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REFERENCE STATISTICS AND PLANNING OF REFERENCE PERSONNEL IN ACADEMIC LIBRARIES: A CASE STUDY OF THE UNIVERSITY PUTRA MALAYSIA LIBRARY, MALAYSIA

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Abstract: *This study systematically identifies a reference activity to discover the trends and types of user questions/problems posed through traditional means at the RAD service based specifically on the nature of the UPM Main Library from the years 2008 through 2012. This study employs the quantitative research method using the data from the reference enquiry statistics to investigate the emerging trends in reference questions and enquiries in the UPM Main Library. The reference statistics were gathered by the reader advisor who manned the RAD service from the years 2008 through 2012. The compiled reference statistics included all the transactions with any faculty; student; staff, external member or public who had used the RAD service either in person or by telephone. A standard reference statistics form used includes a section to indicate types of reference transaction questions with the following options; directional, ready reference, in-depth reference, and demonstrations. Directional questions refer to questions regarding location of services, branch libraries, people and departments, collections, and materials available in particular sections of the library or the university. Ready reference questions are those questions that could be answered quickly in 3 minutes or less,*

for instance, questions pertaining to a particular library service, or regarding the facilities available in the library or the library collections. In-depth reference questions are those that require more than 3 minutes to answer, and/or involve the use of several resources, and it may also include a demonstration of the use of printed and online resources as well. The utilized set of statistical data showed a fluctuation in the data of reference enquiries (questions or problems) at Reader's Advisory Desk (RAD) asked through traditional means over the entire 5-year time period.

Keywords: Reference Question, Directional Questions, Reader's Advisory Desk Service, Reference Enquiries, Reference Service, Reference Statistics, Reference Librarians, UPM Library

INTRODUCTION

Reference Desk, also known as Information Desk, Help Desk, or Reader's Advisory Desk (RAD) service of a library is an important type of reference service provision to the public. It is typically a public service counter required of all academic libraries in institutions of higher learning, as well as the research universities. RAD service is a part of reference service where library users are able to request for assistance from professional librarians to locate library materials, to obtain advice on library collections and services, or to seek any other kind of help to fulfill their information needs.

The RAD service of the UPM library can be conducted in person, through e-mail, by fax or over the telephone, and users can either use this service individually or in small groups. The RAD service is staffed by the librarians of the reference department, other librarians as well as Assistance Library Officers from various departments in the main library. They are tasked with the responsibilities of the reader advisor on a rotation basis during the library opening hours daily and nightly, with an average of 10.7 hours of RAD service in one day. The table shows the RAD opening hours during the semester and also during the semester break.

Table 1: RAD Service Opening Hours.

	Semester	Work day (in hour)	Semester break	Work day (in hour)
Monday to Friday	8.30am-10.30pm	14 hours	8.30am-7.30pm	11 hours
Saturday to Sunday	8.30am-3.30pm	7 hours	closed	
1 st , 3 rd Saturday	closed		closed	
Public holiday	closed		closed	

The RAD service has 5 sessions. As shown in table 2 below, during the semester and also during the semester break, sessions "A", "B" and "B2" are handled by staff of the reference department that includes Head of Reference Department (S48), Reference Librarian (S41) and Assistance Reference Library Officers (S27) on a rotation basis. Meanwhile "B1" sessions on Fridays, the weekends, "C" and "C1" are handled by the all the reader advisors, which include those from the reference department as well as other departments in the main library. The reader advisors may submit their claims by the number of hours on duty based on their eligibility for the session "C1" during the semester break or the weekend sessions. Only for session "B1" on Fridays, all claims must be taken only on Fridays, which means the reader advisors are able to off duty after 12.15pm.

Table 2: RAD Service Schedule.

Session	Mon-Thu	Friday	Weekends
Semester schedule			
A	8.30am -12.30pm	8.30am -12.15pm	8.30am -3.30pm
B	12.30pm - 4.30pm		
B1		12.15pm-2.45pm	
B2		2.45pm-4.30pm	
C	4.30pm-10.30pm	4.30pm-10.30pm	
Semester break schedule			
A	8.30am-12.30pm	8.30am-12.15pm	Closed
B	12.30pm-4.30pm		
B1		12.15pm-2.45pm	
B2		2.45pm-4.30pm	
C1	4.30pm-7.30pm	4.30pm-7.30pm	

Table 3: Total Number of Reader Advisors in UPM Main Library

	Grade	Quantity
Head of Reference Department	Professional S48	1
Librarian	Professional S44	7
Reference Librarian	Professional S41	3
Librarian	Professional S41	22
(Reference) Assistance Library Officers	Paraprofessional S27	1
Assistance Library Officers	Paraprofessional S27	6
Total		40

RAD service statistics are recorded daily using the standard form, i.e., the Statistics Form of the *Meja Penasihat Pengguna* (MPP) Reference Service (OPRR/PSAS/BR07/MPP). Traditionally, reference statistics are recorded by counting every question/problem posed to the reader advisor. The statistics recorded from years 2008 through 2012 in table 4 showed the number of questions/problems posed by the users. The report is presented in a simple total and refined by categories. The table 4 showed annual comparisons from 2008 until 2012.

Table 4: *Types of Questions/Reference Enquiries Asked at the Reader's Advisory Desk, 2008-2012.*

	2008	2009	2010	2011	2012
OPAC	5,829	4,854	5,330	4,248	3,456
Electronic resources	4,381	3,532	3,968	3,553	2,861
External reference	343	322	287	234	3,53
Quick reference	2,602	2,651	3,014	2,108	1,670
Telephone	1,528	1,760	1,789	1,565	1,136
Lost book report	155	97	55	34	74
Direction	2,227	1,974	2,311	2,687	2,306
Total Per year	17,065	15,190	16,754	14,429	11,856

The RAD service provides seven main services. The form mentioned above, is used to record the number of transactions and includes a section to indicate the types of reference transaction questions such as Online Pubic Access Catalog (OPAC), electronic resources, outside/external reference, quick reference, telephone, lost book report and direction. Below is the description of the different types of reference transaction questions:-

- i. OPAC – Involves explanation on ways to locate information using the library catalog system, provide user with information about the printed library collections. Description of the steps to be taken to determine whether or not the library has a copy of the book, thesis or hardcopy journal. Requesting for and renewal of books, checking of user records and transactions. Explanation on the steps to submit Document Delivery Service/Interlibrary Loan requestfor book. Tutoring the users on the use of OPAC basic search, keyword search and setting session filters. Refers a user to specific resources (such as a book, an index, or a hardcopy journal)
- ii. Electronic resources- Involves explanation on ways for users to search information using the online database, e-book, *Refworks*, *Turnitin* and others electronic resources. Provide users with information about the electronic library resources such as E-book, online subscribed journalor after users have been able to identify the outcome of the results of their searches from the

electronic resources whether the library has full-text access to journal articles or not. Explanation on the steps to submit Document Delivery Service/ Interlibrary Loan request for hardcopy journal. Tutoring the users on the use of basic search or advanced search in the online databases. Assist users with database access and download problems. Checking and registration for *Turnitin*, plagiarism checker and *EzProxy* system that will allowed user to access library resources through library website from home or off campuses.

- iii. Outside/external reference – Assisting users to look for information by using an Internet search engine, other university library catalogues, directories, government agencies, and other relevant resources.
- iv. Quick reference - Answering questions about the library's operating hours, collections, policies and facilities such as self check machine, carrel room, photocopying service and others.
- v. Telephone - Callers make enquiries or need the extension number of the library department such as circulation section, interlibrary loan section, a specific library employee such as liaison officer, acquisition librarian, or branch library. Providing users with information about the library resources or collections such as quick questions and answers about the OPAC such as request and renewal of books. Search information or recognizing problem related to the online databases or electronic resources. Answering questions about the library's operating hours, collections, policies and facilities.
- vi. Lost book report form - Checking and making a report for lost book at the library using the Lotus Notes System.
- vii. Direction - Giving direction, describing the location of a branch library, special collections, people, departments, and other questions of the directional type.

At the UPM library, the reference statistics collected also include quick reference question counts that require less than 3 minutes to answer. OPAC and Online Database are considered more of the comprehensive search type of questions which are answered in more than 3 minutes.

Nowadays, The evolution of paradigm in reference service that have seen dramatic changes because of the use of electronic/virtual reference, digital reference service and social networks, as well as been mentioned by De Groote, Hitchcock & McGowan (2007), more and more users have accessed resources from remote locations...and from library electronic resource databases as well as e-books, the

requirement for these skilled professionals to be stationed at the reference advisory desk need to be investigated and periodically evaluated. Besides due to the fluctuation of data on the reader advisory desk statistics, the routine questions ... "the time and energy of the librarians should be exploited in the most effective and efficient manner possible" (De Groote et al., 2007: 28). In this regard, it is appropriate that a study of reference statistics be undertaken so that evaluative data can be provided for an efficient and improved planning of the allocation of staffing at the RAD service of the UPM Library.

LITERATURE REVIEW

The literature on RAD service is extensive and traditionally, this service had been provided by all types of libraries. This service is managed by a person at a designated desk within the library building, and this service can be offered over the telephone, also in person face-to-face. Nowadays, the service is technology-enabled through a web messenger like *Yahoo Messenger*; through social networks like *Twitter*; *Facebook* or even from *Short Message Service* (SMS) and other applications that are currently available in the era of the information communications technology (ICT).

Reference Statistics

Reference statistics is the collected and recorded data of transactions and activities carried out in the reference department. Collecting the reference statistics refers to the process of collecting of data on the types and number of reference questions asked during a reader advisor's time of duty, and recording of the said data onto a standard reference desk statistic sheet. "Collection of reference statistics is a common practice in almost all libraries reference service" (Kuruppu, 2007: 370). Today, some libraries have created their own databases of reference questions received and for the reference statistics collected. Gossett, Stephan, & Marrall (2012) studied about the implementation of *LibAnswers*, which is an analysis software of reference statistics collection at multiple service points in an academic library and at the same time "functions as a public knowledge based component that has been useful as a way to allow patrons to find answers to their questions on their own" (243). This software has an option to make all the questions and answers of interaction between a librarian and a user are open to the public. Even now the library can also use open source programs like *Libstats*(<http://code.google.com/p/libstats/>) that can provide a simple way for library reference and service desk personnel to track the statistics on the number of questions asked.

Some libraries still do the daily collection of statistics in the traditional way with the use of a standard format of a reference transaction. Usually the most popular data elements collected are date, type of question, time of day and location of the reference transaction (Novotny, 2002).

Many studies in the use of reference statistics were carried out in order to identify the trend of the reference transactions for certain institutions. Barrett (2010) carried out a study to examine the trends of reference services in the University of Illinois' Crawford Library of the Health Sciences. His study used the reference statistics that were gathered monthly by the entire library staff from 1990 until 2009. Barrett indicates types of reference transaction questions that included such options directional, ready reference, in-depth reference, and demonstrations/consultations. "Directional questions referred to questions regarding location of services, policies, collections, and materials contained in the building or university. Ready reference questions are questions that could be answered quickly in five minutes or less. In-depth reference questions are those that require more than five minutes to answer and/or involved the use of several resources. Demonstrations/consultations included demonstrations of one or more print or online resources or consultation sessions on conducting research on a project or topic and might be conducted for an individual or a small group" (308).

Reference Questions

Reference questions refer to the questions asked or problems posed by the users. Reference questions can range from the simple fact finding type to complex questions requiring. (Chowdhury, 2002). In 1977, Lubans analyzed the reference statistics of 17 public services units of the University of Colorado libraries during the years 1975-1976. A total of 547, 245 questions handled by the library included directional questions, circulation questions, instructional answer questions and research questions. In addition, Glogoff (1978) determined 3 categories of reference questions and the information pertaining to these questions were recorded, which were: search questions, ready reference questions and directional questions. "Search questions required the librarian to consult two or more information sources. Ready reference questions involved tools or sources such as using an almanac to find a fact, using the card catalog to locate a book, etc. Directional questions do not require the use of any library resource in providing the answers".(5)

The study on reference statistics by Tenopir (1998) discovered that the answers obtained through the library's online catalog was the largest percentage of reference questions in most of the libraries, followed by printed reference books, Barrett (2010) found that directional questions and ready reference questions were the most

popular types of questions asked and this is consistent with reports by De Groot (2005), who found that ready reference questions were the largest type of reference questions asked, followed by technical question, in-depth/mediated questions and instructional questions. The study also indicated that "the decline in questions is a result of those patrons being more computer savvy, more information literate, or more likely to use online help materials to assist themselves with answering their own questions, rather than asking a reference librarian." (22)

The decline in RAD activity may involve many factors. The study of 124 members of the Association of Research Libraries (ARL) by Novotny (2002) found that the decline in reference desk activity is because of the use of the Internet and the fact that researchers no longer need to enter the library to ask questions and led to increase off-desk interactions such as e-mail. Fitzpatrick, Moore & Lang (2008) suggested that "faced with declining traffic in the physical library, many reference departments have reduced librarian time at the Reference desk". (16)

METHODOLOGY

Since the study is to discern the trends of reference questions and its statistics in the UPMLibrary, this study employed basic quantitative research method using the statistics data that is based on the reference enquiry statistics recorded daily. Barrett, 2010; De Groot et al., 2007; Glogoff, 1978 and Lubans 1977 previously also counting the reference transaction and use its statistics for study. Reference statistics were gathered by the reader advisors who had worked at the RAD service from the years 2008 through 2012. The gathered statistics include all the transactions with any faculty, staff, student, or member of the public who had used the RAD service either in person or by telephone. The reference statistics form includes a section to indicate the different types of reference transaction questions with the category options such as: OPAC, Online database, outside/external reference, quick reference, telephone, lost book report and direction.

The data was calculated to get an average of the total reference queries either daily or in one hour as shown by the following formula:

a) Daily

$$\text{Average per day} = \frac{\text{Total reference queries per year}}{\text{RAD workday/sessions per year}}$$

b) Hourly

$$\text{Average in one hour} = \frac{\text{Average reference queries per day}}{\text{Average RAD Service work hour}}$$

Analysis of data for the RAD service statistics of the UPM library can be grouped into seven sections as reflected in table 4, and the data showed the total number of reference queries answered by the reader advisors either in person or by telephone over the last 5 years (2008-2012). Based on table 5, in 2008 the reader advisors answered 17,065 questions, with an average of 58.8 queries per day and an average of 5.4 queries for one hour. In 2009, the reader advisors answered 15,190 questions, with an average of 52.3 queries per day and an average of 4.8 queries for one hour. In 2010, the reader advisors answered 16,754 questions, with an average of 57.5 queries per day and an average of 5.3 queries for one hour. In 2011, the reader advisors answered 14,429 questions, with an average of 50.8 queries per day and an average of 4.7 queries for one hour. Whilst in 2012, the reader advisors answered 11,856 questions, with an average of 41.6 queries per day and an average of 3.8 queries for one hour.

Table 5: *Total of Reference Queries.*

	Total reference queries per year	Total RAD workday per year	Average Per day	In one hour
2008	17,065	290	58.8	5.4
2009	15,190 (-1875)	290	52.3	4.8
2010	16,754 (+1564)	291	57.5	5.3
2011	14,429 (-2325)	284	50.8	4.7
2012	11,856 (-2573)	285	41.6	3.8

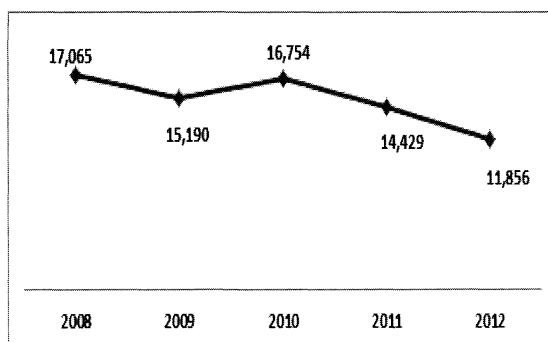


Figure 1: *Total Reference Queries Per Year.*

Table 5 shows that there has been a gradual decrease in the number of reference questions/problems posed in year 2009 (n=15,190), 2011 (n=14,429) and year 2012 (n=11,856) compared with year 2008 (n=17,065) and year 2010 (n=16,754). In year 2009, the difference is -1875 queries when compared to year 2008 and in year 2010, the difference is +1564 queries when compared to year 2009. In year 2011, the difference is -2325 queries when compared to year 2010 and in year 2012, the difference is -2573 queries when compared to year 2011. It continues to

decrease in year 2012 (n=11,856), the difference is -2573 questions when compared to year 2011.

Table 6: Types of Questions Asked at the Reader's Advisory Desk, 2008-2012

2008 - 2012	Online Database	Quick reference	Direction	Telephone	Outside reference	Lost book report form	Total
Total	18,295	12,045	11,505	7,778	1,539	415	75,294
Percent	24.3%	16.0%	15.3%	10.3%	2.0%	0.6%	100%

The most commonly asked questions/problems posed are about the OPAC and the online databases. As shown in table 6, during the 5 year-period, the reader advisors were able to answer 23,717 questions related to the OPAC, followed by 18,295 questions related to online databases, quick reference enquiries totaled 12,045 questions, directional type of question numbered 11,505 questions, and by telephone 7,778 questions were answered. Only 1,539 questions were about referring for outside/external references, while only 415 enquiries were for lost book report.

Table 7: Total Questions/Problems Posed Related to the OPAC and Online Databases, 2008-2012

	OPAC	Online Database	Total	Total RAD work day per year	Total/Average Per day	In one hour
2008	5,829	4,381	10,210	290	35.2	3
2009	4,854(-975)	3,532(-849)	8,386(-1824)	290	28.9	3
2010	5,330(+476)	3,968(+436)	9,298(+912)	291	31.9	3
2011	4,248(-1082)	3,553(-415)	7,801(-1497)	284	27.4	3
2012	3,456(-729)	2,861(-692)	6,317(-1484)	285	22.1	2

As can be seen in table 7, although the data showed that the highest number of reference questions/problems posed is related to the OPAC and online databases, the fact of the matter is that, there has been a decrease in the total number of reference questions/problems posed related to the OPAC and online databases in year 2009 (n=8386) year 2011 (n=7,801) and year 2012 (n=6,317) when compared to year 2008 (n=10,210) and year 2010 (n=9,298). In year 2009 (n=4,854), a difference of -975 questions on the OPAC were recorded compared to year 2008. While in year

2009 (n=3,532), a difference of -849 questions on online databases were recorded when compared to year 2008 (n=4381). In year 2011 (n= 4,248), a difference of -1082 questions on the OPAC were recorded when compared to year 2010 (n=5,330), while questions on online databases (n=3,553) in year 2011 recorded a difference of -415 when compared to year 2010 (n=3,968). In year 2012 (n=3,456), a difference of -729 questions on the OPAC were recorded compared to year 2011, while questions on online databases (n=2,861) in year 2012 recorded a difference of -692 when compared to year 2011 (n=3,553).

Table 8: The Average Queries on OPAC and Online Database

	Total reference queries per year	Total queries per day	Total queries in one hour	Total queries OPAC/Online database Per year	Average OPAC/Online database per day	Average OPAC/Online database in one hour
2008	17,065	58.8	5.4	10,210	35.2	3
2009	15,190	52.3	4.8	8,386	28.9	2
2010	16,754	57.5	5.3	9,298	31.9	3
2011	14,429	50.8	4.7	7,801	27.4	2
2012	11,856	41.6	3.8	6,317	22.1	2
Average		52.2	4.8		29.1	2.5

Table 8 shows that the reader advisors answered 10,210 questions on OPAC and online databases, with an average of 35.2 queries per day and an average of 3 queries for one hour in year 2008. In year 2009, the reader advisors answered 8,386 questions, with an average of 28.9 queries per day and an average of 2 queries for one hour. In year 2010, the reader advisors answered 9,298 questions, with an average of 31.9 queries per day and an average of 3 queries for one hour. In year 2011, the reader advisors answered 7,801 questions, with an average of 27.4 queries per day and an average of 2 queries for one hour. Whilst in year 2012, the reader advisors answered 6,317 questions, with an average of 22.1 queries per day and an average of 2 queries for one hour. In addition, the average total queries per day from years 2008-2012 are 52.2 questions with an average of 29.1 questions related to OPAC/Online databases per day. This works out to a ratio of 29.1 : 52.2 queries that are related to in-depth questions, while the other 23.1 : 52.2 queries refer to other questions that are more of the basic types of questions per day.

DISCUSSION AND RECOMMENDATIONS

The findings showed a pattern of fluctuation of data on reader advisory desk statistics especially from years 2009 and 2011. The total daily session were not

affected by the decrease in the reference queries because the total average per day is divided by its session. Based on the findings, it can be seen that on average, the RAD will answer 5.1 queries in one hour. This means that a reader advisor will have about 11 minutes to answer one question of the in-depth type of reference question which requires more than 3 minutes to answer, and/or involves the use of several resources, and it may also include a demonstration of the use of printed and online resources as well. In point of fact, not all the questions are in-depth type of reference questions; there are also ready reference questions that could be answered quickly in 3 minutes or less, quick reference or ready reference questions and also directional questions. The study by Schulte (2011) found that the staffs had been providing answers to more basic reference questions rather than complex questions. This conveyed that a reader advisor will have more waiting time before the next question/problem is posed by the next user. This is also similar with the findings in this study as reflected in table 8. The OPAC and online database queries are categorized as in-depth reference questions, with a ratio of 2.5: 5.1 queries in one hour, while the other 2.6: 5.1 queries in one hour are categorized as basic questions.

Reference desk transactions have declined over the past decade and mostly because of technology, the Internet and database subscriptions. This also happens in UPM Main Library where also implement all this application. There are internets in all campus including library that equip with computer and more than 70 subscriptions of databases, e-book and other searching tool. Some of databases, e-book and tool that been subscribed by the UPM library are *Science Direct*, *Sage*, *JSTOR*, *Wiley*, and *Springer*, *Gale*, *IG publishing* for e-book, and tool such as *JetP*, *Turnitin*, *Derwent*, and others. Many new databases nowadays have the help link with the guide, online tutorials and FAQ that can help any user who accesses their databases. According to Høvik(2003), the web is a visible decline of reference question. He said that, "many library questions are basic questions and people are becoming more familiar with the web and learning to handle basic reference queries on their own, and in the future people will only ask for help if they are beginners or if they face really difficult questions"(30).

Library instruction or user education programs also do have an effect on the reduction of the reference transactions. To be a research university, the conduct of user education programs is not only one of the essential library programs becomes but this can be considered a vital part of the process to work towards achieving the research university status. Information literacy programs are actively and carried out in UPM library for all students especially for new students, final year students, postgraduate and undergraduate students, as well as the distance learning students. The main objective of these literacy programs is to enable students to acquire the skills to find information on their own and finally be able to become independent

users. User education programs are handled by the Liaison Librarian of the Information Management Division and often times may also involve representatives of publishers whose publications or databases had been subscribed by the library. In addition, the promotion of this service was broadcast through the website by using banners, *Facebook*, display board and other promotional tools in order to ensure that the users are aware about the availability of such service.

Besides that, UPM library also provides multiple points of online reference service like e-mail and *Facebook* that have now become a very common means of communication today. Users can ask/pose problems either directly or by an appointment with a reference librarian at the office of Reference Department or with a Liaison Officer at the Information Management Division, and this can be done via face to face, via telephone and email. As a result of the diverse ways users can ask for assistance for their information needs, this had also become a contributing factor to the decreasing number reference statistics at the RAD service.

Recognizing the decreasing number of questions being asked/posed, it is suggested that more paraprofessional staff be trained to man the RAD service. This suggestion is in light of the findings which showed that many questions asked/problems posed by users are routine in nature. The highest number of questions asked/problems posed relate to the use of the OPAC, the use of the online databases, followed by quick reference information or ready reference questions. Simple search questions about the OPAC, the online databases, facts, documents or ready reference questions essentially do not require the service of fully qualified reference librarians as these can be handled by the paraprofessional staffs. Furthermore, the paraprofessional staffs had already been recruited to be assistants at the library counter, attended training classes such as communication skill, dealing with people as well as had been provided with a training manual about reference service work. This was supported by Høivik(2003) in the research on current patterns and trends in reference statistics for library planning. He stated that all the routine questions such as simple search for facts or documents do not require the service of a trained librarian, they can be handled by a trainee or by a student help with a few weeks of practical experience at the library in question. Aluri (1978) found in his study that many of the questions posed at the reference desk in academic libraries are highly repetitive, and it is not uncommon for large numbers of students to go to the reference desk for the same reference book or to find the answer to the same question and he pointed out that at least half of the repetitive questions are directional and quick reference in nature. It mean that, "providing skilled staffing at the reference desk is necessary, but having the expertise of the librarians 'just-in-time' ability may be a more appropriate use of the librarians' skills, freeing up their

time for activities such as outreach and focusing more on their jobs" (De Groote et al., 2007:26)

Theparaprofessional staffs are able to help the users to answer directional type of questions, or help patrons use the library's OPAC, as well as answer questions that are traditionallyconsidered as ready reference questions. However, in-depth questions that involve a deeper reference inquiry from a user who is working on his/her research project, yet not knowing where to begin, will be referred to the liaison librarians who are equipped with the knowledge, skills and training to help determine the nature of the enquiry and assist the patron. This will usually involve the consultation/demonstration category of reference enquiry, and will be conducted in groups or on a one-to-one teaching session on the use of relevant databases or on the formulation of an information search strategy.

The use and effectiveness of paraprofessional staff at the RAD had been discussed in the literature for many years. Based on a previous study on the service quality and user satisfaction of the RAD service of the UPM library, Zubaidah & Fuziah (2010) found that most of the respondents representing 65% (n=26) were very satisfied, 35% (n=14) were satisfied, whilst none of them were dissatisfied with this service offered by the UPMlibrary reader's advisory. This service was provided by both the professional as well as the paraprofessional staffs. Additionally, the study also reported on the reliability of the reader advisors on duty, and found that 60% (n=24) of the reader advisors were always able to answer most of the respondents' enquiries (questions or problems) correctly, 37.5% (n=15) of them were often able to answer the enquiries correctly, while only 2.5% (n=1) were not very often able to answer the enquiries correctly. This demonstrates that the reader advisors were knowledgeable, competent, and proficient in the use of appropriate reference tools when providing the service.

Despite the many changes that had already occurred in providing reference service today, it is recommended that libraries plan for the best ways to deliver the reference service to users in the future. This essentially means that in the digital/online era, libraries need to grow with the communities they serve, and also change with the times because nothing remains permanent. The Sultan Abdul Samad Library of the UPM is no exception. The UPM Library can look towards a plan of merging the Reference Department (reference service) and Information Management Department (instruction service) in the near future, because these two departments have similar functions, which is to educate and teach students and other users the use of the library catalog, online databases, Internet search skills, and others. The responsibilities of the reference librarian and the Liaison Librarian or also known as subject librarian, are sometimes closely overlapping. Even though each library is

unique and there are needs that must be addressed for each department, hopefully by merging these two departments and their services, the librarians are much better able to have more time to efficiently and effectively provide for instructional and more in-depth assistance. For example, introducing a new service on demand, where a faculty member may request for specific library instruction sessions for specific courses offered in UPM. Such a service will definitely require specific preparations on the part of the reference librarians and collaboration with the faculty members. Libraries need to change and at the same time explore the barriers and study the impact of making changes and improvements for better and efficient reference service provision in the future.

CONCLUSION

In sum, recognizing the decreasing number of questions being asked/posed at the RAD service, the library managers will have to make decisions on how staffing should be realigned to meet the needs of the library users (Dinkins, 2010), and to make more efficient use of the librarians' time while maintaining an effective reference service. Nowadays, users are more likely to have conducted some of the searching on their own. They go to a RAD service when they have not been able to find what they are looking for on the web. This goes to show that the RAD service is still a useful and relevant service for the UPM Library. The statistics used to track trends in use and to see the types of questions being asked (Gossett, 2012) showed that these are therapeutive and ready reference or directional types of questions posed by the users. But the main point is having librarians who are knowledgeable and skillful at the RAD service were need to be discuss in deeply has been mentioned by De Groote et al., (2007), the "just-in-time" ability is a more appropriate use of the librarians' skills, and also at the UPM Library for more instructional and in-depth assistance, rather than the current situation. Moreover, it is more beneficial to the users especially in this research university.

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