**ABM Dynamics**  $6.0 \times 10^4$ Susceptible  $5.0 \times 10^4$ Exposed  $4.0 \times 10^{4}$ Infected Recovered  $3.0 \times 10^4$ Dead  $2.0 \times 10^4$  $1.0 \times 10^{4}$ 0 250 500 750 1000 0 Agents response to n Reproduction number 0.0 -0.25.0 -0.4-0.64.5 -0.84.0 -1.0Happiness Ro -1.23.5 0 250 500 750 1000 250 500 750 1000 0