

# Terms of enjoyment 2.0: Measuring patron use of public library services

By Yasmin Jamal.

## Acknowledgements

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## Introduction

This 2013 study of patron use in and outside public libraries presented by John Shepherd, Accounting Faculty Member, School of Business, Kwantlen Polytechnic University and Kaitlyn Vardy, Children's Librarian, Prince George Public Library is a new and improved version from the previous study conducted in 2008 which estimated hours of use of library services. The current study in August 2013 stemmed from the argument that unlike most municipal facilities whose usage can be measured by onsite use, library usage did not easily conform to this form of recording. Libraries like other municipal leisure activities did not and cannot be viewed with these same lenses as most library use occurs outside of their physical buildings. There is no overall measure of library performance. The ideal performance measure should be:

- Easy to understand
- Comprehensive
- Easily convertible from existing library statistics

Using the analogy of an iceberg, Vardy stated that 91% of patron use occurs outside the library and is not measured nor accounted for — it is unseen and unmeasured! However, all library services and collections can be measured in hours of patron use. How we spend our time reflects our values, priorities and interests.

## Design of the Study

Public libraries are used principally for leisure, for borrowing recent fiction, for useful non-fiction related to immediate life interests, and for DVDs and music. To date, library statistics measured the use of the facilities. In this study, the presenters shed a different perspective on measuring patron use in and outside

the libraries — time as a potential measure of library use. There is immense literature on the use of time matrix and time diaries in recording behaviour. Statistics Canada also performs time — use surveys every five years as part of its General Social Survey.

## Methodology

In August 2013, in-branch library use by patrons was conducted at the Bob Harkins branch of Prince George Public Library. This study presents a relatively cheap and simple method to gather patron use data in libraries through exit interviews, gate counts and time diaries that recorded user behaviour. The project was marketed widely on the library website, social media, press release, etc.

Time diaries were used as one of the research tools for this study. To quote Louise Corti from issue 2 of the *Social Research Update*

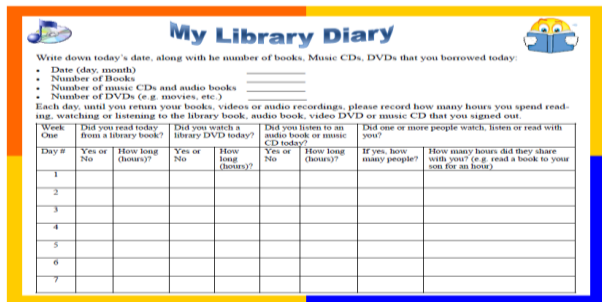
"Diaries are used as research instruments to collect detailed information about behaviour, events and other aspects of individuals' daily lives..... They can be used to supplement interview data to provide a rich source of information on respondents' behaviour and experiences on a daily basis..... The diary entries is considered to be one of the most reliable methods of obtaining information" (1993).

These diaries were designed and tested in the library; a prototype was tested by the circulation staff, as they would be on the front line for handing and receiving these diaries from the patrons. Diaries were designed in a tabular format with clear, prominent headings and instructions. A small reward, an iPad draw, as an incentive to completing these diaries was announced. The purpose of these time diaries was to have people record their daily behaviours and this was in turn measured. What was measured? (Refer to the sample of the Reading Diary)

1. The use of borrowed material
  - Physical books (note: no ebooks)
  - DVD's
  - Music CD's
  - Audio Books

2. Patron behaviours
  - Time spent by patrons in library branches
  - Time spent by patrons using borrowed library materials

### READING DIARY



**My Library Diary**

Write down today's date, along with the number of books, Music CDs, DVDs that you borrowed today.

- Date (day, month) \_\_\_\_\_
- Number of Books \_\_\_\_\_
- Number of Music CDs and audio books \_\_\_\_\_
- Number of DVDs (e.g. movies, etc.) \_\_\_\_\_

Each day, until you return your books, videos or audio recordings, please record how many hours you spend reading, watching or listening to the library book, audio book, video DVD or music CD that you signed out.

Work One: Did you read today? Yes/No How long (hours)?

Work Two: Did you watch from a library book? Yes/No How long (hours)?

Work Three: Did you listen to an audio book or music CD today? Yes/No How long (hours)?

Work Four: Did one or more people watch, listen or read with you? If yes, how many people?

Work Five: How many hours did they share with you? (e.g. read a book to your son for an hour)

Day #	Yes or No	How long (hours)?	Yes or No	How long (hours)?	Yes or No	How long (hours)?	If yes, how many people?	How many hours did they share with you? (e.g. read a book to your son for an hour)
1								
2								
3								
4								
5								
6								
7								

(Shepherd & Vardy, 2014)

The exit survey was approved by the Kwantlen Research Ethics Board and was used to interview library users for a week between August 6-12<sup>th</sup> as they exited the library. One hundred and eighty five patrons were approached on a random basis at selected half an hour intervals and were asked the question: *How much time did you stay in the library branch during your current visit to the nearest quarter hour?*

Gate counters was another method used to estimate in branch library use by patrons. August gate counts after the study totalled 23,289.

Shepherd used contingent valuation (way of estimating value for free goods and services) to show the benefit/cost and return on investment for use of the collection at the Bob Harkins Library. This methodology is particularly important today, as the need to communicate the value of libraries is growing, especially, during these times of shrinking budgets. The dollar benefit for the borrowers of library books and videotapes in this study was estimated at \$835,800.

### VALUING THE EXPERIENCE OF READING AND WATCHING BORROWED LIBRARY MATERIALS

The time-diary data and the hourly rates from the leisure study was used to estimate a dollar benefit for the borrowers of library books and videotapes.

	Use of borrowed materials	Hourly rate of activity	Estimated patron benefit in \$
Print materials	122,500 hours	\$6.55	\$802,400
DVD videos	10,600 hours	\$3.15	\$33,400
<b>Total value</b>			<b>\$835,800</b>

Table 1: Valuing the experiences of reading and watching borrowed library material shows the application of contingent valuation measures to borrowed materials.

### Findings

With Shepherd's sharp skills in crunching numbers, he came up with the following results.

Time Diary results: Analysis of print materials and audio-visual stock use indicated that 43,413 materials were borrowed at the Bob Harkins Branch in August 2013. This translates into 143,100 patron hours as seen in the *Tables 2 and 3* below.

### USE OF BORROWED MATERIALS BY BORROWERS, BOB HARKINS BRANCH AUGUST 2013

	Materials Borrowed	Average Use/Item	Estimated Patron Hours
Print materials	35,299	3.47	122,500
DVD videos	5,574	1.91	10,600
Audio	2,540	3.92	10,000
	<b>43,413</b>		<b>143,100 hours</b>



(Shepherd & Vardy, 2014)

**TIME-DIARY RESULTS  
SUMMARY OF BORROWER DATA  
BOB HARKINS BRANCH**

	% Materials Borrowed	Average hours use/item	% of Total Hours of Use
Print materials	76%	<b>3.47 hr.</b>	82.5% reading
DVD videos	19%	<b>1.91 hr.</b>	11.5% viewing
Music CDs and Audio Books	5%	<b>3.92 hr.</b>	6% listening

3.47 hours/book is similar to the **3.3 hours** reported in the **2008 Prince George study**.

(Shepherd & Vardy, 2014)

The use of borrowed library materials by non-borrowers according to the time diaries revealed:

- 32% of the borrowers shared material with other people
- Non borrowers (family, friends) used approximately 13% of borrowed materials
- 12% of total public library use was these 'secondary users', who may or may not have used the public library themselves

It was interesting to note that the use of borrowed materials by non-borrowers totaled 43,413 items which translates into an estimated 20,800 hours of library use during the month of August, 2013. See *Table 4: Use of borrowed materials by non-borrowers*.

**USE OF BORROWED MATERIALS BY  
NON-BORROWERS  
AUGUST 2013**

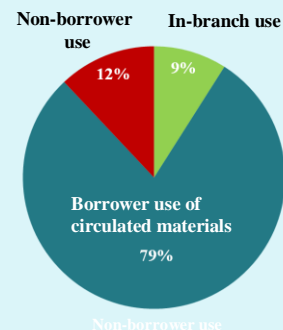
	Materials Borrowed Aug 2013	Average Use/Item (hours)	Estimated August Hours
Use of borrowed materials by others	43,413	0.48 hours	<b>20,800 hours</b>

(Shepherd & Vardy, 2014)

*Table 5: Estimated use of library services summarizes use by borrowers and non borrowers (use by borrowers; in-branch use and off site use and off site non borrower use of borrowed items).*

**ESTIMATED USE OF LIBRARY SERVICES  
BOB HARKINS BRANCH  
AUGUST 2013**

Type of Use	Use (Hours)
In-Branch Use	16,500
Borrower use of borrowed Items	143,100
Non-borrower use of borrowed items	20,800
<b>Total</b>	<b>180,400 hours</b>

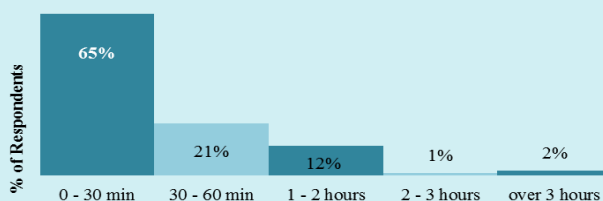


(Shepherd & Vardy, 2014)

Exit Surveys: The data collected revealed that on average, patrons spent **43 minutes** in the Bob Harkins Library. It was also observed that some patrons spent more time in the library due to its central location downtown. Refer to *Graph 1: Duration of patron on-site visits, exit survey*.

**DURATION OF PATRON ON-SITE VISITS,  
EXIT SURVEY**

**Duration of Patron Visits  
Bob Harkins Branch**



(Shepherd & Vardy, 2014)

Gate Count: The gate counts for August, 2013 at the Bob Harkins Library was a total of **23,289** patrons

## Summary

Study results revealed that:

1. Patrons used the Bob Harkins Library for 180,000 hours during August 2013, 91% of which occurred offsite
2. Based on the contingent valuation method, three-quarters of these 180,000 hours of use was valued at \$836,000
3. It is feasible to use this methodology, with further development, in public library cost benefit studies

This study by John and Kaitlyn is very inspiring and sheds a different perspective on measuring patron use of in-library and off site library collections. The analysis indicates that the patterns in the findings, 3.47 hours use per book is similar and consistent with the results of 3.3 hours reached in the 2008 Prince George study. The methodologies used; time diaries, gate counts, including the exit surveys and the

contingent valuation measure, provides a different, probably more accurate picture of the nature and extent of public library use and is an excellent way of answering the question "How much time did you stay in the library branch during your current visit to the nearest quarter hour?"

## References

Corti, L. (1993). Using diaries in social research. *Social Research Update*, 2(2).

Shepherd, J., & Vardy, K. (2014). *Terms of enjoyment 2.0: Measuring patron use of public library services* [Power Point slides].

*Yasmin Jamal has worked in libraries for over 25 years and is currently a Contract Librarian at Kwantlen Polytechnic University, Douglas College and Burnaby Public Library. She is currently a member of the YAACS Awards Committee.*