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WHAT KINDS OF VOLUNTEERS BECOME MORE MOTIVATED BY COMMUNITY CURRENCY? INFLUENCE OF PERCEPTIONS OF REWARD ON MOTIVATION

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ABSTRACT

Local communities in Japan are struggling to increase the number of participants in volunteer activities in order to revitalize local life. To maintain the enthusiasm of active volunteers and entice new volunteers, a new type of reward to increase motivation is needed. Accordingly, community currencies (hereafter, CCs) have been introduced as a reward in an attempt to provide such a source of motivation. In particular, local residents have been expected to participate in volunteer work more frequently in return for receiving CCs; however, there is no evidence yet as to whether CCs arouse their motivation to do volunteer work. In this study, we investigated whether CCs play a role in raising local residents' motivation to do volunteer work. Our conclusion is that even some people with a no-reward orientation are likely to have their motivation raised by CCs, rather than diminished. This result shows that their perception towards CCs and cash is dramatically different though CCs have the same monetary value as cash.

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1. INTRODUCTION

In Japan, all local communities are striving to increase the number of participants in volunteer activities, in an effort to revitalize local life. In order to maintain the enthusiasm of active volunteers and to entice new volunteers to take part, a new mechanism is needed to increase motivation. Accordingly, community currencies (CCs) have been introduced as a new type of reward by organizations such as NPOs, municipal governments, and merchants' associations in an attempt to provide such a mechanism.

Rewards with monetary value have a tendency to undermine voluntary workers' motivation, while not offering any reward at all leads to difficulties in continuity of voluntary work. For example, Ariely (2010) and Frey (1997) argue that giving money to volunteers might undermine their motivation under some conditions. However, unlike individual monetary rewards, CCs might not undermine volunteer's motivation, and have now come to be expected.

Volunteers receive CCs as a reward for participation in certain activities. Cleaning up the neighborhood, helping at festivals, and mutual assistance like caring for a pet or shoveling snow all count as volunteer activities. Some people take part frequently in voluntary work, while other local residents rarely do so. As a result, the burden of voluntary work falls disproportionately on the shoulders of certain people, such as housewives and retired employee. Thus, a new framework is needed that will encourage participation by local residents. In an effort to raise volunteers' willingness to participate, CCs are being introduced in local communities throughout the country.

Local residents can use CCs for either commercial or noncommercial transactions (Kurita et al., 2012). Commercial transactions include using the currency in local shopping districts, at local festivals, and when paying for administrative services. They can buy almost all of the items at local shops using CCs. Non-commercial transactions include use as recompense for voluntary activity or mutual assistance. In this way, CCs can be used for a variety of transactions involving goods and services. Therefore, it was expected that local residents would be eager to receive CCs. However, there is no evidence yet as to whether CCs will contribute to arousing their motivation to do voluntary work. Thus, some local residents view the introduction of CCs negatively. For instance, some hold the opinion that participation in local activities is by nature done voluntarily, and rewards ought not to be given. During a simple verbal survey conducted in Tokyo's Musashino City, a toy shop owner gave the opinion that people who do voluntary work ought to do so without reward. The criticism is that CCs undermine volunteers' virtuous desire to work for no reward. It has also been pointed out that CCs might even have an adverse effect on motivation. Therefore, the question remains whether CCs will arouse local residents' motivation to do voluntary work.

In this study, we investigated whether CCs play a role in raising local residents' motivation to do voluntary work. One feature of our conclusion is that, unsurprisingly, those people who have a reward orientation are more likely to have their motivation raised than are those with a no-reward orientation. In addition, it is interesting that even some people with a no-reward orientation have their motivation raised, rather than undermined.

The structure of the paper is as follows: Section 2 summarizes previous research focusing on rewards and incentives, Section 3 describes the research perspective of the study explaining the effects of reward orientations on motivation, Section 4 explains the research methods used for this study, Section 5 provides findings and data analysis, Section 6 presents discussions on the data analysis, and Section 7 presents the conclusion.

2. PREVIOUS RESEARCH

There have been various types of studies tagged with "perception of CCs," "reward," and "incentive" as their key words. For example, Kaplan (2011) and Thiel (2012) both analyzed perceptions of CCs. Kaplan investigated differences in perceptions between merchants and consumers and revealed how perceptions differ depending on standpoint, and how that influences behavior. Merchants see CCs as a means of increasing sales, and try to encourage more users through word of mouth and advertising. Consumers, on the other hand, see CCs as a means of revitalizing the local economy, and so make their purchases in local shops rather than at major stores. Thiel believes that people regard CCs as having both a functional and a symbolic aspect. The functional aspect refers to the range of uses for CCs. The symbolic aspect refers to the ethics of using CCs. People see CCs not only as a means of exchange for purchasing goods and services, but also as a kind of ethical money, which revitalizes the local economy. Thiel claims that people's perceptions of CCs affect its circulation.

On the other hand, Frey (1997) and Ariely (2010) both have researched the relationship between reward and motivation for doing voluntary work. Frey has established that in some cases, money can undermine voluntary workers' enthusiasm. Why does giving money in exchange for volunteer activities hamper motivation? Frey argues that human motivation is divided into two categories: "extrinsic" and "intrinsic." "Extrinsic" refers to motivation by the belief that one will receive any sort of monetary reward. In contrast, "intrinsic" motivation refers to motivation that is derived internally, such as self-respect, self-determination, or civic virtue. Economists hitherto have argued—from a perspective focusing only on extrinsic motivation—that monetary rewards are strong motivators for individuals. However, this economic theory does not apply to all situations. Specifically, having money as a form of reward can damage self-respect and sense of self-determination of voluntary workers, and thereby undermine their enthusiasm for the work. For them, voluntary work is not interchangeable for money because it is noble. In these circumstances, the reward has the effect of undermining their intrinsic motivation. Likewise, Ariely discusses how money can taint relationships between friends and acquaintances. He also discusses people's motivation in terms of two categories: "social" and "economic" exchange. Benevolent behaviors without thought of recompense are believed to be morally justifiable in a social exchange. On the other hand, behaviors in return for monetary rewards are justified in an economic exchange. People usually switch their behavior between the two categories for different situations. Thus, mixing up the two exchanges could lead to some problems. For instance, Ariely notes that by giving money as a token of thanks to a relative who has provided a meal, or to a friend who has lent a hand in some matter, one runs the risk of sullying one's relationships with them.

Kaplan and Thiel have thought deeply about people's perceptions of CCs, but they have not considered the function of CCs as a means of reward. Frey and Ariely, on the other hand, have thought deeply about the relationship between money and people's motivations, but they have not researched the relationship between CCs and people's motivations. Research hitherto has not dealt sufficiently with the question of whether CCs, which have recently been introduced as a form of reward, do in fact increase people's enthusiasm for work. Consequently, virtually no attention has been given to the phenomenon of the co-existence of cases where CCs do serve to enhance voluntary workers' enthusiasm alongside cases where it does not. Focusing on the domains neglected by previous research, Kurita has investigated the relationship between perceptions of reward and perceptions of CCs, but has not fully considered whether CCs can motivate local residents (Kurita, 2010).

3. RESEARCH APPROACH

Our research objective was to examine the best reward for fostering volunteer motivation. The best reward depends on the type of voluntary work and people's perceptions of a proper reward in return for their participation. Thus, identifying the best reward for participant's motivation is one of the key factors affecting the continuation of voluntary work done in local communities. In the context of this research issue, the present study examined whether CCs could motivate local residents' participation in voluntary work. In particular, we looked at their perceptions of reward, or the way they think of a reward as a proper means of compensation for voluntary work. Rewards for voluntary work include a gift such as candy or chocolate, a coupon, cash, and so on. For example, people who see any kind of reward as unnecessary in voluntary work are not oriented towards any reward. They have a strong resistance to receiving cash, vouchers, or token gifts as recompense for their activities. Indeed, when they are given something in return for volunteering, it dampens their enthusiasm. In contrast, people who believe that some kind of recompense is needed for voluntary work are oriented towards reward. They show little resistance to receiving cash, vouchers, or token gifts as recompense for their activities. Their enthusiasm rises when they receive some sort of recompense. At the same time, these orientations (reward/no-reward) are not fixed

traits in any one individual. Rather, it could be that they are context dependent, so that a person's reward orientation changes according to the voluntary activity. In other words, people vary widely in what they view as appropriate rewards for activities.

Given that CCs with monetary value are a form of reward, they may cause voluntary workers with a strong no-reward orientation to lose their will to work, but increase the will to work in those with a strong reward-orientation. Thus, it is important to focus on local residents' different perceptions of reward. People's perceptions may lead to very different reactions to the same stimulus, depending on the situation and their experiences (Katona, 1951). Accordingly, people's perceptions of a new reward, namely CCs, may vary greatly from one individual to another.

Even among those with the same orientation towards rewards, some may accept CCs, while others reject them. Some people will see CCs as a reward that is somehow less valuable than cash, yet more special than token gifts. Other people, though, may see them as a better kind of reward than either cash or token gifts. Reactions to CCs vary greatly according to a combination of reward orientation and perception of CCs (Table 1). For instance, the local residents in the top-left quadrant (II) of Table 1 have a no-reward orientation, and yet see CCs as an excellent reward because they can contribute to the revitalization and development of local communities. While they do have monetary value, CCs do not undermine such people's motivation, and instead might succeed in raising it. On the other hand, those residents in the bottom-right quadrant (IV), have a reward orientation, but see CCs as an inferior kind of reward because they can only be used in a specific region in Japan. Note that we have simplified the classification of the perceptions of reward in order to help readers easily understand the argument. In reality, it is difficult to divide people's perceptions of reward into two categories, as there are many patterns of perceptions.

Given that people's perceptions of rewards and CCs vary, there will be cases where CCs raise motivation and cases where they do not. In other words, the differences in people's perceptions of reward and perceptions of CCs most likely have a strong influence on whether or not CCs enhance their motivation. This is the perspective we have taken as the basis for the present research study.

Table 1: Combinations of perceptions of rewards and perception of CCs.

Perception of CCs

		Superior Reward	Inferior Reward
Perception of reward	No-reward	II	I
	Reward	III	IV

4. RESEARCH METHOD

This study targeted the CC known as Toda Oar (hereafter, Oar), used in Toda City in Saitama Prefecture. The Oar are issued and managed by the Community Currency Toda Oar Management Committee. The Committee is managed by a number of volunteers. The Oar was first trialed in 2003. The initial purpose was to revitalize citizen activity and encourage mutual assistance. In the beginning, the Oar was used as "Eco-money," which was issued only to encourage mutual assistance. However, in response to the limited circulation problem of "Eco-money", the Oar has started to be accepted in local shops as from 2004. Moreover, the original six-month time limit for using the currency was extended to 3 years. The unit of this CC is the Oar, and at present 10-Oar and 100-Oar bills are in circulation. One Oar is equivalent to one yen (Figure 1).





Figure 1: The current Toda Oar

There are three main ways to acquire the Oar. The first is to become a Toda Oar supporter by paying the 1,000-yen membership fee, for which one receives 1,000 Oar. The second is to receive a grant based on a cash contribution by a donor. Some groups and local residents can receive up to 20,000 Oar from the Committee. The third is by taking part in an event organized by one of several groups. The groups organizing events obtain the Oar from the Committee by paying cash. Local residents can obtain the Oar by taking part in a cleaning up program, an ink cartridge recycling program, or an entrepreneurial experience program aimed at children. There are six main ways to use the Oar. First, they can be used as recompense for mutual assistance. Second, they can be used as contributions to support groups and the Committee. Third, they can be used in local festivals. Fourth, they can be used in local shops that participate in the program, of which there are about 100. Fifth, they

can be used in the shop and cafeterias in Toda city hall. Finally, they can be exchanged for bus tickets to use in the city.

The Oar is a typical Japanese CC that can be used for both commercial and non-commercial transactions. Commercial transactions include its use in shops, at festivals, and in exchange for bus tickets. Non-commercial transactions include its use as a reward for voluntary activities or for mutual assistance, or for participation in educational programs. It can be used by elementary, middle and high school children as well as by adults. Furthermore, there are a variety of volunteer activities that allow people to acquire the Oar, and the Oar is expected to foster local people's participation in volunteerism.

A questionnaire survey was carried out to determine if CCs could foster individuals' motivation. The questionnaire asks about people's preferred type of reward in certain situations as well as their attitudes towards rewards in general. Ideally, we would observe whether there are any changes in participants' motivation before and after the introduction of CCs; however, it is difficult in practice to find a location where such a social experiment could be carried out. Therefore, we constructed a questionnaire designed to observe changes in their perceptions if a new reward were to be introduced in a given situation.

In the questionnaire, the types of reward that could be chosen increased as the questions continued, as we believed this would help identify what other types of rewards would be chosen by those who chose CCs. For example, in the first question, the choices of reward for voluntary cleaning up work were a verbal thank you from the organizer of the event or a certificate that included a message of appreciation from the mayor. The second question had the same two choices plus a third choice of a cake worth approximately a hundred yen. The third question added a further option: that of receiving CCs. The final question added the further option of receiving 100 yen in cash. By adding reward options one at a time, we could identify the perceptions of reward of those who chose the third option (CCs).

For the purposes of this study, we asked about five levels of reward. The relative positions of the five rewards can be seen in Figure 2. The further left you go, the stronger the no-reward orientation becomes, and the further right, the stronger the reward orientation becomes. Words of thanks and certificates represent rewards in the form of language, and thus have next to no monetary value, and are the closest step to the "no-reward" position. At the other end of the spectrum, cakes and cash have value that can be counted in yen, and this strong monetary value places them closest to the "reward" position. As mentioned in Section 3, individual differences in the perception of CCs vary greatly. Some residents see them as close to the "no-reward" position because they encourage voluntary activities in the community, while others may see them as a reward with monetary value. Strictly speaking, "no-reward" means receiving no kind of reward at all, regardless of psychological or monetary value. However, because doing voluntary work will

result in receiving one of these kinds of rewards, we excluded "receive nothing at all" as a response.

In order to observe whether perceptions of reward have any effect on choosing CCs, a respondent was classified as having a reward orientation if he chose "cakes" as soon as that became an option; he was classified as having a noreward orientation if he chose a language reward, regardless of what form it took. Thus, the element of monetary value that starts with cakes as an option is used as the criterion for differentiating between reward and no-reward mentalities. The questionnaire also asked about respondents' perceptions of the various rewards as motivation for a cleanup activity.

The survey was carried out with people face-to-face at festivals held in September and October 2012. We randomly asked visitors to the event to participate in our questionnaire, and 94 responded. Of these respondents, we specifically selected students aged up to 18 years old as our target research group, in order to examine the effect of CCs on their motivation. Thus, the number of selected respondents was 56. The questionnaire included questions about reward selection only for individuals who were aware of the Oar; if they were unaware of the Oar, they would not have been able to accurately understand the questions. In Toda, there is ample opportunity for students to obtain the Oar. They do so by taking part in various programs organized by the Committee. Students can also take part in toy exchange events, cleaning up programs, or ink cartridge recycling programs to obtain the Oar. Thus, Toda has multiple programs that allow students to obtain CCs, and we assumed that they would understand the meaning of our questions.

The respondents were not a randomly drawn sample from the larger population of students who had used the Oar. Thus, it is difficult to be certain that they were a representative sample of the larger population. However, since there is no list of users of the CC, the data acquired here are valuable, and may shed light on the relations between CCs and reward orientation, and generate hypotheses that future research can test.

There were 56 respondents, divided by age as follows: elementary school (ages 6 to 12), middle school (ages 13 to 15), and high school (ages 16 to 18). Elementary school children accounted for 75% of the total sample (Table 2). Boys and girls were equally represented with 28 of each

(Table 3). All of the respondents who answered the question on their awareness of the Toda Oar (55 people or 100.0%) said that they were aware of it, and all but two (54 people or 96.4%) had experience receiving and using it (Tables 4 and 5). One respondent did not answer the question about awareness, which accounts for the discrepancy in the n value.

Table 2: Age distribution

Grade	n	Percent
Elementary School (age 6 - 12)	42	75.0
Middle School (age 13 - 15)	4	7.1
High School (age 16 - 18)	10	17.9
Total	56	100.00

Table 3: Gender

Gender	n	Percent
Male	28	50.0
Female	28	50.0
Total	56	100.0

Table 4: Awareness of Toda Ora

Gender	n	Percent
Aware	55	100
Not Aware	0	0
Total	55	100.0



Figure 2: The relative positions of the five rewards

Table 5: Experience using Toda Ora

Experience	n	Percent
Yes	54	96.4
No	2	3.6
Total	56	100.0

5. RESULTS

Figure 3 shows the rewards chosen by reward orientation as a tree diagram. The reason why the number of respondents was 55 is that only one person did not answer one of the questions. We conducted the surveys using questions about voluntary cleaning up work and assisting elderly women, but the results were almost the same. Thus, in this paper, we only report on the case of voluntary cleaning up work. This figure shows how people change their preferences for rewards after the new reward is added to the question at each level. The first level of each tree shows the ratio of those who chose the cake to those who did not. Those who chose the cake at this stage were designated as having a reward orientation, while those who did not were designated as having a no-reward orientation. Next, at the second level of the tree is the ratio of those who chose CCs to those who did not for each of the two reward orientations. Finally, at the third level of the tree is the ratio of those who chose cash to those who did not for each node at the second level. Thus, this tree diagram describes the effect reward orientation has on the choice of CCs.

First, let us look at the ratio for reward orientation. The proportion of those with a no-reward orientation was somewhat high: 56.4% preferred "no-reward," compared with 43.6% who preferred "reward." Next, let us look at the choice of CCs for each of the reward orientation categories: 79.2% of those with a reward orientation chose CCs, while 51.6% of those with a no-reward orientation did so. Therefore, reward orientation does have an effect on choice of CCs. Most of those who have a reward orientation are highly likely to have their motivation enhanced by CCs, but this effect is reduced for those with a no-reward orientation. Finally, let us look at what happens when cash is added as an option, so we can see better the relationship between types of reward and motivation. Of those people with a reward orientation who had chosen to receive CCs, 52.6% now preferred to receive cash in return for cleaning up work, compared with a mere 18.8% of those who had a noreward orientation. This implies that approximately half of those with a reward orientation will feel more motivated if they receive cash rather than CCs. On the other hand, most of those with a no-reward orientation can have their motivation enhanced by receiving CCs, but not further enhanced by receiving cash instead. We observe that those with a noreward orientation have a perception that allows them to accept CCs, but not cash. Next, let us look at those who did not choose CCs: 80% of those with a reward orientation chose the cash, while 13.3% of those with a no-reward ori-

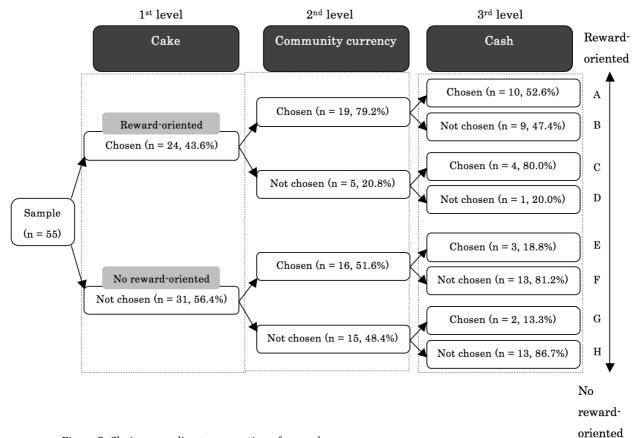


Figure 3: Choice according to perception of reward

entation did so. For most of those with a reward orientation, cash is a better motivator than CCs. We can interpret this as meaning that such people do not see CCs as an appropriate reward to raise their motivation and chose cash, which has a clearer monetary value. Contrasting with this, neither CCs nor cash seems to enhance the motivation of most of those with a no-reward orientation. These individuals do not feel more motivated when receiving any reward that has monetary value. Such people have a strong preference to do voluntary work without reward.

In summary, we confirmed from the analysis that there are various patterns regarding how to choose rewards. In Figure 3, the further down the vertical double arrow you go, the stronger the no-reward orientation becomes, and the further up the arrow you go, the stronger the reward orientation becomes. Each letter along the arrow corresponds to a type of person with a different pattern of reward orientation

6. DISCUSSION

We have seen from the present analysis that CCs with monetary value can motivate people who have a reward orientation. If CCs are introduced as a new reward in communities, local residents with a reward orientation are likely to be more motivated than before, because a reward with monetary value clearly motivates people with a reward orientation.

With respect to those with a no-reward orientation, some interesting results were found. CCs with monetary value will not necessarily demotivate all of those with a no-reward orientation, but may in fact enhance the motivation of some. Furthermore, when we examine the relationship between types of reward and motivation by analyzing the choice to take cash, we notice that some people with a noreward orientation opted to take CCs but refused to take cash (See category "F" in Figure 3). Thus, those with a noreward orientation may see cash as an incompatible reward for voluntary work, but feel that CCs act as an incentive even though they have a monetary value. This suggests that some people with a no-reward orientation recognize CCs as being different from cash, despite both rewards having the same monetary value. In other words, some of those with a no-reward orientation might perceive CCs not simply as a money substitute, but as a special kind of reward that recognizes the value of voluntary work.

Earlier research has shown how giving money can undermine people's motivation. It is possible that in some cases, money serves to undermine voluntary workers' intrinsic motivation (Frey, 1997). Ariely, on the other hand, points out how human relations between friends and acquaintances can be undermined when an instrument of market forces, such as money, is introduced into these social relationships (Ariely, 2010). He claims that when we are asked by a friend or acquaintance to do something for them, we would rather receive a non-monetary present than money. Thus, social psychology and economic psychology have dealt in-depth with the relationship between money and

motivation, separating between social and market domains. However, it is difficult to analyze the social and market domains using this analytic framework. From this perspective, CCs with monetary value might be seen as a reward, similar to cash, that undermines volunteers' motivation.

We have focused on the overlap between social and market domains that has been long neglected by traditional research. The data from the present study indicate that although CCs have monetary value, they represent a social domain that can motivate voluntary workers without undermining their dedication. This suggests that CCs have both social and market functions, and can motivate not only reward-oriented people, but also no-reward oriented people. This is a very different feature between CCs and cash, because cash demotivates no-reward oriented people. From the perspective of revitalizing local communities, CCs serve both social and market functions, and are effective for evoking a feeling of participation by no-reward oriented voluntary workers. Thus, CCs can be effectively used as a type of currency that has both social and market functions, without undermining the virtues of a no-reward orientation.

7. CONCLUSIONS

This study examined whether CCs arouse motivation in local residents to do voluntary work. The findings show that CCs may well enhance motivation in those with a reward orientation, and can enhance motivation in people with a no-reward orientation. In principle, those with a noreward orientation ought to refuse any reward for doing voluntary work, but if the reward is in the form of CCs, then their motivation may be enhanced. This is because they might see CCs as a special kind of reward, different from cash. In some cases, in spite of it having monetary value, CCs can succeed in enhancing the motivation of those with a no-reward orientation, rather than undermining it.

This conclusion has significance for those intending to issue CCs to motivate local residents. Hitherto, voluntary work has usually been rewarded with token gifts, such as cakes. Organizers who rely on volunteer workers have wanted to offer them something as a token of thanks. Since cash and coupons might be a disincentive to volunteers, rewards have generally been cakes, pens, and similar token gifts. However, as the present study shows, some people do not regard cakes as an incentive. Changing the reward from a cake to CCs means that those students with a reward orientation who chose to have a cake will still have their motivation enhanced. In addition, some of those who did not choose cakes will also have their motivation enhanced by being rewarded with CCs. Therefore, CCs can function as compensation for voluntary work, despite the fact that they have monetary value. Changing the reward to CCs may well invigorate some local residents' participation in voluntary work.

It has been said that one of the reasons why the use of CCs has not become more widespread to date in Japan is that the goods and services that it can be used to purchase are too limited. To remedy this, strategies have included con-

vincing new shops to accept CCs, and seeking support from local administrations. As the range of establishments where CCs can be used grows, it is expected that people will be happier to receive this form of reward. Thus, efforts are being concentrated on making CCs more convenient to use. Such strategies are effective in spreading the use of CCs, but at the same time, ideas for increasing circulation that consider people's perceptions of reward and perceptions of CCs are needed.

To this end, the following three points are important for future research. First, further examination of how people with a no-reward orientation perceive CCs is needed. Those with a no-reward orientation whose motivation is enhanced by CCs tend to refuse cash. It is not clear, however, why they accept CCs that have the same monetary value as cash, and how they perceive CCs. These questions need to be investigated further by conducting qualitative research. The second point concerns factors that affect the formation of people's perceptions of reward. The factors in question might be expected to include education, experience of doing voluntary work, and regional characteristics. People's life experiences form their perceptions of reward, and affect their perception of CCs. Further research is also needed regarding whether a perception of reward can change once it has been formed. Addressing these questions will aid in devising plans for spreading the circulation of CCs. Third, this study was limited in that it was conducted only with local students who knew about CCs; thus, it is difficult to generalize the results, and important for future research to employ a sample including the adults.

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REFERENCES

Ariely, D. (2010) Predictably Irrational: The Hidden Forces That Shape Our Decisions, New York: HarperCollins.

Frey, B. S. (1997) Not Just for the Money. An Economic Theory of Personal Motivation, Cheltenham, UK and Brookfield, USA: Edward Elgar.

Kaplan, N. (2011) "Downtown Dollars: Community Currency or Discount Coupon?", International Journal of Community Currency Research 15.

Katona, G. (1951) Psychological Analysis of Economic Behavior, New York: McGraw-Hill.

Kurita, K. (2010) Outcomes and Problems of Community Currency Projects: Evaluation and Discussion of the Vitalization of Local Communities Based on an Interdisciplinary Approach (in Japanese), Graduate School of Economics, Hokkaido University, Doctoral thesis.

Kurita, K., Miyazaki, Y. and Nishibe, M. (2012) "CC Coupon Circulation and Shopkeepers' Behaviour: A Case Study of the City of Musashino, Tokyo, Japan", International Journal of Community Currency Research 16.

Thiel, C. (2012) "Moral Money-The Action Guiding Impact of Complementary Currencies: A Case Study at the Chiemgauer Regional Money", International Journal of Community Currency Research 16.

APPENDIX: QUESTIONNAIRE

- Question 1. If you did 30 minutes of cleanup work at a festival, what kind of reward would you want to receive?
- Q1-1. If you could choose between these 2 rewards, which one would motivate you more? Mark only one option.
 - 1. A word of thanks from the organizer
 - 2. A certificate bearing words of appreciation from the mayor
- Q1-2. If you could choose between these 3 rewards, which one would motivate you the most? Mark only one option.
 - 1. A word of thanks from the organizer
 - 2. A certificate bearing words of appreciation from the mayor
 - 3. A cake worth about 100 yen
- Q1-3. If you could choose between these 4 rewards, which one would motivate you the most? Mark only one option.
 - 1. A word of thanks from the organizer
 - 2. A certificate bearing words of appreciation from the mayor
 - 3. A cake worth about 100 yen
 - 4. 100 Oar of Toda Oar community currency
- Q1-4. If you could choose between these 5 rewards, which one would motivate you the most? Mark only one option.
 - 1. A word of thanks from the organizer
 - 2. A certificate bearing words of appreciation from the mayor
 - 3. A cake worth about 100 yen
 - 4. 100 Oar of Toda Oar community currency
 - 5. 100 yen in cash
- Question 2. If you did 30 minutes of garden weeding for a local elderly woman, what kind of reward would you want to receive?
- Q2-1. If you could choose between these 2 rewards, which one would motivate you more? Mark only one option.
 - 1. A word of thanks from the elderly woman
 - 2. A certificate bearing words of appreciation from the mayor
- Q2-2. If you could choose between these 3 rewards, which one would motivate you more? Mark only one option.

- 1. A word of thanks from the elderly woman
- 2. A certificate bearing words of appreciation from the mayor
- 3. A cake worth about 100 yen
- Q2-3. If you could choose between these 4 rewards, which one would motivate you more? Mark only one option.
 - 1. A word of thanks from the elderly woman
 - 2. A certificate bearing words of appreciation from the mayor
 - 3. A cake worth about 100 yen
 - 4. 100 Oar of Toda Oar community currency
- Q2-4. If you could choose between these 5 rewards, which one would motivate you more? Mark only one option.
 - 1. A word of thanks from the elderly woman
 - 2. A certificate bearing words of appreciation from the mayor
 - 3. A cake worth about 100 yen
 - 4. 100 Oar of Toda Oar community currency
 - 5. 100 yen in cash
- Question 3. Do you know about the community currency Toda Oar? Answer Yes or No.
- Question 4. Have you ever received or spent the community currency Toda Oar? Answer Yes or No.
- Question 5. What do you think are the best ways to spend the Toda Oar? Choose 2 answers.
 - 1. To give and receive as a token of thanks for helping someone
 - 2. To give and receive in return for local voluntary work
 - 3. To give and receive as a gift
 - 4. To use for buying things in shops and at local festivals
 - 5. To exchange for yen in cash

Question 6. When you take part in voluntary work, do you like to be praised for doing so? Answer Yes or No.

Question 7. When you take part in voluntary work, do you like to receive some kind of reward? Answer Yes or No.

Question 8. How old are you? _____ years.

Question 9. Are you in primary school? Answer Yes or No.

Question 10. Sex (M · F)