

The Resilience Network

A Free Tool for SNA and (Health) Intervention Research

Daniel Meier¹ Jürgen Lerner²

¹Swiss Re Institute, Zurich, Switzerland

²University of Konstanz, Germany

Sunbelt, 28 June 2025

What is ResNet?

ResNet is a holistic health & wellness app that supports you and 7 of your close friends

– your personal Resilience Network –

to improve your **7 life categories**



How the core of the app works



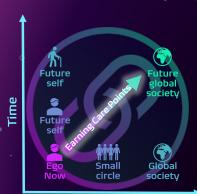
How the core of the app works



How the core of the app works



Philosophy behind ResNet



Social cohesion

Ego/Now: Just caring about yourself, not caring about the future, instant gratification, ego, ...

Small circle: Caring about a well-defined small circle of people, e.g., friends & family, country, ..

Future self: Caring about physical/mental health education, work, financial safety, retirement, ...

Global society: Caring about global society independent of ethnicity, religion, origin, ...

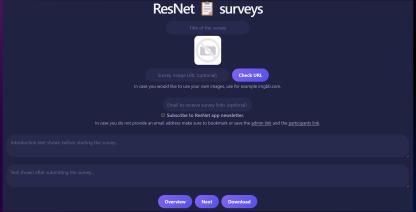
Future global society: Caring about a sustainable future global society – climate change, fairness, technological progress, ...

How to move from lower left to upper right and eventually create societal impact with ResNet?

Care Points \P , education and fun as incentives to use and spread the app *peer-to-peer* (1 to 1 + ε).



Features of the app



resnet.me/surveys

Co-evolution of communication and category changes

Research questions

- 1. Do users react (by sending messages) if their contacts' life categories drop?
- 2. Do such supporting messages (if any) have any effect on their contacts' life categories?

Analysis methods

- 1. Relational event models (REM; Butts 2008) explaining the message rate for any pair (i, j) of tied users.
 - Explanatory variables include: recent alerts sent from *j* to *i*; recent category changes of *j*.
- 2. OLS explaining the sign/size of category changes.
 - Explanatory variables include:
 messages received × recent category changes.

Selected findings: explaining communication events

308 message events on 137 users

Network effects:

- ► Tendency to repeat and reciprocate messages; triadic closure.
- ► Users with more ties (links and followers) typically communicate more: suggests higher degree of involvement.

Communication dependent on category values and changes:

- ► Users have a tendency to send messages to users from which they received an alert.
- ▶ Additionally: the more the category value of user *j* dropped, the more likely *i* sends a message to *j* (all categories except work).
- ► We found no evidence for homophily wrt. category levels, nor for dependence of message rate on category levels.

Selected findings: explaining category changes

number of changes: 322 (happiness); 166 (love); 229 (social); 331 (health); 233 (work); 118 (wealth); 125 (income)

Dependent on past category values and changes:

- ► Tendency to decrease/increase if past values were high/low
- ► Tendency to decrease/increase if past change went up/down
 - ightarrow suggests a "return to mean" behavior

Dependent on ties and communication network:

- ► Only for love: tendency to adapt to mean value of neighbors ("social influence").
- ► Only for happiness: tendency to increase value if having received messages following drop in happiness.

Anecdotal findings - still too low sample sizes

- ► Higher volatility of life categories' scores at younger ages
- ► Males open up more than females
- ► Users report raised self-awareness
- Social reminders:
 - ▶ Physical activity physical health issues, and burnout
 - ► To meet your friends
 - ► Acts of kindness and appreciation in relationships
- ► Those favoring experiences over material goods are happier
- ► Those being conscientious (Big 5) are healthier
- ► Those being more egoistic perceive the world as egoistic

Reach out to us to collaborate...

