Article

Determinants of Volunteering based on a Theory of Volunteer Opportunity

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Abstract

In the search for ways to encourage more participation in voluntary activities, more attention is being given to what motivates people to participate. Participation in voluntary activity is usually explained by rational choice theory, but theoretical predictions have not always concurred with empirical outcomes. We proposed a theory of volunteer opportunity and verified the theory by using a web survey. Our central hypothesis was that having access to opportunities leads to higher participation rates in voluntary activity.

Our analysis of the factors involved in participation in voluntary activity supported the hypotheses based on this theory. For example, number of interests, some sources of information related to the area and specific activities, and other factors connected with participation opportunities had significant positive effects on participation. Factors related to egoistic motives, however, were either not significant or had significant negative effects, and economic models were thus not supported. It was clear that participation in voluntary activity is related to number of participation opportunities, and we suggest further development of the theory of volunteer opportunity.

Key Words: Egoism, altruism, cost and benefit

1. Introduction

The importance of civic involvement in solving environmental problems is now beyond debate. However, nonprofit organizations (NPOs) and other civic groups have long bemoaned the shortages of voluntary staff that limit their activities and could be seen as a permanent problem. Conversely, the public's greater awareness of NPOs and other similar organizations is thought to have increased the number of people wishing to participate in voluntary activities. In one awareness survey conducted by a local authority in Japan, nearly 90% of respondents indicated an inclination to participate in volunteer activities¹⁾. If all of these people were to actually participate in volunteer activities, it could make a considerable contribution towards solving social problems. In reality, however, more than 90% of people in Japan have never participated in voluntary activities²⁾.

To help encourage greater numbers of volunteers to participate in various activities, we must first theoretically clarify the motives for participation in voluntary activity and then practice effective methods of recruiting volunteers. Our purpose here was to analyze the theoretical aspects

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of voluntary participation from a new perspective.

2. Prior Research

Rational choice theory is often used to explain why people participate in voluntary activity. In a review of factors behind participation in voluntary activity, Smith (1994) identified six variables, including social background (i.e., social position) and situational (e.g., a friend requests assistance) ³⁾. All of these variables can be interpreted as being related to rational choice. For example, a person with high social position can gain respect through volunteering. The situational variable shows the normative influence of surrounding people: that is, if people see other people participating in voluntary activities, they may perceive that participation in the voluntary activity will produce some benefit for them⁴⁾.

If we assume participation in voluntary activity to be a rational choice in which a person decides to seek profit, the costs and benefits of participation in voluntary activity are important. In this case, profits, costs, and benefits do not necessarily take on a monetary value. Clark and Wilson (1961) and Chinman (1999) divided costs and benefits into three categories^{5, 6)}, Clary et al. (1992) into six⁴⁾, and Tschirhart et al. (2001) into five⁷⁾. For example, the categories of Tschirhart et al. are as follows: altruistic, instrumental, social, self-esteem, and avoidance. In all of these studies, it has been assumed that minimizing costs and maximizing benefits for volunteers will be effective in recruiting volunteers.

The costs and benefits proposed for volunteering bring diverse values into play, including both social and monetary ones. If we assume that these can be measured as a single utility, such as satisfaction or happiness, we can describe participation in voluntary activity in terms of an economic model. In fact, economic models based on altruistic motives and on egoistic motives have been presented to explain why people engage in voluntary activities⁸ ~ 10.

In the egoistic motive model, for example, participation in voluntary activity was explained by applying a theory of time allocation¹¹⁾, using a basic model whereby individuals have utility functions and act in such a way as to maximize their own utility. According to this, the following relationship can be established from the relational expression for maximizing utility:

$$U = U (W, V, L, X, D)$$
(1)

where U is utility, W is work supply in the market, V is volunteer activity, L is leisure, X is consumption of goods and service, and D is donations (money).

The time constraint equation is

$$T = W + V + L \tag{2}$$

where T is the entire lifetime of the individual.

The budget constraint equation is

$$P_{\rm x}X + P_{\rm d}D = P_{\rm w}W \tag{3}$$

where P_x is the price of goods and services, P_d is the price of the donation, and P_w is the wage rate for market work.

The relational expression that maximizes equation (1) under the constraint conditions of equations (2) and (3) is

$$\frac{\frac{\partial U}{\partial V} - \frac{\partial U}{\partial W}}{\frac{\partial U}{\partial D}} = \frac{Pw}{Pd}$$

From these equations, we can derive the following relationships:

- Increasing wage rates and voluntary activities have a negative relationship.
- Gross income and voluntary activities have a positive relationship.
- (3) Working hours and voluntary activities have a negative relationship.
- Leisure and voluntary activities have a negative relationship.
- (5) Donations and voluntary activities have a negative relationship.

According to these relationships, the following hypotheses have been made.

Income and voluntary activities have a positive relationship: that is, the volunteer must have enough money to be able to participate.

H1a: People with high incomes are more likely to participate in voluntary activities than people with lower incomes.

Working hours and voluntary activities have a negative relationship: that is, the volunteer must have enough spare time to participate.

H2a: People who have spare time are more likely to participate in voluntary activities.

Leisure and volunteer activities compete for time.

H3a: People who engage in leisure activities are less likely to participate in volunteer activities.

Donations and voluntary activities have a negative relationship: that is, they have a substitutional relationship.

H4a: People who make donations are less likely to participate in volunteer activities.

Prior empirical research on these relationships has produced conflicting results concerning the relationship between wage rates and voluntary activities, with one study suggesting that there is no relationship¹²⁾, another that there is a negative relationship¹³⁾, and another still that there is sometimes a negative relationship and sometimes no relationship¹⁴⁾. It has also been reported that there is no relationship between income and voluntary activities.1¹⁴⁾ In addition, some reports have suggested a positive relationship between voluntary activities and donations^{12, 13)} and others have reported a negative one¹⁵⁾.

Utility functions based on altruistic motives, meanwhile, hypothesize that volunteer activity and donations will decrease when personnel and funds are increased through public policy measures (the phenomenon of "crowding out"). In empirical studies, however, the effect of crowding out has been reported to be extremely small⁸⁾. Thus, altruistic motives have not been adequately explained by either cost-benefit or utility functions.

To summarize, although costs and benefits are theoretically taken into account as important elements when decisions for participation in voluntary activity are made, the theory has not yet been empirically proved. No other adequate theory has yet been developed, either.

3. Hypotheses

Cost-benefit and utility theories have not adequately explained participation in volunteer activities. We assume here study that people have an innate tendency to act cooperatively and will therefore participate in voluntary activity if given the opportunity¹⁶⁾. We call this the "theory of volunteer opportunity". In this theory, people do not compare costs and benefits when reaching decisions, but they intuitively take part in voluntary activities when presented with the opportunity to do so. The theory of volunteer opportunity is not part of the rational choice theory. It has been shown that a majority of people participate in volunteer activities because their friends or family members ask them to do so^{12, 17, 18)}. This implies that people will participate as volunteers when chances are provided. The relationships of volunteer participation with income, time, leisure, and donations differ from the cost-benefit case and are as follows.

It is assumed that people will participate in voluntary activity if they are given opportunities: that is, that opportunities lead directly to participation in voluntary activity, so people do not wonder whether they can spare the income.

H1b: People with high incomes and people with low incomes are equally likely to become involved in voluntary activities.

Once again, when directly presented with opportunities, people are assumed to decide instinctively to participate in voluntary activity; therefore, they do not wonder whether they can spare the time.

H2b: People who do and people who don't have spare time are equally likely to become involved in voluntary activities.

Leisure activities offer the possibility of encountering many opportunities for voluntary activity.

H3b: People who engage in leisure activities are

more likely to participate in voluntary activities.

likely to participate in voluntary activities.

Organizations that depend on donations often recruit volunteers as well, and people who make donations are therefore more likely to have contact with organizations that recruit volunteers.

H4b: People who make donations are more likely to participate in voluntary activities.

The interests (hobbies) of people are related to opportunities. People who have a lot of different interests will have higher probabilities of coming into contact with opportunities.

H5: People who have more interests are more likely to participate in voluntary activities.

The media that people use are also related to opportunities. Different information is presented through different media. People who use media that carry more news related to volunteer activities will encounter more opportunities.

H6: People who use specific information media are more likely to participate in voluntary activities.

As well as the above elements directly related to opportunities, positive (mental) attitude and two personality traits (outgoing and altruistic) were taken into account as psychological elements that influence number of opportunities and willingness to participate.

People with positive attitudes are more receptive to opportunities and are therefore more likely to participate in voluntary activity.

H7: People with positive attitudes are more likely to participate in voluntary activities.

People with outgoing personalities have less resistance to participating in new activities and are therefore probably more likely to participate in voluntary activities than people without such personalities. At the same time, people with outgoing personalities participate in more activities and are therefore more likely to encounter more opportunities for participation in voluntary activities than people with different personalities.

H8: People with outgoing personalities are more

People with altruistic personalities are more likely to participate in voluntary activities than people with different personality traits. Also, people with altruistic personalities are thought to have a better awareness of opportunities to participate in voluntary activity.

H9: People with altruistic personalities are more likely to participate in voluntary activities.

Other individual attributes, such as sex, age, and employment, have no relationship to frequency of opportunities.

H10: Males and females are likely to become equally involved in voluntary activities.

H11: Young and old people are likely to become equally involved in voluntary activities.

H12: People from different types of employment are likely to become equally involved in voluntary activities.

4. The Model

Basically,

$$V = f (L, D, P, T, M, O, I, \varepsilon),$$
(4)

where *L* is leisure, *D* is donations, *P* is personality, *T* is spare time, *M* is positive (mental) attitude, *O* is opportunities, and *I* is individual attributes. *V* is participation in voluntary activity and ε is the error term.

More specifically, we divided personality into outgoing personality and altruistic personality and we divided opportunities in terms of interests and information sources used. Individual attributes included sex, age, household income, and employment. Equation (4) could then be presented as,

$$V = f(X_1, X_2, X_3, \cdot \cdot \cdot X_{25}, X_{26}, X_{27}, \varepsilon)$$
 (5)

where X_1 = leisure, X_2 = donations, X_3 = outgoing personality, X_4 = altruistic personality, X_5 = spare time, X_6 = positive attitude, X_7 = interests, X_8 to X_{19} = 12 types of information source, X_{20} = sex (a dummy variable), X_{21} = age group, X_{22} = household annual income, X_{23} to X_{27} = five types of employment dummy variables.

Interests and information source are directly related to opportunities, and leisure, donations, personality, and positive attitude are indirectly related to opportunities. We used regression analysis as a relational expression. The monocoefficient of correlation between independent variables was sufficiently low, and the maximum value for the correlation between independent variables was 0.45.

5. Data Collection

We collected data in a web survey from 9 to 13 March 2006, using a distribution of sex, age (20–59), and area (prefectures) consistent with population component ratios in Japan. The response rate was 46% (12,000 questionnaires sent, 5,488 effective responses).

This was a closed-type web survey. We sampled registered users, known as "monitors," from a list of people who responded to a request for cooperation with a web survey on the home page of a major internet company. More than one million people were registered on the list. An email was sent containing a link to the questionnaire's website, and respondents answered questions on the web page. See the Appendix for more details on the questions and scoring. Because we primarily used a ranked score (on a scale of 1 to 5) of personal feelings, the answers were not sufficiently quantitative. For example, time spent volunteering would be better than a rank of "often" or "sometimes". Future studies should take this into consideration.

The survey results that we obtained may differ from those obtained from personal interviews or mail surveys with random sampling, although we considered the results reliable¹⁹. The web survey was practical in terms of cost and labor, and we were able to get enough quality data to identify the factors relating to volunteer activities, although the values obtained by our non-random sampling will need to be carefully compared with those of [0]random studies in the future.

The distributions of total volunteer participation and annual income of the respondents are shown in Figures 1 and 2, respectively. Only 20% of respondents ranked their volunteer participation as a 4 or 5 (the highest scores), suggesting that most people do not participate to any marked extent in voluntary activities, a result that is consistent with those of previous reports²). Annual income was normally distributed, with an average income of about 6 million yen.

6. Results and Discussion

Figures 3 and 4 show the relationship between volunteer participation and several elements. In many cases, the values given for individual factors (the average score for each rank of volunteer participation) increase progressively towards the right (i.e., up the scale of participation). This was not the case for television utilization, which was relatively constant among ranks of volunteer participation. Although these results indicate that these elements were related to participation in voluntary activities, the effects of different elements cannot be compared on this basis alone. For example, the effects of income and age may be

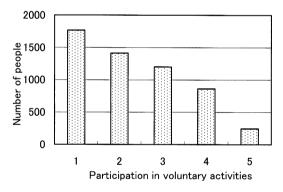


Fig.1 Distribution of volunteer participation (1, never; 5, often).

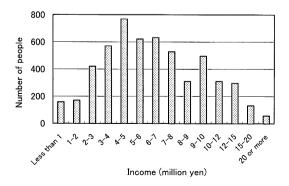


Fig.2 Distribution of annual income.

related to one another. To see the individual impact of the various elements, we performed a regression analysis.

The standardized coefficients presented in the Table 1 show the relative scale of the effects of each factor. Significantly positively factors were leisure, donations, outgoing personality, altruistic personality, positive attitude, number of interests, radio, newspapers, lectures and events, community newsletters, and age group. Significantly negatively factors were TV, magazines, and posters. The remaining elements had no significant effects. The

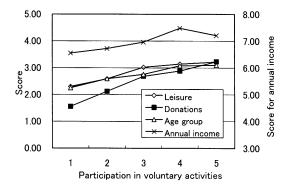


Fig.3 Participation in voluntary activities as related to leisure, donations, age group (the highest score for age group was 4, not 5), and annual income. The scoring for annual income is described in the Appendix.

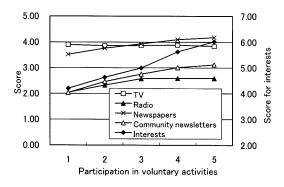


Fig.4 Participation in voluntary activities as related to the TV, radio, newspapers, community newsletters, and interests. The score for interests is the number of interests (hobbies) identified by the respondents.

 R^2 of 0.36 indicates that other significant factors exist, and further study is therefore needed.

Leisure and donations were significantly positively related to participation in voluntary activity, supporting H3b and H4b. Similarly, the fact that spare time and income were not significant supports H1b and H2b, further indicating that opportunities lead directly to participation in voluntary activity. These results did not support the rational choice theory hypotheses on the consumption of money and time (H1a-H4a).

The fact that number of interests was significantly positive also supports the theory of volunteer opportunity (H5). Media that relay

	Leisure	014 **
D 114		0.14 **
D 1''	Donations	0.33 **
Personality	Outgoing	0.07 **
	Altruistic	0.08 **
	Spare time	-0.02
	Positive attitude	0.03 *
Opportunities	Interests	0.02 *
	TV	-0.03 *
	Radio	0.04 **
	Newspapers	0.04 **
	Magazines	-0.03 *
	Mobile phone	-0.02
	Internet	0.02
	Books	-0.02
	Corporate reports	0.02
	Lectures & events	0.07 **
	Posters, etc.	-0.03 *
	Word of mouth	-0.01
	Community newsletters	0.14 **
	Sex	-0.02
	Age group	0.16 **
	Annual income	-0.02
Employment	Company employee, etc.	-0.05
type	Self-employed	-0.01
	Side job	0.00
	Homemaker	0.03
	Student	0.01
	Sample size	5477
	F	112.8 **
	R ²	0.36
	* p < 0.05	** p < 0.01

 Table 1 Regression analysis for participation in voluntary activities

specific information of concern to the local community (e.g., radio, newspapers, and community newsletters) were significantly positively related to participation in voluntary activities. On the other hand, sources of general information aimed at much broader audiences (e.g., TV and magazines) were significantly negatively related to participation. Mobile phones and the internet relay large amounts of both general and individual information, but their ratio of local information is probably small, which may explain why these media were not related to voluntary activities. Although requests from friends have been cited as an important reason for volunteer participation in previous studies^{12, 17, 18)}, word of mouth was not significant. This may indicate that word of mouth as a general source of information exchange differs from a specific request. Overall, the results show that some information sources are significantly related to participation in voluntary activities, supporting H6. Community Newsletters had the largest (0.14)positive standardized coefficient and number of interests had the smallest (0.02). Information media were therefore thought to play a major role in providing opportunities.

Positive attitude was significant, suggesting that voluntary activity is connected to mental disposition (H7).

The fact that both personality traits were positive and significant shows that personality is a causative factor that cannot be overlooked (H8, H9). The positive nature of an outgoing personality leads directly to participation in voluntary activity, while at the same time increasing the likelihood of encountering opportunities that also could lead to participation in voluntary activities. Similarly, an altruistic personality is thought to be directly related to participation in voluntary activity while at the same time increasing participation in voluntary activity because of raised awareness of opportunities. In this way, the influence of personality can be interpreted both in terms of the personality itself and in terms of the theory of opportunity. However, the coefficient values (0.07 and 0.08) were smaller than those of leisure and other significant factors, and personality could therefore not be described as an important factor.

The altruistic personality factor, in particular,

is related to another important theory, that of altruistic motives. Since altruistic personality was significantly positive, altruistic motives could be seen as one of the reasons for participation in voluntary activity. The size of its coefficient (0.08), however, was smaller than that of community newsletters (0.14). As such, altruistic motives could not be described as a dominant factor in the decision to participate in voluntary activity. Even when there are altruistic motives, they may not lead to action unless there are also opportunities. Further study is needed on this point. In our survey, no mention was made of the volume of voluntary activity in society as a whole. Since this is an explanatory variable in relation to participation in voluntary activity in the altruistic utility theory, this factor should be included in future studies.

Age was a significant factor. Older people tended to be more involved in voluntary activity, conflicting with our hypothesis (H11). As they accumulate experience, people may become more aware of situations in which volunteers are needed, and this may increase their participation in voluntary activities. Another possible interpretation is that opportunities are more frequently perceived as such by older people, a concept that would support the theory of volunteer opportunity. However, as people grow older, they may become more strongly aware that they themselves will depend on volunteers in the future and become involved in voluntary activities in expectation of some kind of future reward. Another possible explanation is that having a higher social status leads to greater external expectations of participation in voluntary activity³⁾. Further study is needed on the reasons why age is a significant factor in participation in voluntary activity.

Overall, these results support the theory of volunteer opportunity: that is, that the frequency of encounters with opportunities influences participation in voluntary activity (H1b-4b, H5-10, H12). These results also make it clear that voluntary activity cannot be explained by the egoistic utility theory. In the future, the theory of volunteer opportunity should be further developed with a view to analyzing participation in voluntary activity. If the theory of volunteer opportunity is correct, it would be important to provide frequent opportunities to potential volunteers to recruit more actual volunteers. The development of an effective method of doing so needs to be examined.

Since the theory of volunteer opportunity assumes that participation in voluntary activity is stimulated by opportunities, it negates the hypothesis of utility maximization. According to the volunteer opportunity hypothesis, moreover, participation in voluntary activity is not influenced by whether other people participate or not. For this reason, the Nash equilibrium (the principle that people make decisions after seeing the behavior of others) was not adopted. Sugden (1982) presented a world in which there were numerous altruistic individuals and developed a model based on altruistic motives from the hypotheses of utility maximization, Nash equilibrium, and public goods; he indicated doubts over utility maximization based on the example of donations²⁰⁾. The theory of volunteer opportunity provides answers to Sugden's doubts and goes further to repudiate the Nash equilibrium, which Sugden failed to do.

A point worth noting is that the impact of the Internet was not significant. Currently, support organizations act as intermediaries between NPOs or other civic groups and prospective volunteers by creating a cluster of Internet websites, and the civic groups themselves also expend time and effort enhancing the websites. Our results raise some doubts as to the effectiveness of these efforts. However, this study itself used a web survey, and it is possible that questions related to the Internet involved a certain bias. Further study is required on this point.

In our study, cost-benefit and utility theories were combined as part of the rational choice theory. It is possible, however, that costs and benefits cannot be described as a single utility. In that case, this study would not have fully verified the cost and benefit theory alone. The rational choice theory should be still validated by directly confirming the costs and benefits that volunteers experience.

There are some interesting aspects to consider in terms of applying our results. Whereas the usual cost-benefit and utility theory suggests the effectiveness of policies that impress the significance of volunteer activities to people with higher incomes and more time to spare, our results indicated these policies may not be efficient. Strategies should be implemented to provide increased opportunities for volunteer participation at times when, and places where, people participate in leisure activities and hobbies. The results also indicate that the current idea that the number of volunteers would increase following a rise in national income is not necessarily to be expected. This study, however, has raised the possibility for new mechanisms for increasing participation in volunteer activities, but work must be done on developing the appropriate mechanisms to do so.

7. Conclusion

Our central hypothesis was that participation in voluntary activity is strongly stimulated when volunteer opportunities are presented. We proposed a theory of volunteer opportunity to replace the conventional models of egoistic motives and altruistic motives, and we verified many of our hypotheses using a web survey.

Number of interests and some information sources that relay specific information of concern to the local community were positively related to participation in voluntary activities, indicating that participation in voluntary activity was related to the number of opportunities to participate and supporting the volunteer opportunity theory.

There are other possible interpretations of the results, however. A person who expects some benefits from volunteer participation might think that activities and information relating to volunteering are important. If he or she wants to obtain the benefits of participating in volunteer activities, rational choice theory hypothesizes that participation has to have a negative relation to leisure and donations and a positive relation to spare time and income. Our results, however, indicated that leisure and donations were significantly positive and that spare time and income did not have a significant effect. It is therefore helpful to analyze volunteer participation by using the theory of volunteer opportunity.

Although we expressed interests and information sources as volunteer opportunities, they may not directly explain such opportunities. Further research is needed on the effects of volunteer opportunity on, for example, specific volunteer activities.

From a practical point of view, appealing to the public about the significance of volunteer activities may fall short of expectations for gathering volunteers, because the appeal for participation is geared more towards benefits than it is to opportunities. We suggest that making a "menu" for participation opportunities and presenting this menu to responsive people is important, but the creation of a detailed strategy is a topic for future study.

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Appendix: Questions used for analysis

Voluntary activities (from 5 [often] to 1 [never]) I participate in local clean-up efforts and other voluntary activities. Leisure (from 5 [often] to 1 [never]) I take part in camping, sports, and other leisure activities. Donations (from 5 [often] to 1 [never]) I donate to overseas and local social activities. Outgoing personality (combined variable, conformance confirmed: Cronbach's a = 0.73) I don't think anything I can do will change the world. (from 5 [does not apply] to 1 [does apply]) I like spending time with different types of friends. Other people often ask me for advice. I always think of the positive side of things. I am very fond of shopping. (for each of the above five questions, from 5 [does not apply] to 1 [does apply]) About your personality and usual mood (Outgoing: 5 to introverted: 1) (Humorous: 5 to serious: 1) (Bossy: 5 to reserved: 1) Altruistic personality About your personality and usual mood (from dedicated: 5 to egoistic: 1) Spare time (from 5 [does not apply] to 1 [does apply]) I spend most of my time working (students: studying). Positive (mental) attitude (from 5 [does apply] to 1 [does not apply]) I live life to its fullest every day. Interests Please indicate any of the following that normally interest you (number of topics chosen). Cooking, camping, reading, driving, visiting shrines and temples, classical concerts, growing vegetables, rock concerts, watching movies, playing a musical instrument, domestic travel, overseas travel, walking in the mountains, ceramic art, watching baseball, beauty and massage, photography, looking after pets, fishing, fitness and gym, visiting museums and art galleries, walking, watching football. Usual information sources How much do you use the following to obtain various types of information? (from 5 [often] to 1 [do not use]) TV programs, radio programs, newspaper articles, magazine articles, mobile phone or PHS (communication and information gathering functions other than calls), Internet communities (blogs, mailing lists, etc.), books and works of reference, reports produced by corporations, lectures and events, posters, pamphlets and direct mail materials, information from friends and family members (word of mouth), community and local authority noticeboards and meetings, and community newsletters Sex (dummy variable) (0: Male 1: Female) Age group (1:20s 4:50s) 2:30s 3:40s

Household annual income

(1: less than 1 million yen, 2: 1-2 million yen…10: 9-10 million yen, 11: 10-12 million yen, 12: 12-15 million yen, 13: 15-20 million yen, 14: 20 million yen or more)

Employment type (dummy variable)

Company employee, etc. (1: company director or owner, company employee [management], company employee [non-management, full-time employee)], temporary dispatch or contract employee, organization staff member, and civil servant; 0: Everything else)

Self-employed (1: self-employed, excluding agriculture, forestry, and fisheries, home business help, agriculture, forestry, and fisheries, freelance occupation; 0: everything else)

Side job (1: part-time work, side job, or irregular employment, small office/home office, work at home; 0: everything else)

Homemaker (1: full-time housewife or househusband; 0: everything else)

Student (1: university student, graduate student, junior college or vocational college student; 0: Everything else)

Unemployed and others (1: other occupations, unemployed; 0: everything else)

ボランティア機会理論に基づくボランティア参加の決定要因

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摘 要

ボランティア参加を促進するために、ボランティアの参加動機に関する関心が高まって いる。ボランティアの参加は、合理的選択理論(Rational choice theory)によって説明さ れることが多いが、理論的予測は実証結果と必ずしも一致してこなかった。

本研究では、ボランティア参加の動機について合理的選択理論とは異なるボランティア 機会理論を提案し、これを WEB 調査を用いて検証した。この理論では、機会に触れるこ とがボランティア参加をもたらすと仮定した。

ボランティア参加に関する要因を解析したところ、関心事の多さや地域や特定の活動に 関係する個別的な情報などの参加機会に関係する要因が正に有意であるなど、この理論に 基づく仮説が支持された。また利己的動機に関係する要因は、有意でないか負に有意であ り、経済モデルは支持されなかった。

以上から、ボランティア参加が参加機会の多さに関係することが明らかとなり、ボラン ティア機会理論の可能性が示された。今後、ボランティア機会理論の展開が期待される。

キーワード:利己主義,利他主義,コスト・ベネフィット