2/12/96

Persuasion Experiment Instructions:
Knowledge

[Outside experiment room: Consent forms, Registration bonus, Pay extras. Skip-reader. Mat-- supervises reporter and pays. Jamie- tosses coin and manages data base. Andrea- keeps records, transports reporters. Greg-hands out and collects forms. Scott, Bobby, undergrads - set up and take down lab. Check ID]

[Remember 10 sided die, and a coin to toss.]

Please sit at one of the tables with a pen on it.

[We distribute consent forms, business cards, and $2 on-time bonus. Then, we collect consent forms.]

[Write in number of predictors on reporter questionnaires.]

Welcome to the UCSD Political Science Experimental Lab. Today's experiment is part of a six-month study on decision making. During and after the experiment, we will pay you for your participation. The amount we pay you depends on your decisions, the decisions of others, and chance. While we cannot guarantee that you will earn any specific amount, we can guarantee that if you are careful, make good decisions, and complete the experiment, then you can expect to earn between $20 and $60. Today's experiment will last no longer than 2 hours.

This is a pen-and-paper experiment. Thus, you are to record all of your actions on questionnaires that we will later distribute. Along the way, you may have some questions about the experiments. If you do, please raise your hand and one of us will assist you. It is important that you do not communicate with any other participant at any time during the experiment. If you do, we will ask you to leave. [Pause]

Now we are going to tell you how you can make some money. *You make money by predicting the outcomes of coin tosses*. We pay you 50 cents for every correct prediction that you make. That is, regardless of whether you predict heads or tails, we pay you 50 cents for correctly predicting the outcome of the coin toss.

In addition, we pay you 5 cents for every time that you predict heads. That is, regardless of whether you make a correct or an incorrect prediction, we pay you 5 cents every time you predict heads.

So, for example, suppose that you predict heads. If heads is the correct prediction, then we pay you a total of 55 cents -- 5 cents because you predicted heads plus 50 cents because you predicted correctly. By contrast, if heads is an incorrect prediction, then we pay you 5 cents.

Now suppose that you predict tails. If tails is the correct prediction, then we pay you 50 cents. If tails is an incorrect prediction, then you earn nothing. Are there any questions about how you earn money?

[Assistant handout First questionnaire]

We are now handing out the first questionnaire. Whenever we give you a new questionnaire, the first thing you should do is write your full name on it. This will help us pay you.

To see an example of how our experiment works, please look at Practice Toss 1 on your questionnaire. In Practice Toss 1, the subject predicts that the coin will land on tails. If it does, then we pay the subject 50 cents. If it lands heads instead, then the subject earns nothing.

In this experiment, there are 36 coin tosses. To make a prediction, put a check on the line next to the word Heads or Tails when we instruct you to do so. Once you make a prediction for a particular coin toss, you cannot scribble it out or change it. If you do, then you earn nothing for that coin toss, even if the check mark that is not scribbled out is correct. Are there any questions about how you make a prediction?

Throughout the experiment, we will vary the conditions under which you make predictions. In some conditions, it will be easy to make correct predictions. In other conditions, it will be more difficult. The first two coin tosses should be very easy to predict. This is true because, we are going to toss the coin and show you the result, *before* we ask you to make your predictions.

We will now toss the first coin. [Mat tosses the coin]. The outcome of Toss 1 is [heads/tails]. [show all participants the result]. Please make a prediction about the outcome of Toss 1. [Subjects make predictions.]

We will now check the results and pay you for your predictions. [reader checks results. Mat pays.]

We will now toss the second coin. [toss the coin]. The outcome of Toss 2 is [heads/tails]. [show all participants the result]. Please predict the outcome of Toss 2. [Subjects make predictions.]

We will now check the results and pay you for your predictions.

[Mat pays. Handout new questionnaires.]

We are now handing out a new questionnaire. Please remember to write your full name on your questionnaire.

We will now toss the coin four more times. Unlike before, however, we will record, but will not tell you, the results of the four tosses. Thus, you must make your prediction ***before*** each toss. To move the experiment along, we will reveal coin toss outcomes and pay you your remaining earnings at the end of the experiment.

As before, we pay you 50 cents for every correct prediction that you make. Apart from this, we pay you 5 cents every time that you choose heads. Remember that you earn nothing if you scribble out your prediction. We will now toss the third coin and record the result. [Greg tosses the coin behind black cabinet and records the result.] Please predict the outcome of Toss 3.

We now toss the [fourth fifth sixth] coin and record the result. [toss the coin and record the result.] Please predict Toss [4 5 6].

We will now collect your questionnaires. [assistant collect Toss 3-6 questionnaires, tabulate results.]

Please pay close attention to the following set of instructions. For the remaining 30 coin tosses, we add a simple but important change to the way the experiment proceeds. To understand this change, you should listen carefully to the instructions. When we finish reading these instructions, you will take a brief quiz on them. We will pay you 50 cents for every quiz question that you answer correctly.

The change in the experiment is that, from now on, we will randomly select one of you to see the outcome of the coin toss and send a report to the other subjects about it. We call that one person the coin toss reporter. The rest of you continue to be coin toss predictors, as before, and will not be shown the coin toss result. Thus, for every remaining coin toss, one of you will be the reporter and N-1 of you will be predictors.

Suppose that you are selected to be the reporter. As the reporter, your job is to determine what I can tell the predictors about the coin tosses. So for example, suppose that you are the reporter. We toss the coin [Mat tosses coin] and then show you the result. [Mat walks around the room and shows everyone the result.] You then check on your questionnaire whether you wish for me to say heads or tails. Then, I read the statement you selected to the predictors. After you check a statement, and I read it to the predictors, then they make their predictions without knowing the true coin toss result.

Note that the way that the reporter earns money is different than the way the predictors earn money. We pay the reporter 50 cents every time a predictor makes a correct prediction. The reporter earns nothing every time a predictor makes an incorrect prediction. So, if all Z predictors make correct predictions, then we pay the reporter Z*50 cents. If only 2 predictors make correct predictions, then we pay the reporter $1. If no one makes correct predictions, then the reporter earns nothing.
Predictors continue to earn money as before -- we pay a predictor 50 cents every time they make a correct prediction and 5 cents every time they choose heads.

If you are chosen to be the reporter, it is totally up to you whether you instruct me to make true or false statements. So, if the coin lands heads, it is up to you whether you whether I say heads or tails to the predictors. Note that like the predictors, I will not know the true coin toss outcome.

[Distribute Common Interest/100% knowledge handout.]

The sheet of paper that we are now distributing summarizes the new sequence of events. To recap, first we toss the coin. We record the coin toss in the computer (this helps us pay you faster at the end of the experiment. Then, we tell the reporter how it landed. Then, the reporter makes a statement by checking heads or tails. Then, I read the reporters statement. Then, the predictors make predictions. If a predictor makes a correct prediction, then we pay both the reporter and the predictor 50 cents each. If a predictor predicts heads, then we pay the predictor-- but not the reporter an additional 5 cents.

Are there any questions?
[answer questions]

We will now give you a short quiz on the instructions. We will pay you 50 cents for every question that you answer correctly. Please write your name on the quiz and begin taking it now.

[assistant and reader check quizzes. Write # correct on the quiz. If anyone fails, don't let them be the reporter and we will throw them out later.]

We will now roll a 10-sided die to determine who will be the reporter for the next 10 coin tosses. [roll the die]. To protect the integrity of the experiment, we ask all of you to place your heads on your desk for just a moment. [Pause.] Will the reporter please move to the reporter's chair. [Pause.] You may lift your heads off your desk now.

[Distribute Toss 7-16 questionnaires.]

We are now ready for the next toss. [toss the coin and show to the reporter]. [check statement.] The report for Toss number [7 8 9 10 11 12 13 14 15 16] is [heads/tails]. Please make your predictions.

We will now collect your questionnaires.
[Assistant collect Toss 7-16 questionnaires].

For the next set of coin tosses, we add a simple but important change to the way the experiment proceeds. To understand this change, you should listen carefully to the instructions. Remember, we will pay you 50 cents for every quiz question that you answer correctly.

The next 10 coin tosses differ from the previous set in one important way. This time, for each coin toss, there is a 70% chance that the reporter is shown the result of the coin toss.

Thus, about 70% of the time or in about 7 of the next 10 coin tosses, the reporter gets to see the coin toss result before he or she makes a statement. The other 30% of the time or in about 3 of the next 10 tosses, the reporter makes his or her statement without knowing the coin toss result.

The predictors will never know with certainty if the reporter has seen any particular coin toss result -- all they know is that there is a 70% chance that the reporter knows each one. For example, we roll the die once for the next toss, Toss 17. If it lands on 1 through 7, then the reporter sees the coin toss outcome. If it lands on 8, 9, or 10, then the reporter does not see the outcome of Toss 17. To move the experiment along, we earlier today rolled the ten-sided die ten times, once for each of the next ten tosses, to determine which Tosses the reporter will be shown. Are there any questions about how we determine when to show the coin toss result to the reporter?

All of the other aspects of the experiment remain the same as you can see on the sheet of paper that we are now handing out.

[Distribute Common Interest/70% knowledge handout.]

To recap, first we toss the coin. Then, the roll of a 10-sided die determines whether or not we reveal the coin toss outcome to the reporter. For each of the next set of coin tosses there is a 70% chance that the reporter will see the toss. There is a 30% chance that the reporter, like me and all of the predictors, will not see the toss. Then, the reporter makes a statement by checking heads or tails. Then, I read the reporter's statement. Then, the predictors make predictions. If a predictor makes a correct prediction, then we pay both the reporter and the predictor 50 cents each. Apart from this, if a predictor predicts heads, then we pay the predictor-- but not the reporter an additional 5 cents. Are there any questions?

We will now give you a short quiz on the instructions. Again, we pay you 50 cents for every correct answer. [assistant distribute quiz]. You may begin the quiz now.

[assistant and reader check quizzes. If anyone fails, don't let them be the <u>reporter</u> and we will throw them out later.]

We need to appoint a new <u>reporter for the next 10 tosses</u>. [roll the die.] To protect the integrity of the experiment, we ask all of you to place your heads on your desk for just a moment. [Pause.] Will the <u>reporter</u> please move to the reporter's chair. You may lift your heads off your desk now.

[Distribute Toss 17-26 questionnaire.]

Remember and as stated on your questionnaire, for the next 10 tosses, there is a 70% chance that the <u>reporter</u> knows the coin toss result.

We are now ready for the next toss. [check statement.] The report for Toss number [17 18 19 20 21 22 23 24 25 26] is [heads/tails]. Please make your predictions.

We will now collect your questionnaires.

[Assistant collect Toss 17-26 questionnaires.]

For the next set of coin tosses, we add a simple but important change to the way the experiment proceeds. For the next 5 coin tosses, the reporter will *never* see the coin toss result. Thus, for the next five tosses, the reporter knows no more about the outcome of the coin toss than the predictors do. If a predictor makes a correct prediction, then we pay both the reporter and the predictor 50 cents each. Apart from this, if a predictor predicts heads, then we pay the predictor-- but not the reporter an additional 5 cents.

[Distribute handout for Tosses 27-31].

In sum, we now begin tossing the coin. We do not reveal the outcome of the coin toss to the reporter. We then ask the reporter to make a report. Then, I read the reporter's statement. Then, the predictors make predictions. If a predictor makes a correct prediction, then we pay both the reporter and the predictor 50 cents each. If a predictor predicts heads, then we pay the predictor-- but not the reporter an additional 5 cents. Are there any questions?

We need to appoint a new reporter. [roll the die.] To protect the integrity of the experiment, we ask all of you to place your heads on your desk for just a moment. [Pause.] Will the reporter please move to the reporter's chair. You may lift your heads off your desk now.

[Distribute Toss 27-31 questionnaires.]
[Also be sure to make $5 tails offer to reporter.]

We will now toss coin [27 28 29 30 31]. The report for Toss number [27 28 29 30 31] is [heads/tails]. Please make your predictions.

We will now collect your old questionnaires. [Collect Toss 27-31 questionnaires].

For the final 5 coin tosses, as in the last 5, the reporter will never be shown the result of the coin toss. However, we do make one important change to the experiment. Please pay close attention to this change as we will follow these instructions by a brief quiz. As before, we will pay you 50 cents for every quiz question that you answer correctly.

The change in the experiment concerns how we pay the reporter. The reporter earns 50 cents every time a predictor makes an incorrect prediction and nothing every time a predictor makes a correct prediction. So, if all Z predictors make correct predictions, then the reporter earns nothing. If only 2 predictors make correct predictions, then we pay the reporter $Z-1. If no one makes correct predictions, then we pay the reporter $Z.

Predictors continue to earn money as before -- we pay a predictor 50 cents every time they make a correct prediction and 5 cents every time they choose heads.

[Distribute handout for Tosses 32-36].

[Also be sure to make $5 tails offer to reporter.]

To recap, for the next five tosses, neither the reporter nor the predictors see coin toss outcomes. If a predictor makes a correct prediction, then we pay the predictor 50 cents and the reporter gets nothing. If a predictor makes an incorrect prediction, then we pay the reporter 50 cents and the predictor gets nothing. Apart from this, if a predictor predicts heads, then we pay the predictor-- but not the reporter an additional 5 cents. Are there any questions?

We will now give you a short quiz on the instructions. Again, we pay you 50 cents for every correct answer. [assistant distribute quiz]. You may begin the quiz now.

[assistant and reader check quizzes.]

[Distribute final questionnaire.]

We will now toss coin [32 33 34 35 36]. The report for Toss number [32 33 34 35 36] is [heads/tails]. Please make your predictions.

Conclusion

This concludes the experiment. We will now compute the results and your payoffs. While we are doing this, we would like you to fill out a post experimental questionnaire. Please respond to each of the questions carefully. While you are filling out this questionnaire you may want to know that for the final ten tosses the reporter, who never saw the outcome of the coin toss, was encouraged to report tails at least half of the time. In a few moments, we will call each of you individually to collect your questionnaire and to pay you. At that time, you are free to go. Thanks again for your participation.

[Tabulate results and call up each participant individually to collect post experiment questionnaire and pay them. Give each participant a receipt (with their social security number) and business card.]