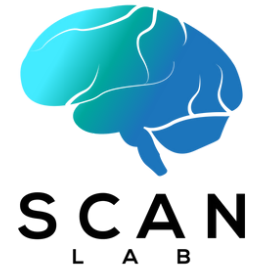




How do Beliefs about Social Regulation Predict the Quality and Quantity of our Social Network?

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Introduction

- Our social network consists of the variety of **individuals we interact with in daily life.**
- When these individuals express that they are feeling down, we have **beliefs about what they want and how much we want to approach them** (i.e. beliefs about social regulation).
- These beliefs inform how we respond to them and consequently the quality and quantity of our social network.
- The quality of our social network has been linked to a variety of health outcomes, including heart disease (Kornej et al., 2022) and the common cold (Cohen et al., 1997)
- **However, it has not yet been studied how beliefs about social regulation predict the quality and quantity of our social network.**

Research Questions

- How does a person's tendency to approach others when they are upset predict the quality of their social network?

We hypothesized that individuals who **believe they have a higher tendency to approach** others when others are upset will have more **high contact social roles.**

- How does a person's beliefs about others' needs for problem solving when others are upset predict the the quantity of their social network?

We hypothesized that individuals with stronger **beliefs about others' needs for problem solving** when others are upset will predict a larger **social network size.**

Results

Hypothesis 1: Approach associated with SNI-ND				
Variable	Estimate	Std. Error	P-value	Significance
Intercept	4.50	0.13	< 2e -16	***
Approach Response	0.12	0.03	0.001	**

Table 1. Table of the results from the regression models for the tendency to approach others when they are upset and the number of high contact social roles in their life

Hypothesis 2: Problem-solving associated with SNI-SNS				
Variable	Estimate	Std. Error	P-value	Significance
Intercept	13.4	0.64	< 2e -16	***
Problem solve Response	0.33	0.18	0.0664	.

Table 2. Table of the results from the regression models for the beliefs about others' need to problem solve when they are upset and their social network size

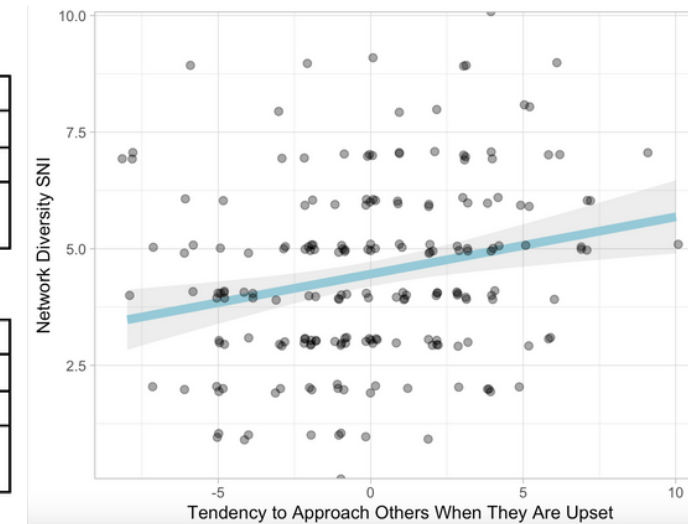


Figure 1. Relationship of tendency to approach questionnaire score and the SNI measure of total number of high contact social connections.

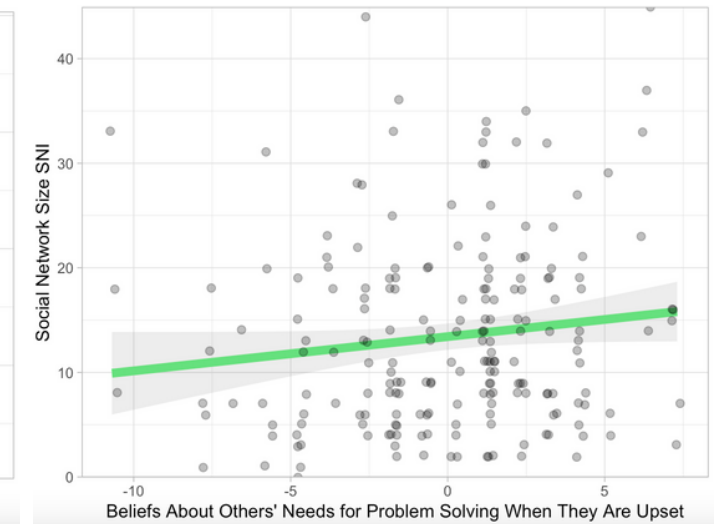


Figure 2. Relationship of beliefs on others' need for problem solving and the SNI measure of total number social connections.

Methods

- **200 participants** representative of the U.S. population completed a Qualtrics survey about their beliefs about social regulation and social network.
- We used the Beliefs about Social Regulation scale to measure two constructs: (a) **an individual's tendency to approach others when others are upset** and (b) **an individual's beliefs about others' needs for problem-solving when they are upset.**
- Social network size and social network diversity were measured using the **Social Network Index(SNI)** (Cohen et al., 1994).
- Two separate regression models were run to test our hypotheses.

Discussion

- We found **no evidence that stronger beliefs about others' need for problem-solving** when others are upset predict social network size. A possible explanation is that **having a large social network requires comforting and supporting others** in both good and bad times beyond solving others' problems (Niven et al., 2015).
- We also can begin to question our robustly significant results predicted by hypothesis 1. We should begin to investigate **what the causal link may be between approaching others and a diverse social network.** This begins by addressing the **quality of the people and the interactions** with people that have a higher SNI in network diversity.
- Finally, we could try to investigate further **what may stop people from approaching others** to address them when they are upset. We could try to discover what guides people's beliefs that others' need help to problem solve when they are upset.

Works Cited

- Cohen, S., Doyle, W. J., Skoner, D. P., Rabin, B. S., & Gwaltney, J. M. (1997). Social ties and susceptibility to the common cold. *Jama*, 277(24), 1940-1944.
- Kornej, J., et al. "The Association between Social Network Index, Atrial Fibrillation, and Mortality in the Framingham Heart Study." *Scientific Reports*, vol. 12, no. 1, Dec. 2022, p. 3958. DOI.org (Crossref), <https://doi.org/10.1038/s41598-022-07850-9>.
- Niven, K., et al. "Becoming Popular: Interpersonal Emotion Regulation Predicts Relationship Formation in Real Life Social Networks." *Frontiers in Psychology*, vol. 6, Sept. 2015. DOI.org (Crossref), <https://doi.org/10.3389/fpsyg.2015.01452>.
- Reeck, C., et al. "The Social Regulation of Emotion: An Integrative, Cross-Disciplinary Model." *Trends in Cognitive Sciences*, vol. 20, no. 1, Jan. 2016, pp. 47-63. DOI.org (Crossref), <https://doi.org/10.1016/j.tics.2015.09.003>.