

【Grant-in-Aid for Scientific Research (S)】

Broad Section A



Title of Project : Application of Behavioral Economics to Policy Issues: Healthcare, Disaster Prevention, Crime Prevention, Labor, and Education

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Keyword : nudge, healthcare, crime prevention, labor, education

【Purpose and Background of the Research】

This study discusses how to solve the policy issues that occur on the frontline of diverse fields (e.g., disaster prevention, education, healthcare, labor, and crime prevention) by using methods of behavioral economics such as questionnaire surveys, randomized controlled trials (RCTs), and economic experiments. Changing how certain information is presented to people by utilizing behavioral economics (i.e., nudging people) may transform their behaviors into ones that are more desirable for both themselves and the society. However, the effectiveness of nudges depends on the personal and cultural characteristics of the subjects such as region, age, and gender. This study aims to identify effective nudges that may solve various policy issues by clarifying the characteristics of Japanese people from the perspective of behavioral economics. It also unveils the fundamental features of nudges through practical, applied behavioral economics studies.

【Research Methods】

This study aims to clarify the effectiveness of behavioral economics-based interventions in practical applications to healthcare, disaster prevention, crime prevention, labor, and education through questionnaire surveys, RCTs, and

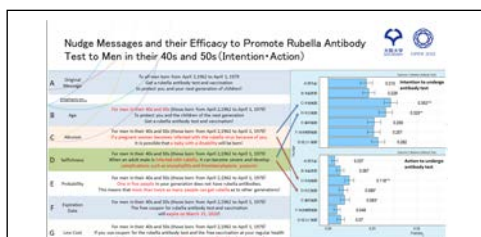


Figure 1 Nudge message for the promotion of a rubella antibody test

economic experiments. To effectively nudge people, both how people make decisions in specific situations and their biases toward different decision-making processes must be understood, and then behavioral economics-based interventions that can correct these biases should be examined subsequently. In this study, we aim to verify the effectiveness of the identified interventions. The academic uniqueness of this study is that it involves personnel working on the frontlines of every target field. Specifically, participants include hospital doctors and nurses for healthcare, personnel from a disaster prevention division of a local government (Hiroshima Prefecture) for disaster prevention, researchers at the National Research Institute

of Police Science for crime prevention, personnel from human resources divisions of different private companies for labor, and administrative personnel in charge of education from the cities of Amagasaki and Nara for education. We will discuss real issues that they are facing, conduct surveys to identify the causes of the issues, and then implement feasible interventions to measure their effectiveness. For issues that actually need to be addressed, we will test multiple hypotheses, which should be effective in terms of behavioral economics. To this end, we will use common causal inference methods such as RCTs, matching, and difference in differences (DID).

【Expected Research Achievements and Scientific Significance】

The expected outcomes of this study include developing nudges, which may practically solve real-world policy challenges. We expect to elucidate the following insights on fundamental and practical features of nudges that need to be considered when solving various social challenges: 1) the effectiveness of the nudges in the presence of heterogeneity in individual and cultural characteristics, 2) the degree of heterogeneity in behavioral economic characteristics and the process of heterogeneity formation, and 3) the differences in short-term and long-term effectiveness between different types of nudge.



Figure 2 Use of effective nudge messages

【Publications Relevant to the Project】

· F. Ohtake and K Hirai. 2018. “*Iryo-genba no koudou keizaigaku*” (behavioral economics in clinical practice). Toyo Keizai Shinposha

【Term of Project】 FY2020- 2024

【Budget Allocation】 151,400 Thousand Yen

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