The Required Competencies of Para-Professionals in Library Services of Sarawak State Libraries

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Abstract

Para-professionals in the library services are library associates, library technicians, or library assistants who assist the professional librarians in library-related task. Mining the literature unveiled that studies investigating the required competencies on para-professional are still very limited. To address this gap, this paper reports a study that was conducted with the purpose to identify the required competencies of para-professionals in the library services. Adopting the survey research methodology, data were collected using questionnaires from 502 para-professional librarians working with the Sarawak State Library in Sarawak, Malaysia. The findings suggest that all the seven sets of competencies, namely general competencies; Agency and Organizational Knowledge; Reference and Research; Collection Management; Content Organization and Structure and Library Technology Management are either moderately or highly required by the para-professionals. Based on these findings, the appropriate training needs could be identified.

Keywords: Competencies, para-professionals, training, libraries, Malaysia.
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Introduction

The importance of mastering a specific set of competencies for any given jobs has been well documented in the literature. It is because of this reason that researchers have developed various competencies models and framework for various kinds of professions (e.g. Vakola, Soderguist & Prastacos, 2007; Schroeter, 2008; Yaszay et al, 2009). According to Griffiths & King (1985), competency is the generic knowledge, skills and attitude of a person related to affective behavior as showed through performance.

Within the library and information management field, various studies have investigated the required competencies of the professional librarians (e.g. Abriza, 1998; Zaiton et al., 2004). Providentially, the findings of these studies have helped to further deepen our understanding of the topic. However, upon further scrutiny, most of these studies have focused on professional librarians. Very few studies have attempted to explore the required competencies among para-professionals of the library services. Questions on whether their required competencies are comparable to professional librarians seem to be unanswered. To this effect, this paper reports the findings of a study which was conducted with a view to identifying the required competencies among para-professionals in the library services.

Literature Review

Para-Professional in Library Services

Para-professionals in the library services are library associates, library technicians, or library assistants who assist the professional librarians in library-related task. The duties performed by them include database management, cataloguing, ready reference and serials and monograph processing. In terms of qualifications, the para-professionals of the library services usually hold college diplomas but not library-related degrees. Within the context of the Malaysian government public services (inclusive of the Malaysian State Government), para-professionals in the public libraries are those staffs holding the post of "Assistant Library Officer"; "Senior Assistant Library Officer"; "Library Attendant" and "General and "General Assistant".

Competencies

Competencies have been defined as the interplay of knowledge, understanding, skills and attitudes required to do a job effectively from the point of view of both the performer and the observer (Murphy, 1991). The Federal Library and Information Centre Committee Library of Congress or FLICC (2008) defines competencies as the knowledge, skills and abilities that define and contribute to performance in a particular profession. *Knowledge* refers to having information about; knowing or understanding something; *skill* is the ability to apply knowledge effectively and *attitude* refers to the individual's mental or emotional approach to something. One can distinguish between *professional competencies* which are generic skills, attitudes and values.

Helmick and Jaguszewski (2006) suggest that in personal career development terms, competencies can also be thought of as flexible knowledge and skills that allow the librarian to function in a variety of environments and to produce a continuum

of value-added, customized information services that cannot be easily duplicated by others. At a time when professionals in all fields are being encouraged to invest in themselves and to prepare for employment as independent contractors, it is critical that librarians define their competencies and that they continue to improve the range of professional and personal competencies that will form the basis for their future careers.

The Competencies Standards of Librarianship

The importance of competencies standard has been well advocated in the literature. For instance, Eells & Jaguszewski (2008) and Kenny (2008) identified the importance of these competencies standards as (i) creating a common bond of understanding and a common language for defining professional standards, (ii) competencies are the foundation for competency-based management and continuous process improvement ensuring that librarians have the knowledge, skills and abilities to accomplish mission requirements, (iii) they can be used as tools to design and develop training and educational programs, position descriptions and performance evaluation instruments and for alignment with strategic objectives.

Within the library profession, currently, there are two professional competencies standards namely the *ALA's Core Competencies of Librarianship* (American Library Association, 2009) and the *Federal Librarian Competencies* (Library of Congress, 2008). Between the two, the later is considered more comprehensive compared to the later as it is more comparable to the various competencies model, such as Management Competency Model; Holistic Competency Model and Professional Competency Model (Lester, 1995; Cheetham & Chivers, 1996; Vitala, 2005). Table 1 presents the domain and sub-domain of the *Federal Librarian Competencies*.

Table 1: ALA's Core Competencies of Librarianship and Federal Librarian Competencies Standards

Domain	Sub-domain
Agency and Organizational Knowledge	Agency and Organization Context and Culture
	Federal Laws and Regulations
	Agency's Regulations, Policies and Guidelines
Library Leadership and Advocacy	Administration and Management
	Supervision and Human Resources
	Public Relations and Library Promotion
	Professional Development
	Program Development and Outreach
	Best Practices and Evaluation
Reference and Research	Research Analysis and Search Strategies
	Research Tools and Services
	Customer Education and Training
Collection Management	Collection Development
	Acquisitions
	Resource Sharing
	Rights Management
	Resource Protection and Preservation
	Collection Access and Control
Content Organization and Structure	Cataloging, Classification and Metadata
Library Technology Management	Technology
	Library and Content Management Systems
	Information Assurance and Security
	Specialized Subject Knowledge

Previous Studies on Required Competencies

Mining the literature unveiled that various studies have been carried out to investigate the training needs of the professionals and para-professionals in the library services. These studies are: Cronin (1983); Goulding et.al. (1999); Musher (2001); Braun (2002); Soo (2005) and Ashcroft (2004). These studies have employed various methodologies, some of which were surveys, interviews and focus groups discussions. Due to the descriptive nature of the knowledge, skills and abilities of the professionals and para-professionals employed in the libraries, survey questionnaires together with face-to-face interviews were the most frequently employed as seen in studies by Buttlar & Du Mont (1996); Soo (2005); Griffiths (2005); Krissof & Konrad (2005); Lou (2007); Rice-Lively & Racine (2008). One of the aims of the studies was identification of competencies needed by the librarians and information professionals in the new millennium.

In the context of Malaysia, there are three previous studies carried out on competencies of librarians. Abriza's study (1998) examined the role of teacher librarians in secondary schools as perceived by three groups of people directly involved in school librarianship – teacher librarians, library educators and education officers. Her study aimed at determining the essential competencies and the education required for teacher librarians to perform their role. In 2004, the National Library of Malaysia conducted a study to identify the gaps between the present knowledge and skills, and those required for excellent performance by the professionals and para-professionals employed by the National Library. One of the aims of the study was to design training and development plan of those involved. On the other hand, Zaiton et al. (2004) examined the manpower needs of

professionals and non-professionals in the libraries of Malaysia.

Research Methodology

The conduct of this study involves the use of survey research methodology. A questionnaire was developed and used to collect the research data. The instrument developed by Federal Library and Information Center Committee of Library of Congress (Library of Congress, 2008) were adopted and adapted for developing the questionnaires. In addition to that, several other measurements developed by previous studies, such as Buttlar & Du Mont (1996); Abriza (1998); Zaiton et al. (2004); Soo (2005); Griffiths (2005); Krissof & Konrad (2005); Lou (2007) and Rice-Lively & Racine (2008) were also referred to. The developed questionnaire used in the study measured seven aspects of competencies as shown in Table 2.

Table 2: Aspects of Competencies Covered in the Questionnaire

Competencies	No of items
General competencies	22
Organizational knowledge	15
Library leadership and advocacy	42
Reference and research	20
Collection management	18
Content organization and structure	8
Library technology management	17
Total elements / items	142

Likert scale was used for all questions measuring competencies. The anchoring used was NR for "Not Relevant"; 1 for "Weak", 2 for "Fair" and 3 for "Good". Prior to actual data collections, the questionnaires were pre-tested and pilot tested with 30 library personnel at PUSTAKA Negeri Sarawak. Several questionnaires were also sent to library personnel at the Perbadanan Perpustakaan Awam Negeri Selangor. In the pilot study exercise, the participants were requested to evaluate and appraise the questionnaires in terms of content accuracy, clarity, length, and overall presentation. They were also encouraged to comment and criticize constructively. However, prior to the evaluation, all participants were briefed on the research questions, research objectives, scope and context of the study. Based on the feedback obtained from the pilot study, the researchers modified the questionnaire accordingly. The questionnaire was sent to every library personnel across all public libraries in Sarawak. However, out of 552 questionnaires that were sent, 507 were returned but only 502 were found useful. The remaining were either unreturned or unusable i.e. incomplete.

Findings

Demographic

Table 3 shows the demographic profiles of respondents who participated in the study. Out of 502 respondents, 100 or 19.9% of the respondent were male, while the females were 402 or 80.1%. In terms of their age, the age group between 36 and 40 were the highest respondents which stood at 22.5%; followed by age group between 41 and 45 (20.3%) and age group between 31 and 35 (17.1%). The least number of respondents came from the age group above 55 (2.0%). With regard to their designation, 50.8% reported to hold the "General Assistant" post, while 46.4% indicated as holding the "Library Assistant" post. The remaining 2.8% responded as holding the "Assistant Library Officer" post. In this study, three categories of job status were reported by respondents, namely permanent, contract and part-time. Evidently, the majority of the respondents indicated that they were permanent staff (54.6%) while 28.9% and 16.5% indicated that they were part-time and contract respectively. Finally, in terms of their length of service, the highest number of

respondents had been working for between 6 and 10 years (22.5%). The least number of respondents indicated to have been working for more than 30 years (4.6%).

Table 3: Demographic Profiles of Respondents

		Frequency	Percent
Gender	Male	100	19.9
	Female	402	80.1
Age	Below 25	49	9.8
	Between 26 and 30	72	14.3
	Between 31 and 35	86	17.1
	Between 36 and 40	113	22.5
	Between 41 and 45	102	20.3
	Between 46 and 50	50	10.0
	Between 51 and 55	20	4.0
	Above 55	10	2.0
Designation	General Assistant	255	50.8
	Library Assistant	233	46.4
	Assistant Library Officer	14	2.8
Job status	Permanent	274	54.6
	Contract	83	16.5
	Part-time	145	28.9
Length of Service	Less than 1	34	6.8
	Between 1 and 5	88	17.5
	Between 6 and 10	113	22.5
	Between 11 and 15	103	20.5
	Between 16 and 20	80	15.9
	Between 21 and 25	39	7.8
	Between 26 and 30	22	4.4
	More than 30	23	4.6

Required Competencies

Table 4 illustrates the required level of general competencies measured in terms of percentage of responses. Overall, out of 22 listed competencies, 46.3% respondents indicated that required level of general competencies was medium, 38.2% respondents indicated that the required general competencies was high while 9.9% indicated that their level of general competencies was low. About 5.8% of the respondents responded that the listed general competencies were irrelevant to their current job. In terms of most required competency, the highest responses was 'teamwork and collaboration' (59.4%), followed by 'interpersonal skills' and 'ethical framework' which scored 52.4% and 50.4% respectively. In terms of the lowest required competency, the highest responses were 'mathematical reasoning' (20.5%), followed by 'external awareness' (14.7%) and 'foundational knowledge' (13.9%). With regard to competencies that are not relevant to their current job post, the three top scoring were 'external awareness' (14.7%), 'mathematical reasoning (13.9%) and 'leadership' (12.7%).

Table 4: Required Level of General Competencies

General	NR = Not Relevant: 1 = Low; 2 = Medium; 3 = High			
	NR	1	2	3
Identifies and understands economic, political and social trends that affect the organization.	14.7	15.9	45.4	23.9
Solves practical problems by choosing appropriately from a variety of mathematical and statistical techniques.	13.9	20.5	38.0	27.5
Influences, motivates and challenges others; adapts leadership styles to a variety of situations.	12.7	11.0	44.2	32.1
Understands and interprets written material and applies what is learned to specific situations.	12.2	11.8	46.2	29.9
Identifies rules, principles, or relationships that explain facts, data, or other information; analyzes information and makes correct inferences or draws accurate conclusions.	11.8	12.9	44.2	31.1
Uses efficient learning techniques to acquire and apply new knowledge and skills; uses training, feedback, or other opportunities for life-long self-learning and development.	6.6	13.3	48.2	31.9
Advances the values of the library profession.	6.0	5.0	40.0	49.0
Actively listen, interpret and provide appropriate Feedback to individuals and groups so that what is heard is properly understood.	4.6	13.3	47.4	34.7
Persuades others to accept recommendations, cooperate, or change their behavior; works with others towards an agreement; negotiates to find mutually acceptable solutions.	4.6	12.9	47.0	35.5
Manages and resolves conflicts, grievances, confrontations, or disagreements in a constructive manner.	4.4	6.6	56.4	32.7
Knows and embraces the corpus of knowledge of libraries and librarianship including the importance of permanent access in a governmental setting.	4.2	13.9	44.0	37.8
Sets well-defined and realistic work objectives; displays initiative and demonstrates responsible behavior.	4.2	5.2	44.4	46.2
Uses imagination to develop new insights into situations and applies innovative solutions to problems; designs new methods where established methods and procedures are inapplicable or unavailable.	4.0	9.6	60.0	26.5
Identifies problems; determines accuracy and relevance of information; uses sound judgment to generate and evaluate alternatives, and to make decisions within scope of authority.	3.2	12.0	47.4	37.5
Is open to change and new information; adapts behavior or work methods in response to new information, changing conditions, or unexpected obstacles; effectively deals with ambiguity.	3.2	11.4	44.6	40.8
Shows respect, concern and empathy for others.	3.2	4.2	40.2	52.4
Makes well-informed and objective decisions; perceives the impact and implications of decisions; commits to action, even in uncertain situations, to accomplish organizational goals.	3.0	8.0	57.4	31.7
Expresses information (for example, ideas or facts) to individuals or groups effectively, listens to others and responds appropriately.	2.8	11.4	48.8	37.1
Uses computers, peripherals and standard office equipment and software applications.	2.8	6.6	45.4	45.2
Subscribes to the ethics, values and foundational principles of the library and information profession.	2.4	4.0	43.2	50.4
Works with others to achieve shared goals and recognizes the value of diverse perspectives.	1.2	4.6	34.9	59.4
Uses knowledge acquired through formal training or experience to accomplish one's work.	1.0	4.4	50.0	44.6
Overall percentage	5.76	9.98	46.33	38.22

Table 5 exhibits the results of the required level of organizational knowledge competencies measured in terms of percentage of responses. Overall, the compositions of responses were 12.9% for 'not relevant', 21.9% for low, 37.4% for medium and 27.9% for high. In terms of the most required competencies, three highest responses were 'knowledge of the library's place and role in the organization' (53.4%), 'knowledge of the mission and goals of the organization' (40.8%) and 'knowledge of the organization's publications and information products' (31.5%). In contrast, the top three highest responses for moderate or medium required competencies were 'knowledge of interagency and government-wide library initiatives and programs' (43.6.2%), 'knowledge of the organization's publications and information products' (42.2%) and 'knowledge of organization's equal opportunity and diversity regulations, polices and guidelines' (40.6%). With regard to the lowest required competencies, the three top most responses were 'knowledge of organization's regulations, directives, standards and policies applicable to the library' (27.1%), 'knowledge of organization and organization Information Management/Information Technology policies, procedures, and regulations' (27.1%) and 'knowledge of copyright and intellectual property laws and guidelines' (26.9%). The top highest responses for the irrelevant competencies were 'knowledge of the organization's customer access and privacy policies' (19.3%), followed by 'knowledge of the organization's property accountability regulations and guidelines' (17.7%) and 'knowledge of the organization and organization information policies and products' (16.7%).

Table 5: Required Level of Organizational Knowledge Competencies

Organizational knowledge	NR = Not Relevant: 1 = Low; 2 = Medium; 3 = High			
	NR	1	2	3
Knowledge of the organization's customer access and privacy policies.	19.3	25.3	32.5	22.9
Knowledge of the organization's property accountability regulations and guidelines.	17.7	26.1	33.7	22.5
Knowledge of the organization and organization information policies and products.	16.7	25.3	36.7	21.3
Knowledge of federal/state acquisition regulations and policies.	15.7	25.7	34.7	23.9
Knowledge of the organizations or organization's security classifications, data protection and access policies.	14.9	25.9	35.9	23.3
Knowledge of the agency's records management regulations and policies.	14.9	22.9	36.7	25.5
Knowledge of organization and organization Information Management/Information Technology policies, procedures, and regulations.	14.3	27.1	33.5	25.1
Knowledge of the mission and goals of the organization.	14.3	7.2	37.6	40.8
Knowledge of copyright and intellectual property laws and guidelines.	14.1	26.9	34.9	24.1
Knowledge of organization's equal opportunity and diversity regulations, polices and guidelines.	13.1	22.7	40.6	23.5
Knowledge of interagency and government-wide library initiatives and programs.	12.5	19.3	43.6	24.5
Knowledge of federal/state laws, regulations, directives, standards and policies applicable to the library.	10.6	24.9	38.0	26.5
Knowledge of the organization's publications and information products.	8.6	17.7	42.2	31.5
Knowledge of organization's regulations, directives, standards and policies applicable to the library.	6.2	27.1	39.4	27.3
Knowledge of the library's place and role in the organization.	1.8	4.6	40.2	53.4
Overall percentage	12.98	21.98	37.48	27.94

Table 6 showcases the required level of library leadership and advocacy competencies profiles of the respondents measured in terms of percentage of responses. Top three highest responses for the most required competencies were 'understanding of principles and practices of team building and team work' (46.4%), 'ability to deliver library program(s) and service(s)' (44.8%) and 'the ability to understand the library's vision' (42.4%). In terms of moderate mediocre required competency level, the top three highest responses were 'ability to understand the principles of library facilities planning and space management' which recorded 51.8%, followed by 'ability to communicate and implement the library's vision in daily practices' which stood at 46.0% and 'ability to apply the results of customer surveys or studies in daily practices' which recorded 45.8%. In terms of the lowest required competencies, the top three responses were 'ability to understand the library's Continuity of Operations Plan (COOP) and risk management program' (31.9%), 'knowledge of the role of alliances and collaborative relationships in program development and outreach' (30.7%) and 'knowledge and practices of outreach to existing and potential clienteles' (27.9%). The top three highest responses for the not needed competencies were 'knowledge of and ability to use staff training programs' (29.7%), 'ability to understand and use library licenses and other agreements' (25.7%) and 'knowledge of principles and practices of human resources management and labor relations in a diverse workforce' (25.5%). Overall, the majority of respondents indicated that the required competency for library leadership and advocacy aspects was mediocre (36.8%). In contrast 15.0%, 18.8% and 29.4% responded that the competencies were not needed, low and high respectively.

Table 6: Required Level of Library Leadership and Advocacy Competencies

Library leadership and advocacy	NR = Not Relevant: 1 = Low; 2 = Medium; 3 = High			
	NR	1	2	3
Knowledge of and ability to use staff training programs.	29.7	16.3	29.7	24.3
Ability to understand and use library licenses and other agreements.	25.7	21.5	30.7	22.1
Ability to understand project management principles and practices.	25.5	24.1	30.5	19.9
Ability to understand library workforce and succession plans.	25.5	20.1	33.1	21.3
Knowledge of principles and practices of human resources management and labor relations in a diverse workforce.	25.5	12.5	36.3	25.7
Knowledge of Federal personnel laws and organization regulations, and policies in the recruitment, training, and promotion of library staff.	23.9	21.5	27.7	26.9
Ability to understand the principles of library financial management, planning and budgeting.	23.7	15.7	35.3	25.3
Knowledge of federal library initiatives and programs.	23.3	22.1	30.3	24.3
Ability to understand the processes for individual development, performance plans and evaluations.	22.9	18.3	33.3	25.5
Ability to understand library marketing activities and outcomes.	22.7	17.7	32.1	27.5
Ability to understand the impact of changes in funding, policies, regulation and legislation on the library.	21.1	22.9	30.3	25.7
Knowledge of the role of alliances and collaborative relationships in program development and outreach.	20.9	30.7	29.1	19.3
Knowledge and practices of program and event planning and development.	20.9	26.5	31.5	21.1
Knowledge and practices of outreach to existing and potential clienteles.	20.7	27.9	28.9	22.5
Knowledge of procurement/payment processes and systems.	20.7	17.3	35.3	26.7
Knowledge of contract requirements.	20.5	22.9	33.3	23.3
Knowledge of and ability to use PNM programs and services.	18.9	16.3	38.4	26.3
Ability to understand the library's Continuity of Operations Plan (COOP) and risk management program.	16.7	31.9	31.3	20.1
Ability to present specialized reports and briefings relating to library products, programs and services.	16.5	21.7	36.7	25.1
Knowledge of and ability to support and motivate subordinates, peers and colleagues.	16.3	13.7	39.2	30.7
Ability to understand and apply the theories and principles of library science and information management.	16.1	20.7	35.3	27.9
Ability to explain the value of library products, services and programs to customers based on marketing plans.	16.1	13.9	39.8	30.1
Ability to understand and explain managerial, strategic, operational and long-range plans for the library within the organization's plans.	15.5	27.3	32.9	24.3
Ability to advocate for support of the library.	13.3	13.5	40.2	32.9
Knowledge of the principles and practices of customer relations management.	11.8	23.5	37.1	27.7
Understanding of general management theories and practices.	10.4	20.1	39.0	30.5

Knowledge of library performance tools and measures.	9.4	24.9	37.6	28.1
Ability to understand relationship of the library to an organization's or agency division's national interests.	9.2	22.5	38.6	29.7
Ability to apply the results of customer surveys or studies in daily practices.	8.8	12.2	45.8	33.3
Ability to understand and apply the evaluation process for library products, services, programs, and systems.	8.2	22.9	40.8	28.1
Understanding of principles and practices of team building and team work.	7.8	9.2	36.7	46.4
Ability to locate and apply library best practices, benchmarks and norms.	7.6	26.9	35.5	30.1
Knowledge of and ability to use PNS programs and services.	7.4	19.1	41.2	32.3
Ability to apply library policies and procedures consistent with localized needs and workflows.	6.8	15.1	45.8	32.3
Ability to understand and explain library's mission, goals and objectives.	6.6	16.1	37.5	39.8
Ability to deliver library program(s) and service(s).	6.6	13.3	35.1	44.8
Knowledge and understanding of the library and functional area(s) policies and procedures.	6.6	12.7	40.6	40.0
Ability to understand the principles of library facilities planning and space management.	6.4	12.0	51.8	29.9
Ability to recognize customer's needs and inform resource allocation.	6.2	11.0	45.4	37.5
Ability to understand the library's vision.	4.4	10.0	43.0	42.4
Ability to use and disseminate library promotional materials.	4.0	11.8	45.6	38.6
Ability to communicate and implement the library's vision in daily practices.	2.6	9.4	46.0	42.0
Overall percentage	15.08	18.83	36.82	29.41

Table 7 depicts the findings of the required level of research and reference competencies for the Basic level measured in terms of percentage of responses. Based on the findings, it was discovered that majority of the respondents indicated that the required competency for the research and reference aspect was moderate (32.0%), while 23.4% indicated that the required skill was low and 23.6% was high. The remainder (21.1%) indicated that the competencies were not required with the current job. The top three highest responses of most required competencies were 'ability to use the library's existing reference and research products, services and programs' (30.3%), 'understanding of selection and dissemination tools and technologies for continuous information flow' (27.1%) and 'knowledge of current technologies and information resources' (25.9%). The three highest responses for the moderate level were 'ability to use the library's existing reference and research products, services and programs' (39.4%), 'understanding of and ability to apply search strategies to retrieve information' (37.8%) and 'knowledge of current technologies and information resources' (36.3%). The top three highest recorded least-needed competencies were 'ability to understand and apply the principles of verification and evaluation of Information Resources' (28.7%), 'Knowledge of database structure and organization' (28.3%) and 'understanding of data mining techniques' (26.9%). The top three responses for the not needed competencies were 'understanding of data mining techniques' (31.3%), 'knowledge of reference and research principles and methodologies' (31.1%) and 'knowledge of the principles and practices of bibliographic instruction' (27.3%).

Table 7: Required Level of Research and Reference Competencies

Research and reference	NR = Not Relevant: 1 = Low; 2 = Medium; 3 = High			
	NR	1	2	3
Understanding of data mining techniques.	31.3	26.9	23.1	18.7
Knowledge of reference and research principles and methodologies.	31.1	21.9	26.9	20.1
Knowledge of the principles and practices of bibliographic instruction.	27.3	20.3	29.5	22.7
Ability to use national/international databases for reference and research purposes.	26.1	24.7	26.9	22.3
Knowledge of learning style models and theories.	25.9	22.1	30.1	21.9
Ability to apply established approaches to research analysis and the development of search strategies.	24.9	25.3	27.5	22.3
Ability to locate and use standard instructional materials.	23.7	19.1	33.9	23.3
Knowledge of database structure and organization.	22.7	28.3	27.1	21.9
Ability to understand and apply reference interview techniques.	22.7	23.5	33.7	20.1
Ability to understand and use finding and research aids and bibliographic tools.	21.5	24.1	32.3	22.1
Ability to understand the attributes of and use of standard reference tools.	20.9	22.5	30.9	25.7
Knowledge of current reference and research practices and tools.	20.3	21.9	32.9	24.9
Knowledge of standard training and instructional techniques.	19.7	23.5	33.9	22.9
Knowledge of current technologies and information resources.	18.5	19.3	36.3	25.9
Ability to understand the types of information seeking behaviors.	18.1	23.1	34.3	24.5
Ability to understand and apply the principles of verification and evaluation of Information Resources.	17.1	28.7	31.7	22.5
Understanding of selection and dissemination tools and technologies for continuous information flow.	14.3	23.1	35.5	27.1
Knowledge of the principles and practices of information literacy.	13.9	26.1	34.7	25.1
Understanding of and ability to apply search strategies to retrieve information.	13.5	23.1	37.8	25.5
Ability to use the library's existing reference and research products, services and programs.	9.4	20.9	39.4	30.3
Overall percentage	21.15	23.47	32.02	23.64

Table 8 shows the respondents' required level of collection management competencies measured in terms of percentage of responses. The top three responses for the most required competencies were 'understanding of the concepts and best practices of circulation and access to library resources', 'knowledge of the library's acquisitions policies and procedures', 'knowledge of the concepts, principles and guidelines of library resource sharing' which recorded 32,7%, 29.9% and 28.1% respectively. The top three responses for moderate-required level were 'knowledge of the library's acquisitions policies and procedures, 'knowledge of the concepts, principles and guidelines of library resource sharing',' knowledge of the theory, principles, and standards and practices in the life cycle of

library collections' which stood at 35.9%, 35.5% and 35.5% respectively. The top three responses for least required competencies were 'knowledge of theories, trends and practices of conservation, preservation, or archiving of resources' (33.5%), 'knowledge of disaster planning and the library and organization's plan(s)' (30.7%) and 'knowledge of disaster planning and the library and organization's plan(s)' (30.3%). The top three responses

for not needed competencies were 'ability to understand and use resource sharing tools' which scored 45.0%, followed by 'knowledge of the licenses or agreements governing access to the library's electronic collections' and 'knowledge of the publishing and information industry in relation to collection assessment and development' which stood at 26.7% and 26.5% respectively.

Table 8: Required Level of Collection Management Competencies

Collection management	NR = Not Relevant: 1 = Low; 2 = Medium; 3 = High			
	NR	1	2	3
Ability to understand and use resource sharing tools.	45.0	13.9	22.1	18.9
Knowledge of the licenses or agreements governing access to the library's electronic collections.	26.7	26.9	24.3	22.1
Knowledge of the publishing and information industry in relation to collection assessment and development.	26.5	19.7	30.7	23.1
Knowledge of disaster planning and the library and organization's plan(s)..	23.3	30.3	25.7	20.7
Ability to understand selection, inventory and de-accession of the library's resources in the context of the library's collection development plans and policies.	23.1	22.9	28.5	25.3
Ability to understand the library's collection development plans and policies.	22.5	20.3	31.9	25.3
Ability to understand the use of bibliographic resources in collection assessment and development.	21.3	21.9	33.1	23.7
Knowledge of disaster planning and the library and organization's plan(s).	20.3	30.7	27.7	21.3
Ability to understand the concepts of planning for permanent access to information resources.	20.3	30.1	28.7	20.9
Knowledge of collection evaluation and assessment tools.	20.3	22.9	31.9	24.9
Knowledge of the principles of collection development and collection development plans.	19.3	23.1	33.7	23.9
Knowledge of theories, trends and practices of conservation, preservation, or archiving of resources.	18.9	33.5	25.7	21.9
Knowledge of trends in information formatting, production, packaging and dissemination such as e-books.	18.9	26.5	30.5	24.1
Knowledge of digital rights laws, regulations and guidelines applicable to the library's information resources.	17.9	27.3	31.5	23.3
Knowledge of the concepts, principles and guidelines of library resource sharing.	16.3	20.1	35.5	28.1
Knowledge of the library's acquisitions policies and procedures.	14.5	19.7	35.9	29.9
Understanding of the concepts and best practices of circulation and access to library resources.	11.8	27.9	27.7	32.7
Knowledge of the theory, principles, and standards and practices in the life cycle of library collections.	10.8	25.9	35.5	27.9
Overall percent	20.98	24.7	30.14	24.5

Table 9 presents the required competencies for the content organization and structure competencies measured in terms of percentage of responses. The 'ability to understand the theories and principles of thesauri, taxonomies and ontologies' was considered the most irrelevant competency, justified by the highest scoring of responses (30.5%), followed by 'ability to understand and interpret bibliographic records' and 'ability to understand and apply the principles and practices of indexing and abstracting' which recorded about 28.5% and 27.5% respectively. With regard to most required competencies, top three scorings were 'ability to understand and use established subject analysis and classification' (29.1%), 'ability to understand and use established subject cataloguing' (28.3%) and 'knowledge of the theories, principles and techniques of information organization' (27.1%). The three top highest moderate required competencies were 'knowledge of the theories, principles and techniques of information organization' (35.5%), followed by 'ability to understand and use established subject analysis and classification' (33.3%) and 'ability to understand and use established metadata' (30.3%). The top three responses in terms of least required competencies were 'ability to understand and use bibliographic databases and tools' (27.7%), 'ability to understand and apply the principles and practices of indexing and abstracting ontologies' (44.8%) and 'ability to understand and interpret bibliographic records' (25.7%). The overall scoring for the 'not relevant', 'low', 'moderate' and 'high' required competencies were 23.0%, 23.9%, 28.9% and 24.8% respectively.

Table 9: Required Level of Content Organization and Structure Competencies

Content organization and structure	NR = Not Relevant: 1 = Low; 2 = Medium; 3 = High			
	NR	1	2	3
Ability to understand the theories and principles of thesauri, taxonomies and ontologies.	30.5	25.1	23.5	20.9
Ability to understand and interpret bibliographic records.	28.5	25.7	23.9	21.9
Ability to understand and apply the principles and practices of indexing and abstracting.	27.5	25.7	24.9	21.9
Ability to understand and use established metadata.	22.9	24.9	30.3	21.9
Ability to understand and use established subject cataloguing.	20.7	21.3	29.7	28.3
Ability to understand and use bibliographic databases and tools.	19.5	27.7	28.5	24.3
Knowledge of the theories, principles and techniques of information organization.	19.3	18.1	35.5	27.1
Ability to understand and use established subject analysis and classification.	15.3	22.3	33.3	29.1
Overall percentage	23.03	23.98	28.95	24.8

Table 10 illustrates the findings of the required level of library technology management competencies measured in terms of percentage of responses. About 23.5% of the respondents answered that the required skills was low, 28.9% and 22.1% were moderate and high respectively. About 25.7% indicated that this set of competencies were not relevant in the context of their present job. Three top popular scorings for the most required competencies were 'knowledge of library technology tools, trends and practices' (27.5%), 'ability to understand how customer needs impact information technology and management systems' (26.1%) and 'knowledge of performance measures for library systems and application' (24.7%). Three highest percentages for the mediocre level of competencies were 'knowledge of library technology tools, trends and practices'

(36.3%), 'knowledge of the theories and practices of library and content management systems' (35.3%) and 'ability to understand how customer needs impact information technology and management systems' (33.9%). With regard to the least needed competencies, three highest responses were 'knowledge of data standards' (28.7%), followed by 'knowledge of systems analysis principles and techniques' and 'knowledge of standard performance measures for library technology applications' which measured at 25.9% and 25.5% respectively. About 34.1% respondents also noted that 'knowledge of the process of system certification and acceptance' was not needed in their current job while 32.9% indicated that 'knowledge of authentication protocols and their application' was also not required.

Table 10: Required Level of Library Technology Management Competencies

Library technology management	NR = Not Relevant: 1 = Low; 2 = Medium; 3 = High			
	NR	1	2	3
Knowledge of the process of system certification and acceptance.	34.1	24.9	23.3	17.7
Knowledge of authentication protocols and their application.	32.9	25.3	24.9	16.9
Knowledge of specialized resources and delivery methods tailored to specific audiences.	31.5	25.1	24.5	18.9
Ability to use discipline specific bibliographic descriptions, classifications, and taxonomies.	31.5	24.7	25.1	18.7
Knowledge of handling, and dissemination of classified information.	30.7	23.5	26.7	19.1
Knowledge of systems analysis principles and techniques.	27.1	25.9	25.9	21.1
Knowledge of the specialized subject matter or discipline required by the organization or agency.	26.7	19.3	30.9	23.1
Knowledge of the theories, principles, practices and protocols of information technology and management.	25.5	24.5	27.3	22.7
Knowledge of data standards.	25.3	28.7	24.7	21.3
Knowledge of communications and information infrastructures.	24.3	22.3	29.7	23.7
Understanding of the concepts and principles of human machine interaction and information seeking behaviors.	24.1	24.5	27.5	23.9
Knowledge of standard performance measures for library technology applications.	23.7	25.5	29.9	20.9
Knowledge of current library and content management technologies and applications.	20.9	22.3	33.5	23.3
Knowledge of performance measures for library systems and application.	20.7	24.1	30.5	24.7
Knowledge of the theories and practices of library and content management systems.	20.7	20.7	35.3	23.3
Ability to understand how customer needs impact information technology and management systems.	20.7	19.3	33.9	26.1
Knowledge of library technology tools, trends and practices.	17.1	19.1	36.3	27.5
Overall percentage	25.74	23.57	28.94	22.11

Discussion

In determining the required competencies of the para-professionals in the library services, this study has developed a questionnaire which measures seven aspects of competencies, namely general competency; organizational knowledge; library leadership and advocacy; reference and research; collection management; content organization and structure and library technology management. Among the seven listed competencies, the general competencies scored the highest, suggesting that it is the most sought after competencies among these para-professionals. The general competencies include mathematical reasoning; leadership; listening skills; conflict management; self-management; problem solving; interpersonal skills; decision making etc. These general competencies which can be considered as the fundamental competencies are the common competencies needed by almost all professions. Famous competencies models developed by researchers have apparently incorporated these competencies into their models.

The lowest required competencies reported by respondents are the library technology management competencies. These competencies which measure, among others, skills and knowledge on systems analysis; information infrastructure; data standards; library content management systems; library technology tools and practices etc, may not be very relevant and appropriate to some of the respondents as their workplace is located in quite a rural area and furthermore, the facility and the nature of their work does not require them to practice such competencies. Perhaps, due to this reason, the library technology management competencies recorded the lowest scoring among the seven listed competencies.

Other than the general competencies and the library technology management competencies, the scoring of all other competencies is almost identical, which can be considered as moderately needed or required. Given that the environment of the respondents' workplace which is very diverse with some working in the urban areas, others working in rural areas, the nature of the required competencies could be different. Likewise, the type of library that these respondents are serving also could be an influential factor. As for those who work in the rural library where the facility is not as extensive compared to the state library, the need for technology-related competencies may not be very demanding. On the other hand, in the state libraries or any other libraries located in the urban part where the libraries are far better equipped with ICT facilities, the need of technology-related competencies could be very demanding. The demographic profiles of the community using the library services could also be an important factor. In a rural library settings, where most users are not well exposed to ICT related services, the need to have human-related competencies would be far higher compared to urban settings.

Conclusion

The conduct of this study has been to investigate the required competencies among para-professionals in the library services in the state of Sarawak, Malaysia. The findings of this study suggest that the competencies needed by the para-professionals are almost identical to the competencies of the professional librarians which incorporate general competency; organizational knowledge; library leadership and advocacy; reference and research; collection management; content organization and structure and library technology management. The findings of this study will help the authorities concerned to identify the training needs required by these para-professionals. In addition, academic institutions offering library management programs will also find the findings to be useful when devising their curriculum. Just as in other studies, this study is not without limitations. Firstly, the study used perceptual measures to gauge respondents required competencies. In addition, the questionnaire is also very lengthy which to some extent affect the concentration of the respondents when

answering. These limitations can be exploited by future researchers, in case they intent to conduct similar study.

Acknowledgement

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