



Empowerment as the determinants of citizen-participation for environmental management plan

Hiroe MAEDA (Tokai Gakuen University) and Yukio HIROSE (Nagoya University)

mhiroe1205@yahoo.co.jp

Abstract

The present study explored the determinants of general attitude and behavioral intention of citizen participation (C.P.) for making basic environment plan. The results of our previous study indicate that through the commitment, environmental volunteers enhanced their empowerment expectation and behavioral intention of C.P. for making the environmental plan. The purpose of this study is to examine whether the ordinary citizens would participate in making the environmental plan when they could expect to get empowerment through their participation. A random sampling survey was conducted on 1500 residents in Tsushima city, which began to make a basic plan for environmental management by citizen participation. Main results of the survey were as follows. Firstly, expectation of social benefit (efficacy to change the administration by C.P.; e.g. "C.P. makes administration adopt environmental policies") was the main determinant of general attitude of C.P. Secondly, individual empowerment expectation (competence; e.g. "I will get a broader view by participating in making the plan") was the main determinants of behavioral intention of C.P. Lastly, general attitude of C.P. did not have significant effect on behavioral intention to C.P for making basic environment plan.

Key words: citizen participation, empowerment, environmental management plan

Introduction

For environmental activities in Japan, citizen participation is an important issue. In 1994, the Japanese government compiled the first basic plan for the environment, specifying that one of its long-term objectives would be to establish an environmentally sustainable society by means of citizen participation. Recently, citizen panel conferences (e.g., consensus conferences and planning cells) have been introduced, and workshops are being held in many cities in order to create environmental management or waste reduction plans. The purpose of our study is to examine why people take part in a collective action like developing an environmental management plan. We focus on ordinary citizens without prior experience in volunteer activities or participation in community planning, and we investigate how they evaluate and take part in developing the plan.

Research on planning has shown that many people express positive attitudes towards citizen

participation, but only a few exercise their behavioral intention to participate in planning activities (Maeda, Hirose, Sugiura, & Yagishita, 2008). Both regional plans like waste reduction plan or environmental management plan and accomplishments of environmental volunteers' activities are considered public goods, because every resident can receive benefit by environmental policies based on these plans or activities. Therefore, developing a regional plan by means of citizen participation has been regarded as a social dilemma in supplying public goods (Olson, 1965). Citizen participation will bring social benefits to all inhabitants of the city, and based on these social benefits, many people evaluate citizen participation positively. On the other hand, people are reluctant to participate, in spite of their positive evaluation. Thus the pattern of citizen participation in planning is similar to behavior in social movements and volunteer activities.

How to facilitate the participation of ordinary citizens is an important question. Recently, a group of

randomly sampled people were invited to participate in a citizen panel conference in EU, United States, and Japan. The participation rate from random sampling was around 10 to 20% in EU (e.g., in case of Karlsruhe: Hirose, 2007). But, it was lower in Japan (e.g., in case of Nagoya: Maeda et al., 2008). To increase participation rates, it is necessary to identify what affects people's evaluations of citizen participation and their behavioral intent to participate.

In previous research (Maeda & Hirose, in press), the main determinants of the general evaluation of citizen participation for making waste reduction plan were direct and spillover social benefits. People who thought citizen participation enabled the plan to provide easy-to-follow rules (direct social benefits of citizen participation), and making the plan by citizen participation facilitated other stakeholders' (e.g., schools or stores) efforts to waste reduction (spillover social benefits), evaluated general evaluation of citizen participation more positively. In addition, inefficiency of citizen participation had negative effect on general evaluation of citizen participation. In contrast, the main determinants of the behavioral intention to participate were expectation of personal empowerment and personal cost. General evaluation of citizen participation didn't have significant effect on behavioral intention. People who thought they could increase self-efficacy or solidarity by their participation and personal cost would be low, evaluated behavioral intention positively. Respondents in Maeda and Hirose (in press) were people who had experience in participating in community activities as volunteers. In the present study, we asked if this pattern of determinants was the same for people who had no prior experience of participation.

The project for waste reduction and environmental management plans in the city of Tsushima, Japan, was a good case for our purpose. Tsushima decided to develop these plans by means of citizen participation. The city first developed a waste reduction plan from 2002 to 2003, followed by an environmental management plan from 2004 to 2006. During the development of the waste reduction plan, Tsushima invited citizens to participate by establishing a citizen committee. The committee sponsored many events (e.g., an inspection visit to an advanced region which already accomplished to reduce waste, a citizen forum for waste reduction) and collected various ideas from the public. After completing the waste reduction plan, the citizen committee acted as a leader in implementing the plan. Therefore, activities for both making the plan and

following up on it involved substantial citizen participation. Based on the methods used in creating the waste reduction plan, Tsushima again invited citizens to participate in the creation of an environmental management plan. About 60 people participated in a citizen committee that met more than 130 times.

The process of developing these plans was highly publicized. Therefore, it could be assumed that many people in Tsushima would know about citizen participation in making these plans, even if they didn't participate in the process. It could also be assumed that those who didn't participate in the process would still be able to evaluate the social benefits of the plan or estimate their expectation of personal empowerment or cost should they have decided to participate.

Our research questions are as follows. The first is whether or not ordinary citizens who lack previous volunteer experience would decide to participate in making community plans. The second question is whether a citizen's general evaluation of the waste reduction plan developed through citizen participation is made on the basis of social benefits and inefficiency of citizen participation. The third question is whether personal empowerment as a selective incentive is a prerequisite for the behavioral intention to participate in developing the environmental management plan. As expected answers to the second and third questions, the following hypotheses are derived from previous studies about determinants of behavioral intention for citizen participation, social movements, and volunteer activities. The first hypothesis is that determinants of general evaluation of the waste reduction plan will be social factors, namely, social benefits as a positive factor and inefficiency of citizen participation as a negative factor (Maeda & Hirose, in press). The second is that determinants of the behavioral intention to participate in developing the environmental management plan will be personal factors, personal empowerment and personal cost (Clary, Snyder, Ridge, Copeland, Stukas, Haugen, & Miene, 1998; Klandermans, 1997; Maeda & Hirose, in press).

Method

Sample

The city of Tsushima in Aichi, Japan was targeted as the study area. A postal survey was conducted of 1500 Tsushima citizens chosen by random sampling in January 2005. At this time, the city had begun to

develop its basic environmental management plan by means of citizen participation.

Measures

The questionnaire included several sections that measured behavioral intention to participate, general evaluation of citizen participation, expectation of personal empowerment, expectation of personal cost, social benefits by citizen participation, and inefficiency of citizen participation. We asked behavioral intention and its prerequisites about environmental management plan. But, as general evaluation of citizen participation and its prerequisites, we asked about waste reduction plan. Because, these two plans were made one after another, then we thought it was easier for ordinary people to evaluate general evaluation and its prerequisites based on waste reduction plan that made earlier.

The main dependent variable was behavioral intention to participate in making the basic environmental management plan. Six items were used for behavioral intention (e.g. “becoming a member of the citizen committee”, “attending a forum or symposium to discuss environmental conservation in Tsushima”). We asked respondents to choose items as many as they like, and constructed an indicator of behavioral intention by combining these six items.

General evaluation of citizen participation in the basic waste reduction plan was measured by two items: “The basic waste reduction plan made by citizen participation is well organized”, and “The basic waste reduction plan made by citizen participation is efficient and good on the whole”.

Independent variables for behavioral intention were expectation of personal empowerment and expectation of personal cost. In this study, two forms of empowerment could be expected by citizens participating in plan development. The first form of empowerment was a sense of self-efficacy as participants obtained a variety of useful information from different perspectives. The second form of empowerment was a sense of solidarity from developing personal relationships with officials or other community residents interested in environmental conservation. Six items were used to measure expectation of these two forms of personal empowerment: for self efficacy, e.g., “If I participate in making the environmental plan, I would be able to obtain useful information”, “If I participate in making the environmental plan, I would be able to achieve a broader perspective”; and for solidarity, e.g., “If I

participate in making the environmental plan, I would be able to create social ties with various people”, “If I participate in making the environmental plan, I would be able to make friends and we can support one another.” Two items were used to measure expectation of personal cost: “If I participate in making the environmental plan, I would feel relationships with other participants to be burdens stemming from my participation”, and “If I participate in making the environmental plan, it would take a lot of time and effort”.

Independent variables for general evaluation of citizen participation in the basic waste reduction plan were social benefits and inefficiency resulting from citizen participation. Six items measured social benefits from citizen participation: e.g., “By means of citizen participation, the waste reduction plan provides easy-to-follow rules”, “By means of citizen participation, the waste reduction plan provides easy-to-recycling rules”. Two items measured inefficiency of citizen participation: “The waste reduction plan developed by citizen participation makes solid waste disposal more costly than ever”, and “The waste reduction plan developed by citizen participation makes separation of recyclable materials more time-consuming and effortful than ever.”

All items except behavioral intention were measured on a 5-point scale from 1 (“do not agree at all”) to 5 (“agree very much”).

In order to identify people who had previous experience in citizen participation, respondents were also asked if they had taken part in the citizen participation program that had developed the waste reduction plan.

Results

A total of 661 valid responses were obtained, for a collection rate of 44%. Of the 661 questionnaires, 516 responses were provided by people who had not participated in developing the waste management plan.

The number of responses from females (54.4%, n=280) and males (45.6%, n=235) was almost the same; the mean age of respondents was 51.35 years.

Means of number of selected items for behavioral intention was 1.3. “Making questionnaire to examine view of citizens about environment in Tsushima” was selected by one third of respondents, the largest number in respondents.

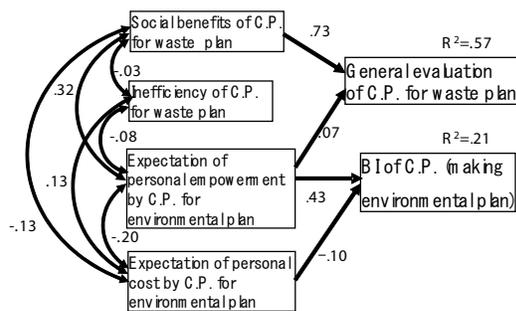


Figure 1. Result of path analysis of determinants of general evaluation of the waste plan and behavioral intention to participate in creating the environmental plan.

Figure 1 shows the result of the path analysis. Non significant paths from prerequisites to general evaluation of citizen participation or behavioral intention to participate were deleted. The fit indicator values were: $\chi^2(6)=10.8(p=.094)$, CGFI=.99, AGFI=.97, CFI=.99, RMSEA=.04. The main predictor of general evaluation of citizen participation in the waste reduction plan was social benefits. Expectation of empowerment by citizen participation in the environmental management plan also had a weak positive effect on general evaluation.

In contrast, the main predictor of behavioral intention to participate was expectation of personal benefit, i.e., empowerment expectation. Personal cost also affected intention negatively.

General evaluation of citizen participation in the waste management plan had no direct effect on behavioral intention for citizen participation.

Discussion and Conclusion

Ordinary citizens, as well as experienced volunteers (Maeda & Hirose, in press), evaluated citizen participation from the general viewpoint of expected outcomes. They focus on the expected outcomes of social benefits and reach their conclusion based on these social benefits.

In contrast, when citizens have to decide whether or not to take part in projects, they are likely to focus attention on the personal benefits and costs. The more people expected empowerment through their participation, the more willing they were to participate in developing the environmental plan. Therefore, the more easily they can see the positive personal benefits of citizen participation, the more likely they are to participate. Therefore, there are two

different processes involved in decision making about citizen participation.

We conclude that administrators who want to introduce citizen participation in environmental planning should emphasize social benefits. They should discuss with citizens the necessity of protecting the environment and the importance of citizen participation. They should appeal citizens that if many citizens participate in making environmental plans, the plans would be more effective, and various stakeholders would also increase their efforts.

On the other hand, at the stage of eliciting citizen participation, administrators should emphasize expected empowerment, as well as social benefits. The administrators should appeal citizens that if they participate in making environmental plans, they would become confident, and get various information, make many friends as support network. However, if citizens have no prior experience of empowerment from a voluntary activity, it may be difficult to get many people to participate. In fact, the means of number of selected items about behavioral intention was low. In future research, we will investigate the kind of actions that can encourage citizen participation.

References

- Clary, E. G., Snyder, M., Ridge, R. D., Copeland, J., Stukas, A. A., Haugen, J., & Miene, P. (1998). Understanding and assessing the motivations of volunteers: A functional approach. *Journal of Personality and Social Psychology*, 74, 1516-1530.
- Hirose, Y. (2007). A normative and empirical research on procedural justice of citizen participation in environmental management planning: A case study of citizen participatory projects in Karlsruhe. In Ohbuchi, K. (Ed.), *Social Justice in Japan: Concepts, Theories and Paradigms*. pp.264-290. Melbourne: Trans Pacific Press.
- Klandermans, B. (1997). *The social psychology of protest*. Cambridge: Blackwell.
- Maeda, H., & Hirose, Y. (in press). Expectation of empowerment as a determinant of citizen participation in waste management planning. *Japanese Psychological Research*, 51(1).
- Maeda, H., Hirose, Y., Sugiura, J., & Yagishita, M. (2008). Representativeness of randomly selected participants. *Sociotechnica*, 5, 78-87. (in Japanese with English abstract)

Olson, M. (1965). *The logic of collective action* □ *Public goods and the theory of groups*. Cambridge, MA Harvard University Press.