

Wiley here is a
description of the
Bargaining game
It should be easy to find
implement. We can't find
the APL program. 8/6/75

BARGAINING EXPERIMENT

a parameter
P: number of
players is
set at beginning
of experiment
Players are
paired randomly
until each has
played to each
of the others
once.

There are six persons participating in this session and you will play the same bargaining game once against each of the others. In any game two players may divide 20 money units between themselves if they reach agreement. If they reach conflict neither receives any money units. At the beginning of a bargaining game it is decided by a separate random experiment for each player by drawing an "H" or "L" with equal chance to determine whether he has high or low cost. ~~from the bag whether he has high or low cost.~~ High cost = 9 money units, and low cost = 0 money units. These costs are deducted from the payments in the event that agreement is reached. If no agreement is reached then the net payoffs to both players are zero regardless of whether they are high or low cost players.

a parameter
set by
experiment
at the beginning
of session

You will not know the cost of the other player but you will know your own cost and you also know that the cost of the other player was chosen high or low with equal probability independently from the selection of your costs. In any one game you will not know against which of the other participants you are playing. The other player will find himself in exactly the same general situation.

The bargaining is done via ~~teletype~~ ^{the terminal} and proceeds in discrete stages. At the first stage the teletype will accept your demand for a share which must be an integer no lower than your cost and not higher than 20. In succeeding stages your demand must not be higher than the demand in the previous stage and no lower than your cost. The demand payment will be reported as soon as both bargainers have made demands. If a player's move is not completed within the decision time for a stage the computer

#/sec/move

will take the demand of that player in the previous stage. The decision time for both bargainers is limited to at most 2 minutes for each stage.

Conflict occurs at any stage for which neither player makes a concession, i.e., both demands remain at the levels set in the previous stage. Therefore if you decide not to make a concession you take the risk of conflict since the other player also might not make a concession. In case of conflict (see above) both players have a net payoff of zero.

Agreement is reached should a stage occur in which the sum of both demands is at most (20) money units. If your demand in the agreement stage is D_1 and the other player's demand is D_2 then your gross agreement payoff is:

$$D_1 + \frac{1}{2} [20 - (D_1 + D_2)] .$$

This means that each player gets his demand and then the amount by which the sum of demands falls short of (20) is split evenly.

If an agreement is reached your net payoff is your gross payoff minus your cost. You will receive this net amount in money units at the end of each play.

At the end of each stage, after the demand of the other is reported to you, you will be required to make a guess about the cost of the other player. If you think he is high cost type "H" and if you think he is low cost type "L". The ^{console}teletype will not accept your new demand before you have made this guess.

Examples of how the teletype printout will look are given below:

Example 1

YOUR COST IS: L

STAGE	DEMAND		GUESS
	YOUR	HIS	
1	19 4	17	L
2	18 4	17	L
3	17 4	16	H
4	17 4	16	H

H CONFLICT: YOUR NET PAYOFF IS 0.

Note: You must type a ^{blank} " " after each integer you input.
To recover from a typing error type "~~rubout key~~" —.
Once you input the "~~blank~~" you cannot change your demand. For illegal inputs the message INPUT ERROR will be typed out and the line will be repeated.

Example 2

YOUR COST IS: H

STAGE	DEMAND		GUESS
	YOUR	HIS	
1	17 [↑]	12	L
2	17 [↑]	11	L
3	16 [↑]	8	L
4	16 [↑]	4	L

L AGREEMENT: YOUR NET PAYOFF IS 7

We expect you to be motivated by profit and it should be your goal to play in such a way as to earn as much money as you can.