

Instructions for replication of *Peer effects in binary outcomes: strategic complementarity and taste for conformity with endogenous network*

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This replication package contains the scripts and data necessary to reproduce the paper "Peer effects in binary outcomes: strategic complementarity and taste for conformity with endogenous network", Journal of Applied Econometrics (2025) by M. Lambotte. The code has been runned on Windows 11, using only R version 4.1.2.

The data is available from <https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/U3BIHX> and included in this replication package in the folder "Banerjee 2013". The interested reader can find the original readme file ("README.pdf") in the folder. In the paper, we use a subsample of the original data, focusing on the households of 29 villages among 43, for which there are no missing values in the household characteristics (see section 6.1 Data). We thus have 6733 observations. The following table describes the variables use in the paper.

Table 1: Variables Description

Variable	Description
Outcome variable	
Participation in microfinance	Yes = 1, No = 0
Households' characteristics	
Leader	1, if the household belongs to the leader group (teachers, shop owners, ...); 0, otherwise
Muslim or Christian	Yes = 1, No = 0
Scheduled Caste or Tribe	Yes = 1, No = 0
Number of Rooms	in the household's house, continuous variable
Number of Beds	in the household's house, continuous variable
Latrine in house	Yes = 1, No = 0
Rented house	Yes = 1, No = 0

To replicate the empirical part of the paper, you should:

1. Open "Create_Data - Generalized model of peer effect.R". Make sure to update the filepaths in each line using "setwd("filepath")" to the filepath of the replication folder. Run the code entirely to generate the network matrices and the database used in the estimations. Note that estimating the network formation process might take up to 1 hour. Depending on the network data available, you may estimate a directed network formation model using "symmetry=FALSE" in the function "homophily.fe()" from CDatanet and estimate two fixed effects for each individual, gregariousness and attractiveness. The code also generates Table 1, in two parts, a table for the restricted sample without missing values (29 villages) and one with the original sample of 43 villages).
2. Open "Do_Estim - Generalized model of peer effect.R". Make sure to update the filepaths in each line using "setwd("filepath")" to the filepath of the replication folder. Run the code to obtain all tables and figures in the paper, as well as the figures in OA (Online Appendix 3).
3. Open "Monte Carlo.R". Make sure to update the filepaths in each line using "setwd("filepath")" to the filepath of the replication folder. Run the script to get the table in OA.2 Monte Carlo simulations. The MC simulations take several hours to be computed on a computer with 12 processing cores.