

# Which factors influence the willingness to pay for electronic library services? A study of the Portuguese electronic scientific information consortium b-on<sup>1</sup>

Journal of Librarianship and
Information Science
44(3) 185–198
© The Author(s) 2011
Reprints and permission: sagepub.
co.uk/journalsPermissions.nav
DOI: 10.1177/0961000611408645
lis.sagepub.com



Luiza Baptista Melo

CIDEHUS, Universidade de Évora, Portugal

### **Cesaltina Pires**

CEFAGE, Universidade de Évora, Portugal

### **Abstract**

This paper investigates the factors that influence the value for the users of the Portuguese electronic scientific information consortium b-on (Biblioteca do Conhecimento Online). We used the contingent valuation method based on a willingness to pay scenario to estimate the value that each user is willing to pay. Data were collected through an e-survey sent to all Portuguese academic users. The main aims of this study are: (1) to investigate whether the willingness to pay is influenced by a set of factors (the frequency of use, whether the user previously knew b-on or not, the type of the user, the scientific area of the user, and the institution of the user); and (2) to estimate the demand function of b-on services as function of the price and the previously mentioned factors. In order to achieve these objectives we use several regression analysis techniques — OLS, Tobit model, linear probability model (LPM), Logit and Probit models. The results show that the factors studied are all important explanatory variables of the willingness to pay for b-on and important determinants of demand for b-on services. Moreover, the demand for b-on services is quite sensitive to the 'price'.

## **Keywords**

academic libraries, contingent valuation, electronic sources, regression analysis

# I. Introduction

Most public institutions are under increasing pressure regarding their budgets. Portuguese research and academic institutions are no exception and, consequently, an estimation of the cost and the benefits of academic libraries services is urgent.

This paper explores the factors that influence the value that users give to the Portuguese electronic scientific information consortium b-on (Biblioteca do Conhecimento Online). Nowadays, this digital library provides unlimited access for research and academic institutions to the full texts of more than 16,750 scientific publications, via the Internet, at the national level (FCCN, 2009).

In order to be able to estimate, in monetary terms, the value that the users give to the b-on services, we used the contingent valuation method based on a willingness to pay scenario. Data were collected through an e-survey sent to all Portuguese academic users.

In a previous paper (Melo and Pires, 2011) we used the data from the e-survey to estimate the total value of the electronic scientific information consortium b-on to the Portuguese academic community. Moreover, we calculated the benefit-cost ratio of this service and concluded that its value was well above its costs. In this paper we are not interested in the aggregated value of the b-on services. Instead our objective is to use the data to explore the determinants of the willingness to pay and to explain whether an individual is willing or not willing to pay a certain amount to access the b-on services, allowing us to estimate the demand function for the b-on services. Therefore the main objectives of

# Corresponding author:

Luiza Baptista Melo, Avenida I° de Maio, 325, 4° DTO. TRAS. 4440-501 Valongo, Portugal. Email: lbmelo@fc.up.pt