






Evaluating Public Library Community Engagement and Impact for Sustainable Information Services

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Abstract. Public libraries have always had a pivotal function within the community. However, libraries are undergoing rapid changes, as are many industries in a globalised world. Therefore they need to re-evaluate their operations and services to provide for the changing needs of their users. In this paper, we describe a pilot study underway that measures the engagement and impact of two library programs/services for young children and their families – *Giggle and Wiggle*, and *Story Time* – that are offered by the Australian Capital Territory (ACT) Libraries in Canberra, Australia. Exploring the impact of these services will help in understanding the factors that ensure the sustainability of public libraries and their engagement with the communities they serve. These factors will focus on four key domains as have been identified from the literature: the educational, social, cultural, and economic impact these programs have on their communities. The findings of this study are expected to generate some practical strategies that public libraries can adopt to maximise community impact and engagement.

Keywords: Public libraries · Community engagement · Early childhood education · Library impact

1 Introduction

People from diverse backgrounds engage with public libraries as libraries perform a number of vital functions within the community. For example, public libraries provide spaces for work, leisure and relaxation; and the digital divide is reduced through equitable access to information, activities and resources [1, 2]. Public libraries also offer a place where people can become part of the community, and connect with local services. However, in an era of changing technology and ever-increasing user expectations, public libraries need to remain agile to meet the evolving needs of the communities they serve.

The aim of the current pilot project is to measure and evaluate the engagement and impact of two library programs/services for young children and their families, *Giggle and Wiggle* and *Story Time*, offered by Libraries ACT - Australian Capital Territory (ACT) - in Canberra, Australia. Outcomes and impact of these two programs will be studied across four domains: educational, social, cultural, and economic. These

domains have been proposed in many library impact studies to be of great value in determining impact (e.g. [5]).

Exploring the impact of these services is critical for ensuring the sustainability of public libraries and communities to ensure development meets the needs of the present community without compromising the needs of future generations. This pilot study will also identify practical strategies that public libraries can adopt to evaluate and maximise the impact and engagement with their communities. Therefore, the study's significance is that the findings will enable public library sector administrators to have a comprehensive view of the social, cultural, educational, and economic contributions made by services such as the ones studied in this project. The administrators will also be able to demonstrate the value of their library services in tangible terms to their funding bodies across a wide range of impact domains.

2 Review of the Literature

The conceptual framework of the current study is informed by many landmark studies in library services assessment (e.g. [3, 4]) and underpinned by the standards and guidelines proposed by peak professional associations and/or government bodies including Australian Library and Information Science Association (ALIA), the Australian Department of Education and Training, and the National Early Literacy Panel (NELP)-USA.

The conceptual framework is focused across four domains: educational, social, cultural, and economic. These domains, in one or another form, have been identified as being of great value in library impact studies. Examples include, a study by Huysmans and Oomes [5], a study by Detez et al. [6], and a study commissioned by State Library of New South Wales [4]. Our assessment will look at the gains in knowledge and skills of children as linked to the six variables identified by NELP being strong predictors of later literacy development. These variables include (a) alphabet knowledge, (b) phonological awareness, (c) rapid automatic naming, (d) rapid automatic naming of objects or colours, (e) writing or writing name, and (f) phonological memory. The perceptions of participants in these programs (both parents/care givers and librarians) will be explored around the four domains identified above.

The review of the literature indicates that remaining agile and engaged with community might simply encompass provision of free internet services and training in technology use [7]. But if public libraries are to maintain an image of being trusted places [8, 9] then greater agility and new forms of service diversity may be required to remain relevant to the needs of the communities they serve. For example, the ALIA 2014 futures report [7] recognises the need for more social and work spaces where people can connect, or disconnect from the stress of being perpetually connected. Such spaces may serve as an access point from which individuals can be encouraged to connect with each other and to community programs [10].

2.1 Value of Public Libraries

Public libraries form an essential part of any community. An indicator of this perceived value is the willingness of community members to pay for library services. For example, Oliphant [11] in their study of 1201 individuals, comprising both library users and non-users, found respondents were willing to pay a median of \$20 per year for library membership. In another study, Barron, Williams [12] found that the key perceived benefits of public libraries are that they: (1) nurture a love of reading, (2) help people obtain a new job, (3) assist people in being more productive with their current job, and (4) support them with life-long learning.

Other studies have examined the impact and engagement of public libraries with their communities to assess their value. These research efforts have adopted various methodologies including surveys of users and non-users perceptions of public libraries, as well as the analysis of usage statistics collected by public libraries. For example, Barron et al. [12] large online study of 3,689 public library users conducted at the University of South Carolina found that public libraries had an impressive array of positive impact on the community, not the least of which was the improvement in quality of life reported by 92% of the sample. In another large study [11] 88% of survey respondents reported that they, or someone in their household, had used a public library in the previous 12 months. Participants in that study indicated having access to their local library was important or very important, thus indicating the high value they placed on public libraries.

Value of public libraries in terms of their social and economic impact on the community is varied and well documented. For example, social impact includes promotion of social cohesion and opportunities to work collectively to help build a sense of local community [13]. Economic impact can include benefits to financial well-being through the provision of access to financial information, job and career resources, computer technology and services, and business resources [14]. Other impacts of public libraries are cultural and educational [15]. For example, some cultural benefits to communities include supporting and promoting learning and development, while libraries can promote education and learning and are increasingly providing both adult and child literacy skills development programs.

2.2 Impact of Public Libraries on Children

Public libraries play a major role in promoting children's literacy learning. These institutions expose children to print books as well as other literacy learning experiences such as arts and crafts, songs, drama, storytelling, and puppet shows. Research shows that the early years are crucial to develop literacy skills [16]. Children from environments lacking in rich language experiences have shown declines in tests of preschool educational development [17]. These children often fail to catch up, thus falling further behind in school achievement. As Burchinal et al. [17] elaborate, exposing young children to quality language and initial literacy learning experiences begins in early childhood.

Public libraries also have the potential for promoting emergent literacy skills and pre-reading skills of young children (e.g. [18]). Many public libraries in Australia focus

their early years' programs to incorporate emergent literacy techniques. Emergent literacy skills refer to interest and enjoyment with books, phonological awareness, letter knowledge, and vocabulary. It is an interactive and holistic approach to reading development which emphasises the natural literacy behaviours of young children. Many public libraries focus their early years' programs to incorporate emergent literacy techniques as it helps narrow the gap in academic achievements in later years for students (e.g. [19]). For example, the Better Beginnings Project is a program linking Western Australian libraries with primary schools to promote reading for enjoyment and improve literacy skills among children [16]. Thus, library programs do more than simply encourage a love of reading [20]; they also offer opportunities for children to develop language and literacy skills which provides the foundations for success in literacy.

2.3 Children's Library Programs in Libraries ACT: 'Giggle and Wiggle' and Story Time

Two popular children's programs hosted by Libraries ACT include *Giggle and Wiggle (G&W)* and *Story Time* where the former is hosted for 0–2 year old children. During G&W sessions, children and their parents/carers share songs and rhymes to support language development. Songs and rhymes are important in the development of phonological awareness. For very young children, songs and rhymes provide rich linguistic, cognitive, and social stimulation for a young child's developing brain [21]. Babies are quick to learn to discriminate between phonemes, which are the sounds in words. Children need to acquire phonological awareness at the word level, that is, be aware that speech is composed of a series of separate words. This awareness can be promoted by rocking, clapping, or counting words in a spoken phrase or sentence [22].

The other program, *Story Time*, at Libraries ACT is an interactive session of stories, rhymes and songs suitable for 3–5 year old children and their parents/carers. The aim of Story Time is to encourage a love of books and to promote pre-reading skills, listening and language skills. It has been shown that reading aloud to children improves their pronunciation, comprehension skills and increases their vocabulary [16]. Rich language experiences in the prior-to-school years plays an important role in developing children's literacy and vocabulary skills and are related to later literacy success [23]. Children's books contain almost twice as many infrequently used words as adult conversations therefore reading children books that have rich vocabulary are useful to promote their vocabulary. Large vocabularies have been known to be linked to later reading success [9, 24]. Stories stimulate children's emotions and imaginations; introducing them to conflict and problem-solving skills, adventure through real or imaginary worlds, and supporting the development of empathy for others.

2.4 Research into Children's Library Programs

Children's programs have long been an important part of library services and due to their long-standing traditions, many research studies have examined the impact of these programs. For example, studies by McKechnie [25], Campana et al. [26], and Mills et al. [27] represent that scholarly tradition. Campana et al. examined early literacy

outcomes in library story-telling sessions, whereas Cahill [28] analysed use of language in stories. Yet, in another study McKechnie explored the ways in which story-telling can help to understand what transpires during these sessions and the contributions made by these sessions to the participants.

However, the focus of these studies has been primarily on understanding the impact these programs have on early literacy, or broadly speaking on educational development of children. This line of enquiry is highly valuable but there is a need to examine the impact of these programs not only on children but also on all of the participants, including parents/carers and librarians. Furthermore, it is also important to understand the impact these programs have across a broad range of domains including educational, social, cultural, and economic aspects.

3 Project Methodology

The methodology to be used in this study will be dictated by the research aim listed above, as has been recommended by others [29–31]). As such, a qualitative approach utilising semi-structured interviews will be used to collect data from library program participants, as well as the librarians who administer these programs. Both open-ended and closed-ended (survey type) questions will be used. Open-ended questions will gather participant and librarian's perceptions about educational, social, and cultural value of these programs, while closed-ended questions will help in gathering information about their general usage and economic value. This methodology is consistent with a majority of literature examining the impact of public libraries, and indeed it has been argued that the qualitative methodology is best suited to examining the different types of impact of public libraries [8, 32].

3.1 Participants

Two groups of participants will be recruited to share their stories in semi-structured interviews:

1. 20–30 library program participants (expected to be parents/carers of a child) who attend the two programs will be interviewed for their perspectives about the programs they have attended at the library with their young children. Interviewing library program participants will allow the researchers to best explore the intimate knowledge they hold of their experiences with these programs.
2. Around 10 librarians responsible for these programs will be interviewed to identify and document their perceptions of the effectiveness of the programs they offer.

3.2 Data Collection

Research data for this study will be collected in December 2019 at those ACT library sites where the two identified programs are being held. Ethics approval has been obtained from the university's Human Research Ethics Committee.

A challenges foreseen during data collection is that fewer than expected participants agree to take part in the study that can necessitate a longer data collection time period. Another challenge will be that question wording can be challenging for participants from different cultural backgrounds, and may necessitate use of appropriate prompts/clarifications by the researchers.

3.2.1 Semi-structured Open-Ended Interview Questions

Semi-structured interviews have a predetermined set of questions. However, the interviewer is not bound by open-ended questions as they only provide a focus for the interview, while allowing the flexibility [33, 34] to follow leads from participants, and probe for further information that might arise during the interview. Through interviewing library program participants (parents/carers) and librarians in this study, the effectiveness of the library services and the barriers and enablers to maximise engagement with the community can be explored and described.

At the beginning of the interview, basic demographic data will be gathered from all participants. Following that, a grand tour question will introduce the topic to begin conversation. For example, library program participants will be asked: 'Tell me about your experiences of coming to Giggle and Wiggle and/or Story Time', and librarians will be asked 'Tell me about your experiences managing Giggle and Wiggle and/or Story Time sessions.'

Guiding questions will follow the grand tour questions as they assist to clarify what was requested and guide the conversation [33, 35]. The following are examples of guiding questions for library program participants:

- How long have you been coming to the library?
- What would you like/what could be improved?
- What other programs do you, or have you attended? Why/why not?

Guiding questions for the librarians will include:

- How do you decide what program to run?
- What is your perception of the success of the program?
- How long have you been involved in the program?

Finally, probing questions will provide back up and clarification to the grand tour and guiding questions for both participant groups, and will add depth to the interview data by asking the participant to be more specific [29, 33–36]. Probing questions will evolve from the interview as it takes place and will include [33, 36]:

- Tell me more.
- Can you give me an example?

3.2.2 Closed-Ended, Structured Interview Questions

Structured closed-ended question will allow the researchers to measure the economic value and the economic activity generated by these two programs as quantitative data. All library program participants and librarians affiliated with the Giggle and Wiggle, and Story time programs will be asked these structured interview questions to:

The economic impact will be assessed using ‘Contingent valuation method’. This method is considered to be a very useful and valid measure of public libraries’ economic value (e.g. [37]), and is one of the best-known methods for assessing the economic value of library programs. The method was originally developed for identifying the financial value of non-profit organisations and services [37] and is expected to work well for this study’s purposes. By engaging this method, users will be asked a hypothetical question ‘if this service is not funded by the government anymore how much would you be willing to pay to maintain community’s access to this service’. A cross check is that the economic activity generated involves assessing the real financial activity in the form of exchange of goods and services, and that can be calculated using ‘industry multipliers’ available from the Australian Bureau of Statistics [38].

3.3 Data Analysis

All interviews will be digitally audio recorded with permission from participants, and later transcribed verbatim. The gathered interview data will be analysed qualitatively through thematic analysis, while the data from the closed ended survey type questions will be analysed using descriptive statistical analysis.

4 Conclusion

Public libraries in the 21st Century are undergoing rapid change. Engagement and use of public libraries is continually under scrutiny to determine the viability of this community resource. Current programs and services need to be evaluated to ascertain their ongoing service to communities. In this paper we described a current pilot study to measure engagement and impact of early childhood programs for the communities which they service. Outcomes of this study will enable us to better understand the educational, social, cultural and economic impact of public libraries on the communities they serve. Preliminary findings will be reported at the conference.

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References

1. Svanhild, A., Ragnar, A., Andreas, V.: How do public libraries function as meeting places? *Libr. Inf. Sci. Res.* **32**, 16–26 (2010)
2. Australian Library and Information Association, Statement on public library services. <https://www.alia.org.au/about-alia/policies-standards-and-guidelines/statement-public-library-services>. Accessed 12 Nov 2019
3. SGS Economics and Planning, Dollars, Sense and Public Libraries: The landmark study of the socio-economic value of Victorian public libraries (2011)

4. Library Council of New South Wales, *Enriching communities: The value of public libraries in NSW* (2008)
5. Huysmans, F., Oomes, M.: Measuring the public library's societal value: a methodological research program. *IFLA J.* **39**(2), 168–177 (2013)
6. Detez, J., et al.: Performance metrics towards 2030: Investigating the news to measure and report on our activities (2014)
7. Australian Library and Information Association, *Future of the Library and Information Science profession*. <https://www.alia.org.au/futureoftheprofession>. Accessed 10 Nov 2019
8. Aabø, S.: The role and value of public libraries in the age of digital technologies. *J. Libr. Inf. Sci.* **37**(4), 205–211 (2005)
9. Anderson, K., et al.: Better beginnings: public libraries making literacy links with the adult community. *Libri* **63**(4), 272–281 (2013)
10. Scott, R.: The role of public libraries in community building. *Public Libr. Q.* **30**(3), 191–227 (2011)
11. Oliphant, T.: “I’m a library hugger!”: public libraries as valued community assets. *Public Libr. Q.* **33**(4), 348–361 (2014)
12. Barron, D.D., et al.: *The economic impact of public libraries on South Carolina*. University of South Carolina (2005)
13. Kerslake, E., Kinnell, M.: Public libraries, public interest and the information society: theoretical issues in the social impact of public libraries. *J. Libr. Inf. Sci.* **30**(3), 159–167 (1998)
14. McClure, C.R., et al.: *Economic benefits and impacts from public libraries in the State of Florida, Final Report* (2000)
15. Abram, S.: Communicating value and impact through advocacy: dealing with the scalability issue in the province of ontario. *Public Libr. Q.* **36**(2), 96–122 (2017)
16. Ewing, R., Callow, J., Rushton, K.: *Language & Literacy Development in Early Childhood*. Cambridge University Press, Cambridge (2016)
17. Burchinal, M., Lee, M., Ramey, C.: Type of day-care and preschool intellectual development in disadvantaged children. *Child Dev.* **60**(1), 128–137 (1989)
18. Kupetz, B.N.: A shared responsibility: nurturing literacy in the very young. *Sch. Libr. J.* **39**(7), 28–31 (1993)
19. Baydar, N., Brooks-Gunn, J., Furstenberg, F.F.: Early warning signs of functional illiteracy: predictors in childhood and adolescence. *Child Dev.* **64**(3), 815–829 (1993)
20. Celano, D., Neuman, S.: *The role of public libraries in children's literacy development: An evaluation report* (2001)
21. Fellowes, J., Oakley, G.: *Language, Literacy and Early Childhood Education*, 3rd edn. Oxford University Press, Oxford (2019)
22. Gleason, J.: *The Development of Language*. Pearson, Boston MA (2005)
23. Snow, C.E., Dickinson, D.K.: Skills that aren't basic in a new conception of literacy. In: Jennings, E.M., Purves, A.C. (eds.) *Literate Systems and Individual Lives: Perspectives on Literacy and Schooling*, pp. 179–191. State University of New York, Albany (1991)
24. Lehr, F., Osborn, J., Hiebert, E.H.: *Research-based practices in early reading series: A focus on vocabulary* (2004)
25. McKechnie, L.: Observations of babies and toddlers in library settings. *Libr. Trends* **55**(1), 190–201 (2006)
26. Campana, K., et al.: Early literacy in library storytimes: a study of measures of effectiveness. *Libr. Q.* **86**(4), 369–388 (2016)
27. Mills, J.E., et al.: Early literacy in library storytimes, part 2: a quasi-experimental study and intervention with children's storytime providers. *Libr. Q.* **88**(2), 160–176 (2018)

28. Cahill, M., Joo, S., Campana, K.: Analysis of language use in public library storytimes. *J. Libr. Inf. Sci.* (2018). <https://doi.org/10.1177/0961000618818886>
29. Berg, B.L.: *Qualitative Research Methods for the Social Sciences*, 5th edn. Pearson Education, Boston (2004)
30. Crotty, M.: *The Foundations of Social Research: Meaning and Perspective in the Research Process*. Allen & Unwin, St Leonards (1998)
31. Denzin, N.K., Lincoln, Y.S.: *The Sage handbook of qualitative research*. Sage, Thousand Oaks (2011)
32. Miller, P.A., Crabtree, B.: Depth interviewing. In: Hesse-Biber, S.N., Leavy, P. (eds.) *Approaches to Qualitative Research: a Reader on Theory and Practice*, pp. 185–202. Oxford University Press, New York (2004)
33. Hatch, J.A.: *Doing Qualitative Research in Education Settings*. State University of New York, Albany (2002)
34. Warren, C.A.B.: Qualitative interviewing. In: Gubrium, J.F., Hostein, J.A. (eds.) *Handbook of Interview Research: Context and Method*, pp. 83–102. Sage, Thousand Oaks (2002)
35. Corbin, J.M., Strauss, A.L.: *Basics of Qualitative Research*, 3rd edn. Sage, Thousand Oaks (2008)
36. Bogdan, R., Knopp-Biklen, S.K.: *Qualitative Research for Education: An Introduction to Theories and Methods*, 5th edn. Pearson, Boston (2007)
37. Poll, R.: Can we quantify the library's influence? creating an ISO standard for impact assessment. *Perform. Meas. Metrics* **13**(2), 121–130 (2012)
38. Information paper: Australian national accounts: Introduction to input-output multipliers, Australian Bureau of Statistics [Canberra] (1995)