 4 5 6 7
- 15. I would have preferred the star group. 1 2 3 4 5 6 7

# Socioeconomic information

| 1.  | Birth date: Month Year:   |
|-----|---|
| 2.  | Gender: ☐ Male ☐ Female   |
| 3.  | Class: ☐ Freshman ☐ Sophomore ☐ Junior ☐ Senior ☐ Graduate Student  |
| 4.  | Which Economics courses have you taken?   |
|     | □ Intro Micro □ Intro Macro □ Intermediate Micro □ Intermediate Macro   |
| (sp | ☐ Other pecify)   |
| 5.  | What Mathematics and Statistics courses have you taken?   |
|     | ☐ College Algebra ☐ Calculus ☐ A course in statistics or probability  |
| 6.  | What is your planned major?   |
| 7.  | Have you ever participated in an economic experiment before today? ☐ Yes ☐ No   |
| 8.  | If so, when?  |
| 9.  | Have you ever participated in an psychology experiment? ☐ Yes ☐ No  |
| 10. | Describe your decision process today. What factors did you consider in your decision? Why did you make the choices that you did? (Use the back of the page if necessary.) |

| 11. | Where were you living when you were 16 years old?  City/Town:   |
|-----|---|
|     | State:  |
|     | Zip Code:   |
|     | Country:  |
| 12. | Thinking about the time when you were 16 years old, compared with American  |
|     | families in general, would you say your family income was roughly   |
|     | far below average below average average above average far above average   |
|     | lai above average   |
| 13. | If you are working now, about how many hours per week do you spend working?  ☐ I don't work. ☐ I work abouthours per week.                                      |
|     |   |
| 14. | In the last job you held, what was your typical hourly wage (including tips)?   |
| 15. | When you finish with your education and take a job, what is your best guess of the annual salary you will be paid?  |
| 16. | Excluding your rent and groceries, about how much do you spend a month on clothes, meals out, and entertainment?  |
| 17. | How many older brothers and sisters do you have? Include stepbrothers, stepsisters, and children adopted by your parents.  Older Brothers: Older Sisters:       |
| 18. | How many younger brothers and sisters do you have? Include stepbrothers, stepsisters, and children adopted by your parents.  Younger Brothers: Younger Sisters: |
| 19. | Did you attend a public, private non-religious, or private religious high school:  Public Private Non-Religious Private  Religious                              |
| 20. | What race do you consider yourself?   |
|     | What was your grade point average in high school? (Please use the standard 4-point scale.)  |

|            | 22. What is your g scale.)                     | rade poi                        | nt average for                   | college?               | (Please use         | the standa    | rd 4-point |
|------------|--|---------------------------------|----------------------------------|------------------------|---------------------|---------------|------------|
|            | 23. Generally spea<br>Republican<br>Independer |                                 | Democrat                         | -                      |                     |               |            |
|            |  | : people <u>;</u><br>y close fr |                                  | close to<br>ou say yo  | ou have?            |               |            |
|            |  |                                 | ur best friend,<br>n or a woman? |                        | end you feel        | closest to:   |            |
|            | 25. Do you have a                              | steady l                        | ooyfriend/girlfr                 | end?                   | Yes                 | No            |            |
|            | 26. How many ser per week?                     |                                 | beer, wine or o                  | other alco             | holic bevera        | iges do you   | consume    |
|            | 27. How often do                               | you atten                       | nd parties or go                 | out with               | friends?            |               |            |
|            | ☐ Every w                                      | eek                             |                                  |                        |                     |               |            |
|            | ☐ Once or                                      | twice a r                       | month                            |                        |                     |               |            |
|            | ☐ Once or                                      | twice a s                       | semester                         |                        |                     |               |            |
|            | ☐ Once or                                      | twice a y                       | /ear                             |                        |                     |               |            |
|            | ☐ Almost r                                     | never                           |                                  |                        |                     |               |            |
|            | ad each sentence<br>agree with it. The         |                                 |                                  |                        |                     | hows how r    | nuch       |
| 31.<br>it. | You have a certa                               | in amou                         | nt of intelligen                 | ce, and yo             | ou really car       | ı't do much   | to change  |
|            | 1<br>Strongly Agree                            | 2<br>Agree                      | 3<br>Mostly Agree<br>Stro        | 4<br>Most<br>ngly Disa | ly Disagree<br>gree | 5<br>Disagree | 6          |
| 32.        | Your intelligence                              | is some                         | thing about yo                   | น that yoเ             | ı can't chanç       | ge very muc   | h.         |
|            | 1<br>Strongly Agree                            | 2<br>Agree                      | 3<br>Mostly Agree<br>Stro        | 4<br>Most<br>ngly Disa | ly Disagree<br>gree | 5<br>Disagree | 6          |

| 33. | You can learn ne  | w things | , but you can't re | eally change your ba | asic intelligen | ice. |
|-----|-------------------|----------|--------------------|----------------------|-----------------|------|
|     | 1                 | 2        | 3                  | 4                    | 5               | 6    |
|     | Strongly Agree    | Agree    | Mostly Agree       | Mostly Disagree      | Disagree        |      |
|     | Strongly Disagree |          |                    |                      |                 |      |

On the following pages, there are phrases describing people's behaviors. Please use the rating scale at the top of each page to describe how accurately each statement describes *you*. Describe yourself as you generally are now, not as you wish you were or hope to be in the future. Describe yourself as you honestly see yourself, in relation to other people you know of the same gender as you are, and roughly your same age. So that you can describe yourself in an honest manner, your responses will be kept in absolute confidence. Your name will not be associated with your responses and will not impact your grade in this course. Please read each statement carefully, and then check one box with either a or a .

|                                   | Very<br>Inaccurate | Moderately<br>Inaccurate | Neither Accurate nor Inaccurate | Moderately<br>Accurate | Very<br>Accurate |
|-----------------------------------|--------------------|--------------------------|---------------------------------|------------------------|------------------|
| Am the life of the party.         |                    |                          |                                 |                        |                  |
| Feel little concern for others.   |                    |                          |                                 |                        |                  |
| Am always prepared.               |                    |                          |                                 |                        |                  |
| Get stressed out easily.          |                    |                          |                                 |                        |                  |
| 5. Have a rich vocabulary.        |                    |                          |                                 |                        |                  |
| 6. Don't talk a lot.              |                    |                          |                                 |                        |                  |
| 7. Am interested in people.       |                    |                          |                                 |                        |                  |
| Leave my belongings around.       |                    |                          |                                 |                        |                  |
| Am relaxed most of the time.      |                    |                          |                                 |                        |                  |
| 10. Have difficulty understanding |                    |                          |                                 |                        |                  |
| abstract ideas.                   |                    |                          |                                 |                        |                  |
| 11.Feel comfortable around        |                    |                          |                                 |                        |                  |
| people.                           |                    |                          |                                 |                        |                  |
| 12. Insult people.                |                    |                          |                                 |                        |                  |
| 13. Pay attention to details.     |                    |                          |                                 |                        |                  |
| 14. Worry about things.           |                    |                          |                                 |                        |                  |
| 15. Have a vivid imagination.     |                    |                          |                                 |                        |                  |
| 16. Keep in the background.       |                    |                          |                                 |                        |                  |
| 17. Sympathize with others'       |                    |                          |                                 |                        |                  |
| feelings.                         |                    |                          |                                 |                        |                  |
| 18. Make a mess of things.        |                    |                          |                                 |                        |                  |
| 19. Seldom feel blue.             |                    |                          |                                 |                        |                  |
| 20. Am not interested in abstract |                    |                          |                                 |                        |                  |
| ideas.                            |                    |                          |                                 |                        |                  |

|                                       | Very<br>Inaccurate | Moderately<br>Inaccurate | Neither<br>Accurate<br>nor<br>Inaccurate | Moderately<br>Accurate | Very<br>Accurate |
|---------------------------------------|--------------------|--------------------------|--|------------------------|------------------|
| 21. Start conversations.              |                    |                          |  |                        |                  |
| 22.Am not interested in other         |                    |                          |  |                        |                  |
| people's problems.                    |                    |                          |  |                        |                  |
| 23. Get chores done right away.       |                    |                          |  |                        |                  |
| 24.Am easily disturbed.               |                    |                          |  |                        |                  |
| 25. Have excellent ideas.             |                    |                          |  |                        |                  |
| 26. Have little to say.               |                    |                          |  |                        |                  |
| 27. Have a soft heart.                |                    |                          |  |                        |                  |
| 28. Often forget to put things back   |                    |                          |  |                        |                  |
| in their proper place.                |                    |                          |  |                        |                  |
| 29. Get upset easily.                 |                    |                          |  |                        |                  |
| 30. Do not have a good                |                    |                          |  |                        |                  |
| imagination.                          |                    |                          |  |                        |                  |
| 31. Talk to a lot of different people |                    |                          |  |                        |                  |
| at parties.                           |                    |                          |  |                        |                  |
| 32.Am not really interested in        |                    |                          |  |                        |                  |
| others.                               |                    |                          |  |                        |                  |
| 33. Like order.                       |                    |                          |  |                        |                  |
| 34. Change my mood a lot.             |                    |                          |  |                        |                  |
| 35.Am quick to understand things.     |                    |                          |  |                        |                  |
| 36. Don't like to draw attention to   |                    |                          |  |                        |                  |
| myself.                               |                    |                          |  |                        |                  |
| 37. Take time out for others.         |                    |                          |  |                        |                  |
| 38. Shirk my duties.                  |                    |                          |  |                        |                  |
| 39. Have frequent mood swings.        |                    |                          |  |                        |                  |
| 40. Use difficult words.              |                    |                          |  |                        |                  |
|                                       | 1                  | 1                        |  |                        |                  |

|                                    | Very<br>Inaccurate | Moderately<br>Inaccurate | Neither<br>Accurate<br>nor<br>Inaccurate | Moderately<br>Accurate | Very<br>Accurate |
|------------------------------------|--------------------|--------------------------|--|------------------------|------------------|
| 41. Don't mind being the center of |                    |                          |  |                        |                  |
| attention.                         |                    |                          |  |                        |                  |
| 42. Feel others' emotions.         |                    |                          |  |                        |                  |
| 43. Follow a schedule.             |                    |                          |  |                        |                  |
| 44. Get irritated easily.          |                    |                          |  |                        |                  |
| 45. Spend time reflecting on       |                    |                          |  |                        |                  |
| things.                            |                    |                          |  |                        |                  |
| 46.Am quiet around strangers.      |                    |                          |  |                        |                  |
| 47. Make people feel at ease.      |                    |                          |  |                        |                  |
| 48.Am exacting in my work.         |                    |                          |  |                        |                  |
| 49. Often feel blue.               |                    |                          |  |                        |                  |
| 50. Am full of ideas.              |                    |                          |  |                        |                  |

| Claim | Check | Number |  |
|-------|-------|--------|--|
| Ciaim | Check | number |  |

This is Scenario #1 in the instructions. In this scenario, the other player <u>is</u> in the Star Group and has the tokens.

| Divide 40 tokens: | Hold | @ 1 point each, and Pass | @ 3 |
|-------------------|------|--------------------------|-----|
| points each.      |      |                          |     |

- Divide 75 tokens: Hold \_\_\_\_\_\_@ 1 point each, and Pass \_\_\_\_\_\_@ 2 points each.
- Divide 100 tokens: Hold \_\_\_\_\_@ 1 point each, and Pass \_\_\_\_\_@ 1 point each.
- Divide 60 tokens: Hold \_\_\_\_\_@ 2 points each, and Pass \_\_\_\_\_@ 1 point each.
- Divide 40 tokens: Hold \_\_\_\_\_@ 3 points each, and Pass \_\_\_\_\_@ 1 point each.

| Claim Check Number |  |
|--------------------|--|
|--------------------|--|

This is Scenario #2 in the instructions.
In this scenario, the other player is not in the Star Group and has the tokens.

| Divide 40 tokens: Hold | @ 1 point each, and Pass | @ 3 |
|------------------------|--------------------------|-----|
| points each.           |                          |     |

| nber |
|------|
| 1    |

This is Scenario #3 in the instructions.
In this scenario, the other player <u>is</u> in the Star Group and <u>you</u> have the tokens.

| Divide 40 tokens: | Hold | @ 1 point each, and Pass _ | @ 3 |
|-------------------|------|----------------------------|-----|
| points each.      |      |                            |     |

| Claim Check Number |  |
|--------------------|--|
|--------------------|--|

| This is Scenario  | #4 in the inst | ructions.               |               |                |        |     |
|-------------------|----------------|-------------------------|---------------|----------------|--------|-----|
| In this scenario, | the other play | yer <u>is not</u> in th | ne Star Group | and <u>you</u> | have t | the |
| tokens.           |                |                         |               |                |        |     |

| Divide 40 tokens: Hold | @ 1 point each, and Pass | @ 3 |
|------------------------|--------------------------|-----|
| points each.           |                          |     |
|                        |                          |     |
|                        |                          |     |
|                        |                          |     |

| Divide 75 tokens: Hold _ | @ 1 point each, and Pass | @ 2 |
|--------------------------|--------------------------|-----|
| points each.             |                          |     |

| Divide 100 tokens: | Hold | @ 1 point each, and Pass _ | @ 1 |
|--------------------|------|----------------------------|-----|
| point each.        |      |                            |     |

| Divide 60 tokens: Hold | @ 2 points each, and Pass _ | @ 1 |
|------------------------|-----------------------------|-----|
| point each.            |                             |     |