



## SCIENTIFIC FINAL REPORT

### Two- and three-year projects and postdoctoral projects

Registration number, Östersjöstiftelsen: 62/18

Project manager: Ola Sternäng

Project title: Individuals' strategic orientations toward social interdependence in Russia and Sweden

#### 1. Three most important results of the project & what conclusions from them

The results that are easiest to communicate briefly involve novel empirical explanations of strategic behavior generally, as well as among the investigated cultures. They were made possible by means of methodological innovations that we explain first.

(i) Methodologically, we have found that asking participants to recall episodes in their own lives, and then answering questions about various aspects of those situations, provides information that has some predictive validity for their interpersonal choices in the experimental session itself. This methodology proved particularly critical given the extraordinary shift away from in-real-life access to research participants in the Russian Federation following the Russian invasion of Ukraine.

(i) Asked about everyday situations in their lives, Russian-speaking participants reported situations that were lower in information transparency (certainty) than Swedish-speaking and American participants. Moreover, their varying transparency perceptions carried over into their strategic choices. These are novel results that conform nicely with earlier known macro-level patterns of low societal transparency in Russia.

(ii) Methodologically, we designed a new outcome measure based on the calculation of the expected value of participants' interdependent choices within the experimental session.

(ii) It turned out that that participants' awareness of social interdependence in everyday social interactions predicted the expected value of Russian and Swedish speaking participants' choices in the experimental session. For example, across the language samples, a lack of awareness of social interdependence in the participant's own everyday-life interactions predicted instrumentally less advantageous strategic choices in the ultimatum game. In addition, there were different, culturally unique predictors of expected value/strategic success that matched the economic systems that dominated 20th century history in the United States, Russia, and Sweden, respectively.

(iii) Methodologically, we modified a partial-information ultimatum game and introduced a novel game (UGmax) where participants were instructed to maximize their own outcomes.

(iii) Among the general findings, we found new predictors of lying in a strategic situation. In particular, we found that more lying in UGmax was predicted by explicit measures of perceived mutual dependence in people's everyday situations as well as implicit measures of such mutual dependence—thus showing in two different ways that perceived degree of interdependence predicted more lying in an interdependent situation where participants had been instructed to maximize their winnings (a situation in which it was profitable to lie). Furthermore, we found that strategic behavior among Russian- and Swedish-speaking



participants was affected not just by the aforementioned measures of situational perception but also by self-conscious emotions, e.g., shame and guilt.

## **2. The project's contribution to the international research frontline**

The mentioned methodology of using participants everyday recalled situations to predict their real-time incentivized choices in an experimental session is new, and has shown how future research may combine social ecology and psychological makeup to enable more precise predictions of strategic behavior.

As measures of strategic choice, we have introduced novel versions of the partial-information ultimatum game, the newest of which is a version where participants were instructed not to be generous but rather to maximize their own outcomes. This new version turned out to be valuable in isolating strategic skill or sophistication from altruism.

These methods enabled us also, substantively, to corroborate our hypotheses about the importance of perceived (and/or understood) social interdependence for predicting successful interactive choices, as well as for predicting choice styles (e.g., lying). These findings contribute to existing psychological predictors (e.g., extraversion) of social choice and complement our recent research on social interdependence skill (e.g., Hedberg, 2021).

Furthermore, we have shown the utility of a broad battery of measures for predicting strategic behavior. For example, besides the mentioned impact of social interdependence perceptions, we have used the dark triad (e.g., non-clinical levels of psychopathy) as well as inclination toward guilt and shame to predict lying in strategic interactions.

Although still tentative, the choice of sampling based on first-language upbringing was supported by our finding that our participants' value responses matched those made in representative country sampling, e.g., the GLOBE study (House et al., 2004). If these results may be generalized, they offer a path to do research on difficult-to-access cultures.

## **3. The contribution of the research to the knowledge of the Baltic Sea Region and Eastern Europe**

Going beyond cultural stereotypes, we have some emerging patterns related to participants' first language history. Some new findings appear so far only at the level of individual behavior. For example, among Russian-speaking lying was uniquely predicted by shame inclination and perceived transparency in one's everyday interactions.

Other findings could have broader applicability. For example, the finding of lower perceived clarity in Russian-speaking participants' everyday interactions are consistent with well-established findings on a macro-level. These parallel findings on micro and macro levels suggest a robust pattern, which could be especially suitable for interventions. Thus, to the extent that we can facilitate greater transparency in people's interpersonal dealings, it may have particularly beneficial impact in regions (e.g., in our data for Russian-speaking participants) that are currently suffering from low expectations of social clarity.

Another insight that could serve the region is our findings regarding people's willingness to make themselves vulnerable in the interest of collective goals. In particular, we hypothesized and found that people's willingness to share their failures was lower among Russian- than among Swedish-speaking. Also, the perceived realism of such behavior was



deemed lower among Russian- than Swedish-speaking. This could both have immediate applicability--as “failure sharing” is becoming a best practice in many businesses in Western Europe and the United States, but could encounter more obstacles in Russian-speaking audiences—and contribute more long term to the understanding of cooperative versus competitive conceptions of cultural differences.

Methodologically, our studies may enable additional timely research about the region, as we show that first-language samples may provide an alternative to data collections in particular countries, which is convenient in times of war and isolation.

#### **4. New research questions that the project has led to**

The consideration of the cultures around the Baltic Sea Region has shown us, theoretically as well as empirically, the importance of attitudes to social interaction. As mentioned, among the most extreme such cases, we have theorized and found empirically differences between Russian and Swedish attitudes to the willingness to share one’s failures with others in the interest of learning collaboratively in the future. This concept has so far led to a project application to ÖSS: “The presence and the potential of failure sharing by individuals in Russian and Swedish language communities” (Per H. Hedberg et al., 2024) on the research question: “How are observed and induced attitudes toward failure sharing related to respondents’ understanding of social interdependence and their inclination toward value creation in social interaction (e.g., conflict and negotiation)?”

In addition, we have examined self-reported shame and guilt in both our studies of strategic thinking (Hedberg, 2021) and of failure sharing (Dahl et al., 2022). In so doing, we have discovered that there exists no psychometrically validated scale of state shame, as opposed to trait shame. Because of the unique shame effects in our studies on Russian-speaking samples, such measures are particularly relevant for ÖSS-related cultural comparisons. Thanks to the ÖSS project, then, we now endeavour to remedy this lack in project applications to RJ and (next month) VR. In particular, we are proposing how to validate a new state scale as well as to introduce novel inductions of shame to investigate how the new self-report measure of shame is related to existing physiological and behavioral measures of shame.

Related also to failure sharing, we are currently creating an RJ application for a Research Initiative on Provocations, which we have discovered is a fruitful shared concept in the social sciences for stimulation toward antisocial and prosocial responses (e.g., Hedberg, 2024).

In a cross-cultural project, there is always a risk of cultural stereotypes regarding how one population is said to be different from another, as if the cultures were discrete boxes rather than huge collectives of heterogeneous individuals. One new research question and method that the project has given rise to is our embarking on latent profile analysis. Thanks to a course taken during the project we have now acquired the statistical skills to discover latent classes across samples; this means that our analyses can go beyond discrete boxes and instead differentiate response styles that may exist in all populations albeit possibly with differing probabilities.

Another concrete outcome of the project is a new master course in strategic thinking (7.5 hp) at Södertörn University, begun in the fall of 2021 and given annually since. Recently,



the Leadership and Command & Control department at the Swedish Defense University has expressed interest in the course and adopting it for their students.

## **5. Dissemination of the results of the project within and outside the research community**

### ***Peer reviewed:***

One step ahead in the game: Predicting negotiation outcomes with guessing-games measures (Hedberg, P.H., 2021). *Journal of Behavioral Decision Making*. Open Access. <https://doi.org/10.1002/bdm.2237>

Conspiracy theories in Russian security thinking (Kragh, M., Andermo, E., & Makashova, L., 2020). *Journal of Strategic Studies*. <https://doi.org/10.1080/01402390.2020.1717954>

Dahl, J., Hedberg, P. H., & Werr, A. (2022). The emotional dynamics of failure sharing under fixed and growth mindsets. In *Academy of Management Proceedings* (Vol. 2022, No. 1, p. 15698). Briarcliff Manor, NY 10510: Academy of Management. <https://doi.org/10.5465/AMBPP.2022.15698abstract>

### ***Manuscripts:***

Cultural orientations to social interdependence: Misrepresentation and strategic choice in the United States, Russia, and Sweden. (Per H. Hedberg, Ola Sternäng, & Martin Kragh)

Cultural orientations to social interdependence II: Strategic behavior in the United States, Russia, and Sweden (Per H. Hedberg & Ola Sternäng)

### ***Popular science publications:***

Provokationer som metod och strategi. (Per Henrik Hedberg, 1/2024). *Axess*.

### ***Media appearances:***

One-hour interview (Per H. Hedberg) on Negotiation with Russian media (TV/Radio) group, RBC (РБК) on 15 December 2021.



***Presentations at open seminars:***

- a. Cultural orientations to Strategic interaction: Russia and Sweden (and the U.S.). (November 2019). Open lecture at Stockholm School of Economics
- b. Cultural orientations to (strategic) interaction in Russia and Sweden (February 2020). Open lecture at Södertörn University - Psychology.
- c. Misrepresentation and strategic choice in the United States, Russia, and Sweden. (November 2020). Open lecture at Stockholm School of Economics.
- d. The emotional dynamics of failure sharing under fixed and growth mindsets (April 2022). Open lecture at Södertörn University – Psychology
- e. Behavioral factors in interdependent decision-making (May 2022). Open lecture at Swedish Defense University
- f. Behavioral factors involved in misrepresentation and strategic choice in the United States, Russia, and Sweden (October 2022). Open lecture at Södertörn University – Economics
- g. Individuals’ strategic orientations toward social interdependence in Russia and Sweden (June 2023). Harvest seminar at the Centre for Baltic and Eastern European Studies, Södertörn University.

***Participation at conferences:***

- a. Society for Judgement and Decision Making Conference & Psychonomic Society Conference, 16-19 November 2018, New Orleans, USA
- b. Society for Personality and Social Psychology Conference, 7-9 February, 2019, Portland, USA