

An analysis of attitudes about paying user fees for nature areas in Japan

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Introduction

Intelligent management of all types of nature areas fosters high quality use of those areas, particularly when funding is obtained and limits on entry are instituted. In accord with resources and ways of administration, various entry fees and rules controlling nature area use have been considered or enacted in some nature areas (Ito, 2005). Individual users face direct costs by paying a user (admission) fee and/or user service fees once they are in the park (Aukerman, 1986). In Japan's notable nature areas such as Kamikochi or Okunikko, users often are asked to pay for services (such as the use of public toilets) but are less likely to pay a fee for admission to the area. In fact, most nature areas in Japan can be used for free. Free access to nature areas is linked to the Japanese cultural idea that people and nature are closely related, leading to the assumption that nature is freely there for all to use. This study aims to improve the use of nature areas by clarifying users' attitudes toward paying to use them. The three specific research questions addressed in this study were:

- Do attitudes toward payment differ according to the type of venue?
- Do attitudes toward payment differ according to the method of assessment?
- What is the relationship between individual characteristics of users and their attitudes toward paying to use nature areas?

Methodology

A survey questionnaire for people aged 16 years and older was offered on the Internet throughout Japan in July 2013. A total of 3,599 completed questionnaires were submitted. The survey instrument obtained information on attitudes toward paying to use a nature area based on the type of venue and based on the type of payment assessed using a four-category Likert scale where 1 = "no problem at all" to 4 = "definitely problematic." The four types of venues were 1) public exhibition facilities, 2) cultural heritage sites such as shrines or temples, 3) nature areas, and 4) mountain areas. The two types of payment assessments were 1) general use (admission) fees and 2) fees for using facilities (e.g., toilets). To analyse the data, we first used a repeated measures one-way analysis of variance (ANOVA) to explore whether attitudes toward payment differed according to the type of venue. That analysis was followed by paired-comparison tests of all possible pairs of venues. Next, limiting the scope to two types of venues, nature areas and mountain areas, we used paired t-tests to explore attitudes toward methods of assessing charges. Finally, ANOVA was used to examine the relationship of individual characteristics to attitudes toward payment for the use of nature areas.

Results

The results of the initial ANOVA revealed a statistically significant main effect ($F [3, 10794] = 346.45, p < 0.0001$), suggesting that the mean attitudes toward payment differed among the four types of venue. Continuing on with Ryan's multiple comparison tests, statistically significant differences were found for all of the tested pairs except for admission charge for cultural heritage sites versus entry fees for mountain areas. Resistance to pay was the highest regarding an entry fee for nature areas, followed by an entry fee for mountain areas, then an admission charge to cultural heritage sites, and resistance was the lowest regarding admission charges to public exhibition facilities.

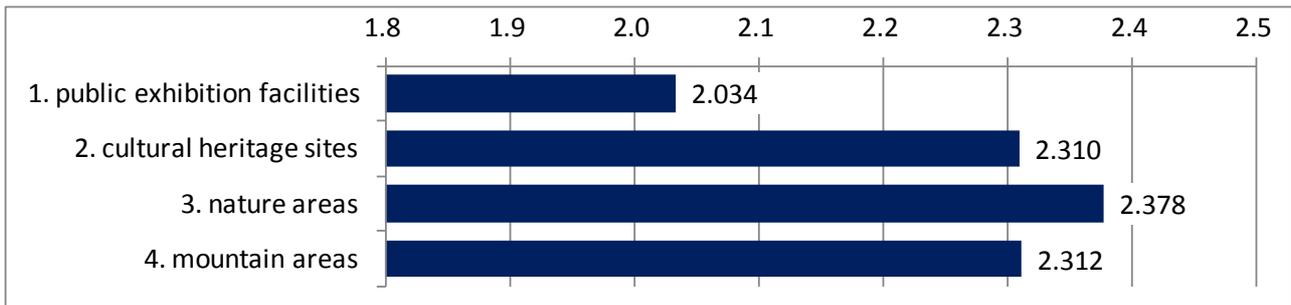


Figure1. Mean differences in attitudes toward payment according to the type of venue (Likert scale where 1 = "no problem at all" to 4 = "definitely problematic")

In the analysis of attitudes toward assessment charges in nature areas, a paired t-test examined differences in attitudes toward paying an entry fee versus a fee for using facilities. A statistically significant difference was found ($t = -4.892, df = 3598, p < 0.01$). The mean was 2.38 for paying an entry fee and 2.42 for paying a fee for using facilities, suggesting that a fee for facility use in a nature area generated relatively greater antipathy. In the case of mountain areas, on the other hand, a significant difference also was found ($t = 5.510, df = 3598, p < 0.01$); however, with mean values of 2.31 for paying an entry fee and 2.27 for paying a fee for using facilities, the results conversely indicated a greater resistance toward paying entry than use fees.

The final analysis examined the association of the respondents' characteristics with their attitudes toward paying to use nature areas. The ANOVA test revealed statistically significant differences according to the frequency of having visited nature areas ($F(4,3594)=17.64, p<.0001$) and the extent to which respondents intended to visit nature areas in the future ($F [4, 3594] = 51.51, p <.0001$). Frequent visitors who were no longer inclined to visit were the most opposed to payment, followed by infrequent visitors who may or may not want to visit again. Frequent visitors who intended to visit again were the least resistant to the prospect of paying.

Conclusion

We conclude the following from these results:

- Resistance to paying an entry fee to a nature area was higher on average than resistance to paying an admission charge to a public exhibition facility or cultural heritage site.

- Aversion was relatively high toward paying fees for facility use in nature areas and toward paying fees to enter mountain areas.
- Attitudes toward payment were influenced by the frequency of visiting nature areas as well as by the extent of the respondents' intention to visit nature areas in the future. Those who had visited frequently but had no future intention to visit displayed the greatest resistance to payment, whereas those who had visited frequently and intended to visit again were least resistant to paying fees.

In Japan, the upkeep of museums and other exhibition facilities usually is borne by the users. Cultural assets likewise tend to be managed at the expense of the users. Nature areas, on the other hand, have no history of assessing fees and resistance among users to paying fees is high. If users are to be made to bear costs, charging them in ways that fit the type of venue will help to institute such costs in ways that provoke the least likely amount of resistance among users.

References

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