

Title: The Conditions People Learn to Acquire a Higher Level of General Trust and the Tendency to Cooperate with a Stranger

Name: Masato Miyazaki

Supervisor: Nobuyuki Takahashi

### **Abstract**

In a group composed of members who know each other, indirect reciprocity (a system where if you cooperate with someone, you will get a return from someone else) functions to eliminate free-riders and achieve cooperation. However, if there is something that can be gained only by other societies, they are more likely to miss out on deals with strangers who may have greater benefits to offer. Thus, there is an incentive to interact with strangers, even though they may be uncooperative. Since the question of how to get people to cooperate with strangers under such circumstances is important in social science, previous studies have revealed that people with higher levels of general trust will cooperate with strangers. However, previous studies have the problem that they do not discover the conditions that the high level of general trust is learned. Therefore, in the current study, we set the initial value of general trust and the learning rate as parameters, and examine the effects of these parameters on the conditions that the high level of general trust is learned by computer simulation. As a result, we revealed that the initial value of general trust and the learning rate were found to be effective in inverse U-shaped effects or decrease the possibility that the high level of general trust is learned, respectively.