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Seeking the unicorn

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1

Works for me

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ABSTRACT

The task is a two-player game in which players interact with 64 tiles arranged in an 8x8 grid. The grid can either hide a unicorn beneath one of the tiles or else it can be absent from the grid. Either event can occur with equal probability. At the beginning of each round, the computer chooses whether or not there is a unicorn, and if there is one, it randomly chooses a tile—each one having an equal probability of being chosen—and places the unicorn beneath it. Then, players have to guess whether there is a unicorn or if it is absent from the grid by uncovering tiles one at a time, with both players uncovering tiles simultaneously, in order to see what lies beneath them. What tiles have been uncovered and whether there is or not a unicorn is only known to the player that uncovers these tiles. However, in the event that both players uncover the same tile, it changes its color and both players can immediately see this. At any time during the round, each player can make a guess as to whether the unicorn is present or absent from the grid. The other player will know this information and they can use it to inform their own guess. The round ends when both players announce that their guess is a final decision, and then they are shown their individual scores from the round. The score depends on whether the player's guess is correct (32 points) or incorrect (-64 points), subtracting the number of tiles that were uncovered by both players.

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- 1 The present task was implemented in the nodeGame platform (<https://nodegame.org/>) and has to be run in a university computer lab. Each participant has to sit at a sound- and sight-isolated personal computer running a version of the game. The code implementing the game is freely available at https://github.com/Slendercoder/Seeking_the_unicorn

2 Instructions for the experiment

On each round, you and your partner will be shown a grid of 64 squares. Your task is to say whether there is a unicorn hiding behind one of these squares or not.

Click on a square to see whether there is a unicorn or if the square is empty. At the bottom of the page you will find buttons for saying that the unicorn is present or absent. You can click on the "Submit Final Decision" button when you have made up your mind and want to see the score.

On half of the trials there will be a unicorn present somewhere in the grid, and on the other half it will be absent.

When you and your partner click on the same square, it will become blue. When your earned points are calculated at the end of each round, then you will get points based on whether you guessed correctly as to the presence of the unicorn, and you will have points deducted based on the number of overlapping squares that you and your partner click on.


If you understood this instructions correctly press the "Ok, I am ready for the game!" button to proceed to the game.

3 Trials

3.1 Game

Seeking the Unicorn

Click on squares to tell whether the unicorn is present or absent:
Important: A blue square means that both players have visited it.

						Empty	Empty
						Empty	Empty
						Empty	Empty
						Empty	Empty
							Empty
							Empty
							Empty
							Empty



<= Points based
on common
locations

My current guess is that the unicorn is:

Your current decision is: **Present**

Your partner's current decision is: **Present**

3.2 Score

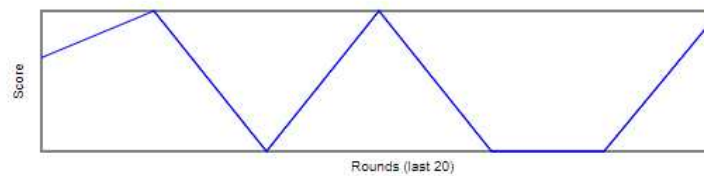
Seeking the unicorn

Your answer is correct

You get 32 points - 3 points = 29 points

for correct answer with unicorn present
for common locations

You and your partner clicked on the same locations 3 time(s).



Ok, I am ready for the next round!

4 Debrief

We were interested in exploring how the members of the group coordinate with each other when they were given a task. As you were playing the game, maybe you noticed that you and your partner were able to make efficient decisions to improve the score. We wanted to show that the members of a group can coordinate with very simple communication in order to better achieve their task.

5 Demographic

Survey

What is your age group? ·							
18-20	21-30	31-40	41-50	51-60	61-70	71+	Do not want to say
What is the area of your study? ·							
Natural Sciences		Social Sciences		Arts and Humanities		Mathematics and/or Statistics	
Do not want to say							
What is your sex? ·							
Male		Other		Female		Do not want to say	
What is your political party? ·							
Democrat		Republican		Socialist		Green	
Libertarian		Independent		Do not want to say			
During the game, and specially in regards to the work of uncovering the tiles, I ·							
Tried to get my partner to do all or most of the work		Tried to do all or most of the work myself		Tried to divide the workload		Do not want to say	
During the game, I tried to ·							
Maximize my points		Cooperate with partner		Both		Do not want to say	
What is your location? ·							
Colombia		Do not want to say		US		Other	