

Blood types and Blood Donation Behaviors: Tests for Pure Altruism Theory*

Shusaku Sasaki¹ Yoshifumi Funasaki² Hirofumi Kurokawa³ Fumio Ohtake⁴

This version: November 2017

Abstract We empirically investigate how blood types influence blood donation behaviors. Using a nationally representative survey in Japan, Preference Parameters Study of Osaka University, we find that people with blood type O are more likely to donate their blood than those with other blood types. Furthermore, this association is strongly observed in the sample, who believe that blood type O medically can be transfused into all blood groups. In contrast, we do not find any significant relationship between the blood type O and other altruistic behaviors, including registration of bone marrow donation, intention of organ donation, and monetary donations. Also, we do not find the relationship between the blood type O and altruistic personality and characteristics, including altruism, trust, reciprocity, and cooperativeness. We discuss these results imply that people with blood type O more likely donate their blood, not because they are more altruistic in personality, but because the blood type O is a public good with a larger number of blood transfusion subjects.

JEL Classification Codes: I10, D64, C30

Keywords: *blood type, blood donation, public goods, pure altruism*

¹ Faculty of Economics, Keio University, Postdoctoral Research Fellow of Japan Society for the Promotion of Science (PD), ssasaki.econ@gmail.com

² Graduate School of Economics, Osaka University, tge020fy@student.econ.osaka-u.ac.jp

³ Faculty of Policy Studies, Doshisha University, Postdoctoral Research Fellow of Japan Society for the Promotion of Science (PD), hirofumi.96kawa@gmail.com

⁴ Institute of Social and Economic Research, Osaka University, ohtake@iser.osaka-u.ac.jp

* We use the data of "Preference Parameters Study" (2017) conducted by Osaka University, which carried out the 21st Century Center of Excellence Program "Behavioral Macro-dynamics Based on Surveys and Experiments"(2003-2007), the Global Center of Excellence Program "Human Behavior and Socioeconomic Dynamics"(2008-2013), and Grands-in-Aid for Scientific Research (S) Humanities and Social Sciences (Social Sciences) "Behavioral-Economic Analysis of Long-Run Stagnation (15H05728)"(2016-). In preparing this paper, Sasaki is financially supported by the Japan Society for the Promotion of Science (17J07242).