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Human resource in Academic library in Gaza Strip

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ABSTRACT

Human resource planning is important in Palestinian Academic library, as a method of efficient distribution of scarce skilled labor. Libraries have given critical attention to human resource management of library professionals. This study aimed to examine the current status of individual working in the Academic Libraries to establish profiles of their staff, and to indicate the manpower requirements necessary to staff current and future information facilities. Data was collected using a questionnaire sent to 380 library and information centers workers, 314 (82%) were returned. Interviews with 60 key officials were done in two phases. The interview findings indicate that the current supply of libraries and information workers is deficient in number of professional staff, necessary skills such as information technology, computer, and language skills.

Respondents overall showed a significant difference $p < 0.005$, between the job title categories, in continuing education and there is a significant difference $p < 0.001$ between the gender of professionals regarding the intentions to continuing education. This study is important for future information resources planning in Palestine Academic Libraries and it will be contributing better assessment and guidelines or recommendations for future demand. It is identifying the problems and characteristics of present information resources in Academic Libraries. This study is producing baseline data about information human resources in Academic Libraries. The study also provides an approach to human resources planning for developing countries with similar situation like Palestine.
The Need for Human Resources in Academic Libraries

An academic library is a library that is attached to academic institutions above the secondary level, serving the teaching and research needs of students and staff. The support of teaching requires material for class readings and for student papers. Academic libraries must decide what focus they take in collecting materials since no single library can supply everything.

Human resource development is needed in Academic libraries, as a procedure for the competent and even allocation of limited skilled labor, no matter how basic the procedure might be (National Manpower Steering Committee, Mbabane, 1987). Human resource development in Academic libraries, therefore, methodically predicts an organization's future supply and demand of labor (Werther, Davis, 1989) which is required to fulfill and achieve organizational goals. According to Werther and Davis, those who implement it may gain enhancements in the employment of human resources; harmonizing personnel tasks to future organizational goals proficiently; creating foremost demands on local labor markets productively; attaining wealth for appointing new employees; increasing the personnel administration database to help and improve other personnel’s tasks; synchronizing different personnel supervision programs such as confirmatory accomplishment graphs and costs. The library's potential future demand for additional or lesser workforce is the key concentration point of human resource development and planning in Academic libraries. A human resource survey (HRS) comes before human resource planning implementation. It requires provision of the precise number of workers accessible on jobs and the openings which are present.

Human resource planning in Academic libraries, therefore, begins with the tabulation of organizational objectives which must be achieved and then estimating the number of employees required to carry them out. It is part and parcel of the overall
organizational plan. Its function is to ensure that the correct number and kind of employees who are capable of performing will be at the appropriate places at the right time in the future, so that the library organization can continue to achieve its objectives. One should be mindful that the aging labor force will most certainly result in direct to a labor shortage. The issue is complex and intricate when it comes to the ever-changing set of expertise that librarians need in the present era of high level of technology and automated information. They are highly expected to be interested in details and determined to achieve their strategic goals, be creative, hard working and inspired; should possess the skills of problem solving; should be keen on accepting challenges and fulfilling them. Above all, they should comprehend the ever changing needs of the communities they are serving and keeping themselves updated with the ever developing innovative scope of their respective information necessities. In most countries HR supply and demand are quite stabile.

Situation of Academic Libraries in Palestine

In Palestine, the Academic libraries and information infrastructure centers prior to the Israeli invasions in 1948, 1967 and 2000 were controlled and financed by Al-Caliphate. Nowadays, the Palestinian Authority or foreign donors sponsor most of them. Two governing bodies are responsible for higher education in Palestine. Firstly, the eleven universities which provides Bachelor's degree and other higher degrees, fourteen community colleges which offer 2 year diplomas, generally in technical and commercial fields, and three universities colleges.

Palestine Universities Libraries are organized under the libraries administration, which comprises a centralized administration department and more than 20 decentralized faculty and special collections libraries. The total staff for these libraries was 201” (Statistical Year Book-Ministry of Higher Education, 2000).
Library and Information Science Program in Palestine

The first library education program in Palestine was established in 1982 at the an-Najah University by the an-Najah National Committee. It produced approximately 350 assistant librarians. Before this program was created the trained librarians in Palestine got their education from all over the world. They bring various library customs and practices back which are very different and rich, and have an effect on the process of standardization. Libraries in Palestine are desperately in need of an institution that could develop a library and information science program adjusted to their needs.

Problems with Human Resources in Palestinian Academic Libraries

Human Resources Department for Palestinian libraries (HRD) has been the main concern and center of attention in the Palestinian Academic libraries and information centers because of the exchange of authority on the system at the end of 1994. This study explores HRD between 1994 and 2001 (Palestinian Human Resource Report, 2004). In fact there is a need to present an insight on fair comprehension of the matter in a variant and transitional framework.

The period of Israeli occupation has created many obstacles and problems which complicated the Palestinian life in different sectors such as education, information, development, trading and industrial sectors. Some of those barriers which are faced by the Palestinian in order to reach out for the libraries are follows:

a. Censorship: From 1967 when the Israeli occupied of the West Bank and Gaza started, and up to this day, Israeli censorship has been strict.

b. Checkpoints: The worst and poverty-stricken areas in the whole of the Palestinian National Authority Areas such as Rafah, Khan Younis (in Gaza Strip) and Ram-Allah, Jenin and Tulkarem (in West Bank), checkpoints, were created where arrests, random and planned killing commonly took place.
Statement of the Problem

Palestine has been witnessing a state of chaos and instability due to recurrent invasions (1948, 1967, and 2000), which have resulted in destroying the basic infrastructure and the public sectors all over the country among which the library and information sector is the most prominent, (Al-Qashtan 1987), (Palestinian Ministry of Higher Education, 2004).

As a result of the invasion of Gaza Strip, most of the educated and qualified personnel and professionals left the region, (Abu Sitta, 2004). On the other hand, the number of library and information centers has increased to more than 24 libraries in Jerusalem and more than 20 libraries in the Gaza Strip.

However, the need to develop human resources for all sectors of the Palestine economy is widely recognized at the present time.

To develop the manpower needed for the future requires a clear understanding of the kinds and levels of personnel currently working in the information sector. However, detailed knowledge of the present manpower levels in Palestine and information related activities did not exist prior to the present study.

Since planning for human resource development is a lengthy process, the Palestine authorities and national organizations must have forward looking and carefully directed and selected programs, if it is to fulfill present and future information human resource needs.

This study represents a first comprehensive study in Palestine which shows a first step in addressing the need of Academic Libraries in palestine. The purpose of the study, therefore, is to:

Discuss the manpower supply for the current and future needs of personnel in the Academic libraries and to make recommendations for fulfilling these requirements.
Objective of the Study

The aim of this study is:

1) To examine the current status and to establish profiles of individuals working in the Academic Libraries in Gaza Strip.

2) To determine the manpower requirements necessary to staff current and future Academic Library facilities in Gaza Strip.

3) To compare the accuracy and achievement of the projected number of library workers by mid and top level managers in June 2004 to June 2009.

Review of Literature

Introduction

Issues related to human resources have occupied a central concern in every educational policy initiative all over the world. Whilst “hot” issues in education focus invariably on student achievement, funding and issues of quality, the factors which concern the recruitment, preparation, hiring, and professional development of the workforce are key to understanding the issues themselves. While bad forecasting on demand side is occasionally cited, in most cases the problem has more to do with supply-side issues, such as the low appeal of the profession (poor career prospects, low salaries, poor working conditions, and low status), low qualifications of the applicant, and inadequate numbers of graduates. Salaries provide a clear expression of profession’s status. Yet, in the last decade, education systems have considered the totality of those issues.

Manpower Studies

Human resource issues related to library and information science have frequently been on the international agenda since the early 1960s. Some of the American organizations began preparing studies and collecting data on this subject such as the
National Academy of Sciences and the National Science Foundation. These efforts supplemented data that have long been collected by the Bureau of Labor Statistics. Much concern about the quality of new entrants to the LIS profession was expressed in the 1980s.

One feature of current skills shortages is the widespread lack of important generic skills and social skills such as quality assurance skills, problem-solving skills, learning efficiency, flexibility and communication skills. (Commission of the European Communities, 1991)

To make their way in a changing and increasingly complex world, and cope in unpredictable professional situations, students need the ability to take on new experiences with an open mind. The changing demands of the world of work mean that graduates must be skilled in more than just the academic discipline they study. Subject knowledge alone is no longer sufficient. (Barnett, 1992)

Therefore, manpower problems have been a major concern of the library profession since the early 1960s. The existence of a library manpower shortage drew national attention when in 1967 the American Library Association announced that the scarcity of professional librarians had reached crisis proportions (U.S. Department of Labor, Bureau of Labor Statistics, 1975, P. ix).

**Manpower Requirements in Academic Libraries for Present and Future**

The most important study in the economic field and related fields was the study done by Gammed (1979) who investigated the manpower requirement in Libya. The aim of the study was to project the top-level manpower necessities for economic requirements for development in that particular country.
Gammed introduced a simple disaggregated model to make Libya’s top-level manpower necessities based on the particular country’s economic objectives and evaluated the manpower required by the educational level, economic sector, and fields of specialization for the period between 1978 and 1985. Finally, he estimated the supply of top-level manpower from the existing (1977) enrollment in educational institutions. This study highlighted only the top-level management requirements without taking into consideration the market needs related to educational institutions such as improvement of the academic programs.

There is an important study done by Al-Dosary (1991) which examined the possibility of reducing the number of overseas workers in Saudi Arabia. The study aimed to evaluate the Saudization of the labor force and find the circumstances under which it would be possible to reduce the number of overseas staff without disturbing the development process in the country.

In order to approximate the supply and demand of the Saudi work force, the author used a socioeconomic labor force model developed by the Battelle Memorial Institute research team in 1966. The model has both supply and demand sides and requires a matrix distribution of the labor force and demographic data. The supply analysis requires educational achievement, and labor force participation rate, the total population breakdown, and labor force participation rate by age group. The demand side requires an industry-by-occupation sharing of the work force, the total employed by industry sector, and education achievement by occupation distribution.

Four projections were generated under different economic scenarios for the years 1990, 1995, and 2000. According to the most probable state, the supply estimate suggested the availability of 1,408,4,72 Saudi employees in 1990. The demand estimate for 1990 showed a need for 3,219,534 employees. The difference was the need for foreign staff.
Al-Dosary concluded his study saying Saudi Arabia must carry on relying heavily on foreign employees. Therefore, short-term and long-term solutions were recommended. However the study did not take into consideration of the programs improvement to meet the market needs.

The example of Sheffield City Libraries was addressed by Mendelsohn (1994). The libraries decided they would involve staff at all levels in the library system selection process. Peter Bayliss, the information system manager, explained: "we formed a selection team comprising 50 per cent library assistants and 50 per cent managers, but early on we discovered that the library assistants, who were mostly young women, were uncomfortable expressing their views alongside people who were their managers". Study circles of 6 library assistants and a facilitator were each set up for staff to share their views. Within weeks they were ready to participate in the selection process. "At the end of the day we bought the system the majority of staff wanted us to buy, and there is tremendous enthusiasm for the new system."

Change may cause anxiety and stress among some staff, but not all. Staff who joined the profession in order to work with books may view automation as a threat to their way of working.

Lim and Klobas, (2000) conducted a study entitled “Knowledge management in small enterprises”. Their study aimed to describe the extent to which six factors drawn from the theory and practice of knowledge management can be applied in small organizations. There are three case studies used to clarify the similarities and dissimilarities between knowledge management in smaller and larger organizations along six factors in this framework, namely: the balance between need and cost of knowledge acquisition; the extent to which knowledge originates in the external environment; internal knowledge-processing; internal knowledge storage; use and
spread of knowledge within the organization; and attention to human resources. The authors used two techniques in this study; surveys and interviews, and a list of questions, which reflected the major organizational conditions, attitudes, decisions, and activities supported by knowledge management theorists and practitioners under each of the six factors. Three small businesses contributed to the research based on the framework. The owner or general manager of each business completed a short survey designed to determine the extent to which small businesses which had not been exposed to formal knowledge management practices shared the organizational environments, attitudes and practices espoused by knowledge management theorists and practitioners and included in the framework. The most important findings were that organizational structure and human resource policies strongly influenced the ways in which the organizations implemented their knowledge, and that the primary concepts of knowledge management have the ability to be adapted from large to small organizations. Moreover, each organization had a different technique of knowledge storage, differences among the organizations strongly reflected differences in management styles, the external sources of knowledge for these small organizations reflected similar needs and variations to those of larger organizations, and none of the organizations had systematic methods for environmental scanning. The researchers recommended information professionals.

1. Smaller organizations' greatest need for knowledge management is the need to build, maintain and use effective and cost-efficient. Such knowledge storage areas might take several forms, from the physical records management systems to a system integrated with existing office communication systems.

2. The organizations rejected formal computer-based management systems as an inadequate use of their limited resources; two of the organizations also recognized the need for better management of their knowledge records.
3. A formal information management system well integrated into their day-to-day work would enhance their ability to share and to retrieve documents and knowledge and records.

**Characteristics of Professionals Workers**

Bhairi (1981) presented a study on the characteristics of workers in Libya. He used Libya’s economic objectives to plan whole manpower necessities at various skill levels as well as the number of foreign employees of different skills from 1981 to 1985. Bhairi used the five skill levels of manpower recognized in the first draft of the second Libyan five years plan (1981-1985). After assessing the predictable output of each economic sector during 1980-1985 and the predictable increments from these records, he calculated the productivity coefficient, technical coefficient, the increase in the quantity of labor, and the total manpower necessities of various skill levels for each economic sector.

Later obtaining the evaluated manpower necessities regardless of nationality, he calculated the indigenous labor supply of different skill levels for each year. Then, by subtracting this value from the evaluated whole manpower requirement of different skill levels for each year; he reached the estimated foreign manpower necessities for the Libyan economy. However this study did not take into a count the supply and demand of manpower for Libya.

**Human Resources of Academic Libraries Planning and Development.**

In 1993 Rehman conducted a study titled “Training of School Resource Center Personal in Malaysia, Status and Prospects”. In this study, he reviewed the availability and preparedness of the school resources center in Malaysia by developing a framework for the review of the existing training programs. The framework for the review developed by Rehman addresses the following factors:
a. Educational – cum – professional content core of the school resources center organizers.

b. Content core of the training programs.

c. And needed resources.

Taking into consideration local particularities, an adjusted framework was applied in the Malaysian context. This review indicated that:

- Despite applying a variety of training programs, there is a huge gap between demand and supply at present.
- Most of these programs had a crash nature
- This is a lack in imparting the needed skills to the trainees.

Considerations from the above analysis led to the following recommendations made to launch a multi-faceted training program at the university level, teacher training colleges, and continuing training centers.

1. One may consider initiation of master and post-graduate degree programs as part of the library and information study programs in resource centre management.

2. One may require universities offering bachelor program in education in order to add media centre management especially to their existing program.

3. A career option may also be provided for those enrolled in the program with the objective of becoming resource centre organizers in primary schools. This task may be fulfilled by the eleven teacher training colleges.

4. The specialist teacher training institute should focus on training only those teachers who opt to become full-time resources centre staff.

This study on manpower planning and development was limited only to school library sectors.

Psacharopoulos, G. conducted a study in 1991, which study entitled From Manpower Planning to Labor Market Analysis. The main driving force of this thesis is
to re-scrutinize the manpower planning debate in developing countries which was forceful in the 1970s and 1980s but has been relatively quiet since then. That debate came to a conclusion that the notion that all estimating techniques that asserted to assess manpower prerequisites in the future were uncertain and that the future lays with labor market analysis and labor market signaling. The present study disputes the first notion but agrees that the previous often over-simplified and non-flexible forecasting models should be enhanced with better data and improved labor market analyses.

**Brief Steps of the Research process**

This document, assuming the need for academic libraries planning, evaluates the level of appropriateness of two methodologies, namely King Research, and Moore pertaining to projecting Human Resource needs of libraries in the Palestinian community. It analyses the current circumstances in which the libraries, their 89,857 students and other stakeholders find themselves in, and consequently evaluates how applicable one methodology may be over the other in determining future needs for planning ahead, and proposes the construction of a Palestinian National Library Organism. This historical and economic thesis argues that due to many constraints the King Research methodology would not be applicable. That because it would require extensive data on past social and economic factors that affect the information workers market in Palestine. There are such data which are not available; the data that can be obtained are not complete or reliable for many reasons: there is no professional center or association in Palestine, such as Bureau of Labor Statistics or National Center for Education to collect general employment data. Neither are there associations similar to the Malaysian library associations that publish regularly reliable annual statistics. Most of the country’s files were damaged, destroyed, wrap in the Israeli invasions since 1948. So the only reliable source for statistical data in Palestine is the central statistical office.
in the Ministry of Higher Education which covers the academic libraries which publish the Annual Statistical Theoretical. So Gaza Strip is now experiencing a new era with changes in almost all aspects of life, especially the population level education, and economy. The information environment has changed also. According to this thesis, the current suboptimal condition of the libraries is primarily due to intrusions by Israeli military since 1948, long-term effects from these events, such as loss of manpower due to death, deportation, imprisonment and living conditions, and other related and unrelated political and economic factors.

The two major issues that are the focus of this document are manpower and equity and access to library material for Palestinians. Many examples of existing libraries are given from both public and private sectors and specific setbacks are illustrated in the story of Palestinian Library and Information Association (PLIA). Restricted movement due to check-points and curfews, and undefined legislation issues are other factors which inhibit compiling predictions based upon quantitative analysis. Hence, it is argued, qualitative analysis is an accurate means of compiling useful data in the Palestinian situation with regard to human resource needs, but not comprehensive enough. Thus a new comprehensive methodology, incorporating available quantitative information, must be developed and applied to the study of and projected human resource needs for Palestinian libraries and their communities. The only reliable sources for data on current and future plans are questionnaires sent to current employees and interviews with middle and top level management.
METHODOLOGY

The researcher used a comprehensive approach for this study, and has included a survey of current information workers and employers. The survey research method is employed in order to look at the characteristics of current library and information workers in Gaza Strip. In addition, the demographic factors also are subjected to statistical testing to find the relationship between demographic factors and continuing education. Descriptive statistics and chi-square test were used to analyze the data. The researcher conducted interviews with appropriate top-level and mid-level officials in the academic libraries. The interview was conducted based on the structured plan. Who are currently employed in the academic libraries? An analysis of related literature was also conducted and the manpower forecasting model designed by Moore (1982) was used. These research techniques were used to provide answers to the research questions:

Population & Instruments

The population of the study consists of all full-time staff working in academic libraries and information centers in Gaza Strip including (a) professionals, (b) paraprofessionals, and (c) clerical workers. All academic libraries surveyed. In addition to the above, 60 middle and top management officials were interviewed.

Questionnaire & Interviews

The Questionnaire was apparently divided into two segments: the questionnaire has been sent to all academic libraries. Part I: comprised of queries concerning, a) Demographic Characteristics of the respondent like age, gender and job title, b) Educational & Professional Characteristics, such as academic degree and training, experience and language skills, public relations and communication skills. Interviews were conducted with mid-level and top level managers.
Supply & Demand

One distressing fact that today’s library and information science is facing is related with the aging of the library staff. In fact, people notice that a great number of the librarian workforce is approaching retirement age and a very few young people are appointed to enter the profession. The total supply comprises those people who have sufficient training or experience to enable them to work in the information sector. The total supply can be divided into two parts: (a) active supply composed of all those who are actually working; and (b) latent supply comprising those who do not have a job in the information sector and are actively attempting to obtain one. They may be unemployed or working in other sectors of the economy, but if a suitable job were advertised, they would apply for it. The latent supply forms a sort of reserve, which may enter the active supply at some time in the future. Neither the active supply nor the latent supply is static.
The stock which represents demand in the model is simply the number of posts, both, engaged and vacant, for the staff in the system, the information sector.

The demand is increased as a result of (1) growth in the size of existing units, or departments, and (2) the configuration of new units or departments.

In order to use the model to arrange the forecasts, supply and demand should be expressed in an equation.

The equation for supply is as follows:

Source: Moore (1986).
Supply \quad S_2 = S_1 + a + b - c - d

Where

\( S_1 \) = supply at the beginning of the period

\( S_2 \) = supply at the end of the period

\( a \) = the number of workers trained in the period

\( b \) = re-entrants during the period

\( c \) = wastage during the period

\( d \) = absolute loss during the period

Similarly, the equation for demand is the following:

Demand \quad D_2 = D_1 + w + x - y - z

Where

\( D_1 \) = demand at the beginning of the period

\( D_2 \) = demand at the end of the period

\( w \) = increases from existing units during the period

\( x \) = increases from new units created during the period

\( y \) = decreases from external factors during the period

\( z \) = decreases from internal factors during the period

The overall recruitment and training requirement is

\( D_2 - S_2 \)

Collection & Analysis Data procedures

The researcher returned to the Gaza Strip in July 2004 to collect the necessary data. The first step was to locate the telephone numbers and addresses of all the academic libraries and other libraries selected to participate in the study. These other libraries were government, semi-government and private libraries. The researcher visited each institution to interview the officials, head librarians, and directors of
academic information centers identified in the population of the study. The total number of the population was identified as information workers in Gaza Strip were of who returned complete questionnaires.

The researcher used descriptive statistical analysis to answer the following research questions by using statistical graph and percentages.

The researcher has selected the chi-square test of independence; Chi square is a non-parametric test of statistical significance for bivariate tabular analysis.

Later analysis and findings of the collected data were presented in the following section.
Group interview data was analyzed based on: big / prominent ideas, a selection of core ideas and choice or meaning of words.

Questionnaire data was analyzed to produce statistical & percentage information for instance CHI-SQUARE TEST. For significant differences.

Sample Selection:
1. Sample for Questionnaire 1.
2. Sample of interviews participants.
3. Sample for Questionnaire 2

Design & Modification:
1. Questionnaire 1 & Interview guide
2. Questionnaire 2
3. Instruments Design Stage

Data Collection:
1. Empirical Survey 1 and interview discussion session conducted

Data Coding:
1. Questionnaire data collected & coded using an SPSS 12.0
2. Data from interview sessions collected with an audio recorder, transcript & coded using latent & manifest procedures

Pre-test:
Questionnaire 1 & Interview guide Pre-test

Analysis:
Questionnaire data was analyzed to produce statistical & percentage information for instance CHI-SQUARE TEST. For significant differences

Analysis:
Group interview data was analyzed based on: big / prominent ideas, a selection of core ideas and choice or meaning of words

Data integration:
Both Quantitative & Qualitative data was integrated to complement each other during the presentation & discussion of research findings.
The summary of the literature review is presented in the following Table 2.1:

**Table 2.1 Main Concept from Literature Review**

<table>
<thead>
<tr>
<th>Resources needs and information taking practices</th>
<th>As a method or information resource</th>
<th>Citation(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Resources Planning and Development at Academic Library</td>
<td>IT-related specialists and experts in management, roles of librarians and other professionals. developed approach and response to dynamic human resources challenges and opportunities unfolding through strategic planning and change management process, used qualitative methods</td>
<td>Psacharopoulos (1991), Rehman (1993), Vipul (2008)</td>
</tr>
</tbody>
</table>
Academic Libraries: Demographic and Professional Characteristics

The Academic Libraries in Gaza Strip surveyed and identified 45 Information Workers in Academic Libraries who met the study criteria. Of these the largest group revealed was Professionals; 24 workers. The following group was Para-Professional with bachelor's degree 18 respondents. The least was Para-Professional having Associate Degrees with 3 respondents. Furthermore, the study depicted that of the 45 respondents, 35 (77.8%) workers live in the city and are able to reach work on time, while 10 (22.2%) of them live outside the city and have to come to the city for their work after crossing the checkpoints. Refer to Table 4.23

Table 4.23 Professional Status with Respect to Location as Reported by Respondents in Academic Libraries (n = 45)

<table>
<thead>
<tr>
<th>Professional Status</th>
<th>Work in the City</th>
<th>Outside city work</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Professional</td>
<td>16</td>
<td>66.7</td>
<td>8</td>
</tr>
<tr>
<td>Para-Professionals with Bachelors Degree</td>
<td>16</td>
<td>88.9</td>
<td>2</td>
</tr>
<tr>
<td>Para-Professionals with Associate Degree</td>
<td>3</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>35</td>
<td>77.8</td>
<td>10</td>
</tr>
</tbody>
</table>

Talking about the age of the respondents working in Academic Libraries See Table 4.24, the highest enumeration came from 56 years or older (20 or 44.4%), following this category were the respondents aged 31 – 45 (11 or 24.4%), then were the respondents aged 46 – 50 (5 or 11.1%). Following the above groups were respondents aged 26 – 30 (4 or 8.9%), then were workers aged 25 or less (3 or 6.7%) and the least were the respondents aged 51 – 55 (2 or 4.4%).
Table 4.24 Ages of Respondents in Academic Libraries
(n = 45)

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 or Less</td>
<td>3</td>
<td>6.7</td>
</tr>
<tr>
<td>26 – 30</td>
<td>4</td>
<td>8.9</td>
</tr>
<tr>
<td>31 – 45</td>
<td>11</td>
<td>24.4</td>
</tr>
<tr>
<td>46 – 50</td>
<td>5</td>
<td>11.1</td>
</tr>
<tr>
<td>51 – 55</td>
<td>2</td>
<td>4.4</td>
</tr>
<tr>
<td>56 or older</td>
<td>20</td>
<td>44.4</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The academic degrees of respondents in Academic Libraries as shown in Table 4.25, indicates that 24 or 53% had majored in Library and Information Science. Among the other respondents, 2 or 4.4% respondents had Associates degree, 16 or 35.7% respondents had Bachelor's Degree while 3 or 6.7% respondents had Master's Degrees in other fields (Computers, Engineering, Business, Management).

Talking about the respondents holding degrees in Library and Information Sciences, 4 or 8.9% respondents had Associate's degree, 11 or 24.4% respondents had Bachelor's Degree, while 5 or 11.1% respondents had Post graduate Diplomas, 2 or 4.4% respondents had Master's and 2 or 4.4% passed High school or less.

Table 4.25 Highest Academics Degrees of Respondents in Academic Libraries
(n = 45)

<table>
<thead>
<tr>
<th>Academic Degree</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library and Information Science</td>
<td>4</td>
<td>8.9</td>
</tr>
<tr>
<td>Associate Degree</td>
<td>11</td>
<td>24.4</td>
</tr>
<tr>
<td>Bachelors</td>
<td>5</td>
<td>11.1</td>
</tr>
<tr>
<td>Post Graduate Diploma</td>
<td>2</td>
<td>4.4</td>
</tr>
<tr>
<td>MLIS</td>
<td>2</td>
<td>4.4</td>
</tr>
<tr>
<td>High School or Less</td>
<td>2</td>
<td>4.4</td>
</tr>
<tr>
<td>Other Major</td>
<td>16</td>
<td>35.7</td>
</tr>
<tr>
<td>Bachelors</td>
<td>2</td>
<td>4.4</td>
</tr>
<tr>
<td>Associate Degree</td>
<td>3</td>
<td>6.7</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
<td>100</td>
</tr>
</tbody>
</table>
Regarding the Years of Experience as Reported by the respondents in Academic Libraries, the highest respondents belonged to the category of 4 – 6 years of experience; 15 (33.3%). Refer to Table 4.26. Following were the respondents having 7 – 9 years of experience; 11 (24.4%), whereas workers having 1 – 3 & 10 – 13 years of experience were 7 (15.6%) each and that of less than 1 year's experience were 2 (4.4%). Talking about the workers with greater years of experience; 14 -17, 18 – 21 and 22 - 25 years were 1 (0.5%) each.

Table 4.26 Years of Experience in Academic Libraries  
(n = 45)

<table>
<thead>
<tr>
<th>Experience</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 year</td>
<td>2</td>
<td>4.4</td>
</tr>
<tr>
<td>1 - 3</td>
<td>7</td>
<td>15.6</td>
</tr>
<tr>
<td>4 – 6</td>
<td>15</td>
<td>33.3</td>
</tr>
<tr>
<td>7 – 9</td>
<td>11</td>
<td>24.4</td>
</tr>
<tr>
<td>10 – 13</td>
<td>7</td>
<td>15.6</td>
</tr>
<tr>
<td>14 – 17</td>
<td>1</td>
<td>2.2</td>
</tr>
<tr>
<td>18 – 21</td>
<td>1</td>
<td>2.2</td>
</tr>
<tr>
<td>22 – 25</td>
<td>1</td>
<td>2.2</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
<td>100.0</td>
</tr>
</tbody>
</table>

According to Table 4.27 almost all (43 or 95.6%) could speak and read excellent Arabic, while (2 or 4.44%) couldn't read / speak Arabic. An aggregate of (35 or 77.77%) people could speak / read English where (10 or 22.22%) people couldn't read / speak English; Meanwhile, a total of (17 or 37.77%) people could speak / read other languages and (28 or 62.22%) people couldn't read / speak other languages.
Table 4.27 Language competencies Reported by Respondents in Academic Libraries (n = 45)

<table>
<thead>
<tr>
<th>Language</th>
<th>Yes</th>
<th>No</th>
<th>No Response</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Arabic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speak</td>
<td>43</td>
<td>95.6</td>
<td>2</td>
<td>45</td>
</tr>
<tr>
<td>Read</td>
<td>43</td>
<td>95.6</td>
<td>0</td>
<td>45</td>
</tr>
<tr>
<td>English</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speak</td>
<td>35</td>
<td>77.77</td>
<td>10</td>
<td>45</td>
</tr>
<tr>
<td>Read</td>
<td>35</td>
<td>77.77</td>
<td>0</td>
<td>45</td>
</tr>
<tr>
<td>Other Languages</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speak</td>
<td>17</td>
<td>37.77</td>
<td>28</td>
<td>45</td>
</tr>
<tr>
<td>Read</td>
<td>17</td>
<td>37.77</td>
<td>0</td>
<td>45</td>
</tr>
</tbody>
</table>

Almost all (43 or 95.6%) could speak and read excellent Arabic where 2 or 4.44% couldn't speak / read Arabic. An aggregate of (2 or 4.44%) people couldn't speak and (6 or 13.33%) people couldn't read English; (5 or 11.11%) people could speak on an average and (3 or 6.66%) could read average English; (8 or 17.77%) people could speak English well and (6 or 13.33%) could read good English; (16 or 35.6%) people could speak on very well and (16 or 35.6%) could read very good English; (4 or 8.88%) people could speak excellent English and (4 or 8.88%) could read excellent English whereas no responses were given by (10 or 22.22%) respondents. Refer to Table 4.28. Meanwhile, An aggregate of (4 or 8.88%) people couldn't speak and (1 or 2.22%) people couldn't read other languages; no one could speak on an average and (3 or 6.66%) could read average other languages; (12 or 26.66%) people could speak other languages well and (11 or 24.44%) could read good other languages; (1 or 2.22%) people could speak on very well and (2 or 4.44%) could read very good other languages; no one could speak / read excellent other languages whereas no responses were given by (28 or 62.22%) respondents.
Table 4.28 Levels of Language Competencies Reported by Respondents in School Libraries
(n = 45)

<table>
<thead>
<tr>
<th>Level</th>
<th>Non-Speaker</th>
<th>Middle</th>
<th>Good</th>
<th>Very Good</th>
<th>Excellent</th>
<th>No reply</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Arabic Speaking</td>
<td>2</td>
<td>4.44</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>95.6</td>
<td>43</td>
</tr>
<tr>
<td>Reading</td>
<td>2</td>
<td>4.44</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>95.6</td>
<td>43</td>
</tr>
<tr>
<td>English Speaking</td>
<td>2</td>
<td>4.44</td>
<td>5</td>
<td>22.22</td>
<td>8</td>
<td>35.6</td>
<td>16</td>
</tr>
<tr>
<td>Reading</td>
<td>6</td>
<td>13.33</td>
<td>5</td>
<td>8.88</td>
<td>8</td>
<td>13.33</td>
<td>16</td>
</tr>
<tr>
<td>Other Languages Speaking</td>
<td>4</td>
<td>8.88</td>
<td>0</td>
<td>0</td>
<td>12</td>
<td>26.66</td>
<td>1</td>
</tr>
<tr>
<td>Reading</td>
<td>1</td>
<td>2.22</td>
<td>3</td>
<td>6.66</td>
<td>11</td>
<td>24.44</td>
<td>2</td>
</tr>
</tbody>
</table>

Academic Libraries

Table 4.54 shows the current supply, demand, and shortage in June 2004 and the projected supply, demand, and shortage by June 2009. The data indicates that the current demand for information workers is 135, the supply is 116, and the shortage is 19 information professionals. Of that number 11 are professionals and 8 are paraprofessionals. There is no shortage of clerical staff.
Table 4.54 High projections: Demand for Information Workers in Academic Libraries: June 2004 and (Projected) June 2009

<table>
<thead>
<tr>
<th>Supply / Demand</th>
<th>Professionals</th>
<th>Para-Professionals</th>
<th>Clericals</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Demand: June</td>
<td>39</td>
<td>67</td>
<td>29</td>
<td>135</td>
</tr>
<tr>
<td>2004</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current Supply: June</td>
<td>28</td>
<td>59</td>
<td>29</td>
<td>116</td>
</tr>
<tr>
<td>2004</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current Shortage: June</td>
<td>11</td>
<td>8</td>
<td>0</td>
<td>19</td>
</tr>
<tr>
<td>2004</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Projected Demand: June</td>
<td>195</td>
<td>142</td>
<td>57</td>
<td>394</td>
</tr>
<tr>
<td>2009</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Projected Supply: June</td>
<td>40</td>
<td>52</td>
<td>23</td>
<td>115</td>
</tr>
<tr>
<td>2009</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Projected Shortage: June</td>
<td>155</td>
<td>90</td>
<td>34</td>
<td>279</td>
</tr>
<tr>
<td>2009</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.54 also shows that by June 2009 the projected demand will reach 394, the supply will be 115, and the shortage is expected to reach 279. Of that number, 155 are professionals, 90 are paraprofessionals, and 34 are clericals. The sharp increase in demand for information professionals may be related to the continued growth of academic libraries in the next five years. The Palestinian government has adopted a policy of moving toward shelf-reliance. By increasing the Palestinian manpower of the future; among the best alternatives to realize this policy is to invest in higher education, including Palestinian universities and faculties of the public Authority for Applied Education and Training. Plans are under way to study the future expansion of higher education. The Public Authority for Applied Education and Training has contracted several consultants in different fields from England and the United States to help in the rebuilding process and planning for future expansion. Another factor that influences the expansion of the library system at the Public Authority is the separation of girls 'and boys' colleges that require a separate library in each college. The library director at the Public Authority estimated the number of academic libraries to be 23 by the end of 2004.
Table 4.55 presents a middle projection of demand for information workers in academic libraries. The data indicates that the demand for information workers will reach 320 by June 2009. The shortage is expected to reach 205 information workers. Of that number there are 107 professionals, 69 paraprofessionals, and 29 clericals.

Table 4.55 Middle Projection: Demand for Information Workers in Academic Libraries in 2009

<table>
<thead>
<tr>
<th>Supply / Demand</th>
<th>Professionals</th>
<th>Para-Professionals</th>
<th>Clericals</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projected Demand: June 2009</td>
<td>147</td>
<td>121</td>
<td>52</td>
<td>320</td>
</tr>
<tr>
<td>Projected Supply: June 2009</td>
<td>40</td>
<td>52</td>
<td>23</td>
<td>115</td>
</tr>
<tr>
<td>Projected Shortage: June 2009</td>
<td>107</td>
<td>69</td>
<td>29</td>
<td>205</td>
</tr>
</tbody>
</table>

The increase in demand for information workers is to fill the current vacancies, those caused by retirement in the next five years, and the future growth of the academic library system. Palestinian University is expected to implement automation. In addition, a new building is under construction on the campus to house a science library, an engineering library, and the libraries administration. This library is expected to move specialized information services to the research level. Also, the library department at the Public Authority for Applied Education and Training has contracted with the British Council to rebuild their Library System, introduce automation and train their Library Staff.

Table 4.56 presents Low projections for Information workers in 2009, indicating that the demand will be 283 with a shortage of 168 information workers: 94 professionals, 52 Para professionals and 22 Clericals. See Figure 4.3
Table 4.56 Low Projections: Demand for Information Workers in Academic Libraries in 2009

<table>
<thead>
<tr>
<th>Supply / Demand</th>
<th>Professionals</th>
<th>Para-Professionals</th>
<th>Clericals</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projected Demand: June 2009</td>
<td>134</td>
<td>104</td>
<td>45</td>
<td>283</td>
</tr>
<tr>
<td>Projected Supply: June 2009</td>
<td>40</td>
<td>52</td>
<td>23</td>
<td>115</td>
</tr>
<tr>
<td>Projected Shortage: June 2009</td>
<td>94</td>
<td>52</td>
<td>22</td>
<td>168</td>
</tr>
</tbody>
</table>

Figure 4.3 Academic Libraries projected 2009
RECOMMENDATIONS

The aim of this study was to examine the current status and to establish profiles of individuals working in the Academic Library sector in Gaza Strip, to determine the manpower requirements necessary to staff current and future information facilities in Gaza Strip, to compare the accuracy and achievement of the projected number of Academic library workers by mid and top level managers in June 2004 to June 2009. Then to make, on the basis of the findings, short, medium, and long-term recommendations for the improvement of Academic library human resources in Gaza Strip.

The researcher used a survey research method by employing the questionnaire and interviews as the survey instrument for gathering data on current information workers and employers in the study. The researcher conducted interviews with appropriate top-level and mid-level officials in the Palestinian National Authority, semi-government, and the private sector, who are currently employed in the library science and information center sectors. The population of the study consists of all full-time staff working in libraries and information centers in Palestine including: (a) Professionals, (b) Paraprofessionals and, (c) Clerical workers. All academic libraries were surveyed. In addition to the above, 60 middle and top management officials, such as, directors of libraries and information centers, directors of computer centers were included. The survey was conducted in three phases.

In Phase I the questionnaires were sent to all libraries and information centers workers, and the questionnaires contained: Demographic, academic and professional characteristics; age, gender, job title, academic degree, training, experience, language skills, public relations and communication skills. Because of the limited knowledge of the English Language, the questionnaire was also translated into Arabic. In phase 2,
interviews were also conducted with 60 of top and middle level management officials, such as, directors of libraries and information centers, directors of computer centers.

Based on the interview a list of areas in which information workers lack necessary preparation were identified and arranged according to priority from 1 – 12 (1 being the most problematic and 12 being the least problematic). A list of common problems such as library automation/computer applications, online searching and CD ROM, audiovisuals, technical services, library administration, indexing & abstracting, basic library skills, information services, collection management, government documents, newspaper librarianship, medical librarianship were identified.

According to the managers, there has been an increase in the demand for librarians in the past five years. They also think that the need for librarians will continue to rise over the next five years. Moreover, top and middle managers along with head librarians, library directors, and information centers in the Gaza Strip reported that there will be great changes in the organizational and restructuring role of librarians. Based on the interview the following common factors have been identified to affect the role of librarians. The most prominent factors that will bring about change in the role of the librarian are re-engineering and an increased adoption of information technology. Another major role shift will be a growing need for librarians to perform leadership and managerial roles as well as a demand for them to perform a generalist role.

Regarding the relationship between continuing education and job title, gender, education level there were significant difference. There was significant difference between the job title categories (p-value less than 0.0005), professional, Para-professional (university degree), and Para-professional (Associate Degree) and continuing education; there was also a significant difference between the gender regarding the intentions to continuing education (p-value = 0.001); similarly there was a
significant difference between continuing education and those holding specialized
degrees (p-value<0.005).

Based on the interview the common human resource challenges were identified
accordingly. The most important challenges were about retirement, experience gap left
after retirement, and the leadership and management qualities of the current staff to be
able to fill the void created by retirements.

The second challenge was handling the financial issues, while the third
challenge was on information technology. With regards to human resources challenges
the most important elements was on employment especially recruiting the mid– or
senior-level positions, the difficulties of finding qualified candidates owing to the skills
needed by their employer. Such skills include the various aspects of management,
leadership systems, or traditional functions. However, concerning library education 60%
of the workers felt there is a need to increase training in several fields as well as
curriculum revision.

Based on the interview a list of problems and obstacles related to information
human resources were identified and arranged according to priority from 1 – 8 (1 being
the most problematic and 8 being the least problematic). A list of common problems
such as absence of human resource development policies, plans, and strategies
regarding HR development, poor status, political crises, scarcity of information
professionals, non-availability of suitable training programs in Palestine, lack of
institutional interest and support, salaries too low to attract professionals, lack of
motives and incentives including promotion or salaries.

It important to note that this study was somewhat limited due to the Israeli
occupation, which divided the West Bank to many cantons and prohibited the migration
/movement of people from one city to another. The researcher limited his study to Gaza
Strip Libraries and Information centers which has the same conditions as the West
Bank. So the small number of top and middle level managers interviewed represents one of the difficulties that the researchers face in data collection. Because of the limitation of the study the researcher not able to cover West Bank library and information centers workers which should be covered as the study concern a state of Palestine.

**Recommendations**

1. Library and Information science sector should invest not only in providing training to the new entrants in the industry but also the present workforce.
2. It should collaborate with the ministries of higher education in order to provide innovation in delivering library and information science programs.
3. It is also the obligation of the Palestinian universities and colleges to provide viable basic education regarding the subject nationwide.
4. More universities should offer degrees, diplomas and certifications in Library and Information Science programs.
5. It is the obligation of the universities to reckon the economic shift and act accordingly in allocating ample resources and training material.
6. Curricula should be revised with the collaboration between Higher education faculty members to achieve excellence in the field of library and information science and to provide quality education.
7. Continuing education and professional development of faculty and staff should be encouraged.
8. Graduate level programs should be developed.
9. Restrictions should be uplifted from Library and information science related departments to have fair access to their courses and programs.
10. It is also the obligation of the professional societies to train and educate the library and information science professionals.
11. Professional societies should continue developing curricula related to library and information science.
12. Distinctions should be made between professionals, paraprofessionals, and clerical information workers. Professional tasks should be assigned to professionally qualified individuals only.
13. There should be a standardized staffing pattern nationwide.
14. Proper channel should be developed for doing research on detailed statistics and demographic data on library and information workers in the country. It should also study and analyze manpower related supply & demand, problems and recommend solutions.

15. National policies on library and information manpower development should be reviewed.

The researcher has attempted to study the supply and demand of information workers in the academic libraries in Gaza Strip. Although the findings reflect that of a situation in Gaza Strip but in reality this could not be achieved until the Israeli occupation are totally alienated from the soil of Palestine. If this happens in the near future the outcome of the study would be more robust and universal. Future studies in the same area of research will give a better picture of the actual situation of information workers and their market needs.
REFERENCES


