Reaching agreement on trusting behavior – evidence on cultural differences from a public goods game with representatives

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Extended Abstract

We study a public good game with representatives in three different countries with varying levels of individualism. Experimental treatments differ with respect to communication possibilities between representatives and their constituencies. Representatives can never communicate with the other representatives. Thus, depending on how much they can communicate with their constituencies, they have to make judgements about the intentions of not only the other representatives, but also their own group members, to be able to represent them well. We focus on interactions between representatives of groups. To take the risk to behave in a cooperative way towards the other representatives, representatives must be sure that their constituency accepts them taking this risk. This implies understanding the possible intentions of the others and to behave in a way that fits with these expectations. In an earlier paper (Iida & Schwieren, 2013) we have shown that for Spanish subjects it is indeed important for representatives´ cooperation to know whether their constituency accepts (risky) cooperative behavior towards the other representatives or not. In this paper, we add the aspect of intercultural differences. Based on Yuki´s (2003) framework for understanding group behavior in collectivist countries and Yamagishi´s structural trust model (Yamagishi, Cook, & Watabe, 1998), we expect differences in trust towards strangers in general between individualistic and collectivistic countries, but also differences in the effect of communication between representative and constituency on cooperative behavior of representatives.

We compare a rather individualistic, European country (Germany) with a rather collectivistic European country (Spain) and the classical example of a collectivistic country (Japan) (following Hofstede´s (1980) categorization)[4].

We used a standard public good game as the basic tool for our experiment. The experiment was programmed and conducted with z-Tree (Fischbacher 2007). Based on our research questions, we used one Baseline treatment and various "Representative" treatments that differed in terms of the informational structure and the number of interactions between the subjects of one group. The Baseline treatment is a simple three-person public good game

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[4] Hofstede´s categories are not undisputed in the literature, but for our purposes they seem sufficiently general.

of ten periods. The subjects received feedback after each round on the total contribution of the others only. In the Representative Treatments, representatives of three-person teams played the game. Therefore, we have three groups of three people, each involved in one public good game, but out of each group, only one person is playing the public good game. Contributions to the public good game have an effect on all nine subjects within one public good game. Earnings made by the representatives are equally distributed among all of the subjects of one group, both those playing (the representatives) and those not playing. In Treatment R1, representatives can talk with their constituencies before knowing the rules of the game, thus this talk can only serve to get an idea of the other people involved in general terms. In R2, representatives are instructed to talk with their constituencies about the strategy applied, thus intentions are made explicit.

We find cultural differences in the behavior of representatives of interacting groups. Baseline contributions are highest in Germany and lowest in Japan, confirming that individualistic countries place trust in strangers more easily and can start from the assumption that people share cooperative intentions. We also confirm that there is a strong end-effect in Germany, but less so in Japan, indicating that once trust has been developed in Japan, it is not easily betrayed. We also find that Japanese subjects need more time to develop trust and are less able to talk about strategies than German/Spanish subjects.

We conclude that there are clear intercultural differences with respect to baseline intentions in group interactions, and these lead to differences in behavior. As a next step, it would be interesting to see how this affects people from different cultural backgrounds interacting with each other and whether the expectations they have about each other´s intentions lead to easy coordination or make it difficult

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