



ELSEVIER

Contents lists available at ScienceDirect

Journal of Forest Economics

journal homepage: www.elsevier.com/locate/jfe



The effect of on-site forest experience on stated preferences for low-impact timber harvesting programs

Xiaoshu Li^{a,*}, Kevin J. Boyle^b, Thomas P. Holmes^c,
Genevieve Pullis LaRouche^d

^a Virginia Tech, Agricultural and Applied Economics, 306B Hutcheson Hall, Blacksburg, VA 24061, USA

^b Virginia Tech, Agricultural and Applied Economics, 305 Hutcheson Hall, Blacksburg, VA 24061, USA

^c USDA Forest Service, Forestry Sciences Lab, Southern Research Station Research, Triangle Park, NC 27709, USA

^d U.S. Fish and Wildlife Service, Chesapeake Bay Field Office, Fairfax Drive, Room 4020, Arlington, VA 22203, USA

ARTICLE INFO

Article history:

Received 22 October 2013

Accepted 27 September 2014

Keywords:

Stated preferences

On-site experience

Low impact forest management

Bootstrap

ABSTRACT

An important issue in the design of stated-preference surveys is whether the information provided to respondents within a survey instrument is adequate to yield valid value estimates. Providing respondents with on-site experience about forest ecosystem management alternatives may influence their expectation of the effects from new policies and programs. In the research reported here, we investigate whether preference parameters for attributes of low-impact timber harvesting programs differ between respondents to a mail survey versus respondents provided with an on-site forest experience (walk through a research forest). The empirical analysis in our application shows that stated preferences for timber harvesting attributes are not statistically different between the mail and on-site applications of the survey, and this result is robust to pretest (before experience) and post-test (post experience) applications.

© 2014 Department of Forest Economics, Swedish University of Agricultural Sciences, Umeå. Published by Elsevier GmbH.

All rights reserved.

* Corresponding author. Current address: University of Kentucky, Department of Forestry, 214 Thomas Poe Cooper Building, Lexington, KY 40546-0073, USA. Tel.: +1 540 557 7368.

E-mail addresses: xiaoshu@vt.edu (X. Li), kjboyle@vt.edu (K.J. Boyle), tholmes@fs.fed.us (T.P. Holmes), LaRouche@fws.gov (G.P. LaRouche).

Introduction

A key consideration in the design of stated-preference surveys is the information provided to respondents describing the ecosystem goods or services being valued, the increment of change to be valued, which occurs in the context of the prior experience or knowledge respondents have with the topic of investigation. In studies estimating use values, respondents typically have specific, first-hand experience with the resource, but possibly not the change in the resource condition to be valued. When nonuse values are elicited, respondents likely do not have specific, first-hand experience with the resource. Applications estimating nonuse or total values likely require respondents who lack specific knowledge/experience to base their responses on their general knowledge/experience, which may or may not be directly relevant, and the information provided in the survey instrument.

Researchers have shown that responses to stated-preference questions vary with respondent experience. For example, Boyle et al. (1993) found that experienced white-water boaters valued scenarios of white-water trips they had not experienced the same as they valued their actual white-water experiences, but that this was not the case for less experienced boaters. Cameron and Englin (1997) found that value estimates increased and variance estimates decreased with respondent experience. When estimating values for programs to protect ecological resources, respondents may have little or no direct experience with the resource conditions being valued.

We can think of the information that respondents use in answering stated-preference questions as falling into two broad categories, *prior knowledge* and *acquired knowledge*. *Prior knowledge* is the knowledge that individuals possess prior to engaging in the stated-preference study. This can be specific knowledge gained from personal experience with a resource or general knowledge obtained from reading or some other indirect source of information. Survey participants can also augment prior knowledge when responding to surveys administered by mail or internet by talking to others, searching the internet, etc. while answering survey questions. *Acquired knowledge* is the information that individuals obtain from participation in a stated-preference study that is provided by the investigator through the survey process.

In the research reported here we investigate a specific type of acquired knowledge—on-site experience. A stated-preference survey focusing on low-impact timber harvesting was administered by mail and on-site at a research forest. Respondents to the traditional mail survey answered stated-preference questions based on their prior knowledge and the acquired knowledge provided in the survey instrument. Respondents who participated on-site at the research forest were asked to complete pretest and post-test administrations of the same survey instrument. After completing the pretest, respondents were taken on a guided walk through the research forest, where they received acquired information about natural and managed forests via direct observation, and completed the post-test survey upon completion of their walks.

In the analyses reported here we investigate two issues. First, we evaluate whether those who agreed to participate on-site have the same preferences as those who agreed to complete the mail survey; a comparison of the mail and pretest results. This step is important to identify whether differences in sample frames and other study implementation features confound the comparison of information treatments. Second, we investigate if the mail and post-test results are statistically similar. This is the primary investigation of the effect of on-site acquired information where respondents experienced the conditions in the experimental forest first-hand.

Our results show that there were no differences in preference parameter estimates between the mail and pretest results. Nor did we find differences in preference parameters between the mail and post-test responses to the survey. Thus, at least in this case study, the results indicate that on-site information does not substantially alter the observations of respondents' preferences.

Previous literature

Researchers have investigated how varying information and respondent experience/knowledge affect answers to stated-preference questions. Studies reveal that value estimates can be sensitive to respondent experience and the level of information provided (Boyle et al., 1993; Cameron and

Download English Version:

<https://daneshyari.com/en/article/91786>

Download Persian Version:

<https://daneshyari.com/article/91786>

[Daneshyari.com](https://daneshyari.com)