

# Simulating network intervention strategies: Implications for adoption of behaviour (Supplementary Material)

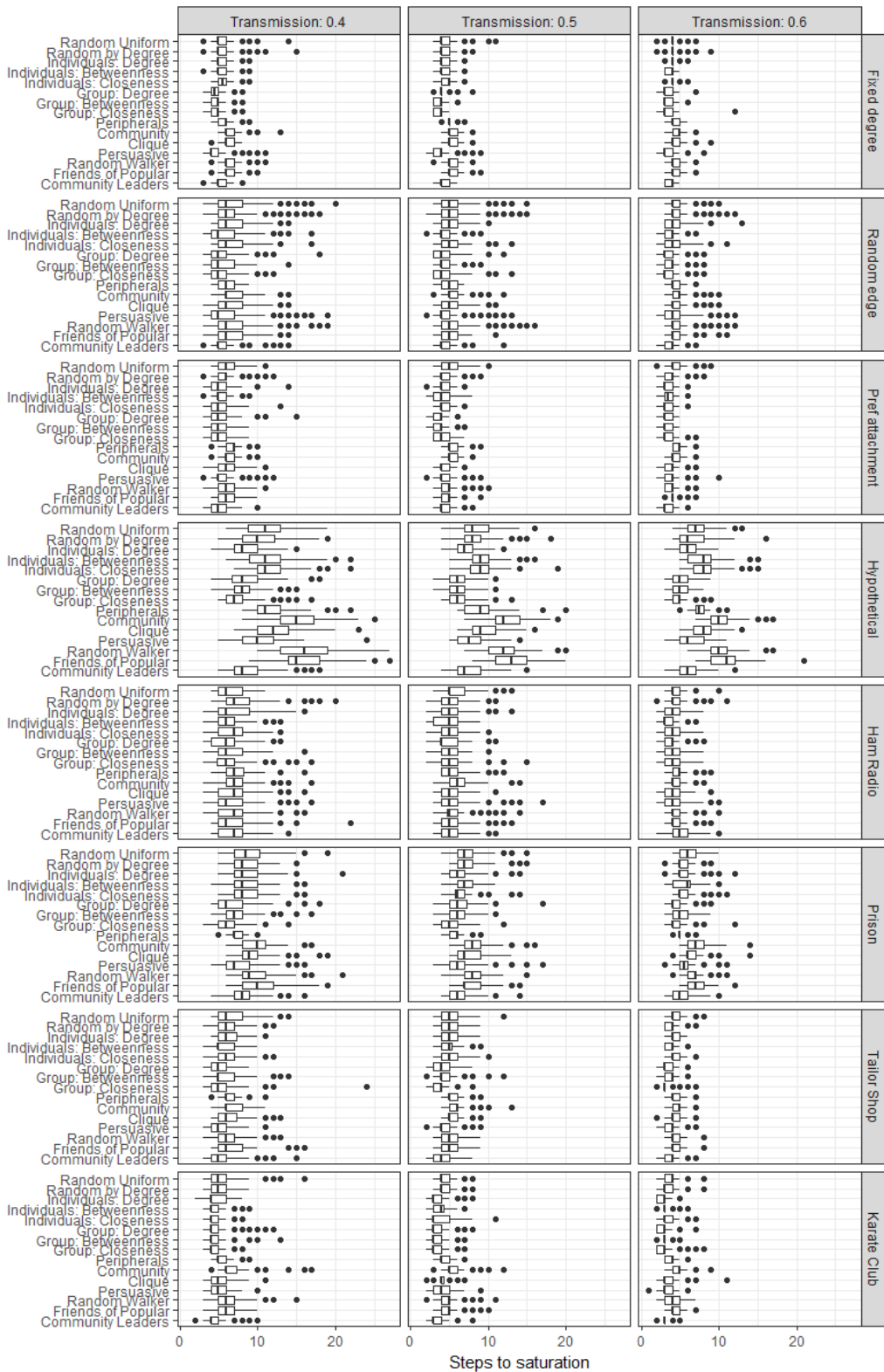
JENNIFER BADHAM, FRANK KEE and RUTH F HUNTER  
UKCRC Centre of Excellence (Northern Ireland), Queen's University Belfast  
University Rd, Belfast BT7 1NN, United Kingdom

Published in *Network Science*

This document provides supplementary figures for “Simulating network intervention strategies: Implications for adoption of behaviour”. The NetLogo model and the dataset of simulation results are also available for download from <https://osf.io/avqyw/>.



*Fig. 3: Steps to saturation with simple contagion: simulation results.* Each coloured cell indicates the mean (over 100 or 1000 simulations) time steps until all nodes have adopted the behaviour. The number of steps is truncated - values > 10 are removed. Each panel includes all the results for simulations with a specific network or networks generated by the nominated algorithm and proportion of the network in the seed group. Within each panel, interventions are compared (row) for 6 different transmission probabilities (column).



*Fig. 4: Steps to saturation with simple contagion: distribution of simulation results.* Borders for the boxes are at the first and third quartile (with median marked), whiskers indicate 1.5 times the interquartile range, and individual points for more extreme results. Only simulations with 15% seed proportion are included. Each panel displays the results for simulations with a specific network type and probability of transmission.

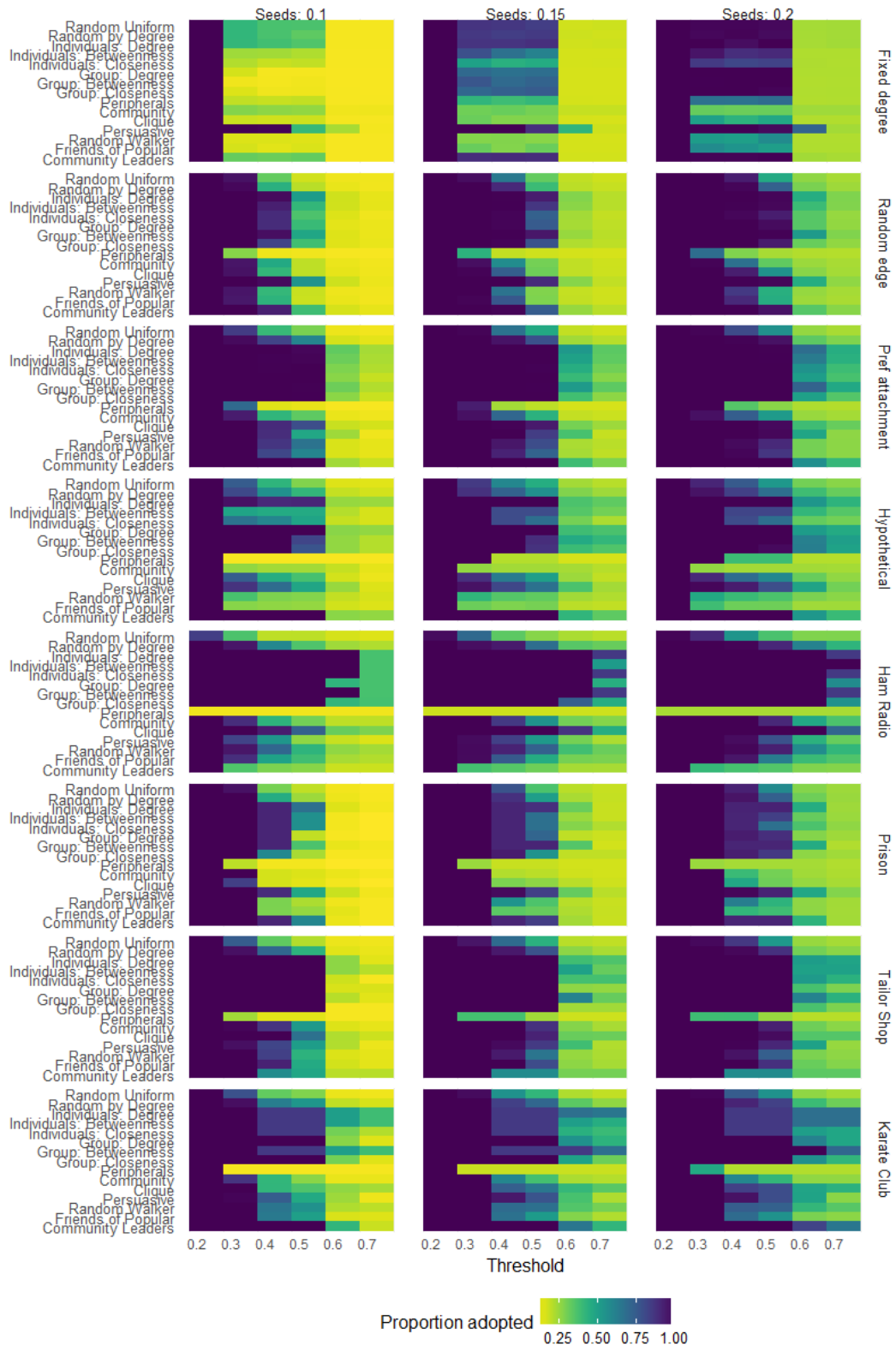


Fig. 5: Proportion of network adopting with complex contagion: simulation results. Each coloured cell indicates the mean (over 100 simulations) proportion of nodes that have adopted the behaviour when no further nodes will adopt. Each panel includes all the results for simulations with a specific network or networks generated by the nominated algorithm and proportion of the network in the seed group. Within each panel, interventions are compared (row) for 6 different thresholds that represent the proportion of network neighbours that must have already adopted for the nodes to adopt the behaviour (column).

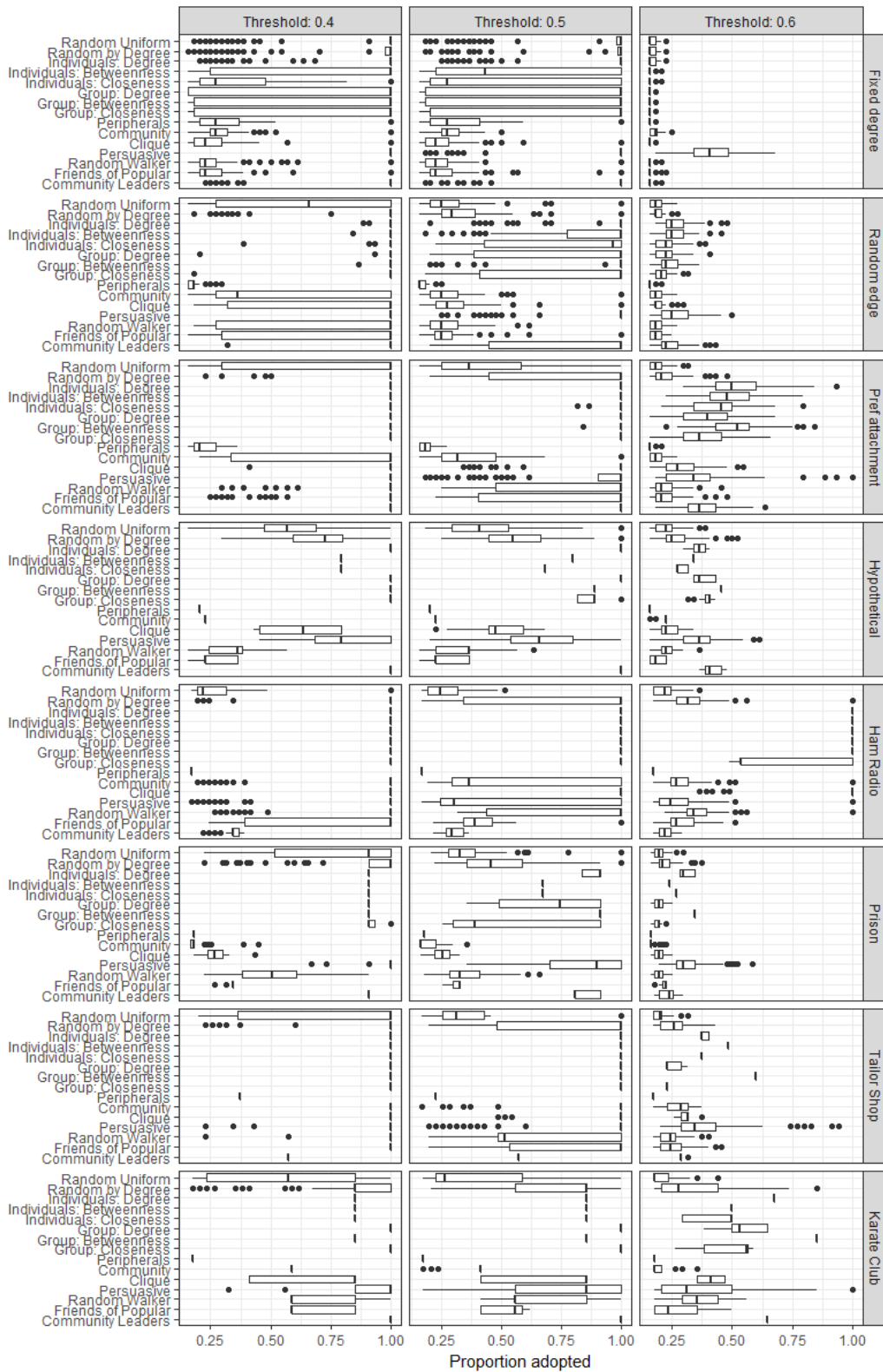


Fig. 6: Proportion of network adopting with complex contagion: distribution of simulation results. Borders for the boxes are at the first and third quartile (with median marked), whiskers indicate 1.5 times the interquartile range, and individual points for more extreme results. Only simulations with 15% seed proportion are included. Each panel displays the results for simulations with a specific network type and threshold.