**DATA MANUAL for GINI experiment, ver. 2.0.**

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**I. Data handling**

The original record of each session (game) was transformed to R-readable files by json format (using rjson package). These .json data (80 fliles) have been created from the original raw csv data by Hirokazu Shirado (h.shirado@gmail.com), and the source is json\_format.rtf. One caution is that “Note: each graph data is the result AFTER cooperation and rewiring step. Therefore, if you want to know connections when players select cooperation or defection, you have to use the graph data of the PRECEDING round”. We assume that we randomly assigned network location of each study participant at round 0, let them choose cooperate or defect at round 1, let them choose connect or not connect at round 1, …, in this order up to the 10th round. Currently the original raw csv data are maintained by Hirokazu and Mark McKnight.

The data file for each session (e.g. D-2013-12-18-02\_6241.json) was imported in R 3.0.2. All the data were merged and converted to two foundation data: node.Rdata (ndata, the information of node attributes) and link.Rdata (ldata, the information of network dynamics). This process has been done by Akihiro (please refer to the R code at Nishi\_Shirado\_GINI\_read.R).

**II. Node data (ndata): node.Rdata**

This data has 15258 rows and 18 columns/variables. 80 sessions and 11 rounds (rounds 0 to 10) are saved separately. Each row represents each individual at each session.

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| **Variable name** | **Category** | **Note** |
| scoreA | 1150,850,700,500 | Initial score for a richer group |
| scoreB | 200,300,350,500 | Initial score for a poor group |
| percentA | 0.3,0.5 | Probability to being assigned to a richer group |
| showScore | T/F | Visible condition (T for visible) |
| costbenefit | 50100 | c/b (50100 means c/b = 50/100) |
| game | 1-80 | The session ID (gameID was relabeled by its time order) |
| gameID |  | Unique ID for each session |
| round | 0-10 | Round 0 means the initial state |
| id | pXX | Individual id for each session. Subjects having same id number at different sessions are different individuals. |
| initScore |  | Initial score of the individual |
| behavior | 0[D]/1[C] | Cooperation behavior of focal subjects |
| behaviorTime |  | Response time of cooperation behavior (msec) |
| payoff |  | Payoff (income) at each round |
| cumulativePayoff |  | Cumulative payoff (wealth) of ego at each round |
| makeLink | pXX, pXX, .. | IDs of alters with whom focal individuals chose to newly connect at each round |
| notmakeLink | pXX, pXX, .. | IDs of alters with whom focal individuals chose not to newly connect at each round |
| breakLink | pXX, pXX, .. | IDs of alters with whom focal individuals chose to break a link at each round |
| notbreakLink | pXX, pXX, .. | IDs of alters with whom focal individuals chose not to break a link at each round |

**III. Link data (ldata): link.Rdata**

This data has 63,309 rows and 10 columns/variables. 80 sessions and 11 rounds (rounds 0 to 10) are saved separately. Each row represents each dyad at each session.

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| **Variable name** | **Category** | **Note** |
| scoreA | 1150,850,700,500 | Initial score for a richer group |
| scoreB | 200,300,350,500 | Initial score for a poor group |
| percentA | 0.3,0.5 | Probability to being assigned to a richer group |
| showScore | T/F | Visible condition (T for visible) |
| costbenefit | 50100 | c/b (50100 means c/b = 50/100) |
| game | 1-80 | The session ID (gameID was relabeled by its time order) |
| gameID |  | Unique ID for each session |
| round | 0-10 | Round 0 means the initial state |
| id1 | pXX | Ego’s id (bidirectional; both listed) |
| id2 | pXX | Alter’s id (bidirectional; both listed) |