



*Evidence Summary*

**Patron Time-Use May Be an Effective Metric for Presenting Library Value to Policy Makers**

**A Review of:**

Shepherd, J., Vardy, K., & Wilson, A. (2015). Quantifying Patron Time-Use of a Public Library. *Library Management*, 36(6/7), 448-461. doi: 10.1108/LM-09-2014-0110

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**Abstract**

**Objective** – To test a metric for library use, that could be comparable to metrics used by competing government departments, for ease of understanding by policy makers.

**Design** – Four types of data were collected and used: Time-diaries, exit surveys, gate counts, and circulation statistics.

**Setting** – A large public library in British Columbia, Canada.

**Subjects** – Time-diary subjects were 445 patrons checking out materials; exit survey subjects were 185 patrons leaving the library.

**Methods** – A paper-based time diary, prototypes of which were tested, was given to patrons who checked out library materials during a one-week period. These patrons were charged with recording the use of the checked-out items during the entire three-week loan period. From this information, the average number of hours spent with various types of loaned material (print and audio/DVD) was calculated. The average number of hours spent per item type was then applied to the circulation statistics for those items, across a month, to get a total of hours spent using all circulated material during that month. During the same one-week period of time-diary distribution, exit surveys were conducted by library staff with patrons leaving the library, asking them how long they had spent in the library during their current visit. The average

number of minutes per visit was calculated and then applied to the gate count for the month, to get a total number of minutes/hours spent “resident” in the library that month. Adding the totals, a grand total of patron time-use hours was calculated. A monetary value was applied per hour, using the results of a contingent valuation study from Missoula, Montana (Dalenberg et al., 2004), in order to convert hours of library benefit into a dollar figure.

**Main Results** – There was a 24% response rate for the time diaries (106/445). The diary entries yielded an average of 3.5 hours of time-use per print item, and 1.9 hours per DVD. The range for audio materials was quite wide, and for all item types, a few heavy users skewed the averages. Hours of secondary use (when people other than the original borrower read, listened to, or watched, the materials) were calculated, and represented 13% of the total hours. The average amount of time spent per visit was 42 minutes. Applying these averages to one month of circulation figures and gate counts, respectively, the result was that patrons spent 182,000 hours using library services in one month. Applying dollar amounts of benefit per hours spent, based on the Missoula study, the result was that patrons had received \$842,000 of benefit from their use of the library in that month.

**Conclusions** – This study confirmed that the prototype performance measure of hours of patron use, and refinements in obtaining it, was a useful tool with which to present the case for the value of libraries to policy makers. The study estimates that 90% of library use occurs off-site, and that a surprising proportion of that use is by secondary users. Future studies could refine the collection methodologies even more by collecting demographic information, by mapping user activities during branch visits, and by obtaining better information about secondary users of materials. Future research should also take into account: seasonal effects on borrowing, reading level of borrowers, and possibilities for collecting information in online formats. With these developments, it

might be possible to assign “enjoyment levels” to items in library catalogs.

### Commentary

Proving a library’s value to those who make funding decisions is a crucial question for libraries everywhere. One common method is to present percentage returns on investment in libraries, by estimating cost savings and benefits, performing contingent valuation studies (figuring out how much patrons would be willing to pay out of pocket) or similar methodologies. Contingent valuation studies are practical, and amenable to statistical analysis, but are extremely complex to develop and administer (Hider, 2008; McIntosh, 2013). Additionally, the methods and results are not easily understandable by policy makers, which can put libraries using them at a disadvantage when jockeying for funding against other equally deserving city departments. The authors of this study propose instead to present an easily understood measure, hours of patron time-use, obtaining data using the well-studied method of time-diaries. Time-diaries are excellent for assessing daily and routine behaviors (Paolisso & Hames, 2010) and thus appear to be a good choice for studying library use.

For this evidence summary, methodologies were systematically assessed using the critical appraisal checklist by Glynn (2006), which indicated issues of potential bias and lack of representativeness. It seems likely that the 24% of subjects who completed the diaries (a low response rate) were different in some important ways from those who did not; having more positive connections to the library and higher literacy levels are two possibilities. Usable time diaries depend on diarists being reliable, motivated, accurate, candid, etc. (Paolisso & Hames, 2010), which could be a high bar for many patrons. Also, for both the time-diaries and the exit surveys, the same staff who were serving patrons were acting as researchers, which could affect responses. The study authors themselves noted important limitations of their data, including the lack of demographic information. E-books and online resources were not examined, which would be

a significant omission for many library systems. Additionally, while there were many mentions of contingent valuation methodology, it only appeared in the final calculation of dollar valuation per hour, using a dated figure from a study that was not discussed in adequate proportion to its importance in deriving the final dollar figure.

While this study has many methodological issues (most of them freely acknowledged) and challenges, at the same time it makes compelling and novel points on the utility both of quantifying hours of library use, particularly those spent with materials outside the library, and of learning more about secondary users. Perhaps most importantly, it shows how a simple measure, simply derived, could resonate with policy makers and lead to better-funded libraries. This study was in its essence a powerful political exercise, and it is likely that the city politicians to whom it was presented were not quibbling about methodology.

## References

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