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# **Evidence-based School Library Practice: Experience from Croatia and Hong Kong**

Annie Tam atam@isf.edu.hk The ISF Academy, Hong Kong

## Ružica Rebrović-Habek

*ruzicahabek29@gmail.com* OŠ braće Radić, Zagreb, Croatia

## Zvjezdana Dukić

*dana.dukic@gmail.com* Independent Researcher, Zagreb, Croatia

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### Abstract

The study explores the involvement of school librarians from Croatia and Hong Kong in EBLIP. The main goal of this study is to find out what types of evidence school librarians from Croatia and Hong Kong use in their library practice and how useful they find different evidence types. The research method used in this study is survey and data were collected with an online questionnaire created and delivered with SurveyMonkey. The study reveals that school librarians in Croatia and Hong Kong use a wide variety of evidence sources in support of their library practice. Most often they use evidence from observation, professional interactions and library statistics. School librarians in both regions agree that these three types of evidence are the most useful for their library practice. However, if school librarians wish to demonstrate to stakeholders how school libraries contribute to teaching and learning they need to generate some more objective evidence through formal research. LIS educators and local school library associations may be encouraged to develop educational programs that will enhance school librarians' competences in formal research and involve them in participatory research community.

### Introduction

Evidence-based library and information practice (EBLIP) is an innovative, data-driven approach to professional decision making in librarianship, widely applied in various types of libraries (Koufogiannakis and Brettle, 2016). In the context of school librarianship, EBLIP represents a systematic process of generating various forms of evidence to evaluate and further develop school library programs and also to demonstrate the role of the school library in teaching and learning to stakeholders (Richey & Cahill, 2014). This paper explores the involvement of school librarians from Croatia and Hong Kong in EBLIP and their perceptions of the usefulness of various types of evidence in their school library practice.

#### **Related Literature**

The evidence-based practice concept has been introduced to librarianship by medical librarians. Eldredge (2000) introduced the Evidence-Based Librarianship (EBL) framework to medical librarianship aiming to integrate the research findings into librarians' decision-making and daily practice. Booth (2002) extends Eldredge's framework and states that EBL means the collecting, interpreting and applying the best available evidence that comprises user-reported, librarian observed and research-derived evidence. Todd (2009) introduced EBLIP to school librarianship and stressed that this approach would help school librarians to enhance library services and also to inform stakeholders about the school library contribution to students' learning. According to Todd (2009), EBLIP in school librarianship entails three dimensions: evidence for practice, evidence in practice and evidence of practice. Evidence for practice relates to examination and use of best available empirical research in librarian's daily practice and decision-making. Evidence in practice integrates available research evidence with professional experience and local evidence. Evidence of practice involves the measurement and evaluation of practice in terms of outcomes derived from systematically measured, user-based data. Richey and Cahill (2014) applied the EBLIP scheme proposed by Todd (2009) in their research conducted with school librarians from Texas (USA) aiming to explore how school librarians use components of EBLIP in their library practice. They found that most school librarians use *evidence for practice* by reading professional literature and only a few by reading academic research literature. Implementation of *evidence in practice* included the implementation of various informal and formal sources of information, from observation and patron comments to circulation statistics, collection age and funding data. In reference to evidence of practice, the research findings showed that a very low percentage of respondents collected data related to students' learning and assessment. Morris and Cahill (2017) analyzed articles published in School Library Research (SLR) and School Libraries Worldwide (SLW) from 2007 through July 2015 and found that only a few studies involved practicing school librarians as researchers. They also found that only a limited number of studies included Pre-K-12 students as research subjects. Authors think that a collaboration between school library researchers and practicing school librarians in conducting research may be beneficial for both. Researchers would get more opportunities to involve Pre-K-12 students in their research and practicing school librarians would strengthen their research skills and increase the collection of "evidence of practice."

Koufogiannakis (2011) examines the roles of different types of evidence in library practitioners' work and decision making and states that in addition to research there are two other broad areas of evidence that significantly contribute to LIS practitioners' decision making, evidence from local sources and evidence from professional knowledge. The author agrees that research-based evidence plays an important role in library practice but also points out that research findings are often influenced by certain social and environmental factors, and do not always fit in the context of a local situation. Therefore, Koufogiannakis (2011) proposes an EBLIP model that combines three types of evidence: research evidence, local evidence, and professional knowledge. In local evidence, the author includes user feedback, librarian observation, interaction with colleagues, assessment of library programs, usage data, and organizational context. Professional knowledge includes librarian's formal education, informal learning, on the job training, tacit knowledge and reflection on decisions made. Koufogiannakis (2011) suggests that local evidence combined with librarian expertise may be more useful to practicing librarians than research evidence because they address the actual needs of the user community that the library serves. Gillespie et al. (2017) explored what librarians in Australian academic and public libraries experienced as evidence in their professional practice and identified six types of evidence: observation, feedback, professional colleagues, research literature, statistics, and intuition. Koufogiannakis and Brettle (2016) introduced a new model for EBLIP which comprises two components, one describing various types of evidence that

librarians may collect and use in their library practice and the other defining processes in the evidence-based decision making. Types of evidence are categorized as research evidence, local evidence and professional knowledge. The processes of gathering evidence and applying it for decision making include the following steps: articulate, assemble, assess, agree and adapt. Further, Koufogiannakis and Brettle (2016) provide a systematic review of EBLIP process in various types of libraries. Authors also emphasize that an important component of EBLIP is research performed by practicing librarians and that the scholarly output of librarians-researchers would significantly move forward the library and information science (LIS) theory and practice.

#### **Problem Statement and Research Questions**

The research literature reveals that LIS professionals apply various types of evidence in their practice. The goal of this study is to examine what kinds of evidence school librarians from Croatia and Hong Kong use in their library practice and how useful they find different evidence types. Three research questions are formulated to address this goal:

RQ1. What types of evidence do school librarians from Croatia and Hong Kong apply in their daily practices?

RQ2. How useful they find various types of evidence for enhancing library services and strategic planning?

RQ3. Do school librarians from Croatia and Hong Kong differ regarding the types of evidence used and the usefulness of used evidence for their library practice and library planning?

#### Methodology

This is a quantitative study and the research method applied is a survey. Empirical data were collected with an online questionnaire comprising fifteen questions, organized into two parts. In the first part, respondents were asked about their demographic characteristics, employment, and their school library collections and equipment. In the second part, respondents were asked what types of evidence they collect and use in their library practice and how useful they find them to be. Three types of questions were included: factual questions, opinion questions measured with Likert scale and open-ended questions. The research sample involved school librarians from Croatia and Hong Kong. The questionnaire was created with *SurveyMonkey* and delivered to school librarians via library association group email (Hong Kong) and by posting the link to the questionnaire on professional association virtual platform (Croatia). Participation in the research was voluntary and anonymous. Data were collected during the spring term of 2019. Seventy valid responses were received from Croatia and sixty-six from Hong Kong. Collected data were analyzed by applying descriptive statistics.

#### **Findings**

#### **Demographic Features of Study Participants**

The general characteristics of research participants are described in Table 1. In both samples research participants are predominantly female. Age distribution indicates that respondents from Hong Kong are noticeably older than respondents from Croatia. While in the Croatian sample the dominant age group are school librarians from 31 to 40, in the Hong Kong sample school librarians are almost equally distributed in three age groups: from 31 to 40, 41 to 50 and 51 to 60. Concerning the years of working experience in school libraries, the two samples do not differ significantly. Figures in Table 1 show that study participants from Croatia and Hong Kong are experienced school librarians, as nearly two-thirds of respondents in both samples have more than 5 years of working experience in school libraries. Regarding

the type of school library, data show that in both samples primary and secondary school librarians are represented in similar proportions.

	Croatia N=70	Hong Kong N=66
	%	%
Gender		
Male	8.57	15.15
Female	91.43	84.85
Age		
up to 30	12.86	9.09
31 - 40	42.86	28.79
41 – 50	24.29	31.82
51 - 60	15.71	28.79
61 and over	4.29	1.52
Working experience in school library		
up to 5 years	28.57	34.85
6 - 10 years	20.00	18.18
11 - 20 years	35.71	36.36
21 or more years	15.71	10.61
Type of school library		
Primary school	55.71	45.45
Secondary school library	32.86	37.88
K 12 school library	7.14	16.67
Other	4.29	0.00

 Table 1. General characteristics of research participants

Reviewing the data about school library collections it can be noticed that school libraries in Hong Kong hold electronic databases and e-books in significantly higher percentage than school libraries in Croatia. Further, school libraries in Hong Kong use automated LMS and provide photocopying and scanning facilities to users more often than school libraries in Croatia. Interactive whiteboards are available in 24.24% of school libraries in Hong Kong and only in 4.29% school libraries in Croatia. Technologies such as RFID and 3-D printers are rarely available in school libraries.

	Croatia N=70 %	Hong Kong N=66 %
Books (in print)	98.57	100.00
Periodicals (journals, magazines, newspapers)	92.86	96.97
Electronic databases	15.71	57.58
E-books	21.43	63.64
Automated Library Management System	50.00	77.27
OPAC	70.00	71.21
School library web presence (e.g. website, blog, Facebook)	81.43	62.12
Computers, laptops, tablets	81.43	89.39
Internet, WiFi	90.00	87.88
Interactive whiteboard	4.29	24.24
Photocopying and scanning facilities	47.14	74.24
Printer	75.71	78.79
Screen & projector	52.86	65.15
RFID	0.00	10.61
3-D printer	1.43	3.03

**Table 2.** School library collections and equipment

One thought-provoking result in Table 2 is that Hong Kong school libraries less frequently provide school library website or some other kind of web presence than Croatian school libraries. Namely, one would expect that libraries holding e-resources in their collections would also provide a website for users to access and retrieve these resources any time and at any place. Further research may shed more light on this issue.

# *Types of Evidence School Librarians use in Library Practice and How Useful They Find That Evidence*

For the purpose of this study, various types of evidence are organized in two major categories: evidence from internal (local) sources and evidence from external sources.

The internal sources of evidence include evidence from a library local practice and evidence from library users' feedback. The evidence from local library practice corresponds to "evidence in practice" and the evidence from users' feedback corresponds to "evidence of practice" in Todd's model (2009). The external sources of evidence include evidence from librarians' interactions with professionals in LIS and related areas, and evidence from research and non-research literature. All processes related to gathering, evaluation and applying evidence from internal and external sources are guided and reinforced by professional knowledge and experience of practicing librarians.

#### Internal Sources of Evidence

#### **Evidence from Library Local Practice**

Researchers in LIS agree that evidence collected from the school librarian's daily practice play an important role in the development and improvement of library programs as it reflects the specific characteristics of the library local environment. Data gathered from the local context, linked together with librarian expertise, provide information that librarians can directly apply to their practice (Koufogiannakis, 2011).

Traditionally librarians compiled library statistics by collecting data about library collections, expenditure, staffing, and services to assess library resources and performance. Nowadays, library statistics represent an essential tool in evidence-based librarianship. Data from library statistics are used by library management for planning and development and also can be used to demonstrate the value, impact, and efficiency of the library operations to stakeholders (Laitinen, 2013).

#### **Table 3.** Evidence from school library statistics

	Evidence u %	ıse	Evidence use Weighted ave	
	Croatia N=54	Hong Kong N=51	Croatia N=54	Hong Kong N=51
Data from Library Management System	92.59	98.04	2.54	2.58
E-databases & e-books access and use	68.52	82.35	2.16	2.29
Library website traffic (blog, Facebook)	70.37	70.59	2.11	2.42
Library visits – individual or group visits	92.59	90.20	2.28	2.35
Library instruction: lessons & instructional materials	96.3	92.16	2.56	2.57
Reading-related activities & documents (author talks, reading contests, reading lists, posters, etc.)	88.89	94.12	2.52	2.63
Book exhibitions, book fairs, book sales	87.04	94.12	2.30	2.31
Technology & equipment (computers, laptops, tablets, photocopiers, etc.)	85.19	88.24	2.57	2.38
Library budget (funding & expenditure)	94.44	94.12	2.55	2.58
Library staff (librarians, library assistants, students and parents helpers)	76.92	94.12	2.55	2.63

\*A 3-point Likert scale is applied: 1=not useful, 2=somewhat useful, 3=very useful.

Data in Table 3 indicate that school librarians from Croatia and Hong Kong widely use various types of library statistics from library practice for making decisions, library development, and strategic planning. Over 80% of study participants from Croatia and Hong Kong use data generated by Library Management System (LMS), library visits, library instruction, reading-related activities and documents, book exhibitions, fair and sales, technology and equipment and from the library budget. In a somewhat lower

percentage, they use statistics from library website traffic. Study participants from Croatia and Hong Kong differ in how they utilize statistics from e-resources usage and from library staffing. It does not surprise that Croatian school librarians less often apply statistics from e-resources then school librarians from Hong Kong as e-resources are to a lesser degree included in Croatian school library collections (Table 2). The most useful statistical data from library practice for school librarians from both regions are data from LMS, library instruction, reading-related activities and documents, library budget and library staff. School librarians in Hong Kong value significantly more the usefulness of data from library website traffic then school librarians in Croatia. This difference may be clarified by further exploration of the contents offered on library websites by school libraries from the two regions involved in this research.

	Evidence use %		Evidence usefulness* Weighted average	
	Croatia N=54	Hong Kong N=51	Croatia N=54	Hong Kong N=51
Problems with searching (OPAC, e-databases, Internet), and locating resources	98.15	94.12	2.57	2.50
Students' attendance and participation in library activities	98.15	100	2.81	2.63
Use of technology & library space	100	98.04	2.67	2.54
Areas and periods of high use	100	96.08	2.74	2.51

**Table 4.** Evidence from Observation

\*A 3-point Likert scale is applied: 1=not useful, 2=somewhat useful, 3=very useful.

In the course of their daily practice, school librarians get many opportunities to observe the behavior of library users and to find out how effectively they use library programs and spaces. Such observation helps school librarians to assess the functionality of various library services and get ideas about improvements. School librarians may observe students' library attendance and engagement with library activities, use of computers and other technology, use of library space, areas and periods of high use and through observation identify problems that users might face while searching and retrieving information or location resources. Data from Table 4 show that school librarians in Croatia and Hong Kong commonly observe how library users behave in the library, how they use various services and what difficulty the users experience in using various library services and facilities. Further, data show that school librarians in both regions find information gathered through observation very useful for their daily practice and decision

making. School librarians in Croatia value evidence from observation slightly more than school librarians in Hong Kong.

Table	5.	Evidence	from	Intuition
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	Evidence use %		Evidence usefulness* Weighted average	
	Croatia N=54	Hong Kong N=51	Croatia N=54	Hong Kong N=51
Intuition (based on professional knowledge & experience)	96.23	87.23	2.57	2.37

\*A 3-point Likert scale is applied: 1=not useful, 2=somewhat useful, 3=very useful.

Gillespie et al. (2017) through their research identified intuition as a type of evidence that librarians often apply when they need to make decisions, solve problems or redesign library services. Intuition is defined as a type of evidence that is based on librarians' past experience and professional knowledge. Data from Table 4 confirm that school librarians also commonly apply intuition in making decisions in their library practice and find it very useful. School librarians in Croatia estimate the usefulness of intuition higher than their colleagues in Hong Kong.

#### Evidence From Library Users' Feedback

User-reported evidence plays an important role in evidence-based librarianship. In school librarianship, evidence from library users' feedback may help school librarians to demonstrate the value-added role of school libraries to the learning goals of a school (Todd, 2009). School librarians may collect information about the effectiveness of library services and their input to teaching and learning in many ways. They may collect and record oral comments from face-to-face encounters with library users and written comments that can be passed in email or posted to library website forums or social media platforms. School librarians may also apply some more systematic and objective ways of gaining feedback from students, teachers and other stakeholders. Common strategies for obtaining more objective and reliable evidence from library users are conducting empirical research and collecting samples of students' work. Research methods most often applied by school librarians are a survey, interview and focus group (Morris & Cahill, 2017).

	Evidence use %		Evidence usefulness* Weighted average	
	Croatia N=54	Hong Kong N=51	Croatia N=54	Hong Kong N=51
Users' comments (oral, via email, library website, social media etc.)	92.59	84.31	2.70	2.49
Survey, interview, focus group	83.33	74.51	2.47	2.37
Samples of students' work (learning & assessment)	88.46	92.16	2.65	2.30

**Table 6.** Evidence from the school library users' feedback

\*A 3-point Likert scale is applied: 1=not useful, 2=somewhat useful, 3=very useful.

The study findings show (Table 6) that school librarians in Croatia and Hong Kong in their practice widely rely on evidence from verbal and/or written comments by library users. Somewhat less often they use evidence from more systematic and objective data acquired from empirical research (e.g. from surveys (questionnaires), interviews, focus groups). School librarians from both regions widely use evidence from students' work. Regarding the usefulness of evidence from users' feedback it transpires that study participants from Croatia and Hong Kong highly value user-reported evidence and also that school librarians in Croatia value these types of evidence slightly higher than those in Hong Kong.

#### External Sources of Evidence Evidence From Professional Interactions

Through interactions with professional colleagues, librarians get opportunities to share their own knowledge and experience with others and also to gather new ideas to implement in their own libraries (Gillespie, 2017). School librarians commonly connect with their colleagues from other libraries and information organizations to discuss various work-related issues and to share their professional knowledge and experience (Moreillon, 2015; Gillespie, 2017; Choi, Dukic, & Hill, 2018). Through interaction with colleagues, school librarians collect various types of evidence from external sources that can be very useful for their library practice.

	Evidence use %		Evidence usefulness* Weighted average	
	Croatia N=54	Hong Kong N=51	Croatia N=54	Hong Kong N=51
E-mail, mobile apps, social media	100	88.24	2.72	2.51
Professional meetings	100	92.16	2.69	2.55
Conferences (national and international)	100	90.2	2.74	2.44

**Table 7.** Evidence from professional interactions with colleagues

\*A 3-point Likert scale is applied: 1=not useful, 2=somewhat useful, 3=very useful.

School librarians connect with colleagues librarians in many ways and on various occasions. They may interact with colleagues via e-mail, mobile apps, and various social media. Further, they interact with colleagues at various professional gatherings such as meetings of local library associations and conferences (national and international). Data in Table 7 indicate that study participants from both regions widely use evidence from interactions with colleagues and find it very useful in their library practice. However, it can be noticed that school librarians in Croatia estimate the value of this type of evidence somewhat higher than school librarians from Hong Kong.

#### Evidence From Research and Non-Research Literature

Empirical research and non-research literature are external sources of evidence informing school library practitioners about what is happening within their wider professional community. Evidence from the research literature is a major component in various versions of EBLIP model (Todd, 2009; Koufogiannakis, 2011; Koufogiannakis & Brettle, 2016). Empirical research is a type of evidence that has been collected and tested through rigorous research processes and validated by experts through the peer review process. Non-research literature may be less objective but still very useful for practicing school librarians. Many kinds of non-research literature are available to school librarians nowadays: all kinds of published materials (e.g. books, journals, magazines, pamphlets) that are not based on research, and various resources from professional websites, blogs, or social media. Evidence from non-research literature may be very useful to school librarians, it may provide them with some background information or inform them about new trends in the library profession (Koufogiannakis & Brettle, 2016).

	Evidence use %		Evidence usefulnes Weighted average	'S*
	Croatia N=54	Hong Kong N=51	Croatia N=54	Hong Kong N=51
Research literature (e.g. journals, books, conference proceedings)	98.15	82.35	2.53	2.24
Non-research, professional literature (e.g. websites, blogs, social media)	98.15	80.39	2.57	2.27

 Table 8. Evidence from research and non-research literature

\*A 3-point Likert scale is applied: 1=not useful, 2=somewhat useful, 3=very useful.

From data in Table 8 it can be concluded that school librarians in Croatia and Hong Kong widely use evidence both from research and non-research literature. Also, Croatian school librarians use both types of evidence more often than those in Hong Kong. Further, study participants from both regions highly value the usefulness of evidence from research and non-research literature but school librarians in Croatia estimate both the importance of these types of evidence significantly higher than school librarians in Hong Kong.

#### Discussion

As it has been shown, school librarians in Croatia and Hong Kong use various types of evidence in their library practice, including evidence from their local library practice (statistics, observation, intuition), evidence from users' feedback, evidence from professional interactions and evidence from research and non-research literature. This finding aligns with findings from similar studies conducted with librarians employed in academic and public libraries (Koufogiannakis, 2015; Gillespie, 2016). Further, it is found that school librarians in Croatia and Hong Kong use some evidence types more extensively. Most widely they use evidence from observation, professional interactions and from some components of library statistics such as data from LMS, library budget, library instruction, and library visits. To a lesser extent they use research literature, non-research literature and intuition. School librarians in both regions strongly rely on evidence from users' feedback, although they use it slightly less often than other types of evidence. Richey and Cahill (2014) also found that school librarians in Texas less often collect and apply evidence related to student assessment and/or learning than other evidence types. Todd (2009) points out that the evidence from users' feedback is particularly important for school libraries as it indicates outcomes and impacts of library practice in the school environment and demonstrates the value of the library to stakeholders.

Regarding the usefulness of various types of evidence, the study findings show that for school librarians in both regions the most useful types of evidence are evidence from observation, evidence from professional interactions with colleagues and also some data from library statistics (LMS records, budget,

staffing, library instruction, and reading-related programs). Lastly there is feedback from users as well as research and non-research based literature.

Some differences in types of evidence use and evidence usefulness assessment are identified between school librarians in Croatia and Hong Kong. School librarians in Croatia use evidence from research and non-research literature and from professional interactions with their colleagues more often than school librarians from Hong Kong and they also value more the usefulness of these types of evidence. Further, school librarians from the two regions use evidence from users' feedback, observation, and intuition to a similar extent but Croatian school librarians assess the usefulness of these evidence types higher than school librarians from Hong Kong. Variations in use and usefulness of library statistics between school librarians in Croatia and Hong Kong are only sporadic. School librarians in Hong Kong more often apply statistics about e-resources use and statistics of library staff. Regarding the evidence usefulness, Hong Kong school librarians show higher appreciation for evidence from e-resources usage (what is understandable as they have rich e-resources collections) and evidence from website tracking, whereas Croatian school librarians put more emphasis on evidence related to library provision of technology and equipment. Differences between school librarians in Croatia and Hong Kong regarding the use and usefulness of statistics about e-resources use can be easily explained. School libraries in Hong Kong have more access to e-resources (e-books and e-databases) and it is understandable that they more often closely monitor the use of these collections. Statistical data about e-resources use enable them to assess the cost-effectiveness of the investments in e-collections and also to make the best choices in the selection of those e-resources that suit best to the needs of library users. The usefulness of library website tracking may be related to the e-resources use as library users access e-resources through the school library website. According to Koufogiannakis (2011), the school library organizational realities, such as funding, organizational climate, school strategic plan, and political directions, may significantly influence the importance of various types of evidence for school librarians. Therefore, for understanding differences between school librarians in Croatia and Hong Kong in applying EBLIP, further research will be required into the wider organizational and social context in which these school libraries operate. An interesting finding from this study is that school librarians from both regions tend to rely more often on evidence gathered in various informal or semi-formal ways such as observation, intuition, comments by users or semiformal ways like professional meeting and conferences. Evidence from measured user feedback, based on data collected with survey questionnaires, interviews and focus groups, is used less often. These findings correspond to those from Richey and Cahill (2014) as they report that the school librarians tend to collect and use more often various informal evidence types, rather than research-based evidence. Authors claim that various informal ways of collecting evidence like observation and occasional comments by library users may be very helpful to school librarians in their daily library practice and decision-making. However, school librarians will also need to collect and analyze some more objective, user-driven, and user-reported data for library strategic planning and for demonstrating the value of the school library to stakeholders. Various library statistics are good indicators of strengths and weaknesses of library programs and services, but school librarians would need a different type of evidence to prove the connection of school library program to student learning and school outcomes (Richey & Cahill, 2014). Therefore, school librarians would need to focus more on collecting user-reported data that would, in conjunction with library statistics, demonstrate the role of the school library in educational processes. Researchers of EBLIP agree that empirical research has an important role in promoting school library sustainability and suggest to school librarians to actively engage in building a strong research base in school librarianship (Ballard, March & Sand 2009; Koufogiannakis & Brettle 2016; Todd 2009; Richey & Cahill, 2014). However, the analyses of papers presented in the Research Forum track of the IASL conferences from 1998 through 2009 shows that school librarians authored only

6% of the research papers while 77% of research papers were authored by university faculty or students (Mardis, 2011). One possible reason for this low percentage of school librarians presenting a research paper may be their lack of research skills. This problem can be addressed by offering courses and professional development opportunities in research methodology. Further, even if school librarians are familiar with research methodology they may lack confidence and support to conduct research. Therefore, there is a need to build a community of participatory research and encourage a collaborative partnership between school librarians and university faculty (Todd, 2009; Robins, 2015).

Major limitations of this study should be also noted. One limitation is that the study was conducted on small samples, thus the study findings have a limited application. Another limitation is that the study participants self-reported, so the validity of the responses depends upon respondents' honesty and understanding of EBLIP.

#### **Conclusions and Recommendations**

This study reveals that school librarians in Croatia and Hong Kong use a wide variety of evidence sources in support of their library practice. Implementation of different types of evidence varies substantially. School librarians from both regions tend to rely more on some, more informal types of evidence, such as evidence from observation, intuition and from interactions with colleagues, as research findings show that they use them more extensively and estimate them as more useful. This informally gathered evidence may be convenient to school librarians as it provides them with speedy and direct feedback and enables them to immediately make necessary changes and improve library services. Further, the study findings indicate that school librarians from both regions often use certain types of library statistics. Using quantifiable evidence from library statistics combined with evidence from observation, intuition and from interactions with colleagues helps school librarians to manage school library efficiently, and also to identify areas for improvements. However, if school librarians wish to demonstrate how school library contributes to teaching and learning they would need to generate some more objective and systematically gathered evidence. For that reason, it is critical for school librarians to engage more actively in formal research and gather empirical evidence from their own library practice.

For conducting empirical research school library practitioners will need to possess appropriate knowledge and skills in research methods, research processes, and in writing a research report. In addition, school librarians may also need some guidance and support from experienced researchers to boost their self-confidence in conducting research and to encourage them to engage in research activities (Robins, 2015). Therefore, LIS educators ought to pay close attention to the part of their curriculum covering research methods and make sure that students get practical and solid theoretical knowledge in research methodology as well as practical experience with research. School library associations, local and international, may also play an important role in boosting school librarians' engagement in research. In collaboration with the LIS academic departments and their faculties, school library associations may develop and run professional development programs that would further enhance school librarians' competencies in research and offer them academic support in conducting research. Through their engagement with academic research school librarians will participate in EBLIP in a productive way.

#### REFERENCES

Ballard, S. D., March, G., & Sand, J. K. (2009). Creation of a research community in a K-12 school system using action research and evidence based practice. *Evidence Based Library and Information Practice*, 4(2), 8-36. Retrieved from http://ejournals.library.ualberta.ca/index.p p/EBLIP/article/view/5020/5319

- Booth, A. (2002). From EBM to EBL: Two steps forward or one step back? *Medical Reference Services Quarterly*, 21(3), 51-64.
- Booth, A., and Brice, A., Eds. (2004) Evidence-based practice for information professionals: a handbook. London: Facet Publishing.
- Choi, S., Dukic, Z., & Hill, A. (2018). Professional networking with Yahoo! Groups: A case of school librarians from international schools in Hong Kong. *Journal of Librarianship and Information Science*. doi:10.1177/0961000618763488
- Eldredge, J. D. (2000). Evidence-based Librarianship: An Overview. *Bulletin of the Medical Library Association* 88(4), 289–302.
- Gillespie, A., Miller, F., Partridge, H., Bruce, C. & Howlett, A. (2017). What do Australian library and information professionals experience as evidence? *Evidence Based Library and Information Practice*, 12(1), 97-108.
- Koufogiannakis, D. (2011). Considering the place of practice-based evidence within evidence based library and information practice (EBLIP). *Library and Information Research*, 35(111), 41-58.
- Koufogiannakis, D. (2015). Determinants of evidence use in academic librarian decision making. *College & Research Libraries*, 76(1), 100–14.
- Koufogiannakis, D. & Brettle, A. (eds.). (2016). *Being evidence based in library and information practice*. London: Facet Publishing.
- Laitinen, M. (2013). Library Statistics with Confidence: Facts from Figures with no Fear. *Qualitative and Quantitative Methods in Libraries (QQML)*, 2(4), 459 467.
- Mardis, M. (2011). Evidence or Evidence Based Practice? An Analysis of IASL Research Forum Papers, 1998-2009. *Evidence Based Library and Information Practice*, 6(1), 4-23. https://doi.org/10.18438/B8W04B
- Moreillon, J. (2015). #schoollibrarians tweet for professional development: A netnographic case study of #txlchat. *School Libraries Worldwide*, 21(2), 127–137.
- Morris, R. J. & Cahill, M. (2017). A Study of How We Study: Methodologies of School Library Research 2007 through July 2015. School Library Research, 20. Retrieved from www. ala. org/aasl/slr/volume20/morris-cahill
- Richey, J. & Cahill, M. (2014). School librarian's experiences with Evidence-Based Library and Information Practice. *School Library Research*, 17. Retrieved from http://www.ala.org/aasl/sites/ala.org.aasl/files/content/aaslpubsandjournals/slr/vol17/SLREvidenc eBasedLibraryV17.pdf
- Robins, J. (2015). Action research empowers school librarians. *School Library Research*, 16, 1-38. Retrieved from https://files.eric.ed.gov/fulltext/EJ1084782.pdf

Todd, R. J. (2009). School librarianship and evidence based practice: Progress, perspectives, and challenges. *Evidence Based Library and Information Practice*, 4 (2), 78-96.

#### **Biographical Notes**

Annie Tam (MEd, Charles Sturt University, Australia) is the Head Librarian of Secondary school of The ISF Academy in Hong Kong. She presents at local and international conferences and also serves the IASL Regional board as a Director for Region 5: East Asia.

Ružica Rebrović-Habek (BA, University of Zagreb, Croatia) is a teacher-librarian in a primary school in Zagreb (Croatia). She organizes professional development events for school librarians from Zagreb and presents on conferences.

Zvjezdana Dukic (Ph.D LIS, University of Zagreb, Croatia) has working experience in academic, special and school libraries and also taught LIS courses at The University of Hong Kong. She presents at conferences and publishes papers in academic journals.