

**H-052 A study on the effective information dissemination measures for lifestyle change  
(Abstract of the Final Report)**

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[Abstract]

The goal of this project is to investigate ways for people to change their lifestyle for mitigating or preventing climate change. For this purpose, we applied public opinion survey and media contents survey and analyzed the relationships between people's information exposure and their environmentally friendly behavior in Japan and three cities, Shanghai, Hong Kong, and Shengyang in China.

In Japan, we carried out two types of surveys, one is monthly public opinion survey about "the most serious issues in the world /Japan", and the other is the survey of lifestyle, with relationship of environmental actions and information. In the three cities in China, we carried out only public opinion surveys lifestyle, with relationship of environmental actions and information, as we need to refine sampling method in China.

Our findings are as follows.

- 1) People's awareness for the climate change in general as well as environmental issues is rapidly increasing, especially after January 2007, and continues to be high level. Mass media coverage is one of the main reasons for this rise, but also, people's "actual feeling" 95% of Japanese people answered "yes" when asked "Do you think earth's climate is changing?"
- 2) People's main information sources are newspapers and television programs both in Japan and Chinese three cities. Television programs especially informational and entertainment programs are effective for raising awareness of less interested groups of people and newspaper articles about current affairs are effective for people who have enough knowledge about the environmental issues to advance understanding for climate change issue.
- 3) Different behavior model can be applied for male from female. Environmental behavior-understanding-newspaper model can be applied for male, while behavior-awareness-television programs can be effective for female from the ordinal probit model.

## 1. Introduction

Japanese Government announced the new Kyoto Target Implementation Plan in April, 2005, responding to the fact that the Kyoto Protocol came into effect in February 2005. Japan is responsible for 6% reduction from 1990 emission level.

But, domestic GHG emission is continually increasing after 1990, Japanese government is carrying out national campaign called “Team minus six percent” actively using mass media and other information dissemination measures, and tries to get people aware of this issue, and encourage lifestyle change for saving energy, or reducing waste.

## 2. Research Objective

The goal of this project is to investigate ways for people to change their lifestyle for mitigating or preventing climate change. For this purpose, we applied public opinion survey and media contents survey and analyzed the relationships between people’s information exposure and their environment-friendly behavior in Japan and three cities, Shanghai, Hong Kong, and Shengyang in China. Adding to above, we employ the social capital theory by Putman (1993) to analyze factors for people to join pro-environmental actions by China-Japan comparison study.

In Japan, we carried out two types of surveys, one is monthly public opinion survey about “the most serious issues in the world /Japan”, and the other is the survey of lifestyle, , with relationship of environmental actions and information. In the three cities in China, we carried out only public opinion surveys of lifestyle, with relationship of environmental actions and information, as we need to refine sampling method in China.

For studies in China, we have picked three cities up- Shanghai, Hong Kong, and Shenyang. Shanghai city is the Chinese largest commercial city on the Yangtze delta. Hong Kong is also a commercial city but has different background from mainland of China. It has different economic system from the mainland of China, and has been influenced by British governance. Shenyang is dominated by heavy industry and it locates north-east part of mainland of China. It suffered heavy industrial pollution – air, water, soil, but it is the key city for Chinese government to promote economic development in the north part of China.

## 3. Research Method

Our research method is a combination of public opinion survey and media analysis. In Japan, we applied two types of public opinion surveys, one is the monthly ones that asked respondents “What, do you think, is the most serious issues in the World?” and “What, do you think, is the most serious issues in Japan?” and the other is the survey of lifestyle, with relationship of environmental actions and information, which consists of more than sixty questionnaires.

In the UK, a survey company called MORI(now called ipsos-MORI) has been carrying out monthly survey from 1970's. Its result shows ups and downs of various social issues in these thirty to forty years in the UK society. For example, from late 1980's to early 1990's, global environmental issues such as acid rain, ozone layer depletion, and climate change issues were on the social debates, and then the Prime Minister Margaret Thatcher took a lead for several treaties within EU. At that time, people's awareness for the environmental issues was at higher levels than before. But after that time, the people's attention went to other issues such as unemployment, pension or peace issues. Our planned sample for this monthly survey is about 1500 and completed around 1,000 answers in every month.

For analyzing this monthly survey data, we incorporated media coverage analysis.

The survey of lifestyle, with relationship of environmental actions and information, is planned for the China-Japan comparative survey. We used common questionnaires design for those two countries ( Japan and three cities in China) and common sampling method such as two (three)

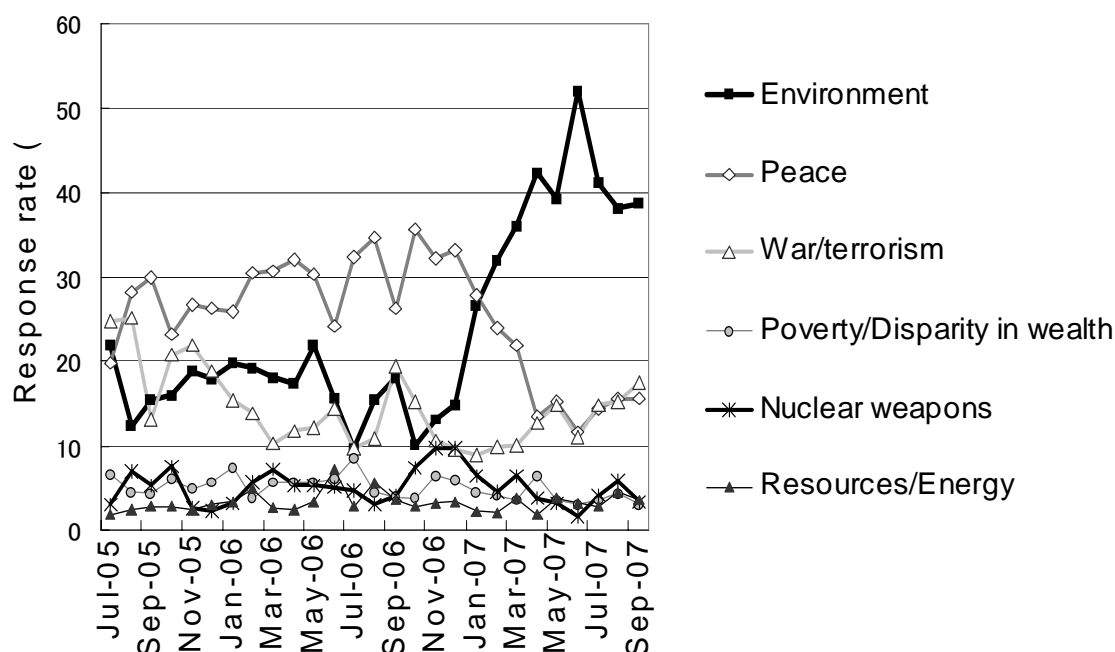


Fig. 1 Response rates for the most common categories in the public opinion survey

stratified random sampling technique for choosing respondents. For the survey of lifestyle, environment and information gain, Japanese planned samples were 2,000 and 1,100 for Chinese three cities.

#### 4. Results

##### 1) The result of the monthly survey

The result of this monthly survey is shown as fig.1. People's awareness for the climate change in general as well as environmental issues is rapidly increasing, especially after January 2007, and continues to be at high level. Mass media coverage is one of the main reasons for this rise. We

found that there is statistically significant relationship between numbers of newspaper articles and response rate for the “Environment.” There is another reason for this rise of the awareness. That is the people’s “actual feeling”. 95% of Japanese people answered “yes,” when asked “Do you think earth’s climate is changing?” in the other survey of lifestyle, with relationship of environmental actions and information. (Table 1).

2) The result of the the survey of lifestyle, with relationship of environmental actions and information

People’s main information sources are newspapers and television programs both in Japan and Chinese three cities. Television programs especially informational and entertainment programs are effective for raising awareness of less interested groups of people and newspaper articles about

		Yes	No	DK	Total
Japan	n	911	26	22	959
	%	95.0	2.7	2.3	100.0
Great Britain	%	91.0	4.0	5.0	100.0

**Table 1. As far as you know, do you personally think the world’s climate is changing, or not?**

**\* Numbers for Great Britain are from Poortinga, Pidgeon et., al,2006**

current affairs are effective for people who have enough knowledge about the environmental issues issue by cross tabulation analysis. Then we used the ordinal probit model for testing the models of behavior-awareness-understanding-information source. In whole sample in Japan, we found that the gender-television program-education level-understanding-newspaper articles-awareness model. But we found quite different distribution of environmental actions between male and female, we applied probit model separately. Then, we found different behavior model can be applied for male from female. Environmental behavior-understanding-newspaper model can be applied for male, while behavior-awareness-television programs can be effective for female.

## 5. Discussion

Carrying out three year project applying public opinion survey, and other method such as media analysis, we recognized significant raise of public awareness for the environment, especially the climate change issue. Those raise was influenced by mass media coverage, and people’s actual feelings. But our analysis shows we need to prepare several media strategies for those raised awareness to environmental behavior which can mitigate the damage from the climate change. One is for females, the strategy for stimulating “awareness” by television programs, and another is for males, the strategy for enhancing “understanding” by newspaper articles.

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