公共財自願捐獻
Public Goods Game

Game Rules (遊戲規則)

➤ There will be SEVERAL rounds (本活動將進行 多 個回合)

➤ Each group receives 4 cards (same number, 2B2R)
(各組會發到 4 張牌面數字相同的撲克牌: 兩紅/兩黑)

➤ In each round, each group gives me 2 cards
(每回合開始時，主持人會去跟各組收取 2 張撲克牌)

➤ You have to decide which 2 cards to DONATE
(各組要決定繳交哪兩張牌給主持人以存入 公庫)

➤ Donate cards faced down so others cannot see
(繳交撲克牌時注意 牌面朝下 以確保他組無法看到你們繳出的牌組內容)

Game Rules (遊戲規則)

➤ Payoff depends on number of red cards donated
(各組的報酬決定於繳出多少張 紅 牌給公庫)

➤ Value of Red cards kept differ from that donated
(紅 牌留在手中 (私庫) 跟存入 公庫 的報酬 不同)

➤ In the beginning, each Red card kept yields 5 Ecoins
(在前幾個回合中，每張 私庫 中的 紅 牌價值 5 Ecoins)

➤ Red card donated yields 10 Ecoins for all groups
(公 庫中每張 紅 牌價值 10 Ecoins，各組都能得到)

Game Rules (遊戲規則)

Ex: 8 groups each donate 1R1B and keep 1R1B
(有 8 組參與遊戲，每一組都繳出一紅一黑存入公庫，並留下一紅一黑在手上)

➔ 8 cards donated (=80 Ecoins); each group earn 85
(公庫中共有 8 張紅牌總價值 80 Ecoins，各組得分 85)

➤ Your cards will not be revealed when counting and be returned faced down. (主持人在計算公庫中有多少紅牌時，決不會透露各組所繳出的牌組內容，發回牌組時也會嚴守 牌面朝下 原則)

➤ Black cards are worthless & exist only to conceal.
(黑牌 完全沒有 點數價值，其存在目的僅在於 保密)

Game Rules (遊戲規則)

➤ [Summary (整理)] In the beginning, each group earns
(在前幾個回合中，各組報酬的計算方式為)

5 * Red cards kept + 10 * Total Red cards donated
(私庫紅牌數)　　　　　(公庫紅牌 總 數)

➤ Later, value of red cards kept may change, but value of red cards donated remain the same.
(在之後的回合中，私庫 中的紅牌價值會 有所變動，但 公庫 中的紅牌價值 總是不變)

Practice Round (練習回合) 1

Group Earnings (小組報酬) =
5 * R kept + 10 * Total R donated
(私庫紅牌數)　　　(公庫紅牌 總 數)

Practice Round (練習回合) 2

Group Earnings (小組報酬) =
150 * R kept + 10 * Total R donated
(私庫紅牌數)　　　　(公庫紅牌 總 數)

Round (回合) 1

Group Earnings (小組報酬) =
20 * R kept + 10 * Total R donated
(私庫紅牌數)　　　　(公庫紅牌 總 數)

Round (回合) 2

Group Earnings (小組報酬) =
20 * R kept + 10 * Total R donated
(私庫紅牌數)　　　　(公庫紅牌 總 數)

Allow 2 min Discussion
(開放組間討論 2 分鐘)
Round (回合) 3

Group Earnings (小組報酬) =
20 * R kept + 10 * Total R donated
(私庫紅牌數)　　　　(公庫紅牌 總 數)

Allow 2 min Discussion & Reveal Donation (開放組間討論 2 分鐘，資訊公開)
Round (回合) 4

Group Earnings (小組報酬) =
20 * R kept + 10 * Total R donated
(私庫紅牌數)　　　　(公庫紅牌 總 數)

Calculate Total Earnings
(計算總得分)

Discussion (小組討論)

➢ What did your group do in the real round? How many cards did you donate?
(你們這一組在正式回合做了什麼的決策(繳出幾張紅牌到公庫)?)

➢ Explain your reason for this decision.
(請解釋這些決策背後的思考邏輯或理由為何?)

Discussion (小組討論)

➢ Did you discuss other considerations or have disagreements on how much to donate?
(小組討論時你們有提及哪些考量? 在繳出幾張牌的決策上有出現不一致的看法嗎?)

➢ Did your decision differ from that of other groups?
(請比較你們的決定跟其他各組的整體情況，有沒有什麼不同?)

Discussion (小組討論)

➢ What is the cost of donating one R?
(繳出一張紅牌到公庫的代價是什麼?)

➢ What is the rate of return donating one R?
(繳出一張紅牌到公庫的投資報酬率是多少?)

➢ Is it good for groups to donate (from a social standpoint)? Explain. (從所有組別的整體觀點來看，單一組別繳出紅牌到公庫是好事嗎? 請解釋你的推理。)

Discussion (小組討論)

➢ Some goods are non-rival (非敵對/共享) , so adding another consumer does not reduce the utility of others consuming it.

➢ What are examples of non-rival goods in the real world? Do reds cards donated in the experiment count? Why or why not?
(那些現實中的商品具有「非敵對性」?公庫的紅牌算嗎? 為什麼?)

Discussion (小組討論)

➢ Some goods are non-excludable (非排他), so one cannot prevent free-riders from enjoying it.

➢ What are examples of non-excludable goods in the real world? Do reds cards donated in the experiment count? Explain.
(那些現實中的商品具有「非排他性」?公庫的紅牌算嗎? 請解釋。)

Discussion (小組討論)

➢ If a firm produces something that is both non-rival and non-excludable, what problem will it face?

➢ (如果一家廠商生產的商品同時具有「非敵對」與「非排他」兩種特性，你認為這家廠商會面臨什麼樣的問題?)

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Discussion (小組討論)

➢ What did you discuss in the next-to-last round (when the experimenter left the room)? Did it affect your decision? Was the result of that round surprising to you? Why or why not?

➢ (在倒數第二回合主持人離開現場時，各組之間討論了些什麼? 你們在決策時有受到這些討論的影響嗎? 這個回合最後的結果有讓你感到驚訝嗎?如果有的話，為什麼驚訝呢?)

Discussion (小組討論)

➢ Did your decision change in the last round (compared to the next-to-last round)? Why or why not? Was the result of this round surprising?

➢ (相較於倒數第二回合，你們在最後一回合的決策有沒有不同呢? 有的話又是為什麼呢? 這回合其他組的決策有讓你感到驚訝之處嗎?)

Discussion (小組討論)

➢ What happens if donations are revealed?
(當資訊公開的時候發生甚麼事情?)

➢ [Irrigation Game] How will things change if groups took Ecoins from the pool 1-by-1?
(灌溉賽局: 如果改成讓各組輪流一個個從公庫中拿走任何數量的Ecoin?)

➢ Are there other ways to promote donations?
(有其他辦法鼓勵更多捐獻嗎?)