Time Management Operations of Heads of Academic Departments in Libyan Universities

This thesis is submitted in partial of fulfilment of the requirement for the degree of Doctor of Philosophy at Liverpool John Moores University

By

Abtesam Ali H. Elabbar

Student No: 394282

Director of Studies: Professor Mark Brundrett

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Acknowledgements

First and foremost, I must acknowledge that it is God who has helped me and given me the health, the ability and the patience to complete this work. However, I also wish to thank the many people to whom I grateful for their help and support along my PhD journey.

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Abstract

The overall objective of the research outlined in this document was to analyse the practice of time management operations by the heads of academic departments in Libyan universities. This was accomplished through attention to four sub-aims: firstly, the extent to which time management operations are practiced by heads of academic departments in Libyan universities according to the specific fields of planning, organising and controlling time; secondly, to determine which principles of time management are most commonly used by heads of departments; thirdly, to define which factors, both internal and external, have impacted on the practice of time management by Libyan heads of academic departments; and, finally, to determine whether there are any significant differences in time management practice as a result of key variables, including managerial experience, specialization, qualifications, gender and the number of universities heads of department are working in.

The data was collected through the use of two main tools, a self-administered questionnaire and semi-structured interviews. The questionnaire was designed to employ a likert scale, and was piloted before final administration in order to ensure validity and reliability. The questionnaire was distributed by hand to 331 heads of academic departments in Libyan universities and the response rate was 309 completed questionnaires out of 331 administered. The semi-structured interviews lasted for about one hour in each case and involved 15 heads of academic departments. The two tools were employed in order to gain the strengths of each and so to provide a greater understanding of the topic under investigation, to complement each other and to enrich the research findings.

The gathered data was translated from raw material into usable information to be ready for statistical analysis and the 309 received questionnaire forms were analyzed through implementation of descriptive statistics using SPSS software. The semi-structured interviews were analyzed through textual analysis by reading and re-
reading the interview content. The content was subsequently analysed carefully to
gain an understanding of the key themes and in order to identify commonalities and
differences. The researcher the organised the material by dividing the data into
groups of themes under the main key issues. Quotations have been used in order to
exemplify the thoughts of the respondents about the issues discussed.

The analysis of data revealed that time management operations are not practiced
time management operations are not practiced well by heads of academic department in Libyan universities. However, control
operations are not practiced well by heads of academic department in Libyan universities. However, control
over time is practiced better than time planning and time organizing and control
over time is practiced better than time planning and time organizing and control
over time interruptions is the principle that is most commonly used by the heads of
over time interruptions is the principle that is most commonly used by the heads of
academic department. With regard to time wasters, heads of academic department
academic department. With regard to time wasters, heads of academic department
affirmed through their answers that external factors such as poor channels of
affirmed through their answers that external factors such as poor channels of
communication between the department chair and faculty, hesitation in decision
communication between the department chair and faculty, hesitation in decision
making due to lack of clear wanted information, unexpected visitors and the overall
making due to lack of clear wanted information, unexpected visitors and the overall
instability of Libyan universities’ management. as a managerial factor are the most
instability of Libyan universities’ management. as a managerial factor are the most
important factors that impede the practice of time management, surprising, no
important factors that impede the practice of time management, surprising, no
differences in the practice of time management were found according to the
differences in the practice of time management were found according to the
managerial experience, specialization, qualifications, gender or number of
managerial experience, specialization, qualifications, gender or number of
universities individuals were working at.

The researcher believes that these findings may aid in developing university
administration in Libya in particular and in developing societies in general through
discovering the main shortcomings and problems which are faced by heads of
academies departments. The researcher thus makes key recommendations for
practical procedures which may be adopted to ameliorate the problems faced by
head of department in managing their time. It is suggested that consideration
head of department in managing their time. It is suggested that consideration
should be given to reconsidering the current articles of governance relating to the
duties heads of the academic department and to the processes used in the selection
duties heads of the academic department and to the processes used in the selection
of the heads of academic department in Libya. It is also suggested that training and
development courses for the professional and managerial growth of department
heads in Libyan universities should be established.
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Chapter One

Introduction to the thesis

Background to the Research

1.1 The nature and circumstances of Higher Education in Libya

Universities in the developing countries have tended to receive more attention than other higher education institutions in the education system since attitudes towards education in the Arab and developing countries arise from the traditional cultural background that obtains in those regions. This background often influences views about higher education institutions including the conception of the value of higher education, whether in university or other higher education institutions (Algosaibi, 1994). Chapman and Austin (2002) have stated that higher education has undergone a rapid growth in both developed and developing countries to meet social demand as a consequence of the substantial economic growth. Within the Libyan environment, higher education is an important sector of the public education system and this is especially true of the Libyan universities. After Libya's independence in 1951, the first university in Libya was established in Benghazi. Originally it housed only the Faculty of Arts and Education but this was followed in 1957 by the establishment of the Faculty of Science, and the Faculty of Economics and Commerce which were followed by the Faculty of Law in 1962, Faculties of Agriculture in 1966 and the Faculty of Higher Technical Studies and the Higher Teacher Training College in 1967 (El-Hawat, 1995; Bobtanh, 1994; Alfaidy and Ibrahim, 1997). The number of universities increased considerably after the 1969 revolution from one university to four in 1970 and to fifteen universities in 1980. Indeed, Attir (2006) stated that by 2006 the number of universities had increased and spread across the country because of the increasing number of students enrolled in higher education since the 1980s and he noted further that the university system had been restructured to include many public universities. El-Hawat (1995) and El-Kikhiya (1995) interpreted the growth in student numbers to be due to:

- The impact of high demographic increase.
- The improvement in the schooling system.
- Free access to higher education institutions.
• The meeting of social demands.

In general, university level studies in Libya are divided into three stages, the Bachelors degree, the Masters' degree, and the Doctorate:

• First stage: Bachelor’s Degree; conferred after four to five years’ university study (five years in Architecture and Engineering) in universities and higher institutes.
• Second stage: Master's Degree; conferred after two years’ study following a Bachelor’s Degree and offered mostly by large universities, such as Garyounis and El-Fateh.
• Third stage: Doctorate; may be awarded after a further two years of research in such fields as Arabic, Islamic studies and Humanities, and is conditional upon the submission of a thesis.

According to the Ministry of Higher Education legislation issued in 1973 and followed by new act No.1 issued by the Ministry of Higher Education in 1992, higher education administration aims to achieve the following strategic objectives:

• Provide a qualified graduates and specialists in different fields according to the needs of labour market.
• Encourage and develop the movement of scientific research and expand the base of national consultations whether scientific, humanitarian or technical.
• Confirm the relationships between higher education institutions and the other local, Arab or international scientific institutions.
• Contribute in the planning and implementation of the development plans for society, and provide appropriate solutions to all problems and challenges facing the implementation of these plans.
• Develop science and knowledge to contribute in the development, progress and prosperity of civilization in Libyan society. (Ministry of Higher Education, 2008).

These objectives of higher education are usually determined according to the philosophy of society and their political, economic and social situations as well as cultural philosophy and conditions prevailing in the society. Thus, Fadl (1986) pointed out that the goals of higher
education in Libya are subject to constant change in accordance with the changes that occur frequently in political decisions in the Libyan society.

This change, whether in the legislation and decisions of higher education, or in increasing or reducing the number of universities occurs suddenly and without the necessary material, financial and human resources to meet the change and this has led to confusion and instability in Libyan universities. Bashir and Ali (2002) noted that these changes in the policies of university administration in Libya always occur in the absence of a clear vision for the future of university education. This lack of clarity of objectives, in addition to the absence of a clear and specific philosophy of the role of university education in the service of Libyan society, and the issue of instability in the Libyan universities and its negative impact on the practice of time management operations will be discussed in depth in the following chapter.

1.2 The concept of time in different cultures

Differences among individuals and between societies have led to large variations in how time is utilised as a resource. Al-Jeraisy (2004) indicated that the issue of time is a permanent human problem. Its concept varies according to motives, needs and the nature of the required functions and activities. Developed societies have realized the importance of time for the individual, but developing societies are still not aware of the value of time, and the bad consequences arising from poor investment of time. Therefore, time is wasted more frequently in these societies.

The early Muslim scholars have stated the importance of time in Islam. The characteristics of time were contained in the Quran and the Sunnah as well as its importance and value in the lived experience of the Muslim, since a Muslim is required to give a value to time and to invest this resource wisely. Therefore, time management features actually emerged from the early Muslims life before it was recognized by western scholars, such as Taylor, Fayol and others, who founded the modern theories of time management. Indeed, it is notable that early Muslims practised time management operations via the adoption of some 'modern' principles such as delegation and setting priorities.
In western societies time management theories commenced with the work of Frederick Taylor, Henri Fayol, and Henry Gantt. Such early management researchers studied time within the context of efficiency and productivity. For instance, Taylor's study aimed to increase productivity through a decrease in unnecessary activity by setting the time standard used for planning and scheduling work (Barnes, 1980). Davidson (2000) added that over fifty years ago, such time management pioneers astounded the industrial world by establishing time and motion procedures that enabled employers to get higher productivity from their workers. In this way Taylor established the basis of modern time management techniques, whereas Fayol developed fourteen management principles such as division of work, which are still used as basic time management principles. Moreover, Gantt created what is known as the principle of time analysis (Cole, 2004). In addition, Lakin (1973), Mackenzie (1972), and McCay (1959) suggested simple remedies such as writing work plans down on paper (so-called “to-do lists”) in order to increase job performance. Such approaches were widely adopted by executives, and time management is the most common way which made leaders go about accomplishing tasks or daily routines in relation to time.

1.3 Time within the higher educational administration context

Although much attention is given to time management in business management training, however, it is an issue that is often ignored in the Libyan education system particularly, and in systems of higher education in developing societies generally. Davies et al (1999) stated that the main reason of importance of using time effectively is the dual role of the leader in teaching and managerial duties. Further, Oran (2009) asserted that, the effective and productive use of time in education, generally and in higher education, particularly, is a highly important determinant of educational costs worldwide.

The Centre for Academic Leaders (CAL) (2007) indicated some drawbacks in administrative roles, and their feedback fell into the following areas:
• Academic department administrators have a heavy workload and a range of responsibilities that is too broad. The consequences of this are stress and exhaustion and loss of work-life balance.
• Academic department administrators do not have enough time for research and teaching.

CAL also asserted that, the biggest problems for academic administrators are not a lack of training, but an overly heavy workload and lack of enough resources. They also realized that they are working hard, but without any advanced planning and without enough time. Anderson (2006) stated that almost all academics reported that their workloads were increased what mean that they have reduced time available for research leading to an increase in stress. Anderson also noted that some academics indicated that their research productivity had become very low which led to poor opportunities for promotion, while others reported that they lost their self-esteem due to their inability to invest time for research. On the other hand, Fisher (2004) indicated that academic leaders increasingly face coping with high demand and losing control over many aspects of their traditional tasks. Anderson (2006) also pointed out that work intensification and increased workloads are the most important factors contributing to academic dissatisfaction.

The management of higher educational institutions has increasingly recognized the significance of departments and colleges in providing an effective education and service for society if they are well managed. Thus, higher education institutions need to employ good management practices to deal with the challenges mentioned earlier, and good leadership is necessary to create viable new institutions. Tierney (1984) suggested that higher education administrators could improve time management by diagnosing their institutions from a cultural perspective.

It has already been stated by the researcher that university administration plays a basic role in planning and accomplishing the activities of the universities, and the achievement of their educational and scientific goals. Nonetheless, higher education administration in Arabic societies still suffers from some negative phenomena such as the tendency of leaders to
attempt to escape from their responsibility, as well as not putting the right person in the right place, and other problems which prevent administrative work development (Elorafi, 2002). On the other hand, universities in developed societies are suffering from some modern problems such as a stress and poor use of time, which has led to the creation of time management theories (Mclean, 2007). Earley and Campbell (1998) indicated that the first and main difficulty which is faced by heads of departments is lack of time because of the multiplicity of tasks including administration, teaching and research.

Time as a managerial resource occupies a special place among the factors of production. The importance of time as a productive resource has been noted with the realization of the importance of general management theories in achieving the goals of the organization. Early management researchers as mentioned previously realized the value of time through the findings of their research. Pre-eminently among these early researchers it was Taylor who clarified the importance of time management in increasing production rates and it is noteworthy that the importance of time management has caused researchers to study the principles and effectiveness of time management and its importance for busy managers. This led to an increase in the attention paid to the establishment of training courses for managers, in order to improve their skills of time management. Libyan researchers such as Alawod (2001) and Elkadiki (2003) found that many Libyan administrators are unable to manage time effectively to accomplish more in less time owing to their weak skills in dealing with time. Moreover, the cultural background of Libyan managers plays an important role in their limited understanding and awareness of the importance of time. Indeed, in Libya the greatest focus of managers tends to be given to social relationships and courtesies during work time rather than to a focus on productivity.

Heads of academic departments in Libyan universities face the same challenges as other managers, especially since Libyan universities are suffering from instability, the adoption of several conflicting decisions, and unplanned expansion. Within this context Elabbar (2001) summarized the results of her research by noting that:
“All these factors led to ineffective consumption of universities resources”.

Elabbar recommended that Libyan universities should be managed by able and trained leaders and that this change in leadership could only be achieved by choosing the most suitable person for managing academic departments and faculties and by providing additional training opportunities. She added that the heads of academic departments play the main role in the success of their universities but that they play many roles at the same time and these roles are continually changing to meet new challenges and demands that require time and precision.

1.4 Statement of the problem to be addressed

In spite of the progress made in recent years in the development of the higher educational system in Libya in areas of curriculum and the opening of new universities in several cities, Libyan universities still suffer from many deficiencies. For many years, various Libyan researchers have documented these shortcomings (El-Allaf, 2007). Indeed, the poor quality of higher education means that many Arabic Universities may be inadequately prepared to meet the challenges of the twenty-first century. Baira and Durra (1998) have stated that Arab universities remain a captive intellectual system based on traditional philosophies and management systems dominated by a hierarchical model of leadership.

Nonetheless, the opening up of Libya to international society in recent years has led to a remarkable increase in the ability of Libyan universities to meet the social demand for higher education. For instance, new campuses have been opened in many cities. However, this has occurred without sufficient advance planning and this expansion has been undertaken without the appropriate provision of material and human resources. Moreover, Libyan universities have witnessed cases of instability in their management structures as a result of some managerial complexities and difficulties in Libyan society (Bashir and Ali, 2002).
The comparative paucity of administrative policies at Libyan universities was the result of an unclear vision for the future of university education and its goals. This confused vision was manifest in the lack of a specific philosophy for the role of university education in everyday life, and in the absence of necessary regulations and administrative criteria for making decisions regarding university education. As the World Bank noted in 2003, higher education institutions in developing countries suffer from traditional and increasingly archaic management practices and poor leadership. University management in all developing countries, and Arab countries in particular, typically does not use the necessary tools when it plans for future practices, and this causes an increase in tension and undermines their capacity to achieve their goals. This in turn leads to further waste in material and moral potential (International Bank, 2003).

As a result of the factors outlined above, Libyan higher education institutions and other social organizations need to develop effective management strategies in order to achieve their objectives. This requires universities to prepare effective organizational structures in order to achieve these aims. The current problem facing the administrators of higher education institutions, as well as higher administrative authorities, is the lack of information and data about academic leadership at universities. This is because researchers have tended to focus their attention on educational leadership in the primary and secondary stages of school education rather than on higher education. In addition, officials in Libyan universities often focus their attention on developing greater infrastructure, such as opening new universities but this is often at the expense of the development of the qualitative dimension of academic leadership. Therefore, any evolutionary process for developing academic leadership at Libyan universities, as Kraem (2004) has stated, must be preceded by a comprehensive evaluation of performance levels and managerial skills, including time management ability. Lozi (1999) specifically pointed out that any flaw or weakness in the investing of work time would lead to an imbalance in overall organizational processes.

The researcher believes that the current lack of information about the levels of academic performance of heads of departments at Libyan universities - and particularly with regard to time management - means that there is a lack of clear vision about how to make progress.
Those responsible for higher education in Libya, alongside other parties interested in developing and improving universities must address these issues and provide information about the current status. This will be the first and most important step in planning for the future.

The problem of time management can appear in the administration of institutions that are seeking to develop, modernize and enhance quality in terms of achieving their objectives. Academic management essentially not differ from other fields of management, but it is differentiated by its goals which are basically productive and focused on providing community service such creating the suitable workforce to meet needs of work market, as well as it able to satisfy the requirements of large-scale national development (Hilal, 1995). However, academic management according to Elwi (1999) is a unique system. The goals, the values and even the structure of a university board appear in both form and methodology to be completely different from those of other organizations. This requires that university management provide a special philosophy that meets the requirements and fits the facts of its goals and values in order to provide the best results.

On the other hand, some aspects of legislation have allowed academic staff members to work as a co-operator at several Libyan universities by signing many contracts with more than one university at same time. This legislation has encouraged faculty members to cooperate in teaching some courses as a full quorum at other universities and institutes of higher education departments in order to improve their living standards. This problem has become a widespread phenomenon, even though the literature of administration and management in higher education clearly states the importance of balancing roles to provide the necessary time for the heads of academic departments to be able to carry out their administrative duties while enabling them to find the time for research and teaching. This assertion is clearly evident in the studies of seminal writers such as Tucker (1984).

The gravity of this problem increases when the heads of academic departments occupy more than one administrative position. This leads to a weakening in the performance and levels of
their administrative functions and leadership abilities. As Kraem (2004) indicated, business is disrupted when there is insufficient time to carry out certain tasks. Moreover, the results of some recent studies conducted in the Libyan environment by Khawaja (2001), Alawod (2001) and Elkadiki (2003) have suggested that the time management skills of the leaders of Libyan industries are inadequate, and yet managers of Libyan educational institutions have never been the subject of research with respect to their ability to manage time. In fact, some Libyan researchers have studied many topics in educational leadership without evaluating time management itself (Kraem, 2004). This has stimulated the current researcher's interest in examining the time management performance of academic leaders at the Libyan universities. Therefore, based on the findings of previous studies in Libyan society, the researcher proposes to examine the time management operations of academic departmental heads at Libyan universities.

1.5 Objectives of the research

The preceding sections of this chapter have indicated the lack of information about the level of time management operations that are used by academic department heads in Libyan universities. This research aims to investigate the level of time management practice as it manifests itself in planning, organisation and control, by seeking answers to the following questions:

1-To what extent do heads of academic departments practice time management according to the specific fields of planning, organising and controlling time?

This objective will determine the level of time management based on specific fields of planning, organising and controlling practiced by Libyan heads of departments, on the other side it will determine which operation are commonly practiced by Libyan heads of academic departments since the previous studies in time management tended to investigate time management skills in different levels of the educational administration field.

2-To what extent do heads of academic departments practice the overall principles of time management?
This objective will investigate which principles of time management are commonly used by heads of departments. Moreover this objective will serve the previous objective via defining of these principles involved within any process of time management.

3- What factors impede the practice of time management?

Previous studies in time management in some Libyan Institutions have noted that there is a weakness in time management. Therefore, this objective seeks to define which factors (internal, external) have impacted on time management practiced by Libyan leaders in higher educational administration.

4- Are there significant differences in the levels of the practice of time management processes as a result of key variables, including: managerial experience, specialization, qualifications, gender, and number of university you are working within?

Through this objective, researcher aims to determine whether there are any significant differences in time management practiced according to variables of research sample.

1.6 The importance of the research

Addressing the problems of Libyan administration requires more than simply adapting of the models and methods employed by developed countries to deal with similar circumstances. Instead, it requires the specific analysis of the elements and causes of problems in a Libyan environment, with finding effective solutions that will work specifically in a Libyan context (ElSalmy, 2005). This study is therefore necessary in order for university administrators to identify the problems and shortcomings that hinder their work especially those that are related to the administrative skills of academic departments heads. Accordingly, this investigation highlights the importance of conducting a local study based on the particular circumstances, needs and problems existing in Libyan universities. It seeks to examine the nature of existing time management processes, and to identify those factors that impede effective time management. Moreover, knowledge of the main principles and existing implementation of time management by heads of departments would help universities to develop successfully. The success in achieving objectives cannot be properly evaluated if those objectives are not achieved within the specified time (Mansuri, 1999).
The researcher is aware that the study of time management dates back to Taylor's study on time and motion, which he made careful experiments to determine the best way of performing each operation and the amount of required time (Taylor, 1967). However, studies on time management are still rare in the administrative literature, especially in relation to higher education, and are even rarer in developing societies. Libyan administration has never been studied in this way, and the current study will be the first systematic analysis of time management in the educational field in Libya.

1.7 Originality of the research

The importance and value of the study may be summarized in the following points:

1. This study is the first study in a Libyan educational environment, and one of the first in Arab countries as a whole, to examine the ability to manage time effectively.

2. The study will provide an opportune tool to determine ability in time management practice since this topic has never been investigated within Libyan university management.

3. This study will contribute to providing the information necessary to assess the existing skills (including time management skills) of academic department heads, to develop these skills, and to help the Ministry of Higher Education to take the required steps to promote that development.

4. This study can also offer practical definitions of time management skills, which might help heads of academic departments to perform their administrative duties more effectively.

5. The results of this study might also open the way for future researchers to investigate the subject from other points or view, and to explore variables that were not covered in the current research.

6. This research provides a clear picture about relevant aspects of time management operations through higher education administration in general and Libyan universities in particular.

7. The research contributes significantly towards the global understanding of time management by presenting findings concerning time management operations in a Libyan cultural context.
8. It provides a clear description about relevant aspects of Libyan public universities; therefore it describes Libyan university administration, and higher education in Libya generally, within a global context.

1.8 Definitions of research terms

In discussing the process of the research, the researcher has already used several terms that require definition and these are addressed below and will be explored further in the next chapter:

**Time management** as used in this study, refers to the strategies utilized by heads of academic department to manage their time. It has been defined by Clark (2007) as the ability to utilizing time in effective way (Clark, 2007). In addition the researcher has defined certain key strategies of time management as operations of time management, so that the researcher refers to:

- Planning of time as a scheduling of time via priorities arranging (Timpe, 1987).
- Organising of time as the arrangement of all elements of management, defining and delegating tasks to the suitable staff (Naylor, 2004).
- Control of time as dominance over obstacles of time (Daib, 1999).
- The head of academic department as the person who occupies an executive leading position in the organisational structure of university (Elabbar, 2001).

In conclusion, the researcher uses the procedural definition of operations of time management: that time management is the ability to use work-time effectively by the practice of processes such as planning, organising, and control.

1.9 Justification and scope of the research

This research addresses only Libyan heads of academic department who are working in Libyan public universities and focuses in particular on investigating the time management operations practised by heads of academic departments. Universities as the main higher education institutions play an important role in achieving development goals and heads of academic departments play the greatest role in achieving these goals. The researcher believes that the department heads play a greater role when compared to other leaders since heads of department - as executive leaders - are responsible for the preparation of plans and projects.
which have been defined by university board and they are responsible for the accomplishment these plans through the provision of all the necessary requirements for successful completion of strategic plans. Therefore, the researcher chose the academic community in Libyan public universities that are subject to the higher education ministry through the academic year 2009-2010 to be questioned via interview and questionnaire for the following reasons:

- Heads of academic departments in all universities play many roles such as, teaching, research, and leadership; in other words, they engage in several roles at the same time.
- Heads of academic departments in Libyan universities spend much time in routine functions, as is one of the findings of Elabbar's research in 2001.
- Some heads of academic departments in Libyan universities occupy many leading functions simultaneously both inside and outside the university.
- Almost all heads of academic departments are academic members at many Libyan universities. Consequently, they are suffering from a lack of time because of the multiple functions that preoccupy them.

1.10 Research approaches used

As noted earlier in this thesis, the overall objective of the research was to investigate the level of time management practiced by academic department heads in Libyan universities as it manifests itself in planning, organisation and control, as well as to define the principles of time management. The researcher decided that the descriptive methodology was the best approach to implement in order to answer the research questions since it involves gathering data that describe events and then organises, tabulates, depicts and describes that data collection (May, 2001).

Descriptive research can be either qualitative, quantitative, or a combination of the two. Therefore, a mixed method (qualitative and quantitative) was implemented in this signal research to collect data from the research sample through the use of tools that include interview and questionnaires. In the current research a questionnaire and a semi-structured interview were employed to complement each other and to provide the researcher with more detailed insights. Qualitative data, which are mostly verbal, and quantitative data which are mostly numerical, were employed in this process and both kinds of material were collected.
and analysed in the same study, which is an approach that is acknowledged in the literature (Mertler and Charles, 2005).

As will be outlined in more depth later in the methodology section of this research, a self-administrated questionnaire was distributed to heads of academic departments in Libyan universities alongside one hour semi-structured interviews with heads of academic departments in Libyan universities. In addition, the researcher will present how the samples will be selected. The researcher will also provide material about how she dealt with the gathered data in both qualitative and quantitative methods, and which methods were used in the analysis.

1.11 Structure of the thesis

This thesis has been structured to provide the critical review of relevant information related to time management operations practiced by Libyan heads of academic departments in Libyan universities. The research methodology, theoretical framework and research questions will be provided and discussed. The gathered data will be analyzed by use the suitable statistical method to nature of research questions-to answer the research questions. Additionally the findings of current research together with the findings of previous research will be compared, discussed, and finally interpreted to assist in the provision of the recommendations for changes to the Libyan system of higher education. Therefore the thesis consists of five chapters as follows:

Chapter 1: Introduction: This chapter has outlined the background of the research along with the research problem, in addition to outlines the objectives of this research, the significance, scientific contributions, key terms, scope, research approaches, and the structure of the study.

Chapter 2: literature review: This chapter aims to review the literature related to the research topic, it includes three sections: The first part focuses on the philosophy of time within different cultures, the importance of time in making the civilization and development in societies, time within Islamic perspective, as well as discussion of time within developing
societies as Libya. The second section focuses on time management, and includes a definition of time management, an outline of the importance of time management, and time management operations, this latter sub-section includes reference to time planning, time organizing, and control over time, and the issue of time wasters. Finally, the third part includes the philosophy of Libyan universities administration, roles of Libyan head of academic department within international context, practice time management of heads of academic departments in Libyan universities.

Chapter 3: Methodology: This chapter presents the research methodology used and methods as well as the justification of choice for these methods, In addition to defining of research population and selected sample and manner of choice, furthermore, defining the questionnaire items and design, the piloting of the questionnaire, the way of questionnaire distribution, in addition to, interview design, and conducting of interviews. Finally the management of data and the statistical method of analysis of both qualitative and quantitative data will be presented.

Chapter 4: Presentation of quantitative and qualitative data analysis: this chapter will be divided into two sections. The first section will be addressed to present data analysis of the questionnaire to answer the research questions by use of suitable descriptive statistics such as, arithmetic mean, standard deviation, t-test, and one-way Anova by applying the Statistical Package for the Social Sciences. Furthermore, the second section will present the research findings which have been obtained from semi-structured interviews which are designed around the research questions to be discussed, and interpreted objectively.

Chapter 5: discussion of results: by this chapter the researcher aims to present the obtained findings from both questionnaire and interview to be discussed, interpreted and compared with previous studies in the field of time management.

Chapter 6: Conclusion: this chapter will be designed to provide an overview about the whole research, and the summary of the research findings which have already been obtained from qualitative and quantitative data. This chapter will also show the recommendations and scientific contribution of the study, in addition to the challenges which were faced in the research and suggested areas for further research.
1.12 Conclusion

As has been shown above, the researcher believes that the heads of academic departments in Libyan universities are faced with the problem of dealing effectively with time. Furthermore, some Libyan researchers, such as Mansuri (1999) and Alawod (2001) have indicated that although Libyan managers complain of a lack of time, they do not care sufficiently about time as a managerial resource and consequently they do not manage time effectively. This is the central problem at the heart of the topic on which the current research focuses as outlined earlier in this chapter. In addition, the research objectives and their importance have been outlined in the opening chapter. Moreover the researcher has indicated the originality of research in order to state its clear importance and professional relevance. The researcher has also defined in brief the main terms that are used in the research that will be stated in detail through the review of the relevant literature on time management and higher education management in the next section.
Chapter Two
Literature review

2.1 Introduction to literature review

This chapter presents a review of the relevant literature about time management and higher education management in order to delineate and analyse the key features of the main topic of the research. An extensive review of the literature revealed that time management has not been addressed in depth until recently for academic leaders in general, and not at all in the context of Libyan universities. The review draws on the general business, management and educational management literatures.

The research topic addressed in this thesis is to investigate time management within higher education administration in the Libyan environment. However, there is comparatively little material available on this topic. For this reason the researcher has drawn on literature across educational sectors including schools, colleges and universities. The researcher is aware that there are differences in substance and nuance between the approaches employed in the different sectors, but she feels that there are commonalities between all sectors in terms of the challenges of time management. In addition, the researcher has drawn on both Arabic and Western leadership models but the reader needs to be aware that some western models are challenging in the Libyan context because of the cultural differences of Libyan society.

Consequently the researcher will write in depth, analytically, and critically within three sections. Firstly, the concept of time will be outlined in order to provide a critical review of issues of time in different cultures, as well as identifying the importance of time in the development of societies. In the second section, the researcher offers the main body of the research by determining a definition of time management, the importance of time management and time management operations. These operations will be considered in depth by discussion of time planning, time organizing and control over time; providing the principles which define each operation. Finally, in the third part the researcher aims to
provide a review of time management in Libyan universities as it is a new issue which has not been discussed to date, since the issue of time within Libyan administrative culture is previously un-researched, in order to achieve the objective of this section some issues must be critically discussed; such as the Libyan universities within the context of globalization, administration of Libyan universities, and time management practised by heads of academic departments within Libyan universities.
Part I: The concept of time from different perspectives

2.2.1 Introduction

The managerial literature asserts that there is a direct relationship between the importance of time, the level of civilization, and development of societies. The way in which time is employed determines the degree of progress in life as well as the tasks accomplished. For these reasons, achievements are usually taken into account to measure the benefit of the use of time. Therefore, in this section, the researcher is aiming to provide a clear background about the concept of time, types of time, and time within different cultures, in order highlight the importance of time in the development of civilization and societies since it has been recognized as a main factor in identifying civilization.

2.2.2 The development of the concept of time

The problem of determining what time is has preoccupied philosophers and scientists for centuries. Historically, great efforts have been made to determine the nature of "time", but they could not agree on a common point, while most societies possessed some concept of time there was no commonly agreed definition. Conceptualizations of time are as varied as the cultures themselves (Hayden, 1987) each of them holding a different view. Zakay (1990, 59) stated:

"Despite of the importance of time, however, there is no agreement about what time means exactly, nor is it clear in what form of information it is utilized to make time estimates”

Place and time are the main dimensions of existence, place is the dimension when there are things, while time is the dimension which becomes apparent when things change (Elkadiki 2003:39). Elkadiki (2003: 40) added that the concept of place is static, while the concept of time is dynamic and indispensable in searching of the meaning of change, growth and development.
The concept of time has occupied the thinking of mankind since prehistoric times, and became one of factors that contributed to the growth of civilization. Early humans measured time through the movement of the sun and the moon, the stars and planets. They learnt to distinguish between night and day; they followed the succession of four seasons and these observations led ancient societies to the assumption that time can be measured with some degree of certainty (Peter, 1999). Within this context Hayden (1987: 85) pointed out that in the third century B.C Strato stated:

"Day and night, a month and a year are not time or parts of time, but they are light and darkness and the revolution of the moon and sun"

It is sometimes stated that time is not a natural phenomenon, rather it is a societal construct, and the sequencing of events is scheduled by societal patterns Hayden (1987). Time is the most used resource by all; it is measured by using a series of units that can be calculated accurately. These units are based on the movement of the Earth, the day is associated with the rotation of the Earth on its axis, and the year associated with rotation of the Earth around the sun. As time passes, events become 'fixed' relative to one another and appear in a sequential manner along a straight line beginning far in the past, but heading towards an uncertain future. Within this context time was defined on Merriam-Webster online as:

"A nonspatial continuum that is measured in terms of events which succeed one another from past through present to future"
(http://www.merriam-webster.com/dictionary)

"The continuum of experience in which events pass from the future through the present to the past" (Webster's Dictionary, 2011)

Time is a unique and essential resource which is irrecoverable, limited and dynamic, and can not be stored or replaced (Haynes, 2001; Ojo and Olaniyan, 2008). Al-jeraisy (2004: 56) indicated that the issue of time is a permanent human problem. Its concept varies according to motives, needs and the nature of the required functions and activities. Time is an essential resource; it is irrecoverable, and limited (Godefroy and Clark 1995). Robertson (1999) asserted that we speak figuratively when we say we save, spend, or waste time. Time has been described by Walter (2008: 76) as a non-flexible resource and the modern economy
faces a problem of creating time for the sake of satisfying future needs since it cannot be stored as other economic and organizational resources. Harung (1998) added that time is a measure of change, of duration, and of events. In modern society change, diversity, and complexity are increasing, hence, the ability to handle change and time is becoming a more critical factor. Guoging and Yongxin (2000) defined time as a major organizational resource, they added that the five main factors of any administration activates are goal, human, environment, time and information. Equally, Haughey (2001: 103) listed some important characteristics of time such as:

1. It cannot be expanded or contracted.
2. It is irrecoverable and irreplaceable.
3. It is a flow from future to present to past in the context of planning.
4. All processes that we manage are time processes.
5. Time is the dimension in which change takes place.

On the other hand, Wilbert (1963) identified several concepts of time; these concepts completely differ according to the phenomenon that is reflected by that particular concept:

**Mechanical time:** is used to measure the movement of physical objects. Time is reflected in the movement of the Earth around the sun. In this context, time is constant, fixed, available to all equally and is subject to division into small units such as second, minute, hour, month, and year.

**Biological time:** is usually linked to the development and growth of phenomena. It measures the extent of physical maturity of the organism. It includes the identification of working and rest hours which are usually set according to the biological capacity of the human body.

**Psychological time:** depends on the nature of the event which individuals going through, the administrative phenomenon which is reflected by the psychological time largely includes the psychological condition of employees since there are times when individuals prefer not to talk about work and its problems.

**Social time:** is related to social events. It is measured in accordance with the criteria for social actions revolving around important events in the community. The administrative phenomena which are expressed by social time include the composition of social groups and the organization's relationship to the surrounding environment.

**Metaphysical time:** is the time that is used in the interpretation of the 'supernatural', such as the day of Judgement, eternity, and the eternal.
Pettinger (1994) suggested that work time can be divided into productive time; non-productive, stoppage or downtime; maintenance time; and wasted time. It is necessary to recognize the prevalence of each element in any working situation; what the composition of each element is and then use that information to structure the work in order to maximize the usage of time available.

Time is completely different in relation to the individual and society. The researcher is aware that the relationship between the human and time is a self-relationship that varies from one person to another in terms of understanding, perception and response to deal with it. Societies vary among themselves in assessing the value of time due to the level of the societies' culture and the prevalent style of the administration. Furthermore, the researcher realizes that the attitudes of individuals about time, such as its importance and the way in which it is used leads to substantial differences in how time is viewed, its importance and value. In developed societies, for example, we find that there is a greater interest and attention about time as well as better use and exploitation to ensure achievement of general and specific objectives. This attention and care tends to be less prevalent in developing societies because of their social background. Different cultures have had different views about time at various times and many notable people have discussed the concept of time differently. Plato stated that time is the principle of order in nature's world, while Aristotle perceived time as the simplest measurement of motion (Taylor, 2007: 47). In the modern era time management has come to be seen as the organization of tasks or events by estimating how much time a task will take to be completed, when it must be completed, and then adjusting events that would interfere with its completion so that completion is reached in the appropriate amount of time (Taylor, 2007: 47). Therefore, the concept of time was researched in order to understand the differences between culture, societies and individuals (Nonisa, et al, 2005) but the differences between people and societies develop as a result of the changes and insights that have occurred on the views of these societies about time

2.2.3 Time within different cultures

The argument about the nature of time and determining its importance differs from one individual to another due to their differences in geographical environments, history and traditions and their own understanding of the nature of time and its impact, and awareness to time value (Hall, 1982). The concept of time is different between human societies according
to the religious and intellectual backgrounds of those communities as well as their attitudes towards time. The attitudes of communities to the importance of time are not conclusive evidence of the integrity of their thoughts or beliefs. In antiquity almost all cultures have used natural phenomena, such as movement of the sun and moon, succession of day and night, to be linked with their own religious and social activities (Landes, 2003; Levinson, 2004). In these contexts Levine and Wolff (1985: 198) pointed out the distinctness of societies about their attitudes concerning the importance of time and its investment in accomplishing the tasks of daily life. The results obtained through their study affirmed that people in Japan are the most astute in their recognition of time, while those in Indonesia do not prefer to invest in time and prefer leisure to work. In the same context Ashour (1989: 225) concluded in his study about the comparison of the value of time between both developed and developing societies that time is a basic feature of significance of the development of individuals and societies. He added that the national character can be analysed in terms of time in two respects; firstly, the understanding of individuals for the value of time and the degree of their interest; and secondly, the time frame which covers their actions and planning for their lives. He also stated that there are stark disparities between societies in the value given to time resources. In industrial societies, due to the nature of economic life and the degree of technological development, time is a scarce resource. Members of these societies invest their time to the fullest extent. This is reflected in their attention to time resources as well as the degree of their commitment with the agreements that are included the time element. Hours, minutes, and seconds measure time in these societies, while in developing societies, such as Libya, time is often measured in larger units such as seasons, months, and weeks. Philosophers, sociologists and natural scientists have researched time as a natural phenomenon need to be interpreted.

Therefore, the researcher attempted to present and discuss the different views in order to provide a clear background about what time means in different cultures previously and presently as well as its values and importance according to their views.
2.2.3.1 Time in western culture

The concept of time has been discussed by many western scholars. In the Middle Ages, as previously mentioned, the concept of time dominated the thoughts of these individuals and became one of the cultural reasons that prompted some societies to assumptions of frequency and rotation of time.

The researcher previously mentioned the views of some Greek philosophers. Plato is one of the early philosophers who discussed the concept of time through the events that occur, where he expressed his opinion by saying that "the moving image is to reveal about itself in a world of ever-changing cycles". Time according to Plato is the principle of order in nature's world. In addition, Aristotle (384–322 B.C.) believed that time is an account of the movement in relation to what is before and beyond, thus, time according to his view is the simplest measurement of motion (Taylor, 2007; Beetle, 1999; Wagnera et al, 2008).

Elkodari (2000:16) in his study entitled "Cultural Management of Time", stated that in the middle ages time was identified by Newton as an:

"...absolute thing that always flows with the same sequence and coherence regardless of any external factors"

Rashed (2003,79) quoted from Francis Bacon the saying that "the time is a measure of management, as the money is a measure of the goods". Rashed (2003) added that time is a sensitive resource to individuals, organizations, nations and people.

In the 18th and 19th centuries with the rise of capitalism and the development of industry Adam Smith focused on saving time as a valuable resource. His main principle about time is; the division of work which leads to an increase of production, compensating for wasted time, and increase of the wealth of nations. This principle has been used as one of the most important success factors of time management. In addition we may note the famous study of
Fredrick Taylor, a pioneer of scientific management, which has been associated with the movement of time. This study was designed to determine the best way to perform the work through the division of the work into simple activities, and then determine the number and basic movements and time needed for each movement to reduce the amount of time used. Consequently, the policy of management and economy professionals in western societies agreed about the importance of time and the need to invest it. Furthermore, they see it as an important factor for material progress. Shehata, (2005:68) stated the opinion by saying:

"Time is seen as a materialistic thing through Western society".

He added that they recognized time as money because money is the most important goal that in most societies. Thus, time in western societies is a financial issue. He -Jun (2008:61) stated the material value of time by saying:

"The western culture usually considers time as a line and a linear one-directional continuous movement. Time is moving on and passing. It is very precious and stubborn. Once it has passed, we cannot get it back. They also think that time has its beginning and end and can be measured by the clock and calendar; a certain regularized time is a point on this line and the space between two points is a period. Therefore, the westerners use their time very exactly, like to the minute, in a second, and so on. Time in the western world is nearly a commodity because it is concrete and valuable. We can buy, sell, save, waste, lose, borrow, make and measure time. There are also papers suggesting people how to shop, cook, clean their houses and babysit their children by using less time and achieving excellent results."

In conclusion, it can be stated that time in western societies has a great value. Western Philosophers and scholars see the time as the money. They focus on how to invest time to achieve the financial gain in the fastest time, they are fully aware of the value of each hour, minute and second. Furthermore, the value of the profits obtained from invested capital are always measured by the time which is spent on the project. Also, the value of the cost of goods is calculated via consumed working hours. Thus, we can find that the value of time is
not different from the value of the rest of the resources that were used in the production of those goods.

2.2.3.2 Time in Islam

Islam asserts the importance of time through the texts of the Quran and Prophet Sunnah, in addition to the curriculum of Ancestors in the science and work in various fields in the life, religious rites according to Islamic doctrine depends in the specific criteria of time to be acceptable, these rites reflected in Prayer, Fasting, Zakat, Hajj, all of which should be performed at certain times. The Holy Quran and Sunnah mention time in many ways as the day, night, month, and year in both at the terminological or the theoretical level (Ahmad and Hafiz, 2003). Therefore, we can see that the use of time in Islam does not relate to an abstract idea that aims to exploit time that leads to an increase the profit and production, rather it is more idealistic because the use of time effectively is a spiritual goal to avoid the terrors of the day of punishment.

2.2.3.2.1 Time in the holy Quran

Islam cares strongly about time as an issue in various aspects of life, it is recommended that Muslims deal with time as sent from God. The attention to time has been mentioned in many places of the Quran and Quranic texts as conclusive evidence from legal document on its importance, it is considered a great responsibility to humanity. Almighty Allah states:

"And subjected to you the sun and the moon and tenaciously and subjected to you the day and night" (Ibrahim: 33: Holy Quran)

In other words God says that the sun and the moon in their succession have been subjected for service of slaves.

El-Deeb (2011) and El-Qaradawi (1991) indicated that time as a godsend should be kept well, and the believer will be punished if they do not save it or use it effectively. Furthermore, they added that Muslims are living within a timeframe since they practice their
activities -which benefit them in their worldly life and the hereafter. Within this timeframe and the loss of any part of time is a great loss, and will lead to regret by the Muslim about it on the doomsday. Elsewhere, Aljori (2011) expressed his view about the regret of humans due to loss of time. He pointed out that the Almighty God in the Holy Quran identified the positions in which most people feel regret due to the loss of time where it is too late, especially the hour of the agony of death, where the Almighty says in the Quran:

"Until, when death cometh unto one of them, he saith: My Lord! Send me back, (99) that I may do right in that which I have left behind! But nay! It is but a word that he speaketh; and behind them is a barrier until the day when they are raised. (100) "(Al-Mumenoon 99-100: Holy Quran)

This can be interpreted by saying that when death comes to one of them, man says: O my Lord! Send me back (to life), In order that I may work righteousness in the things I neglected. Aljori (2011) added that Muslims also will regret due to loss of time in the Judgment Day as stated in the Quran:

"And on the day when he shall gather them together, (when it will seem) as though they had tarried but an hour of the day, recognizing one another, those will verily have perished who denied the meeting with Allah and were not guided." (Yunus, 45: Holy Quran)

In other words, God means that believers will gather together on Doomsday and they will be as if they had lived only one hour of a day. They will recognize each other, as well as others who did not believe in the meeting of God, and refused to receive true guidance, they definitely will lose and will never be guided again.

Within this context, the researcher found in holy God’s Quran what has been said about the people of Hell who ask God to help them and give them a chance to do the best things in their new life. The Almighty says in the Quran:

"And they cry for help there, (saying): Our Lord! Release us; we will do right, not (the wrong) that we used to do. Did not we grant you a
This saying means that people who lost their time and spent it on unworthy things during their lives will cry aloud (for assistance), and asking their Lord another chance to do their best in their new life.

On the other hand, the value of time according to Islamic criteria is not measured in accordance with only the specific timeframe, but according to obtained efficaciousness within that timeframe, for example, Almighty Allah expresses the meaning:

"The Night of Power is better than a thousand months. (3)"
(Al-Qadr, 3: Holy Quran)

By looking into the above saying, it can be realized that the Quran has identified the strength and benefit of this night in Ramdan month. This night is better than a thousand months and its value is derived from coming down of the Qur'an from the sky on Prophet Muhammad (Shehata, 2005). Shehata (2005), El-Qaradawi (1991), and Alian (2007) indicated that God swore with specific times due to its greatness as stated in the Quran.

"By the Dawn (1) And ten nights, (2) "(Al-Fajer, 1-2: Holy Quran)

And swear in another case by saying

"By the night enshrouding (1) And the day resplendent (2) "
(Al-lail , 1-2: Holy Quran)

To affirm the value of time according to the two sayings above, some commentators have stated that God wishes to draw the attention of Muslims to its value and great usefulness. As mentioned earlier, the worship of Muslims is associated with specific times which are deemed acceptable by God. For instance, as is known widely, there are the five daily prayers which are repeated five times a day and night. Therefore, Islam emphasizes the importance of
respect and commitment to time as a condition for acceptance of those acts of worship. To explain further, Al-Astal (2009) and Al-Jeraisy (2000) stated that times in the Muslim’s life differ in their value and greatness at different levels. At the daily level; the five daily prayers have a private sanctity, whilst at the level of week; Friday has sanctity of privacy, as well as the year level; the month of Ramadan has holiness and greatness, especially the night of Al-Qadr as the best in the whole month. Additionally, the months of Hajj have been given a particular value, especially the first ten days of the month of Dhul Hijjah.- According to the Islamic calendar (this month is the last month in the Hijri year) those days have been sworn by the God due to its greatness. Those ten days include standing on Mount Arafat in Mecca city during the Hajj season (it is the ninth day in Dhul Hijjah) and the day of Eid al-Adha which is the tenth day in the same month.

"And have appointed the night as a cloak, (10) and have appointed the day for livelihood. (11) " (An-Naba, 10:11: Holy Quran)

God means that the night has been created to cover and leisureliness of the man and the day has been made for subsistence and work.

2.2.3.2.2 Time in the Prophet Sunnah

The Prophet Sunnah has confirmed the value of time through words and deeds of the Prophet - peace be upon him - as well as Prophet Mohammad strongly recommended Muslim people to use their time effectively as the greatest of blessings. Narrated from the Prophet - peace be upon him - what has been mentioned in the Books of Abraham

“A wise person should - unless he is mentally ill - have four hours: an hour conversing with the Lord, one hour reviewing what he did during his day, one hour thinking about what he was doing for God, and one hour for his personal needs such as eating and drinking " (Al-Albani, 2000, 88)

Furthermore, he advised his friends and followers in his Hadeeth which was addressed to Ibn Abbas to use priorities principle in their life by saying:

"you have to invest five things before other five in your life ; your youth before old age, your health before sickness, and your wealth
This Hadeeth has been interpreted by Iban Abbas where he stated: Muhammad advised his followers to invest youth, health, free time and life for doing the best things (Saka, 1994). Prophet Mohammed during his life recorded many rich Hadiths that acknowledge the value of time and confirm the responsibility of man to save it and use it effectively. It was reported by Al- Soufiani (2002) that the Prophet, peace be upon him, was the keenest of people to take advantage of every moment of his time in favour of Islam and Muslims in order to teach Muslims how they should take advantage of their time during their life. The attention of the Prophet Muhammad to time is apparent through his strong interest in the performance of worship within the allocated time. Muhammad was, peace be upon him, a good example to his nation in the practical application of those acts of worship in the perfect way. Ibn Majah indicated some evidence of the Hadith about time and its importance and the need for it to be effectively used to gain the satisfaction of God. Hadith of Aisha (mother of believers) - Allah be pleased with her – about the using of time by Muhammad is:

"The Prophet of Allah was sleeping during the beginning of night, and was waking up in the end for worship"  

(AI-Albani, 2000, 242)

Ibn Majah also stated that Muslims on the day of judgement will be asked four main questions. Two questions will be addressed about time, Mu’adh ibn Jabal quoted from the Prophet, peace be upon him:

"Man will not go ahead on doomsday before he is asked about four things: his age, how he lived it, his youth, how it was spent, his wealth, how it was earned and spent, and his knowledge what he achieved through it?"  

(AI-Ghamdi, 2008, 45)

Thus, as Al-Amiri (1997) indicated; man will be asked about his age in general ,and his youth in particular- despite that the youth is a part of age- however, in Islam it has a special value as a vital stage in the life of man. It is the phase of gaining experience and work ,as well as a phase of power between the two weaknesses: the weakness of childhood and the weakness of old age.
Thus, we see that the Prophet, peace be upon him, urged his nation to give time the greatest attention in both their private and public life. The Prophet Muhammad has been a good example for his Muslim nation, since he was able to achieve a good balance between his private and public life, where he was also the main leader for Muslims over the Earth, as well as being a father, husband, messenger, and fighter for Islam in order to be widespread over the Earth as narrated by Abdullah ibn Amr ibn al Aas:

"...the Prophet of Allah - peace be upon him came to me and said: do you wake up in the night, and fast during the day? I said: Yes. He said: Do not do that, you must sleep and wake up, eat and fast, take time for your body, for your eyes, and for your wife and family as well."

(Bukhari, 1998, 1232)

According to what was written above about the texts of the Hadiths of Prophet Muhammad about time, and his advices in order to invest it to get its advantages, the researcher realized that the Hadiths were not a directive, regulations or educational instructions, but were actual practices that were applied by the Prophet realistically which made the positive impact on his nation and followers after his death. The positive consequences of Muhammad’s attention appear through his performance of the varied roles which have been played during his life; religious, secular and humanitarian; during that period of time Muhammad was acclaimed widely as a very great man who was able in a short period of time to make very great achievements. Therefore, followers of the Prophet Muhammad realized the great importance of time in those famous words and deeds which clearly affirm the real value of time. Where, Abu Sheikha (1991, 20) said from Abu Bakr Al-Siddiq- may Allah be pleased with him:

"I know that there is a duty to God which we have to do in the daytime, and will not be acceptable in the night, and another duty to God which we have to do in the night, and will not be acceptable in daytime"

This means that the night is for sleep in the beginning of it, and then you should wake up for worship, whilst the daytime is for work to achieve your goals.

In general, Kahf (1994) indicated that Muslim scholars and the contemporary Fuqaha' do not dispute about the value of time. There is no doubt that time is important. Since the Muslim should carry out his activities through allocated time. He added that time in Muslim life should be an investment phenomenon more than a purely consumption phenomenon.
Finally, to summarize the opinion of the researcher about what has been written above, she recognized that Islam through the Quran and Sunnah strongly confirmed the importance and greatness of time, and this definitely points to the primacy of Islamic concepts about time management before western scientists realized it. Therefore, she indicated that the concepts and frameworks of time management were apparent to Islamic scientists before western scientists fourteen centuries ago.

2.2.3.3 Time within the culture of developing societies such as Libya

There is considerable variation in the importance of time and the pattern of consumption according to the level of civilization of a society. Developed societies depend on industry, which relies on hardware, equipment and machinery, which operates to the second or millisecond and thus the operant unit of time is the second or a part of the second. In contrast, developing societies depend on agriculture, the grazing of animals and fishing, therefore, the unit of time is the weeks or seasons as is the case in the Arab countries. Consequently, Ibrahim (2001) stated that the environment negatively affects in the investment of time due to the poor attention given to the value of time in Arab societies.

Salama (1988) found that there are several social considerations that affect in the consumption pattern of time, such as economic conditions, religious values, geographical factors, customs, traditions, and the role of women in and out of the home, family cohesion and exchange visits. Additionally, Amer (2004) stated that differences in the environments in which individuals live affect the investment of their own time. The effect of these factors can be seen clearly if we try to compare the behaviour of individuals who live in urban societies with the behaviour of individuals who live in rural societies within the same country, as well as comparing the behaviour of individuals in a society with their counterparts living in other societies. To affirm this opinion Najm al-Din (2004:26) asserted:

"The value of time and its investment in the Arab societies are still carrying the distinctive features that reflect the backwardness, frustration and apathy in managing their own time, in addition to that time as resource is usually wasted, so some researchers wonder about how the Arab people realize of
Hegazy (1998) pointed out that Arabs and Muslims in the past were interested in time and its great value in their life. Their attention was a result of their awareness about the full significance of texts of the Quran and the Hadith, which clearly stated the importance of time. Arabs and Muslims in the beginning of the first era of Islam recognized that time is a blessing from God, so that they have to deal well with it; also they see it as a comprehensive vision to overtake personal interests and selfish individual concerns and, therefore, they benefited from time and provided their great achievement to their nation at that time.

On the other hand, Oweidat (2008) Imam (2003) Asta (2001) and Barakat, (1996) clearly demonstrated the status of Arab societies at the present time by saying that the developing Arab and Muslim societies are suffering at the present time from chaos in social structure: economic, political and cultural. These patterns of behaviour lead to alienation and cultural dependency, and make an incapable society lurching between subordination, isolation and confrontation with resources that have never been completely invested. Ziaour (1987) added that the Arab does not appreciate the value of time due to the prevalence of the features of underdevelopment which are reflected in chaos, randomness, and poor planning. Other factors are reflected in the traditions and legends that have some control over Arab thought, history, economic poverty, low standards of living, poor distribution of production and income. All those factors have led Arab citizens to exercise patience, wishful thinking and imagination to satisfy their needs. Ibrahim et al (1996), Glion (1994) and Salama, et al (1989) demonstrated that most of the social, political and historical sources have agreed that Arab societies have suffered from weakness and deterioration in their political systems, social values and their inheritance of a civilization dating back to the tenth century. These factors collectively (weakness and deterioration) led to a state of confusion, chaos, social backwardness, and wastage of time.

Furthermore, Imam (2003) and Al-Aadili (1994) recognized that the most important reasons for failure of development in developing societies are dealing with the time as commodity, as well as the failure in respect of deadlines. All of these factors led to the prevalence of a
culture of unconcern and indifference towards time. Within this context Karyoti (1985) and Al-Nuas (2003) showed that weekly working hours identified in developing countries for employees were typically thirty-six hours, but they found that the employee in developing countries spent much of working hours to reading the newspapers, taking drink breaks, and meeting friends. Therefore, Algebr (1998) stated that the positive values about time, cost, and quality have not been realized by Arab citizens as a result of the absence of planning and lack of behavioural awareness about the importance of time, poor planning and the lack of clarity of procedures, policies and regulations lead also to the depletion of resources such as the time resource (Asfour, 2000) (Alian, 2005). Furthermore, the lack of policies for employment and bad choices in terms of appointments to senior posts have led to the assigning of functions to those who are unable to fulfil the requirements such positions. All these factors negatively affect the required time to accomplish management tasks.

Ahmed (2003) and Al-Abedi (2009) summarized the most important environmental and organizational reasons that caused a problem with time in the Arab societies as follows:

1. The prevailing social system and its impact on the behaviour of workers: behaviour of individuals differ among societies and communities, and characteristics of Arab societies such as dependency, lack of planning, liaison with customs and traditions, affect their communities, and often lead to poor the attention about time.

2. The type of family and social relationships which are determined in accordance with a framework for dealing internally, particularly those relationships that do not represent the importance of the element of time, where the commitment of performance and the specified behaviour is becoming the most important.

3. Generality and escape from specialization, and filling some jobs with people who do not meet the requirements; furthermore, senior staff have always believed that they can participate in discussions because of their position of leadership without considering their lack of specialization in the field of discussion or the weakness of their experience.

4. Lack of knowledge about the job description, therefore, difficulty in determining the responsibilities, rights, lines of communication and authority in the organizational structure at the institutions along with a lack of understanding of the applied laws and
regulations. All of this leads to many arguments and discussions and evasion of responsibility.

5. Poor attention often given to the direction, guidance and training of employees at the beginning of their careers on the skills of time management, they are dependent on the transfer of their previous experience coming from the social communities in determining their ability to deal with the work time.

Overall, the researcher realized that time is often wasted in Arab societies at the present, in spite of their faith in the value of time that is emphasized by Islam in the Quran and the Sunnah. The researcher believes that poor investment of time is due to the adopted policies by Arab governments. Such governments frequently come to office position through military coups. Therefore military rationalism has a negative influence on social systems both economic and educational. Imam (2003) pointed out that Arab regimes adopt a method that is not familiar in other societies which depends on 'buying time' through procrastination and indifference so as to provide more time in order to stay longer in office. Thus, there is more underdevelopment, dependency and corruption in order to create confusion at the institutional level, which lead to the waste of material and human resources, as well as to the diversion of attention from the seat of government. Therefore, the researcher realized that the problem of dealing with time in the Arab societies would take a long time to be resolved since there is a crisis of thought, culture and mentality. The Arab citizen is inherently convinced that the value of time as has been confirmed by Islam but needs to develop himself, cleansing his mentality from sediments of regimes in order to be able to deal with the resources surrounding them effectively.

2.2. 4 Conclusion

Overall, the researcher asserts that the value and importance of time must be recognized as well as exploited and invested for effective use both at the level of the individual and the society. She indicates that time is an important factor in the development of any nation in all fields and adds that what has been accomplished in the past can be replicated in the present and the future through comprehensive awareness of all the reasons for progress, including
awareness of the importance of time, and the contribution of all institutions of society to guide the behaviour of its members about the seriousness of dealing with time as well as take advantage of it in every aspect of life on the level of the individual and the group. It is an important criterion of achievement and a crucial factor in the development of any society. All cultures in antiquity have used natural phenomena to give cues to social and religious activities (Landes, 2003). This was the basis for the earliest measurements of time. However, in the present era, the concept of time differs from one individual to another according to their particular understanding of its nature and impact and awareness of its importance.

In addition, the perception of the importance of time among individuals differs between human societies according to the religious and intellectual backgrounds of those societies. In developed societies; we find more attention has been given to time resources, as well as better utilization of time. Less attention and care is paid in the developing societies in general. The researcher points out that, despite Islam having asserted a primacy to the emphasis of the importance of time, however, modern Muslims have forgotten and ignored this focus in Islam in the Holy Quran and Sunnah. Developing societies, including Arab and Islamic countries are often classified according to the political perspective of western societies as ‘third world’ countries (Nabi, 1986). Nabi (1986) added that the Muslim and Arab world today have never known the meaning of time, and they have not realized its effect on production in the same way as has been realized in western societies. Therefore, it may be concluded that the awareness of the importance of time management in Arab and Islamic societies is very low when compared to that in developed countries. In addition, we should note that there is a replacement for the principles of time management with principles of procrastination and courtesy at the expense of work, which leads to the accumulation of work, which in turn reflects negatively on progress in Arab societies.
Part II: Time management operations

2.3.1 Introduction

As mentioned in the previous part of this chapter, the researcher will write in depth, analytically and critically about time management operations as the main body of research, including: time and its relation to general management theories in order to determine how time management has been developed as a science; determining time management definitions through the presentation of different views about the concept of time management, as well as extracting the points of agreement about the concept. The researcher will also offer an analysis of concepts of time within other management theories, and aims also to clarify the importance of time management at both individual and organizational levels. Furthermore, since time management operations is the heart of the present research subject, these operations will be discussed in relation to the time planning operation, the time organizing operation and control over time operations. The researcher will also provide an outline of the principles which reflect each operation, additionally, time wasters will be discussed in depth whether internal or external which exist around work environments or social life. Finally, the researcher aims to discuss time management operations within the culture of developing societies such as Libya.

2.3.2 The concept of time management from different perspectives

Time is ubiquitous, experienced by all, and is fundamental to organizational life. The effective use of time is implicitly or explicitly assumed in many management theories. The concept named "time management" appeared to meet the needs of people on how to effectively exert control over their time. This concept differs among individuals according to their motives, needs and different professions and also differs from one culture to another, from one society to another, as well as the nature of the business exercised by the individual within the organization. As mentioned in the previous chapter the progress of individuals and societies is measured by the effective investment of time, time management does not mean reducing the time which is spent in achieving the specific activities, but allocating time for each activity. Mendonca and Kanungo (1996:65) argued the issue of organizations' culture in developing countries and its impact on use of time by stating:
"Organizations in developing countries – traditionally those in the private sector and, more recently, the public sector organizations – have invested considerable resources, time, and effort to adopt the state-of-the-art human resources management and techniques practices in Europe and North America"

Mendonca and Kanungo (1996) added that techniques that were used and evolved in the context of the developed countries could be moved to be equally successful when adopted in organizations in the fundamentally different socio-cultural environment in the developing countries. However, they did not assert this with respect to policies of time use, since time management practice issues are related to the views of the people in those countries about time value and importance of time management. Claessen et al (2007) and Hasan (2006) stated that the term “time management” is actually misleading since time cannot be managed, because of the inaccessibility factor. In addition, Taylor (2007) argued that time cannot be managed because it is constant and consistent, however, the way that people conduct themselves can be managed. In this sense, time management can be viewed as a way of monitoring and controlling time. In other words, it is a form of self-management which increases personal and professional satisfaction (Dick, 2006) and time management is the way in which leaders go about accomplishing tasks or daily routines in relation to time. Thus, Taylor (2007:16) defined time management as:

"Setting priorities and taking charge of a situation and time utilization. It means changing those habits or activities that cause wasted time. It is being willing to experiment with different methods and ideas to find the best way to make maximum use of time"

Koch and Kleinmann (2010:20) explained that time management does not refer to what people do with their time in general, but it refers to what people do with their time in order to achieve a specific something. They refer to it as:

‘...the self-controlled attempt to use time in a subjectively efficient way to achieve outcomes’.

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Time management actions typically focus on the prioritization of activities through focusing on the prioritized actions until they be completed, and development of a plan for work that uses the prioritization as an organizing structure (Slaven and Totterdell, 1993). Therefore, Boak and Stephenson (1987) pointed out that time management is linked closely to objectives and priorities, so it is an approach that can reveal what managers wish to achieve and the barriers in their way. In addition, time management refers to tools and techniques that can be used to invest time more effectively. On the other side, Claessens et al (2007: 262) defined time management as:

"...behaviour that aims at achieving an effective use of time while performing certain goal-directed activities".

Claessen et al (2007) said time management involves the process of determining needs, setting goals to achieve these needs, prioritizing, in addition to, planning the tasks to achieve these goals; providing a range of skills, tools, and techniques which are usually used to manage time and accomplishing of the specific tasks, projects and goals. Time management operations include a wide scope of activities, and these include planning, allocating, setting goals, delegation, analysis of the spent time, monitoring, organizing, and scheduling. The effective use of time is usually measured with what has been achieved during that time period, as well as the importance of time depending on the event that has been made through that time. Claessen et al (2007) indirectly defined the time management principles since they have seen time management as a process that aims to use time effectively in order to achieve specific objectives. In this regard Mackenzie (1989:42) indicated:

"the effective use of time necessary requirement to reach the goals, since achievement of the goals are the basis of success, thus the individual who wants to be succeed in his life have to be an effective manager of his time"

Since time pressure can cause stress, time management has been created as an effective mean for coping with such pressures (Whetten and Cameron, 1991). Time management is the ability to decide what is important in both life and work. It is, as Davidson (2000) said, a personal process and must fit the personal style and circumstances. Time management is a technique for using time effectively. Additionally, time management was defined by Hellsten (1999) as an idea of having control over your time through balance, flexibility and
spontaneity. Thus, Time Management is not about getting more things done in a day, but rather it is about getting the things that matter most done. Within this context, Islam has stated that time management is not dependent on the element of speed for accomplishment only. In addition to that it emphasizes the need to achieve quality and efficacy in the achievement; according to the words of the Prophet Muhammad - peace be upon him - that "God loves when one of you do anything it should be well done" (Shehata, 2005).

Summarizing what has been presented so far about time management definition, it can be recognized that the administrative literature is rich with many concepts about time management, since it presents different concepts according to several different major researchers who have different points of view according to their understanding and awareness of both concepts of management and time as an administrative resource. These concepts reflect the frame and background of each researcher. We can also see that time management in modern management is defined according to modern concepts of management and is thus completely different from time management in Islam as well as time management in developing countries, where there is a great awareness about time value and importance of time management. However, there is a poor practice of time management in such developing countries due to social pressures and poor economic levels.

2.3.3 Development of the time management (practice and theory):

Referring to ancient historical and religious documents, it can be found that the value of time was realized since ancient man tried to interpret the phenomenon of time and the succession of night and day, as well as the phenomenon of the four seasons. Thus, Abu gouda, 1995) stated that ancient man invested the rainy season in farming works, and the summer season for fishing and travel. According to El- Qaradawi (1995), Nasir al-Din (1992) and Karyoti (1985) time management in the era of Islam was practised very effectively. As noted in the previous chapter, Islam, through the Quran and Sunnah, strongly confirmed the importance and greatness of time and this definitely points to the primacy of Islamic concepts about time management before western scientists realized them fourteen centuries ago.
As noted by Shehata (2005) and El Ashwah (2004) the investment of time and effective management which were practised by the Prophet Muhammad - peace be upon him - and his followers after him led to make the great Islamic state, as well as the great Islamic civilization, which was recognized and brought to the Western World.

The holy Quran, Books of Muhammad's biography and Islamic texts have indicated that time management was practised effectively by Muhammad - peace be upon him - where he practised the delegation policy which is in the modern science of time management the most important principle, and one of the most effective methods of time management. The Prophet Muhammad also strongly faced down time wasters through operation of control over time, in addition to the principle of the division of labour among followers.

As Islam recommended, the dividing of work time should not be into equal portions. Indeed, the main thing is that each task should be given the time necessary to be achieved effectively (Al-Jeraisy, 2000). These principles were realized in the 18th and 19th centuries by some western scholars such as Adam Smith, who believed that the saving of time leads to an increase of production, the compensation of wasted time, and a consequent increase of the wealth of nations. In the modern era; time management has been realized as the organisation of tasks or events by first estimating how much time will be taken to complete the task, when it must be completed, and then adjusting events that would interfere with its completion (Taylor, 2007).

This progress on time management whether on time management theory or practice has been accomplished due to the progress in both social and technological activity, as well as the growth of the industrial revolution. During this research, it was realized that the attention given to the subject in the Western World began with theoretical research and experiments that have been conducted by administration scientists about time management as a modern administrative subject.

According to Shehata (2005), Benjamin Franklin (1706-1790) was the father of time management science in western society. He asserted the importance of exerting one's best effort in order to achieve what is wanted, and that the most important achievements come through the creation of a system for time management. He developed some criteria in order to measure his behaviour by identifying the values and principles needed to achieve long-term
goals (long-term planning). He then developed these concepts through the identification of what needs to be done every day (short-term planning). In other words, he created a list of principles needed to achieve and develop a framework to evaluate his daily behaviours. Thus, he generated what is known as the 'Little Book', which includes values and goals to be achieved.

In general, most of western managerial literature states that the origins of time management commenced with the work of Frederick Taylor, Henri Fayol, and Henry Gantt. Early management researchers studied time in the context of efficiency and productivity. Taylor aimed to increase productivity through a decrease of unnecessary motion and time standard used for planning and scheduling of employees work (Barnse, 1980). While Davidson (2000) added that over fifty years ago, Taylor, Fayol, and Gantt astounded the industrial world by establishing time and motion procedures that enabled employers to get higher productivity from their workers. Taylor established the basis of modern-day time management techniques, whereas Fayol developed fourteen management principles, such as the division of work. Moreover, Gantt created what is known as the principle of 'time analysis' (Cole, 2004). In addition, Lakein (1973), Mackenzie (1972), and McCay (1959) suggested simple remedies, such as writing work plans down on paper (so-called “to-do lists”) in order to increase job performance. Such approaches were widely adopted by executives, and time management is the way leaders go about accomplishing tasks or daily routines in relation to time. Consequently, it can be noted that the management theories stated to be at the heart of the topic of time management, such as the theory of scientific management were developed during the first half of the 20th Century. Alian (2007:15) affirmed this by saying:

"Despite the large contribution of Taylor it did not reflect the modern concept of time management, the Taylor's attempts largely focused on increasing production and profits through a focus on increasing the effectiveness of executive management, especially in the aspects of productivity to work .... in general in the late of fifties and early sixties of the twentieth century. After this time period attention given to time management increased significantly by increase researches, studies and, articles in this area. This increased attention was a result of impact of economic, cultural and, social developments, especially the enormous technological developments in the field of communications, high rates of investment in institutions, and the costs of production"
Therefore, according to thoughts of Taylor the value of the cost of goods is calculated via consumed working hours. Thus, the value of time based on his opinion is not different from the value of the rest of the resources that are used in the production of those goods.

On the other hand, Shehata (2005) obtained a different view since he divided time management into four generations whereby each generation is built according to the previous generation:

The first generation: interested in scheduling of the work, it is an attempt to include the business according to a classified list.

The second generation: interested in setting a date for each task, in order to programming and linking business and future activities with specified dates. This generation led to the idea of timing each activity on the agenda.

The third generation: has added what is known currently as a pyramid of priorities. It also focuses on setting goals which require time and effort to be achieved, as well as paying great attention to planning to achieve goals.

The fourth generation cares about the self, the individual as interested in the values of the individual. In general this generation focuses on the humanitarian aspect more than the material aspect. This interest came as a reaction to the third generation which dealt with the human as a machine without regard to his need for time to meet his personal needs. As shown in the figure below:
Figure 2.1 The four generations of time management

Achievements of each generation

Identifying business in specific regulations.

Programming dates of business.
Use of notes.

Accomplishing of the most important things first.
Setting Goals.
Planning.

Attention to the lives of the individual.
Insertion of the value of life within time management.
Focus on relationships and humanitarian cooperation.
Shehata (2005)

In summary, we note that the subject of time management was not discussed and researched from a theoretical perspective, however, we find that time from an Islamic perspective has been identified and practised at both levels of theory and practice earlier than in developed societies. At the theoretical level, many Quran texts and Hadiths have referred to the importance of time, and the need for investment through the effective application of some principles of time management, and we find that the Prophet Muhammad and his followers translated these texts of the Quran into practice in the daily behaviour which affirmed the effective time management which was practised at that time.
Time management through the Islamic approach featured balancing among the life of this world and the hereafter, as well as the balancing between the right of God, the right of self and the right of others. It also featured the use of the principles of delegating, division of labour and planning - as we shall see later - whilst at the present time the concepts and practices of time management are associated in the administrative literature with western literature. Many administrative theories founded by western management scientists relate directly or indirectly to the modern principles and basics of time management. Also we can find that most of the management literature emphasizes that the science of time management is a modern science which has developed in accordance with the experiments of Frederick Taylor, and they completely ignore the existence of the science, and practice of time management beforehand in Islamic societies. This neglect as the researcher realized was due to the failure of Islamic societies in the effective practice of time management - which was practised in the first era of Islam - as well as the present Muslims absent from the Prophet's school to learn the origins and principles of time management. These were the main reasons for failure, but other problems existed such as the adopted policies in Arabic and developing societies, social background, culture and the economic level of development.

2.3.4 Time within management theories

Any movement and action are carried out by the individual should be completed within a specified time. The administrative actions essentially focus on movement and time or time and work, since each action needs an allocated time to be achieved. Accordingly, the importance of time management theories emerged within classic and modern management theories, and occupied a prominent place in these theories. Such theories indicated that the topic of time management is partial and has not been studied fully, so, those managerial theories cannot be described as comprehensive. Indeed, the researcher would argue that those initial theories were expressions of different points of view which will be described more fully in the following chapters.

2.3.4.1 Time within the school of scientific management

The theory of scientific management was led by Frederick Taylor (1856-1917) who focused on the study of movement and time. This study was conducted in order to analyse the best
way to perform work through division of labour and to determine the basic movement from one area to another, as well as to determine the needed time to complete tasks. Taylor took into his account the fact that defining of percentage for count of time is needed to cover work blockages, interruptions or delays, for a break, or for other compelling reasons that may interrupt activity. Experiments on movement and time were conducted in one of the U.S. industrial companies, where Taylor noted that there is a significant loss in production due to bad investment of managerial resources. Therefore, Taylor’s experiment was conducted in order for the individual worker to perfect his job performance. Work could thus be organized into production lines and items produced efficiently and to a constant standard. As a result, Taylor’s method featured new ways to organize job-time such as how long the workday should be, and how fast employees should work (Pettinger, 1994; Levinson, 2004; Bowditch and Buono, 1997).

Equally, Henri Fayol (1841-1925) was one of the earlier scholars of the ‘classical school’ as well as being one of the first scientists who defined the concept of management and its principles. The researcher notes that most writers in the field pay homage to the efforts of Taylor on the establishment of the basics, principles and origins of time management, while they completely ignored the efforts of Henri Fayol in this context. Fayol created what is known as fourteen principles of management in a book which was published in 1916. The researcher found that some of these principles continue to be applied in the practices of time management; such as the principle of division of labour. Those principles contributed effectively to developing the skills of time management, such as the principles of stability of tenure of employees, this principle is contributed in providing the time for employees to develop their skill level. Equally, notions of unity of direction, this principle makes employees receiving their orders from the same source of authority, and keep them from dispersion of their efforts in relation to time.

The great advances that Taylor, Fayol and others who followed the scientific school made in the standardization of work was to put the concepts of productivity and efficiency into practice, and create the basics and origins of time management. Henry Gantt continued this work by development of the work schedules, charts and plans to help assist in the development of timetables for the work as a basis for the planning, implementation and control. Additionally Gantt’s bonus system allowed men to challenge allocated time for a particular task in order to increase the productivity rate (Cole, 2004). Furthermore, Gilberth
was able to reduce the number of movements, and made improvements in the development of work and performance, the development of working rules that divided work into several steps or sections, and defined the concept of performance, as well as the creation of mapping for this purpose (Cole, 2004). In addition, Urwick, who was strongly influenced by Fayol's thoughts produced a list of ten managerial principles, some of which strongly influence the effectiveness of time management, such as the principles of specialization and definition of jobs. Both principles will lead to providing a good opportunity to develop work skills, as well as reducing the number of wrong attempts in achieving management goals. Furthermore, Brech who created his own principles which overlapped considerably with those of Fayol and Urwick, he was interested in division and delegation of responsibilities, which are now one of the time management principles and methods (Cole, 2004).

2.3.4.2 Time within The behavioural school

The behavioural school adopted the theory of human relations, and focused on establishing organizations from social destination and humanitarian grounds. This school also focused on individuals and their human behaviour, relationships and feelings, as well as the social relations between individuals with each other and with their superiors. The value of time which was given through this school is focusing on giving the workers a period of rest in order to ensure the high morale and production (Cole, 2004).

The human relations movement focused on the need for managerial strategies to ensure that concern of people at work was given the highest priority. The famous studies - the so-called Hawthorne Studies- concluded that the phenomenon of absent workers and irregular working hours reduces the rate of production (Cole, 2004). This school, as the researcher concluded affirmed the importance of time in organizations, since it focused on the necessity of time management by providing a sufficient period of time for rest and work for employees in order to ensure achieving the organizational goals effectively.

2.3.4.3 Time within the modern school

Modern theories of organization appear to take advantage of the ideas of earlier researchers. Time has been given great attention by pioneers of modern theories, such as the theory of decision making where the time management occupies a prominent place, time is used in
solving the fundamental problems of planning and production (Abu Sheikha, 1991). This theory depends on the past events and classifies them in line with decision making. Thus, time in such a theory affects on the quality of decisions. In addition, mathematical theory depends on mathematics in problems solving and time management. Abdullah (2006) has stated that the mathematical theory assumes that the organization is an organism. It generates, grows, and then dies after having passed through several stages, one of which is a stage of maximum production. Therefore, the mathematical theory strongly recommends us to invest the period of time to achieve the desired organizational goals.

Consequently, the researcher concluded that the modern theories have given a special attention to the time factor, for example the school of quantitative methods has singled out special attention to time management such as the Queuing Theory. While the school of systems considered time as one of the external environment factors that cannot be controlled because it is moving forward according to a regular progression. Within this context Arabiat (2001) affirmed that the modern school dedicated attention to the development of technology and communication due to the progression in technology and information. There are also increasing challenges faced by organizations which need to focus on the time management in order to increase the effectiveness of investment of all managerial resources in order to ensure higher levels of performance to push the development (Asfour, 1982).

Thus, the researcher found that the time factor and time management have been given special attention within the classical and modern management theories, where most researchers realized that the time factor is not less importance than other managerial factors in providing the highest level from performance.

2.3.5 The importance of time management

The significance of time has been emphasized recently by an increasing number of studies about time in organizations. The vast amount of research on time has generated numerous and divergent notions, concepts, and ideas about time. Claessens et al (2007) stated that during the last two decades there has been a growing recognition of the importance of time in the organizational literature, since the temporal dimension of work has become more important because of expanding global competition and increased demands for immediate availability of products and services. Where Majid (2007), Diab (2004), Suleiman (1998) and Towill (1996)
agreed that the strong competition in global markets has focused on how to use time as a competitive source and strategic weapon which is equivalent to money, quality, and productivity, as well as investment of time effectively become more important than the size of costs and expenses. In addition, Aje et al (2009) stated that one of the success factors in the projects is to choose the right time for accomplishment. Durker (2002: 53) stated:

"Time is the scarcest resource, and unless it is managed, nothing else can be managed."

Sasson (2009) defined key issues in time management:

- Time is limited. Time is a very special resource as defined previously; time cannot be stored or saved for later. Everyone gets the exact same amount of time each and every day.
- Time is scarce. Most people feel they have too much to do and not enough time. So there is a necessity for time management to get things done. The significance of time management and time practice has been increasing day by day.

This significance shows through the increasing attention of institutions to establish training courses and programmes for developing the practice of managing time (Barnard, 2007). In addition Harung (1998) asserted some advantages of time management such as:

- To obtain maximum value in a minimum interval of time - to do less and accomplish more.
- To have more time in the private or social life, or at least more prime time.
- To think and act in a timely manner.

Quoting from Al-Ghamdi (2008) we may note that the benefits of time management result in reduced stress, since time management contributes to the prevention of stress and optimises the balance between our social and work life, as well as providing time for work, family and self, in addition to increase of productivity (Sheridan, 1988).

Orr (2009) added some other advantages about the reduction of stress, asserting that many frustrating situations can be avoided by effective time management by saying:
"One of the great advantages of time management is reduction of stress". (Orr, 2009:1)

When leaders manage their time effectively they will have an organized and prioritized schedule, and they can achieve greater financial stability and produce stronger family bonds. Furthermore, Slaven and Totterdell (1993) defined some of the positive results of effective time management where they said that time management potentially provides a set of principles to help people cope with demands by:
1) Prioritizing tasks into crucial areas.
2) Concentrating on work within priority areas.
3) Planning work in accordance with those priorities.

Ojo and Olaniyan (2008) indicated that time management in general is a panacea to organizational effectiveness. Time management improves leader's productivity, makes leaders perform tasks at their highest skill level, helps them to prioritize and accomplish important tasks, and guide the organization towards achieving its goals. On the other hand, Hayden (1987) pointed out another benefit of time management by saying that time is often cited as an important and sometimes crucial variable in the quality of decision making or planning process. Dedonno (2009) said within this context that despite of managers differing in their perceptions of the amount of time needed to complete a task, they are aware that time pressure is a major constraint on the quality of their decisions and they agree that time pressure has an impact on the degree of risk taking in certain decisions. In addition, Al-jeraisy (2004: 64) stated:

"Decision-making requires a defined period of time. The diversity of problems and conditions which are usually faced by managers, and the varied nature of decisions at management levels affect the time allocated for decision-making".

Adair (1999) and Pettinger (1994) pointed out that the effectiveness of decision-making processes is partially dependent on aspects of time management. Since the decision-making process goes through many steps which are dependent on a specific period of time, it is apparent that some decisions are effective at a specific time and not effective at another time. In general, time is not the kind of resource that can be increased by working hard. The aim of
time management is to increase the quality of the activities performed in a limited time (Tanrogen and Iscan, 2009; Cemaloglu and Filiz, 2010).

In another context, the value of time plays an important role in influencing the performance of governmental organizations, and the normalization of behaviour of workers. The high value of time in some societies is usually reflected in the criteria of the evaluation of these organizations, and in the prevailing behaviour among workers in these organizations. The performance of organizations in the society which cares about time is often measured in terms of programmes and achieved tasks within an allocated time. On the other hand, when the value of the time is low, the efficacy of time for the performance of organizations may not be an important focus for evaluation. In this case, absenteeism among employees will be a common behaviour, spread of slow performance phenomena, the frequent delays to procedures, as well as procrastination by workers which leads to bad relationships with the organization and the public. Shehata (2005) and Walter: (2008) added that the modern economy is characterized by a division of work as a modern strategy and should be used to invest work time in order to increase productivity.

With regard to the importance of time management within development issue; most scientists in social and economic field agree that time management has a great importance in the lives of societies and people in the accomplishment of achievements. Accordingly, Rashed (2006) indicated that the gaps in development between societies and cultures are usually measured by time scales and they describe the progress of one society over anothers as a century or two centuries. This depends on the nature of the differences among these societies. Therefore, the development of societies should be measured according to time movement. According to Oshagbemi (1995:19)

"...time is a limited economic resource and how the manager allocates, it is important for his or her productivity and indeed, for organizational success. Managerial allocation of time among several activities can be used to gauge the relative importance attached to those activities."

It can be seen that time management is important and necessary at both individual and organisational levels. In general, in the western societies peoples have recognized the importance and value of time. Therefore, they searched for the best way to use that resource
effectively, so, their researches, studies and experiments have appeared in western managerial literature earlier than Arab researchers.

2.3.6 Time management operations

Time is one of the management resources, in order to be managed effectively leaders must manage the major processes to be carried out, those operations reflected in planning, organizing and control. The three major administrative processes and activities according to Patten (1981) can be used as a general time management operations. The operations of time management are often associated with the recommendation to set goals. These goals are recorded and divided into projects, an action plans, or a simple tasks list. This process results in a plan with a task list, a schedule or calendar for activities. According to Dobbins and Pettman (1998), time management refers to the process that make leaders able to control over the sequence of events that leads to the achievement of the goals. According to (Erdem, 1999:27) time management is:

"a process in which a person applies such management functions as planning, organizing and controlling into his own activities to attain his goals effectively, and productively in his both private life and career"

Levin (2007) defined some important needed points for successful time management strategy such as:

- Finding the needed time in order to accomplish the task.
- Committing to making the necessary effort to accomplish the task.
- Making sure of comprehending exactly what the task requires to be done?
- Getting hold of the physical resources- equipment and material- that your task requires.
- Finding an environment to work in that is conducive to accomplishing the task.

Terry (1964) described the administrative process that it includes major functions such as planning, organizing and control; consequently, time management also includes such functions. In order to manage time effectively a specific plan should be drawn up, a specific organizational policy must be adopted, and controlling process also must be practised to
reduce time wastage. Ruthery (1972) gave the greatest emphasis to the organizing process. In addition Adcock & Lee (1971) created ten management principles distributed on the process of time, planning, organizing and controlling. Therefore, it can be seen that the operations of time management represent the procedural aspects that enable the administrative executive to benefit from the time by correct manner as well as make them able to reduce the wastage of time, those operations include some time management principles as follows.

2.3.6.1 Time planning

The planning process is the most important process in the development of time management through the effective use of the time available. There is an assertion that planning is the most important administrative process, this assertion appears in the work of Claessens et al (2007) who refer to time management as a process of determining needs and setting goals to achieve needs.

Planning is a basis of time management operations. Successful planning leads to reducing the required time for implementation, therefore, planning is usually associated mainly with time. The success of any plan is always linked with a specific period of time, on the other side, the failure of many efforts and actions is a consequence of inadequate attention given to the element of time. Within this context Cemaloglu and Filiz (2010) stated that everything at every levels must be planned, implemented, developed and assessed within specific time. Salama (1988: 79) emphasized that opinion by saying:

“One of the most important factors of success for any plan is its association with specific time, time planning processes save time which can be invested to do other important activities.”

McKenzie (1972) affirmed this opinion by saying that every minute spent in planning provides three or four minutes in the implementation. Kearns and Gardiner (2007) stated that the planning process aids to avoid unnecessary distractions and alleviate stress as well.
Therefore, researchers who are interested in time management recommend daily, weekly, monthly or other planning periods. Different planning periods are usually associated with different scopes of planning. The time log can be used when leaders want to monitor their behaviour to save their time (Adair and Allen, 2004). McCay (1959) asserted that setting goals, and time logs are an important strategy for managing one's time. In addition Claessens (2007) indicated that the first step to good time management is to prioritize of the tasks. In other words, deciding which task is most important. Moreover Reynolds and Tramel (1984) clarified that the planning operation makes leaders able to avoid all an unproductive work. Dobbins and Pettman (1998) defined planning as a list of activities; actions which must be done along with defining the responsible person for each action at each stage of the planning within this context. Cemaloglu and Filiz (2010) affirmed in their study that the social, economical and cultural factors should be taken into consideration in the time planning process.

2.3.6.1.1 Goal setting

Goal setting is a powerful tool that can be used to motivate and challenge managers. All management levels in every workplaces can implement the goal-setting strategy. Achieving goals give managers a sense of accomplishment, making it a flexible and very useful tool to learn, and providing the motivation for growth and success in many important areas (Rouillard, 2003). According to Slaven and Totterdell (1993) the effective goal-setting principle depends on knowing the areas where results need to be achieved. Planning is one of the most important elements of efficient time management. The best time planning requires the determination of purposes (Cemaloglu, and Filiz, 2010). Fitsimmons (2008) affirmed through his view that goal setting can be used effectively as a time-management tool as well as an aided in departmental and organizational planning. Hellsten (1999) pointed out that managers must know how their time is spent in order to get control over time effectively. He added that the greatest benefit of time analysis is to enable managers to identify the real problems related to the use of time which that are faced in achieving objectives.

2.3.6.1.2 Scheduling

The successful time planning process depends on scheduling that includes both an order of activities and tasks, and estimates of the time necessary for each task or activity. According to
Ojo and Olaniyan (2008: 401) time management was defined in accordance with the allocated time for achieving each goal by saying:

"Time management is the organizing of tasks or events by first estimating how much time a task will take to be completed."

According to Adcock and Lee (1971) scheduling includes a list of duties, activities and objectives which should be achieved according to a specific timeframe with the need to leave a free space for exceptional cases that may require change. Equally, Abu Sheikha (1991) noted that most managers distribute their full work time on all activities without leaving any time for scheduling and dealing with crises and exceptional cases, Halwani et al. (1995) noted that half of all managers' time would be spent in dealing with crises and work stress.

2.3.6.1.3 Priorities

Ghoneim (1999) noted that the time required to solve a specific problem or achieve a goal plays a major role in setting priorities since goals that require the shortest time should, logically, be achieved first. Trickett (1962) pointed out that the principle of prioritising depends on the classification of the tasks according to their importance on a scale ranging from very important to unimportant. Further, Lakein (1973) suggested a method for planning and identification of priorities in accordance with a list of planning. This approach depends on the classification of the goals into three groups: A, B, C, based on their necessity. The ABC system is relative and flexible which means that managers can move a goal from one group to another group based on its importance. Within the same context (Heinz, 2001) stated that the priorities represent a number of tasks which should be undertaken by the managers and must be arranged according to their importance. He recommended that there are two important points for these priorities:

1. Put a list of tasks that must be undertaken.
2. Determine the priorities for these tasks.
According to Tanrogen and Iscan (2009) it is difficult for managers to provide complete control during their daily plans, therefore, to achieve these daily duties and activities a priority policy should be created. Kearns and Gardiner (2007) found that the planning and prioritizing of tasks are the best two ways to manage stress. Cemaloglu and Filiz (2010) noted that time management requires using the time in the most effective way as well as apportioning the time and determining the priorities. They added that planning is one of the most important elements of efficient time management; therefore, the best time planning requires the determination of priorities in order to avoid any imbalance case in the goal achievement.

Margol and Kleiner (2009) stated that the choice for the future do not require spending long hours on solving and thinking past problems, it requires:

• Focus on opportunities rather than problems.
• Choose your own direction.
• Aim for something that will truly make a difference.

In general, the definition of priorities is not recognized and implemented by most Arabic managers, as Al-Jeraisy (2004) indicated that most Arab managers do not believe in priorities and do not work within that system. Some of them manage their work according to the crises that they face during their work time. Consequently, they define their priorities according to the crises they face every work morning. Patten (1981) added that these kinds of managers do not manage their business, but, their business is managing them. The application of this principle is a difficult task since most managers face difficulty in making decisions about determining which goals are more importance than others, and must be on the top of the priorities list (Dorney, 1988).

The process of time planning is an integrated and connected operation. It begins with the identification of activities, functions and goals, then arranging and organizing them in groups into specific lists according to the priority and importance of each defined goal. They must be organized based on a matrix of urgency and importance that has been mentioned previously with the need to allocate time for each goal within a flexible timeframe in order to face any emergencies, which may cause waste of time. Al-Mullah (1991) summarized this opinion by saying that principles of time planning can be associated with the Pareto principle,
which is attributed to Alfredo Pareto, an Italian economic scientist. The principle depends on the distribution of a few vital tasks and the many simple tasks according to the allotted time for the organization work, as shown in the following figure.

Application of the Pareto principle of time management describes an imbalance in distribution, for example that 80% of the effort results in 20% of the results, whilst 20% of the effort leads to 80% of the results. This is known as the “80-20 principle”. The implication for analysis of time management using the Pareto principle is that a smaller proportion of the work time (for example 20%) used effectively in achieving the most important tasks will provide a larger proportion (say 80%) of the desired results, while 80% of work time spent ineffectively will provide only 20% of the results. This, of course, reveals cogently that there is an imbalance between time, effort, and results (Al- Mullah, 1991).

2.3.6.2 Time organizing

Organizing of time is considered an important requirement for successful managerial work. Time organizing was defined by Rashed (2003) as a managerial process that leads to providing the needed time and management means to implement the tasks that are required to implement the specific plan. In general, time organizing is a process that aids leaders to save time via work within a well-organized work environment and effective delegation. Salama (1988) affirmed that the effectiveness of time organizing is relative to the identification of the functions of staff and the division of labour among them objectively to reduce conflict and duplication in both functions and powers.
2.3.6.2.1 Organizing the work environment (work place)

Taylor (2007) defined the workplace as a place to get things done. Masterton (1997) said the efficaciousness of work depends on arranging the work place, such as keeping the desk clear so that just things that relate to the present task should be on desk. Adair (1988) stated that time can be wasted if the work place is not organized well, and he recommended managers to keep their offices arranged in the light of the functions which they perform, because the physical comfort and aesthetic satisfaction are important factors for saving time and getting the best outcome. Moreover, Reynolds and Tramel (1984) summarized that the arranging of the workplace, such as keeping the desk clear with only documents related to the task on the desk, is a good method to manage time well. Sharif and Ismail (2010) concluded from their study that an unorganized work environment negatively affects time management and also leads to failure of plans, whereas a better organized and healthy work environment is best to organize available time and to be more productive and creative. Margol and Kleiner (2009) added that the organized desk is a reflection of an organized mind, and an organized approach to the business at hand.

An organized work environment, according to Frostberg et al (2010), leads to job satisfaction and commitment, avoidance of stress, disruptions and losses, and to greater throughput efficiency since it makes work easier. Oshagbemi (1995) affirmed that managers spend half of their total working hours in their own offices. Therefore, the Canadian Union of Public Employees Health and Safety Branch (2003) suggested that workplaces need to be reorganized to eliminate stress hazards. They added that this is the most effective way of solving health and safety problems and stated that the physical features of workspaces should minimize noise, ensuring natural lighting and proper ventilation to reduce the stress hazards to a minimum, whilst, Scarborough and Lindquist (1998) suggested that a typical work environment should be structured to minimize interruptions.

2.3.6.2.2 Dealing with paperwork

One of the most important time wasters is the inability of workers to find work papers quickly. Therefore, many researchers recommended managers to keep only paper that is
related to the specific job in hand. Administration of paperwork is the ability to classify and describe important documents. (Godefroy and Clark:1995) Bird (2008: 79) stated:

"Unless you have a system for dealing with paper, you may waste a lot of time either by delaying dealing with it, or dealing with it inefficiently."

Masterton (1997:69) explained the benefit of dealing with paperwork effectively when he said:

"The dealing with paper effectively can be achieved by using a specific system to keep the documents easier to reach."

Ojo and Olaniyan (2008) pointed out some consequences as a result of poor dealing with paperwork as:
- Not being able to retrieve important items on time when the need arises.
- Forgetting to take action when necessary.
- Non-separation of relevant papers from relatively less important ones.

On the other hand, Godefroy and Clark (1995), Manser (2010) and Tracy (2004) provided a great strategy to deal with paperwork effectively as follows:

File it for future reference: the most important documents should be filed just in case the manager will need it (such as invoices, managerial reports, contracts). Also managers or their secretaries must regularly go through the system, filing items that are still important and throwing away the papers that the office no longer need.

Bin it: papers which have already been dealt with whether by manager or secretary and are no longer needed, or that are not needed to be read should be thrown away in the waste basket as the best way to save time, as well as to keep desks clear.

Deal with it or take personal action: involves reading it, or replying to it, if the document is important, or requires more than five or ten minutes to read then you can make a note in an action list to come back to it at a more convenient time; time that you have specially allotted for this task, or the paper that might remind you to phone or email a colleague, if so, enter the details on the action list and keep the relevant piece of paper close to hand.

Delegate it to someone else: papers that can be handled by others, such as the secretary, and should be passed them on to deal with.
2.3.6.1.3 Delegation

Atkinson (1988) stated that leaders who use their time effectively can increase productivity by using the delegation process to increase the amount of available time. It is essentially a way of obtaining help to save time for achieving the most important tasks that are never completed by others (Fontana, 1993). Taylor (2007) asserted that delegation is an essential element of any managerial job. Using delegation effectively provides real benefits for everyone involved. Proper delegation enables the leader to get the best possible results (Haughey, 2001). Some major benefits of delegation include:

- Extending results from what a person can do, to what a person can control.
- Releases time for more important work.
- Develops subordinates initiative, skill, knowledge, and competence.
- Maintains the decision level.

Al-Mullah (1991) indicated that managers should take into account those tasks that cannot be performed by others, and those that can be delegated to others when goals have been set. In addition, he suggested arranging tasks in order to provide time for the manager to do other work of importance.

The researcher through her reviewing found that this principle is linked to the law of Pareto which we have previously shown. Through application of the Pareto principle managers can delegate the larger part of their work which is expected to contribute only a few of the results. Effective delegation depends on the mandate for staff to do business according to their abilities, and being provided with a portion of the power and authority to perform those tasks effectively. The use of delegation saves time for manager, and the mandate is an appropriate way to develop the skills of staff.

In general, principles of time organizing relates to each other as any managerial process. Each principle depends on the other processes, as the researcher will clarify later. Management of work depends on classifying and identifying the most important documents from unnecessary ones. The most important documents are either filed after they have been examined, or delegated to others to deal with. Furthermore, managing paperwork is an effective part of managing the work place.
2.3.6.3 Control over time

Control over time is a major managerial process which has led some researchers to state that the best starting place to improve the use of time is to determine the extent to which you control the time available to you.

The control of time is an essential element in time management. It is an integral stage of good management. It aims to ensure that management activities are satisfactorily directed toward the defined goals, to identify and correct errors and deviations that cause the wasting of time. Within this context, Dobbins and Pettman (1998:18) pointed out:

"In essence, time management refers to the process by which managers control the sequence of events which leads to achievement of organization's goals"

They added that to get complete control over time managers need to use the law of control, take control of their thoughts, life, time, own mind, feelings, knowledge, experiences ,and attitude since these all impact on effective time management. In addition, Elorafi (2002: 34) defined time management through the process of control by saying:

"Time management is; management of ourselves through control upon internal and external factors which often be behind loss of time."

Moreover Taylor (2007) asserted that control over time involves changing those habits or activities that lead to waste of time, and added that time management can be viewed as an act of controlling of events whether they are external (meetings, family, and work) or internal (talking on the phone, watching television or a commitment). In addition to Dobbins and Pettman (1998:18) indicated:

"Time management refers to the process in which we control the sequence of events which leads to the achievement of our goals"

Moreover, Ramsey (1994:14) asserted that:
The ability to take control over time is the key of success in today's world of work.

According to what has been written above the researcher believes that effective principles of control over time are essential to the successful management of organisations and the researcher asserts that this is especially true in the challenging circumstances of higher education in developing countries.

2.3.6.3.1 Time analysis

Analysis of how managers spend their time is a necessary factor for successful time management, because, it aids in identifying unproductive activities that lead to wastage of time. Drucker (2002) added that effective managers do not begin with their jobs, but they begin by identifying how to spend their time, and then manage it through the exclusion of non-productive activities.

Time analysis is a method used to provide details about how time is spent each day, preferably an analysis primarily in terms of activities rather than projects (Boak and Stephenson, 1987). Haynes (2000:4) said that:

'Analysing how you use your time is the first step to achieving the best control over it'

Trickett (1962) reported that the main problem faced by the majority of managers is their lack of knowledge of how do they spend their time. Ruchti (1958) provided two ways to find out how time is spent, either by keeping a record or diary, or by mandate of someone to observe and record the time and organize the activity of work. Managers who do not know how they spend their time will be unable to choose among the alternative methods to manage time effectively (Ashkenas and Schaffer, 1982). The benefits of time analysis, as Drucker (2002) pointed out, is that it would lead managers to identify the following key issues:

1. Unnecessary activities that do not need to be practised by managers.
2. The current tasks that are practised by managers but that can be delegated to others.
3. The activities which lead to wasting of the manager's time and which can be controlled, as well as the activities which are practised by managers and lead to waste of staff time.

Consequently, the accurate information from the time analysis process leads to a precise definition of problems which lead to wasting of time. In addition, the time analysis principle is a good factor to manage time effectively. Therefore, managers have to keep a record of their activities as a first step to analysing their use of time; managers can use an urgency and importance matrix which was designed by Abu Sheikha (1991) in order to define how time is spent.

![Figure 2.3 The urgent and important matrix of activities](image)

<table>
<thead>
<tr>
<th></th>
<th>Important</th>
<th>Unimportant</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Urgent</strong></td>
<td>1-Important and urgent</td>
<td>3- unimportant and urgent</td>
</tr>
<tr>
<td><strong>Not urgent</strong></td>
<td>2-Important and no urgent</td>
<td>4- unimportant and not urgent</td>
</tr>
</tbody>
</table>

Abu Sheikha (1991)

2.3.6.3.2 Control of time wasters

This principle is the key to control over time in particular and the way for effective time management generally. It has possibly led some writers to describe time management as self-management. Most researchers, such as Al-Qaryouti (1985) and Donglass and Goodwin (1980), have concluded that efficiency in time management is based on control over all things that lead to the loss of time.

Interruptions during work time lead to delays in completion of the work which means defects and weaknesses in the planning of time and priorities. Interruptions can be controlled through
self-discipline and by avoiding those things that lead to delay in achieving objectives, as well as commitment to good work habits (Leboeuf, 1980).

Additionally, Dobbins and Pettman (1998) provided recommendations to gain control over time interruptions, such as use sign of 'Do not disturb' in order to blocking of interruptions. They also recommended that leaders meet unexpected visitors outside the office or stand up to leaving the office, and make a habit of saying 'No' to those activities and invitations that do not lead to the desired result.

To summarize what has been written above about time management operations, it can be seen that all principles of time management are related and depend on each other, Lozi (1999) pointed out that any flaw or weakness in the investing of work time will lead to an imbalance in overall organizational processes. The planning process is related to control over time since managers cannot plan for the use of their time unless they have specific information about interruptions that may already be known through analysis of time. In addition, the delegation process cannot be adopted unless a manager already knows his goals and has classified them based on their importance. Therefore, it may be concluded that time management operations work within the framework of one system and any failure or defect in one of the operations negatively impacts on the rest of the operations.

2.3.7 Time management operations within the culture of developing societies such as Libya

By referring to Islamic history it can be found in the Quran - a heavenly document - that there are many clear references to administrative processes which were practised by the Prophet Muhammad and his followers as a response to the need to save time. The Prophet Muhammad, as mentioned early - practised the principle of priorities, setting goals, delegation and other operations involving the principles of time management. According to Abdel-Fattah (1976) and Safwat (1977) the Prophet Muhammad -peace be upon him -practised the delegation process in his call for Islam when he mandated some of his followers to achieve goals outside of Mecca. For instance, Musab bin Omair was sent to Medina as a teacher, Ali Ibn Abi Talib
to Yemen as an advocate, Maaz bin Jabal to Yemen as a judge, and Ala bin Hadrami to Bahrain as a ruler, in order to achieve of Islam goals as spreading of Islam and building the Islamic state. In addition, the relevance of planning operations has been noted by Prophet Yusuf, in the Sura of Yusuf where God says:

"He said: Ye shall sow seven years as usual, but that which ye reap, leave it in the ear, all save a little which ye eat. (47) Then after that will come seven hard years which will devour all that ye have prepared for them, save a little of that which ye have stored. (48) Then, after that, will come a year when the people will have plenteous crops and when they will press (wine and oil)." (Yusuf 47-49: Holy Quran)

These verses show that the Prophet Yusuf - peace be upon him - has identified a time plan through the inspiration of Almighty God to gain and invest time in the years of prosperity to double production and storage in a scientific way to take advantage of it in the years of drought. This is a clear reference to the practice of time planning process and investing time which was practised by the Prophet Yusuf, as has been mentioned in the Quran before being mentioned by Taylor and other western scholars in western literature. In addition, other time management operations were also practised by Muhammad and his followers as the researcher stated in the previous chapter and those which have been mentioned above are just examples.

Despite the above facts about the practice of time management since the Prophet Muhammad era, Muslims now are generally not interested in the topic. Al-Qaryouti (1985) affirmed through his study that thirty-six work hours per week have been identified for the employee in developing countries and they spend a lot of them reading newspapers, taking drinks, meeting friends and in ineffective chatter with others. Shehata (2005) conducted from his study about time management which had aimed to extrapolate of the reality of Muslims about their perception of time. Through a survey of was addressed to some Muslims widespread among different social groups, and various regions around the world they were about 4015 individuals, he gained the follows important findings:

- The total actual production by Muslims was 4.7% per day and rose up to 36% for those who work in their area of specialization.
• They wasted hours in recreation and leisure, watching TV, and social visits are more than seven hours per day, in addition to hours spent in sleeping, eating, and other basic needs.
• The total spent time each day on daily activities was seventeen hours, which means that seven hours per day are lost.
• One-third of young people arrive at their work place late which means weakness of time-discipline.
• 41% of respondents think they are inefficient members in their community, 60% of them are dissatisfied with their dealings with time, and 27% of respondents did not feel regretful for the loss of time, because they do not have clear goals in their life.

In addition, many other Arab researchers have conducted researches to determine how and to what extent Arab managers practice time management. Abdu Al-Jawad in 2000 in his study about the balance of time of the Egyptians involving 2000 people aged between 20 to 70 years and gained the following results:
• The average working hours were about seven hours per day for both genders.
• Half of the respondents from the Egyptians in general do not comply with their appointments with others and organize their time, despite that more than three-quarters of the sample affirmed that they respect their appointments.
• 46% of the sample, especially the less-educated women were not interested in their work, and were late for their appointments. (Abdu Al-Jawad, 2000).

The actual time that is spent in performance of work daily in Egypt as affirmed by Alharfa in his study is no more than a few minutes, and the rest of time is spent on things unrelated to work (Alharfa, 1991). Another study conducted in the Palestinian society by the Central Bureau of Statistics in 2000 showed that females practice time management operations less than males, since they are less awareness of the value of time than men who work together in the same organization. Most of the sample spent eleven hours and seven minutes in personal activities, such as sleeping or eating, worship and other social activities. It is clear that there are differences between the time which is spent in the activity of work and another in production, the rate of work is higher than production which means that there is a clear weakness in the planning and organizing which led to negative effects in the Palestinian production rates (Central Bureau of Statistics, 2000). Jaber (2001) noted that there are often
weaknesses in the time planning process including hesitation in decision-making, because of the tendency for leaders to take decisions without the necessary information, which leads to time wasting (Jaber, 2001). Furthermore, Al-Ithawi (1990) and Muna (1980) concluded that there is a weakness in the practice of control over time as use of open door policy has led to an inability to identify time wasters Abu Kahf (1987) also affirmed that most managers agreed that time is valuable. However, they did not use it effectively owing to workload, nature of work, lack of any training courses, weakness in managerial experience, weakness in delegation because of a lack of trust in staff, poor time planning due to lack of available information, work habits and an unclear vision of the nature of their work. Al-Mullah (1991) concluded that there is a weakness in the practice of time management operations such as time planning, organizing, and control due to weaknesses in defining priorities, scheduling, and the lack of information that can aid in identifying goals. In addition to poor control over interruptions of time, Al-Mullah also stated that managerial leadership style affects the practice of time management operations, and that the the use of a team leadership approach was better than other approaches in the practice of time management. Equally, Al-hloani et al (1995) suggested that weakness in the ability to delegate was a central issue in causing problems in time management. Tarawneh and Lozi (1996) pointed out that variables such as experience and qualification do not have any impact in the practice of time management; consequently, they stated that there are not any differences among managers in time management skill. Muhsen (1997) affirmed that there are weaknesses in practice of time planning and time organizing more than control over time.

Within Libyan culture such findings are supported by many others studies such as those by Elkadiki (2003); Al-Zwai (2004); Khawaja (2002); Mansouri (1996); and Naiehi (2001). Beltamer (2001) and Alawod (2001) also affirmed that poor attention was given to time resource; consequently, it is very clear that time management operations have not been practised effectively by Libyan managers.

Overall, it can be seen that, although there is a positive perception about the value of time by Arab and Libyan managers theoretically, in practice, time management is poor. It may also be concluded that Arab and Muslims managers waste their time without knowing why. The researcher suggests that this is because of the lack of clear objectives, and chaos in social structures. This results in alienation reflected in economic, political and cultural dependency, which has made an incapable society lurching between subordination, isolation and
confrontation. There is also a prevalence of the features of under-development, which is reflected in poor planning. On the other side, economic poverty, the low standard of living, poor distribution of production, and income all of these led Arab citizens to patience, wishful thinking, and imagination to satisfy their needs.

2.3.8 Time wasters

It is difficult to generalize about time wasters in all organizations and for all managers. Some activities can be time consuming for someone, in some location, and at a specific time, and not in other circumstances with other people, and at another time. Thus it can be said that the concept of time wasting is a relative concept, which is changeable in accordance with the individual, time and location.

In spite of its great importance time is the most loss element at both the organizational and the individual levels; however, there are some interruptions and distractions from outside and inside sources (Haynes, 2000). Rezsohazy (1986) identified wasted time as a time which has passed without achieving the goals of an organization. He confirmed that reducing or avoiding time wasters is one of goal of time management.

In addition, Al-Mullah (1991) stated that the weakness of the practice of time management operations is the most important cause of the loss of time. There are no general rules to identify factors of time wastage since time management is practised in different ways from one society to another, as well as it depends on the level of civilization of societies. In addition, the time wasters differ according to experience, gender, qualification level, economic situation and standard of living, social habits, lack of awareness of behavioural and social values about the importance of time. Some Arab and Western researchers have agreed that there is wastage in manager’s time and that the rate of wastage differs according to the above mentioned factors. Most western researchers such as Lebouf (1980) and Diaz (1994) have agreed that the most common time-wasters in western society are telephone interruptions and paperwork, whilst in Arabic societies common time-wasters are caused by social pressure, unscheduled meetings, poor delegation, unclear goals, and lack of information.
Attempts have been made by some researchers to list and classify time wasters. We may cite the work of Mackenzie (1972:17-20) who indicated that the lack of practice of time management operations is the major reason for time wasters or time wasting. He identified some of the reasons related to bad planning, as well as poor time organizing and time control as shown in the figure below.

**Figure 2.4 Time wasters**

<table>
<thead>
<tr>
<th>The factor</th>
<th>The reasons</th>
<th>The treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weakness of delegation</td>
<td>- Lack of an efficient of followers.</td>
<td>- Training courses.</td>
</tr>
<tr>
<td></td>
<td>- Overload of followers</td>
<td>- balancing of workload</td>
</tr>
<tr>
<td>The telephone</td>
<td>- Weakness of self-discipline.</td>
<td>- The allocation of time to respond to calls.</td>
</tr>
<tr>
<td></td>
<td>- Manager's desire for fame</td>
<td>- answer only important calls</td>
</tr>
<tr>
<td>The meetings</td>
<td>- Decisions difficult to made.</td>
<td>- Encouraging to decision-making when information is available.</td>
</tr>
<tr>
<td></td>
<td>- Opened and extensive discussions.</td>
<td>- Avoid unimportant meetings</td>
</tr>
<tr>
<td>The visitors</td>
<td>- Social courtesies.</td>
<td>- Practice outside of work.</td>
</tr>
<tr>
<td></td>
<td>- Inability to say no.</td>
<td>- Apologize for the unnecessary visits.</td>
</tr>
<tr>
<td>Weakness of planning</td>
<td>- The goals and priorities are not determined.</td>
<td>- Defining the objectives and priorities.</td>
</tr>
<tr>
<td></td>
<td>- Not realizing the benefits of planning.</td>
<td>- Realizing that the planning takes time but it saves time and benefits in the future.</td>
</tr>
<tr>
<td>Interruptions</td>
<td>- Inability to reject.</td>
<td>- The ability to rejection and non-use of open-door policy</td>
</tr>
<tr>
<td>Hesitation in the decision-making</td>
<td>- Lack of confidence in the facts.</td>
<td>- Improvement of data collection method.</td>
</tr>
<tr>
<td></td>
<td>- A punishment for error.</td>
<td>- Using the error as a method to learn.</td>
</tr>
<tr>
<td>Paper work</td>
<td>- Information Revolution.</td>
<td>- Quick reading.</td>
</tr>
<tr>
<td></td>
<td>- Inability to sort the paper work.</td>
<td>- Achieve only Important paper work and delegate the rest.</td>
</tr>
</tbody>
</table>
Time wasters in general cause ineffective use of time management operations. However, time wasters can be put into two categories in relation to external and internal factors. According to Drucker’s work (2002) time can be wasted because of: meeting beyond reasonable limits, inadequate information and communication systems, unnecessary phone calls, reading newspapers, bad management and inefficient organization, unexpected visitors, hesitation in decision making, fear of making mistakes, unsound delegation, wrong order of priorities, social interaction and entertainment within the organization, beginning to implement tasks without prior thinking and planning, moving to a new task before accomplishing the present one, and focusing on less important routine matters. Fisher (2004) added other examples of time wasting such as procrastination and indecision. Baira and Durra (1989) identified the time wasting of Arab managers as lack of necessary information to make a good decision, which leads to delay and weakness in decision making, lack of trust in efficiency of staff, lack of enthusiasm for the delegation process, bad filing systems and bad communication systems.

Most of the time wasters identified by Baira were related to time organizing principles. In addition, Dora (1991) affirmed that most time wasting in Arab organizations is related to poor time organizing and he confirmed that Arab managers avoid delegation because of lack of trust in their staff, as well as bad filing of papers and documents.

By referring to the above, it can be concluded that the Arab and Western researchers have different viewpoints about the rate and reason of time wasting, however, all agreed that it is costly and time consuming, and most focus on poor time management operations. Some have tried to find an effective treatment to reduce these time wasters by identifying the underlying reasons in order to find the best treatment such as those shown above in Macenzie’s table. On the other hand, Al-Jeraisy (2004) pointed out some basic steps comprising the approach suggested for combatting time wasting:

- Defining objectives by planning and scheduling tasks.
- Arranging of priorities.
- Organizing of office.
- Application of the fundamentals and skills of effective communication.
- Control over interruptions
2.3.9 Conclusion

The researcher has concluded previously during the presentation of the related literature on time management operations represented in planning, organizing and control that those operations are associated with each other. She has also attempted to link the western literature and the work of Arab researchers in this regard, but she found that the work of the Arab group is more recent work compared with the signals of western researchers who were the earliest within this field. However, the browser into ancient history will find that ancient man practised many of such operations spontaneously without prior awareness of the concepts and principles of management and for specific purposes related to their simple life at that time. For instance, Al-Bayati (2002) said that ancient man practised the processes of division of labour, and delegation by organizing themselves into groups and then mandated each group with a particular job according to their abilities. Equally, Dora (1991) explained by saying that the members of one family were sharing the work among themselves, the father and sons would do the fishing, hunting or husbandry, while the mother and daughters would do job of cooking and helping children to collect firewood. As well as, members of the same region or same tribe would operate in groups as a team for hunting; each group might have a specific destination for achieving a specific purpose. Dora (1991) realized that these processes were developed to achieve higher rates of production as well as to save time. These practices -as researcher see- have never stated in their documents as evidence to prove that ancient man realized and practice time management, but, they were stated within the social framework to clarify the pattern of their social life.

According to the viewpoint of researcher; time management has been practised first by Arabs and Muslims since time management principles have been stated in the holy Quran before they have been realized by western scientists who conversely presented their thoughts as a theory about time management in western managerial literature before the Arab managerial literature. The two groups of researchers- Arab and Western - have identified too many overlapped issues regarding to time management, in addition to, they have noted a significant cultural differences in time management according to each society.

Time management operations are usually practised by all cultures, but they differ from one society to another based on the social, economic and political systems. They also differ within the same society due to the nature of the work in each organization. Time management as a
practice is better in western and developed societies than developing societies, but, time management as a theory has come to be viewed as a key issue in successful leadership and management in the wider business literature, but, few studies exist on this crucial topic in the higher education sector.

As will been shown, Libyan higher education has developed rapidly in recent years, but many challenges remain, which can only be addressed if the leaders of higher education institutions are equipped with the best managerial skills available, including in the field of time management. Based on what has been shown above the researcher will continue to search the administrative and educational literature to explore the topic, and analyse in depth the viewpoints of previous researchers on the subject under scrutiny in the following chapter.
Part III: Time management in Libyan universities

2.4.1 Introduction

This chapter presents a review of the relevant literature about time management in Libyan universities in particular and higher education management, in general in order to delineate and analyse the key features of the main topic of the research.

As mentioned earlier an extensive review of the literature revealed that while time management is addressed in the general business, management and educational management literatures, it has not been addressed in depth until recently for academic leaders in general, and not at all for Libyan universities. Most of the interested Arab researchers have addressed their researches on time management to industrial institutions or basic education institutions. Thus academic leaders have not yet received enough attention from research in particular as the category that most need to practice time management well owing to the duplication of roles that is inherent.

In this section the researcher aims to provide a clear vision about the topic, through analytical writing that illustrates the different points and opinions. Therefore, the main purpose of this chapter is to offer a deeper understanding about the practice of time management operations in Libyan universities in order to address the research questions. The literature review is largely based on the key issues determined in the research objectives outlined in the first chapter. Consequently, this part includes in-depth writing about Libyan university administration in light of the global change, Libyan university structure, head of academic department and the practice of time management of Libyan heads of academic departments.

2.4.2 Administration of Libyan universities - "reality and challenges"

Despite of the progress that happened in the international world, the Arab universities are still suffering from many deficiencies in meeting the requirements of the community, as well as an inability to cope with the requirements of change. They also are far from overcoming the obstacle of technology (Allaf: 2007).
Durra (2007) pointed out that the systems of Arab universities and other universities in developing countries are traditional systems which remain captive in traditional philosophy, curricula, structures, management and teaching methods, with a lack of research, the absence of programs in community service and weakness in their role in development process. Whilst Abdel Rahman (2007) referred to internal and other external factors, these factors relate to the quality of leadership, the professional conduct of administrative staff, the quality of staff in charge of education in universities as well as external factors linked to the nature of social, economic and political life in the community. Therefore, Allaf (2007) stated that Arab universities face the crisis, which is in fact a part of the crisis of underdevelopment experienced by the Arab society which negatively reflects on the universities.

According to Hmami (2004) the eighties witnessed many changes in the higher education environment in most Arab societies to meet the increased social demands. Hmami added that the success of these universities in the process of competition in the Third Millennium is likely to be linked with the level of ability of administrators to meet the challenge of change. Such a shift in the nature of competition between higher education institutions makes any university wanting access to the global market need to completely rethink in its strategies and philosophy.

Libyan universities have another specific feature reflected in the policy adopted by the Libyan government and the nature of social and cultural life as mentioned previously. The opening up of Libya to international society in recent years has led to a remarkable increase in the ability of Libyan universities to meet the social demand for higher education. This increase is represented by opening new campuses in many cities. Theeb (2009: 3) affirmed this by saying:

"Recently, Libya announced the beginning of a new wave of relations with western countries. The previous disagreements with these countries will cease. Major changes occurred in political, social and economical environments, in which global organisations and companies started to establish their connections with the national organisations in Libya. These changes covered all aspects of the national activities in Libya, including the higher education sector. The changes in the external environment stimulated the policy-makers and administrators of the higher education institutions in Libya to take innovative steps towards their organisations. However, managers, administrators and leaders of
this sector faced a new challenge, in addition to the external one, represented by their abilities and power to manage and to adapt their organisations towards the external pressures and the emerging strategic changes in the external environment.

Nevertheless, those changes have occurred without sufficient advance planning, and this expansion has been undertaken without the appropriate providing of material and human resources. Moreover, Libyan universities have witnessed cases of instability in their management structures as a result of underlying difficulties in Libyan society (El-Allaf, 2007; Bashir and Ali, 2002; Baira and Durra 1998). Libyan universities continue to suffer from many deficiencies. For many years now, various Libyan researchers have documented these shortcomings, the relatively poor quality of higher education means that many Arabic Universities may be inadequately prepared to meet the challenges of the twenty-first century. Libyan universities suffer from problems that hinder their work to meet the challenges of globalization and development aspects of the world. University management in Libya is still a captive of traditional administrative thought. The challenge facing the Libyan universities today is the possibility of overcoming the external and internal circumstances surrounding the performance of their duties and responsibilities towards of Libyan society. See the following figure.
Figure 2.5 Challenges of heads of academic departments

Challenges of Libyan universities

- external challenges
  - Political
  - Social
  - Economic
  - Cultural
  - Globalization
  - Information revaluation

- internal challenges
  - Goals and philosophy of the university
  - Weak leadership
  - The instability of the organizational structure
  - Weak curriculums
  - Enrolment policy
  - Poor of the spending policy
  - Poor channels of communication
  - Poor planning
  - underdevelopment of information systems
  - The instability of the organizational structure
  - Weak leadership
  - Goals and philosophy of the university
  - Weak curriculums
  - Enrolment policy
  - Poor of the spending policy
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  - Poor channels of communication
  - Poor planning
  - underdevelopment of information systems

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Within this context, Radwan (2010) Elfhdil (2007) and Khalaf (1993) defined the main challenges that are usually faced by Libyan universities in bureaucracy, centralization, and underdevelopment of information systems, the dependence of the Libyan universities to the political system which led to creation the dominance of bureaucratic administration of the universities. It has been mentioned earlier that Libyan universities suffer from instability in their administration and structures as a result of the changes that occur in the political environment in which the university works, as well as underdevelopment of information systems leading to weakness in strategic planning and to weakness in effective decision making, since both managerial processes whether planning or decision making are completely dependent on the availability of the database and effective information systems. Bobtanah (1994) in his study -which was addressed to identifying problems that impede of the performance of Libyan universities - affirmed that the failure of plans adopted by these universities was largely due to the lack of effective information systems. Bryant (2003) stated that an effective information system would enable the universities to enter into global competition. Theeb (2009) recommended that universities should have complete self-regulation as a tool to be used to create better decision making and more effective, and realistic strategies for guiding the institution.

Therefore, it can be seen that Arab universities and Libyan universities in particular must be able to overcome problems that hinder the effectiveness of their performance and cause problems of entry into the market of global competition. They will also need to overcome internal and external challenges, and re-consider the structure of their administration, adopt flexible administrative policies, and provide an academic environment detached from the political system.

2.4.3 The powers of the heads of the academic department within the organizational structure of the Libyan universities

The organizational structure is a formal map that represents the role and position of each unit works inside of the university. The achievement of academic goals requires the existence of specific managerial and technical systems within the organizational structure, in order to
implement the requirements and objectives of the university especially in academic terms. According to Hassan (1990) these can be classified into following groups:

- **Academic structure includes:** faculties, academic departments, scientific research centres and laboratories as organizational units responsible for the accomplishment of the academic goals of the university.

- **Administrative structure includes:** the administrative units responsible for providing the organizational environment that supports the academic units to achieve their goals effectively, the administrative structure represents of the administrative units such as "employees affairs management, Financial management, management of registration, students affairs..." and service units such as: "management of the libraries, the publishing and printing management ... " On the other side Elabbar (2001) stated that the organizational structure achieves the following main goals:
  - Clarifying lines of authority and communication between the parts and units of the university.
  - Application of the principle of specialization through identification of requirements for achieving each goal and activity in one administrative unit.

Universities and other higher education institutes have witnessed many developments during the 1990s. These have included administrative and organizational changes and a reduction in the total number of universities (World data on education, 2006). According to view of Theeb (2009: 71):

"These changes faced by the institutions of higher education are without scientific basis and consistent controls, and without the in-depth study into feasibility of economic and social of institutions, along with the failure to provide many of the requirements and needs and the potential to play a functional role to the community according to international standards of higher education institutions."

Theeb (2009) and Ambarek (2010) added that the on-going structural changes since the early eighties had and still have an impact on the efficiency and effectiveness of universities in various areas. These changes which affected various administrative and operational levels show up during the review as changes in the structure of universities. Theeb (2009) and Ambarek (2010) also stated that the instability faced by the Libyan universities led to an imbalance in university administration, which manifests itself in various areas such as:
• Unclear vision of strategic policy for the role of university education in future development.

• Central administration at both the level of the Council of Universities, and at the level of university administration, where the faculties conduct their own managerial and scientific affairs through many different channels, which may delay and hinder the educational process as well as waste of their time.

• Ineffective communication system between university administration and units such as colleges, departments, and other administrative units.

• Lack of an integrated information system that serves all administrative activities.

• Lack of clarity and overlapping of roles and responsibilities as well as the absence of criteria and systems for assessing performance.

• The problems of financing and the instability of funding sources as a result of the instability of the organizational structures.

The Libyan universities and all institutions of higher education in Libya are suffering from the lack of a dedicated secretariat to oversee the identification of clear goals, and availability of possibilities for achieving these goals, as well as instability of the universities administrations. The Libyan universities were administered by the Secretariat of Education at one time and at another time were administered by a National Commission for Universities, and finally, decision No 111 in 2004 was issued by the Secretariat of General People's Congress in order to establish the Popular Commission of higher education. This includes both the Head of the General People's Committee for Higher Education, university presidents, deans of colleges and higher institutes. In the same year, 2004, decision No. 118 was made in order to reorganize the universities. These changes were not only implemented to ensure the independence of universities but also included changes to the policies and goals of higher education.

An academic department is a main unit in organizational structure, which is usually established as a result an increase of the knowledge field, as well as increased number of interested students in this field. Academic departments are strategic units within colleges and universities that influence on the institution, course content (Wisdom, 2007).

Anderson (1977) stated that the emergence of academic departments might be the result of cultural and social reasons or as a result of the revolution of knowledge in a specific field.
Whilst Gwany (1995) pointed out that the academic departments are the administrative units which include a number of researchers, scholars and faculty members who are responsible for graduation of qualified work forces in order to serve the society. According to (Alhawat, 1996: 56):

"The academic departments have been recognized as a comprehensive administrative and academic unit in organizational structure in Libyan universities which contain a group of educational programmes, in order to covering most of the careers and positions that meet the need of Libyan work market"

It is clear that the academic department in the Libyan university plays a major role in achieving goals such educational goals, scientific research, and serving the local society. According to Article 1 issued by the General People's Committee Decision No. 120 of 2004 the academic department in the Libyan universities is a basic unit in university structure.

2.4.3.1 The importance of academic department in Libyan universities

The importance of academic departments increased in the late of nineteenth century and the beginning of the twentieth century due to the importance of its three main jobs represented in management of research activities, teaching, and community service, in addition to an increase of the size of the universities. Salamy (1978) confirmed that the importance of academic departments in universities is derived from the universities' main objectives related to education, research, and service to society. Academic departments are responsible for all that is related to the academic, scientific, and educational issues, as well as being responsible for clarifying the key features of university policy and its productivity (Wilson, 1979)

In this regard Bennett and Figuli (1990) stated that the main business of the university is only at the academic department's level. Wisdom (2007) stated that it could be argued that the success of an institution of higher learning is measured largely by the success of its academic departments. Equally, Zaher (1985) said that in the light of the importance of the academic department as an administrative and organizational unit most planners in the world created their plans in higher education for the adoption of an academic department system in the universities. He noted that most of the studies, which have been conducted about the
effectiveness of the system of academic departments compared to other structures proved that the multi-department university provides for more efficient and productive researches.

Thomas (1990) stated that academic departments are the main key of raising the level of productivity in universities in both quality and quantity. He added that through academic departments most of the central university decisions can be controlled, such as selection of faculty members, determining of courses of study, developing of criteria for admission and graduation, estimating of the relative importance of different activities such as teaching, scientific research and community service, and other decisions that determine the nature and features of the university.

This result was affirmed by Rita (1986) and Knight and Hollen (1985), who stated that about 80% of all administrative decisions in the university are taken at the departmental level. In academic departments decisions are not only made, but decisions are also implemented, as well as all managerial operations are usually practised. At departmental level faculty members interact with students, and researchers are coordinated; in addition, academic departments can identify the ways of contributing to the development of the environment and society (Dahshan and Al-Sisi, 2005). Also, Maerten (2001) stated that the communication process between the leaders of the faculties and faculty members is only conducted through academic departments.

Within the context of Libyan universities academic departments derive their importance from their roles, which are identified under articles 40 and 41 of Law No. 37 for organizing of universities in 1998, as well as Article 61 of the decision No 53. Those articles identified academic departments’ responsibilities as follows:

- Caring for the scientific and academic works in the department.
- Identifying references and courses in the department.
- Distribution of teaching schedules and times of lectures to the faculty members and teaching assistants in the department.
- Distribution of tasks and groups of postgraduate research students to faculty members.

Decision No. 22 of the Ministry of Higher Education, issued in 2008, focused on the organizational structure of universities and higher education institutions in Libya and clarified that the department is responsible for considering applications of faculty members, in addition
to expressing an opinion about applications of scientific leave (Ministry of Higher Education 2008). Therefore, the academic department is an executive and supervisory management structure, it is responsible for implementing university objectives through the practice of managerial operations that are usually carried out by the heads of those departments. The job of head of academic department is one of the most important jobs in the organizational structure of universities, and the head of the department takes a major role in the specification of higher education institutions in terms of productivity, performance, the management of the department, and achievement of its objectives (Valley and Tiemann, 1995).

2.4.3.2 Method of selection of heads of academic department in Libyan universities:

Heads of departments represent the academic and administrative leadership in administration of their departments. Therefore, they are required to perform many different leadership jobs, as well as they face many different challenges since their work is not limited to managing the affairs of departments in the routine way. They also carry out a range of organizational functions such as managing of staff, resources and the curriculum. Consequently, they must manage two interconnected issues: firstly, academic leadership, including both educational and research processes as the main objectives of the university; secondly, the administrative role, including responsibility for the implementation of all departmental work such as management of department meetings and decision-making at the department level. Within this context Estes and Welch (2007: 7) stated:

"The department head position remains one of the most challenging and important jobs at any university. The department head is faced with a myriad of issues that range from curriculum development to hiring faculty, and from managing resources to establishing a vision."

Wheeler (2002: 201) stated that heads of departments must translate their visions into an actual programmes, services and products that make a difference in the lives of the clientele whether inside or outside the university. Since the role of head of the department is complex, therefore, it is difficult to put a fixed and specific definition to the work of heads of academic departments. Indeed, definitions of the work of heads of academic departments differ in accordance with the subsidiary entities of the universities. Therefore, when the role of the head of department is defined the needs and specific circumstances of the cultures around the university management must be taken into account.
Within the Libyan university culture heads of academic departments are members of the General People's Committee in the faculty, and they are a channel or means of communication between the Council of the department and its academic staff, students and employees on the one hand, and between the People's Committee of the faculty on the other hand. They are often selected by members of the board of the department to manage the academic affairs, and the administrative issues of the department (Ministry of Higher Education, 2008).

With regard to the methods of selection of the heads of the academic departments in Libyan universities Shkulaih (1976) noted that the selection criteria for leaders of Libyan universities at all levels are not different from the political approach adopted by the Libyan government in the selection of political leaders at higher levels. In both cases the selection process is conducted by popular choice in a system known as the people's vote. Academic members of the Council of the academic departments must choose the head of department from among those who have features that qualify them to be chosen as a head of an academic department. Article 26 in the decision of the Assistant Secretary for Services Affairs No. 130 issued in 2000 regarding to organizational structure of the Libyan universities, and decision of number 53 section 36 item 4 (2002) identified the conditions to be fulfilled by those who choose to be the head of the academic department as follows:

- They must be one of the Libyan members within the department council.
- They must have practical experience in the field of university teaching.
- They must have some of published scientific research.
- They must be distinguished in scientific and cultural activities.

The researcher noted that the conditions that must be taken into account at the process of the selection of a department head are general conditions. Since the level of qualification is not taken into account as well as the standards of excellence in scientific activities and researches for those who hold the position is unclear, the researcher also concluded - through interviews conducted with heads of academic departments - that the decision to fill the position of department head is often a trade-off between the applicants who have a personal relationship with the interview panel and the sharing of expertise. Therefore, the process is unclear since it
is far from an objective assessment of the management skills needed in the proper selection of 
the heads of academic departments.

2.4.3.3 Authorities and the nature of the role of the head of the department in Libyan 
universities.

Tucker (1984) identified the roles of heads of academic departments in different areas, and 
asserted that they reflect the wide powers granted to the heads of departments to practice their 
different roles. In particular, he defined these roles in the following areas:

- The administrative area: such as the managing of administrative meetings; drawing up 
  long-term plans and working on their implementation; the use of committees; 
  delegation of certain powers to the other members and committees.
- The education area: including defining and scheduling lectures; the distribution of 
  lessons and programmes; supervision over the academic activities of department 
  inside and outside the university.
- The area of faculty affairs: including participation in supervision of the services 
  provided by the faculty; clarifying the academic and cultural plans and activities of 
  their department to the faculty board; recommendations for appointments and 
  promotion.
- The area of affairs of students: including presenting advice to the department’s 
  students; helping them to resolve problems that negatively impact in their academic 
  progress.
- The area of external communication: including interaction with top leaders in the 
  university; management the information base and communication channels; 
  coordinating efforts and cooperation with other administrative institutions for 
  community service.
- The area of budget and resources: including preparing of department budgets; offer 
  the proposals for improvement to meet department's needs; clarifying policy of 
  spending, and preparation of the annual financial reports.
- The area of the professional development: including support the academic members in 
  the department and encouraging them to participate in scientific research and 
  scientific conferences locally and internationally.
• The area of management of offices: including the participation of the head of department in the assessment of university equipment; technical supervision of the department academic staff and providing the training programmes to improve their skills.

On the other hand, Arabic literature has never researched the issue of the role of Libyan heads of academic department since the issue of the higher educational management in general and the management of Libyan universities in particular is still relatively new in the field of scientific research in the Libyan environment. Therefore, the researcher identified the roles of heads of department by reviewing the legislation and decisions that have already been issued by the Libyan higher education ministry.

Article No. 27 in the decision of the Assistant Secretary for Services Affairs No. 130 issued in 2000 identified the specialities of the academic department heads in the Libyan universities. These specialties have not undergone any significant change. They have been confirmed in the decision number 53, section 36, item 4, the Libyan higher education law issued in 2002, and the decision No. 207 issued in 2002 of General People's - regarding to the organizational structure of Libyan universities-, the decision number 53, section 36, item 4 of the Libyan higher education law issued in 2002 and the article No 35 issued in 2004 as follows:

• Invitation of all academic staff to meetings of department and managing of such meetings.
• Raising the decisions and recommendations of the Committee of department to the Secretary of the Committee of faculty (Dean), and take all necessary means to implement the recommendations and proposals of the department meetings.
• Maintaining of the organizing inside the department, and supervising of the administration affairs whether, academic, educational, or research issue.
• Preparing a report at the end of the academic year about academic and administrative affairs of the department that shows what had been achieved, and the obstacles they faced in achieving those goals.

In accordance with what has been mentioned above it can be recognized that the powers of head of department are limited and not absolute. Consequently, the researcher realized that
the role of Libyan heads of academic departments according to the legislations and decisions presented above does not exceed the mediator role between the department and faculty, nor exceed the executive role of implementing the policy of the university and faculty in the specific areas of the academic, educational and administrative roles.

2.4.4 The roles and responsibilities of heads of academic departments (the duplication role)

As a result of the importance of the academic department and its vital role in achieving the goals and the university's policy, the importance of the heads departments have been increased as well. The head of academic department is as Clark (1987) pointed out a specialist in one of knowledge, characterized by independence. He is also an educational leader and he works in a democratic way with a small group of department members, and is keen to develop and increase their academic productivity, as well as raising the level of their performance in other professional roles.

The job of department head came about more than 100 years ago with the establishment of land grant universities (Bennett, 1983). The position of the academic department head in higher education is one that requires leadership, administrative skills and scholarship (Wisdom, 2007). According to Mathias (1991) the head of department occupies a key institutional position, the role is a complex and subject to many pressures, conflicts, and uncertainties. Ramadan (2005) found that some American universities issued a special list to identify the responsibilities of heads of department and academic characteristics, roles, skill, a list of responsibilities, for example, the University of Oregon (2002) issued a list of roles of heads of departments reflected in: planning, evaluation and organizing, leadership and implementation. Whilst Adelaide university (2002) identified the list of characteristics of heads of academic departments represented in excellent academic record, administrative leadership and academic effectiveness, the ability to communicate with the largest possible number of colleagues and individuals within the department, the university and the community, as well as ownership of personal skills, the ability to plan, and taking a lead role in the university. In addition to Minnesota University (2002) focused on the roles and many responsibilities of the heads of the academic departments represented in the special role of the department, the specific role of academic programs, the special role of expectations and planning for the future.
According to Aaron (2005, 23)

"Heads of departments in higher education serve in a role that is multifaceted, and critical to the effective functioning of a program."

In general, the academic department head occupies a complex administrative position according to his duties towards students, colleagues, his managers, and the local community, so, heads of academic departments should have the required skills to deal with all these parties. The role of head of an academic department contains two major aspects: the academic role, and the managerial role. Therefore, in accordance with the other researchers' opinions, which were mentioned above, the researcher has defined roles and responsibilities of heads of academic department as follows in the next sub-section.

2.4.4.1 Scientific and educational responsibilities

The major responsibilities associated with the work of the department head directly to jobs of scientific research and teaching, all university's leaderships at all levels - and especially the heads of academic department - are responsible for creating the best conditions for teaching and learning processes, and creating an academic, positive environment for growth, research and education.

These responsibilities include determining the philosophy of the department, its objectives, requirements, enlightening the members of the department, development of the content of courses, and making sure the content is appropriate for the students, suggesting the appropriate criteria to assess students, as well as following up the scientific publications and the organizing of seminars and conferences (Mahjoub, 2004) and development of a plan to evaluate the performance of department members, directing their performance, planning and organizing of programs and courses for professional development, and follow-up their commitment with the required ethics in their profession. Shiha (1994) added that head of department suggests a plan for research in the department and following up their implementation to encourage members of the department to do researches as individuals and groups, as well as diversification of the methods of teaching and learning inside the department, they also must know the academic problems of students to find the best solution and develop a plan to overcome problems. All these responsibilities require considerable
experience to head the department including extensive knowledge in planning, a high capacity for renewal and innovation, the support and cooperation of the members of the department, and strong support from top university administration (Hare and Hare, 2002).

2.4.4.2 Administrative responsibilities

The importance of the administrative responsibilities of the head of department appears through the transition of their roles from professional to the administrative role (William, 2001) because most of the administrative decisions are taken at the departmental level, as well as the university board. Sometimes necessary modifications must be made and thus decisions may be referred back to the departmental board.

The importance of these responsibilities also appears through the mediator role which is played by heads of academic departments in the need of transfer of the interests and concerns of faculty administration to department board, and transfer the demands and needs of department to faculty administration (Wu, 2004). The administrative responsibilities can be summarized as: identifying a suitable system for the distribution of duties of teaching to the academic members, preparation of the curriculum, the involvement of academic members of the department in important decisions, development of morale within the department, and following up regularly the staff members in the department, creation of guidelines to outline the ways of dealing with academic teaching members, staff and employees in the department, determining their functions and evaluating their performance (Miller, 1999). In addition to delegation of some tasks to the teaching staff according to their ability and coordination between the work related to departments and other works such as teaching, research, scientific activities, as well as providing of necessary materials, equipment and tools to work in the department (Miller, 1999; Mahjoub, 2004)

2.4.4.3 Political and social responsibilities

The most needful characteristic for the head of department is the ability of effective communication internally and externally, in order to achieve the goals of the academic institution. This requires performance of the social and political responsibilities to deal with different problems, which may arise in the department, especially when new issues appear (Bennett, 1990). Head of department should mediate between the interests of competition and conflict in order to face these pressing forces, this responsibility requires the wisdom and
experience (Wu, 2004). A head of academic department needs to be social and friendly in order to get the support from his colleagues in the department and other departments, the dean of the faculty, and top university administration (Piper, 2001; Wu, 2004; Maerten, 2001). He has to create a positive working environment in order to reduce conflicts between members of the department as well as encouragement of department members to do research. Attention is needed to provide good relationships among the department board and relations of cooperation and coordination with the other departments in the faculty at the same university or other universities. The development of friendly relations with top management to protect and development of the interests of the department, balancing between the interests of department members and protection of their rights, and to identify their problems to help them to resolve them. He also needs to take note of the views of students' representatives to look into their suggestions and complaints and work to resolve them, as well as enlightening new members of staff about the available resources and capabilities within the department and outside it, and attendance the social and political development programs whether within and outside the university (Wolverton, 1999; Mahjoub, 2004).

2.4.4.4 Responsibilities of service to society

These responsibilities depend on the third function of the university related to the service to society and development of the environment surrounding the university and the department. According to this function the department contributes to solving the problems of the region and developing its resources. The university can follow its mission or achieve its goals in the development of the environment and service to society only through academic departments which usually design and create the specialized training programs. These programs contribute to transfer of developed experience to the field of employment in order to offer for trainees the required skills (Shiha et al, 1994). The participation of members of department in these programs lead to moral and material benefit, thus contributing to give them more stability in career (Mahjoub, 2004).

One of the main responsibilities of the head of the department in this area is the planning of programmes for society's service, distributing and delegating of tasks to members of the department, preparation of the specialized guides to describe services and technical
consultations which can be performed by the department and its members. In addition the formation of research teams to solve social problems with cooperation from other departments as key functions, furthermore, meeting the needs of graduates and knowing their abilities, as well as development of their skills to meet the labour market. This may involve keeping contact with the institutions that employ graduates in order to ensure strong relations between the department and its graduates (Mahjoub, 2004; Shiha et al, 1994; Wolverton, 1999).

Through this analysis it can recognized that the responsibilities of heads of academic department are reflected in two responsibilities and specialties “managerial, leadership role and educational, academic role. The educational academic role appears through identifying a suitable system for the distribution of duties among the academic members, preparation of the curriculum, in addition to creating an academic, positive environment for research and education, as well as other scientific activities. On the other hand, the managerial and leadership role appears through the identification of the functions of the academic staff member and division of labour objectively to reduce conflict and duplication in both functions and powers, and providing of effective communication channels among the department members on the one hand, and faculty committee, university and local society on the other hand, since the head of academic department is mediator and academic leader among all these groups. Delegation is also a necessary process that should be practised to reduce the pressure on heads of academic department and avoid duplication in their roles.

2.4.5 The necessity for the practice of time management by heads of academic department.

As stated previously, university administration plays a basic role in planning and accomplishing the activities of the universities, as well as achievement of educational and scientific goals. Nonetheless, higher education administration in Arabic societies still suffers some negative phenomena. On the other hand, universities in developed societies are suffering from some modern problems such as a stress and poor use of time (Mclean 2007). Earley and Campbell (1998) indicated that the first and main difficulty that the heads of departments face is lack of time, because of the multiplicity of tasks among administrative
teaching and research. Bush and Coleman (2002) asserted that the differences between eastern and western countries in the way that inequalities in power, the importance of the individual, the nature of gender roles, and understanding the role of the leader. Consequently, the difference between the developing and the developed societies is related closely to the difference in the level of management in both societies. Nevertheless, these societies attempt to provide an effective means to face such problems.

Within the Libyan society the cultural framework plays a major role in determining the functions and roles that are played by the leaders in the administration of institutions. As mentioned earlier. Higher education in Libya has undergone rapid changes in the last ten years. These new challenges and the change in the Libyan environment have put the focus on leadership in higher education. This change was a consequence of the instability in the organizational structure. Moreover, higher education suffers from a lack of a specialist ministry to set policies and achieve goals. Higher education institutions were merged with the Ministry of Education and at other periods attached to the Ministry of Scientific Research, or managed by the National Committee of Universities (Ministry of Libyan Higher Education, 2007).

According to the viewpoint of executives in some large institutions; time is a vital strategic element (Benabou, 1999). Harung (1998) stated that executives do not manage their time well. This issue is usually faced by most of executives in the institutions including heads of academic departments. They are executive leaders in the universities. They are a major human element, and play an important role in achieving the goals of universities (Baira and Durra 1998). Therefore, academic leaders have to possess many managerial skills that enable them to achieve the goals of their departments. Leaders must be able to respond on challenges of work in a positive way such management of time efficiently through the appropriate delegation of work or defining of priorities. Burke and Collins (2001) noted that to be an effective leader it must be adept at a number of skills such as using time efficiently. The researcher indicated previously that some aspects of legislation and resolutions in Libyan universities have encouraged faculty members to cooperate in teaching some courses as a full time at other universities and institutes of higher education departments in order to improve their living standards. This situation leads to a lack of time, because of the variety of duties including teaching, academic research and academic administrative duties.
A head of an academic department is an executive academic leader, who practices both administrative functions, which are reflected in the planning, organizing, control and decision making, in addition to the teaching and researching tasks, as well as managing and developing the department and its staff, through the most effective use of resources within the general strategic aims of the university (Elabbar, 2001; Murray, 1994; Thomas, 1990).

Due to the complex role which is played by the head of academic department therefore, he must have skills of leadership and managerial skills in order to meet the expectations of the position, heads of departments need to take an active role in developing their leadership skills to meet the needs of department effectively (Lucas, 2000).

The greatest difficulties faced by heads of departments that necessitates them to practise time management are related to the duality of the role played within the university, it is represented in the role of academic teaching and research, as well as leadership and managerial role. Tucker (1984) affirmed that heads of academic department face a problem to implement their academic and managerial duties. Since the role of the department chair is complex and stressful, it would seem apparent that different leadership strategies would need to be adopted in order to be most effective and that time management is the best strategy to face such stresses (Aaron, 2005). Tucker (1984) also asserted that the biggest problems for academic administrators is the balance between their research, teaching, administrative duties and personal life in the light of an overly heavy workload and not enough resources. While Al-Mulla (1991) and Adcock and Lee (1971) affirmed that workload had increased by 80% in recent years and many more believed it would continue to increase in the coming years. In addition, Baira and Baira (2010), Muhammad (2008), and Ramadan (2005) noted that the heads of department are unable to create a balance between their research, teaching and administrative duties which lead to a focusing on teaching work since this achieves the highest rate of revenue. In addition to the administrative and legislative issues, which are related to the policy of the top management of the university, such instability leads to chaos and the absence of sanctions for any failure in achieving the objectives of the department. Issues of knowledge related to the lack of clear information that can be invested by heads of departments in setting goals are also highly problematic when combined with the weak administrative capacity of heads of departments in the field of planning.
The researcher perceives that the nature of university objectives, the complex role and responsibilities of heads of academic departments in Libyan universities and issuance of such decisions that allow some heads of academic departments to occupy more than one position at more than one university, the social and political pressures have affected and are still affecting negatively the policies of universities, and have contributed to the instability of their organizational structures. Another consequence is the continuous change in leadership and the issuance of contradictory decisions. Furthermore, poor funding and the lack of resources have created poor work environment. Examples that Libyan universities are missing the availability of modern communications equipment, updating of internet services in universities, and providing database and communications systems. These would contribute to activating the administrative decision making which is usually taken at the departmental level, as well as affects the policies and general goals of the university, since 80% of the university decisions are taken at the departmental level.

2.4.6 Conclusion

Overall, heads of academic departments play a major role in achieving the university objectives in accordance with the general university policy. They play a complex role since they are responsible for the teaching, educational and academic issues, as well as managerial and leadership issues, the duplication roles which are played by heads of academic departments lead to stress. Regarding Libyan heads of academic department these stresses have increased after the new legislation allowed academic staff members to cooperate in teaching some courses as a full quorum at other universities and institutes of higher education departments, in addition to the real major problems that are being faced in Libyan universities, such as poor funding, instability as a result of sudden and rapid changes in the academic leaders, and the adoption of several central decisions, which are taken at the level of high politics without reference to the executive levels, in addition to some of the changes that occur without prior planning just to meet the higher policy needs of Libyan society.

2.5 Conclusion of the literature review

By referring to the first part of this chapter, the importance of time resources can be seen and that time was invested since creation of humans on Earth. All cultures in antiquity have used natural phenomena to give cues to social and religious activities. In the present era the
concept of time differs from one individual to another according to their special understanding of its nature, impact, and awareness of its importance. The perception of the importance of time among individuals differs between human societies according to the religious and intellectual backgrounds of those societies, in developed societies we find more attention has been given to time resource, as well as better utilization of that resource. Less attention and care is paid in the developing societies in general.

Despite Islam having a primacy in the emphasis of the importance of time, modern Muslims have forgotten and ignored this focus in Islam in the Holy Quran and Sunnah. The awareness of the importance of time management in Arab and Islamic societies is very low when compared to administrators in developed countries. There is a replacement for the principles of time management with principles of procrastination, randomness and courtesies at the expense of work, which led to the accumulation of work, thus, negatively reflecting on the progress in the Arab societies, as mentioned previously.

In reviewing the literature, we find that time is an important factor in the development of any society in all fields, as well as the increased awareness of the importance of time leads all institutions of society to guide the behaviour of its members about the seriousness in dealing with time, and taking advantage of it in every aspect of life on the level of the individual and the group. It is an important criterion of achievement and a crucial factor in the progress and backwardness of any society. Arab and Western researchers have identified many overlapped issues, but they have noted a significant cultural difference in management of time among societies. Therefore, the researcher has stated that time management operations are usually practised by all cultures but they differ from one society to another based on social, economic, and political systems, as well due to the nature of work in each organization.

Regarding Libyan universities, cultural framework plays a major role in determining the functions and roles that are played by the leaders in the administrative institutions. The new challenges and the changes in the Libyan environment have put the focus on leadership in higher education.
It is widely agreed -as shown in the literature review- that the head of academic department is an executive academic leader who practises both administrative functions which are reflected in practice of managerial operations as well as practice of the academic jobs, such as teaching and researching. (Elabbar, 2001; Murray, 1994; Thomas, 1990). Also, the researcher mentioned that the most important difficulties faced by heads of departments is necessity of practice of time management because of the duality of the role played within the university. Since the role of the department chair is complex and stressful, it seems that different strategies would need to be adopted in order to be most effective and that time management is the best strategy to face such stresses (Aaron, 2005).

Overall, the researcher concluded from the literature review that there is poor use of time by Libyan heads of academic departments and other Libyan managers in other Libyan institutions. This is because of external influences surrounding managers. These external influences are represented in cultural, social, political, economic, and organizational factors. In more detail, the social and cultural factors represent in a procrastination pattern, lack of respect for deadlines. All these problems relate to the prevalence of a culture of indifference towards time. Whilst the economic factors are reflected in the economic poverty and low standard of living of Libyan people as a result of poor distribution of production and income, and economic dependency. This has made an incapable society lurching between subordination, isolation and confrontation. All these economic factors have encouraged the Libyan heads of academic departments to implement decisions that are issued at central level and are related to the work with more than one institution, which has led to weak investment of official work time in their main universities. On the other hand, the organizational factors represented in the poor use of management operations include an absence of good planning, lack of clear information, poor channels of communication and weakness of delegation process, because of lack of trust in followers. Other Arabic researchers indicated that the weakness of time management practice in Arabic institutions is due to poor description of jobs, which makes it difficult to determine the responsibilities, rights, lines of communication, and authority in the organizational structure at the institutions. There is also a lack of clarity of procedures, policies and regulations, as well as a lack of policies of employment with bad choices among applicants for many posts. In addition, there is a lack of understanding of the laws and regulations. Meanwhile, Imam (2003) stated that the adopted method of many heads of departments is buying time through procrastination and
indifference in order to stay longer in their office – like the adopted policy by heads of some Arab governments- In addition, there is a culture of underdevelopment, dependency, and corruption, which tends to create confusion at the institutional level. Finally, and sadly, the researcher sees that centralization, instability, and the dominance of bureaucracy in Libyan administration has led to chaos, and the absence of sanctions for any failure in achieving the objectives which have been set for heads of department.
Chapter Three
Methodology and Methods of Research

3.1 Introduction

The research methodology describes the strategies adopted by the researcher in order to describe reality, derive facts, or prove relationships. Kumar (2005) defined research strategy as the ‘procedural plan that is adopted by the researcher to answer questions validly, objectively, accurately and economically’. Taylor and Bogdan (1998) assert that methodology refers to the way in which the researcher resolves problems and seeks answers. According to Kumar (2005) and Walliman (2006) there are certain major types of research including: descriptive research that describe a situation, phenomenon, problem or specific issue; correlational research that aims to explore relationships between two or more variables; explanatory research which is most often used to explain how certain things happen; and exploratory research that is used to examine the feasibility of conducting a study. The decision on applying any such approach depends on the nature and objective of the research itself. Wellington and Szczerbinski (2007) indicated that the choice of method should be appropriate to the nature of research problem and addressed questions. Therefore, the appropriate approach should be chosen carefully in order to resolve the research problem achieve the research objectives, and answer research questions.

Accordingly, throughout this chapter the researcher aims to present the methodological procedures that are used in the research, to present the philosophy and background of the implemented approach, the main features of the research chosen, and to justify the research chosen objectively to clarify reasons for using mixed methods (both quantitative and qualitative). The quantitative method was used as a means to collect data from a large number of participants, while the qualitative method was used as a means to get a deeper understanding from the heads of academic departments about the topic under investigation. Moreover, this chapter aims to offer a description of the research sample that was selected to be subjected to the chosen research tools, as well as the manner of selection. This section will
also include an outline of data collection and management, and the statistical method that will used in order to analyse the data collected.

3.2 Quantitative and Qualitative approaches within the research philosophy and research Paradigms

According to Hartas (2010) methodology refers to the specific ways, strategies or methods that are used by researchers in order to understand social reality. From the previous definition; methodology means the method that is usually used to provide a deep understanding about social reality. While other interested researchers such as Teddlie and Tashakkori (2009) have a different viewpoint, since they argued in terms of the differences between the methodology and method and clarified the two important conceptual terms (methodology and method) which are usually interchangeable in use. Teddlie and Tashakkori (2009) suggested that methodology involves a theory on how a research questions should be addressed and thus answered, whilst methods are specific strategies implemented for collecting, organizing, and analysing data. Andrew and Halcomb (2009) also discussed this confusion in the terms of methodology and method. They asserted that methodology is a “thinking tool” that influences the presenting of the research questions by researcher, and decides on the methods and data analysis to employ in a study, while they described method as a “doing tool”, or the way in which data are collected and analysed.

Educational research as a field in Social Science has witnessed a competition between methodologies, as well as between the two paradigms of quantitative and qualitative research. This comparison has led to establishment a specific culture of two research paradigms with specific principles associated with each approach (Duemer and Zebidi, 2009).

Generally, researchers employ paradigms to describe how they investigate to interpret knowledge and social reality. Burton et al (2008,60) compare the two paradigms by saying:

“For centuries, positivism has been the prevailing paradigm, while interpretivism has established itself relatively late as an alternative, challenging traditional assumptions underpinning research. Both paradigms represent opposing worldview with regard to the way in which...
reality is understood (ontology) and the production of knowledge (epistemology) is perceived"

Teddlie and Tashakkori (2009) identified the three major paradigms as ‘positivist, constructivist, and pragmatist. Meanwhile, Collis and Hussey (2003) pointed out the main two paradigms or philosophies are positivist and constructionism, and they cited that the term constructionism is usually used instead of terms such as phenomenology and interpretivism.

3.2.1 Positivism

Positivism has also been known as a ‘logical positivism’ (Teddlie and Tashakkori, 1998). Positivism entirely depends on the idea of what exists of the social world externally, and that its properties should be measured through objective methods, not inferred subjectively through sensation, or intuition (Easterby-Smith et al, 2006). This central idea has been explained by the French philosopher, August Comte (1853), by stating:

"...since Bacon's time, that there can be no real knowledge but that which is based on observed factors" (Easterby-Smith et al, 2006, 28).

Assumptions contained in Comte’s explanation are an ontological assumption that asserts that reality is external and objective, while an epistemological assumption means that knowledge is only significant if it is based on objectively measurable observations of this external reality (Easterby-Smith et al, 2006). The positivist paradigm is used in order to ensure that scientific investigation is completely based on realism to find out about the ‘real’ world. Walliman also pointed to the establishment of science on what is already known (Walliman, 2006). Collis and Hussey (2003) said that the positivistic approach seeks to know the facts or causes of social phenomena, with little regard to the subjective state of the individual. Recognition of the reality in existence regardless of whether researchers are aware of it, the positivistic approach was instigated to ‘advocate the study of social phenomena and human behaviour in the same way as study of phenomena in natural sciences’ (Collis and Hussey 2003). Jankowicz (2006) summed the main idea of positivism in that positivism means realist truth exists independently of people who investigate it, and can be found through logical deduction
or through the collection of data which results in facts. This data can be collected by a dispassionate outside observer. In other words (Teddlie and Tashakkori 2009) indicated explicitly that in a positivist, value-free, environment the values of positivisms do not affect the interpretation of findings.

3.2.2 Constructionism

Constructionism is also known as phenomenologicalism or interpretivism. In the current research the term constructionism was used in order to serve the research objectives. Jankowicz (2006) pointed out that constructivism works directly with conviction and adopts an ontology and epistemology. The phenomena under investigation can be constructed by researchers individually and collectively Teddlie and Tashakkori, (2009) and Cohen et al (2008) stated that researchers through the constructionism paradigm see things as they really are, and they are able to realize the meaning of things through focusing and explanation rather than through taxonomic approaches or abstractions. Therefore, the constructionist researchers is able to develop subjective meanings via focusing on the specific context in which people live and work, in order to understand the historical and cultural settings of the participants (Creswell, 2003).

Easterby-Smith et al (2006 remarked that reality is not objective and exterior. It is determined by people not by objective or external factors, the idea of social constructivism focuses on the ways in which people make sense in the world, particularly through the exchange of their experiences with others. Phenomena are not observed from outside the system, where realization by the constructivism researcher - about social reality - is usually influenced with their preconceptions, thoughts, and beliefs which also affect on the interpretation of the real world (Walliman, 2006).

Briefly, the researcher realized that, through the constructionist paradigm; researchers unlike with the natural sciences, cannot merely be objective in their interpretation of reality, especially in the social and behavioural sciences, because the human is the axis and centre. Therefore, researchers cannot look at the facts and phenomena from outside and merely from
what is around them. Taylor and Bogdan (1998) stated that researchers are committed to understanding social phenomena from their own perspective and examining how the world is experienced. Cohen et al (2008) defined some of the advantages of the phenomenological paradigm by saying that the phenomenological paradigm enables researchers to develop theories through the dialogic relationships of researcher to research.

In general, each paradigm is distinct from others by special features, which depend on the main idea, or conception of the research that is based on social reality. The figure below clarifies the key features of the main two paradigms.

**Figure 3.1 A key to the differences between the main two research paradigms**

<table>
<thead>
<tr>
<th>Positivistic paradigm</th>
<th>Phenomenology paradigm</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Quantitative.</td>
<td>- Qualitative.</td>
</tr>
<tr>
<td>- The world is external</td>
<td>- The world is socially constructed.</td>
</tr>
<tr>
<td>- Objective and statistical</td>
<td>- Subjective and non-statistical.</td>
</tr>
<tr>
<td>- Scientific.</td>
<td>- Humanistic.</td>
</tr>
<tr>
<td>- Uses large sample.</td>
<td>- Uses small numbers of cases.</td>
</tr>
<tr>
<td>- Data can be collected by a dispassionate outside observer.</td>
<td>- Data are collected by observers who have varying degrees of involvement.</td>
</tr>
<tr>
<td>- Reliability is high.</td>
<td>- Reliability is low.</td>
</tr>
<tr>
<td>- Validity is low.</td>
<td>- Validity is high.</td>
</tr>
<tr>
<td>- Focus in facts.</td>
<td>- Focus in meanings.</td>
</tr>
<tr>
<td>- Experimentalist &amp; traditionalist.</td>
<td>- Interpretivist.</td>
</tr>
<tr>
<td>- Generalises from sample to population.</td>
<td>- Generalises from one setting to other.</td>
</tr>
</tbody>
</table>

Collis and Hussey (2003)

### 3.3 Research method

The term ‘method’ simply means a range of approaches used in educational research in order to gather data that will be used as a basis for inference and interpretation for explanation and
prediction. (Cohen et al, 2008). Nisbet and Entwistle (1970) asserted that the careful defining of research methods in which data will be collected, ensures the effectiveness of the research. The research methods are closely linked to the hypotheses to be tested, the questions to be answered and the nature of the sample to be selected. They added that questionnaire and interview are direct methods to collect information.

Kroll and Neri (2009) pointed out that qualitative and quantitative data can be collected either sequentially or concurrently, and choosing whether sequentially or concurrently depends on the nature of the research questions and the rationale for collecting each dataset. The aim of using both qualitative and quantitative data in this single research is to obtain rich and in-depth information.

3.3.1 Data collection methods

3.3.1.1 Quantitative data collection method (Questionnaire)

A questionnaire is a technical tool used to collect data from a large numbers of respondents. It is very commonly used in quantitative methods, both Kumar (2005) and Jankowicz (2006) indicated that a questionnaire is a written list of questions which is submitted to be completed by a selected sample to determine their opinions and attitudes about the topic under investigation. The aims of a questionnaire are to obtain information from a representative sample that will enable the researcher to present the findings as being representative of the population as a whole (Bell, 1989). Mehdi et al (1996) indicated that a questionnaire is a tool which provides objective measurements, saves effort and time, and provides the necessary data that can be relied on in developing principles and practices. It is usually used in descriptive research to describe the prevalent circumstances at a particular time. It also provides descriptive and quantitative data to get more accurate analysis than research based on personal judgements. A questionnaire is used to obtain information from informants who cannot be interviewed personally. The obvious advantage in using a questionnaire is economy in cost, time and labour (Nisbet and Entwistle, 1970; Burton et al, 2008). According to Kumar (2005) and Cohen et al (2008) a questionnaire is more reliable because it is anonymous and provides greater honesty. While Gillham (2008) affirmed that no face-to-face interaction
between interviewer and respondent is one of a questionnaire's disadvantages since misunderstanding can be a problem faced by the respondents due to unclear questions.

3.3.1.2 Considerations in questionnaire design

In order to collect useful and relevant information to address the specific issue under investigation careful consideration must be given to the design of the questionnaire. Questionnaire data collection can include two types of questions: open-ended questions and closed questions. Easterby-Smith (2006) suggests that the closed questions are quick to complete and analyse. The main decision must be made in questionnaire design is usually related to the type of questions to be included and the overall format of the questionnaire (Smith, et al, 2002).

In educational research questionnaires for self-completion are the most widely used form. Questionnaires can encompass those with a multitude of responses or a series of attitude scales. Youngman (1978); Bell (1989) and Easterby-Smith (2006) point out that some conditions should be taken into account at the questionnaire design. Moreover Easterby-Smith (2006) suggested some considerations that must be also taken into account in questionnaire layout and formatting, they include: providing a short covering letter to explain the aims of the research, why or how the respondent was selected, and starting the questionnaire with brief instructions. In more detail they explained those considerations in the following manner:

**Question types:** questionnaires always contain questions about facts or opinions; these questions usually reflect the facts or represent opinions whether closed questions or open-ended questions (Easterby-Smith, 2006). Open-ended questions allow respondents more freedom to reflect their opinions as precisely as possible in their own words (Collis and Hussey, 2003). Easterby-Smith (2006) added that open-ended questions allow the researcher to ask deeper questions and consequently obtain unanticipated perspectives on an issue; however, they said that this type of question is more difficult, and time consuming to analyse. On the other hand, respondents in closed questions are required to choose among several alternatives that are determined by the researcher. This type of question is easier to analyse. Furthermore, Moor (2000) and Easterby-Smith (2006) added that closed questions provide
the opportunity for the respondents to answer in a simple and quick way. However Easterby-Smith (2006) stated that data obtained from closed questions can be very superficial.

**Content of questionnaire items:** the content of the questions must be developed in such a way to reflect or represent the research questions and aims. The writing style should be conversational, free of specialist vocabularies, accurate in terms of language and the used vocabularies and sentence structure should meet the level of respondents. In general questions included in the questionnaire must be relevant and embedded in the research context (Hartas, 2010). Kumar (2005), Blaxter et al (2008), Borg and Gall (1983) and Cameron and Price (2009) reported that the quality of the information derived from implementing a questionnaire largely depends upon careful formulation of the questions. They suggest that the items should be formulated clearly and be easy to understand since the researcher has no opportunity to explain questions to the respondents. Also, the questionnaire items should provide the same meaning for all respondents and avoid negative, intrusive, embarrassing or double-barrelled questions concerning, and they also asserted that general questions should be first and then specific questions.

### 3.4 Qualitative data collection method - interviews

Interview is a qualitative method used to collect data from participants through organized conversation between the interviewer and interviewee in order to obtain valuable, pure, and rich information from interviewees about the subject under scrutiny. The term ‘interview’ has been interpreted literally by Cohen et al (2008) as ‘inter-view’, thus meaning of the views exchanged between people. Interviews are the most reliable way of gathering accurate information from people (Waters, 2001). Cohen et al (2008) explained that interviews enable participants to discuss their interpretation of the issue under discussion, and to express how they are aware of a situation from their own viewpoint.

Cameron and Price (2009:361) stated explicit:

‘...interviews can provide much richer information than questionnaire, they are sometimes describes as a conversation with a specific purpose, but differ from conversations in significant ways, and require different skills, because they are particularly prone to bias.’
The interview is seen as a way of transporting knowledge from the respondent on the one side to the interviewer on the other about a specific subject (Gubrium et al, 2003). Within this context Kvale (1996) clearly stated that the interview is an oriented theme since two persons talk together about a theme that is interesting to both, and thus it is a conversation with a specific purpose (Jankowicz, 2006).

In spite of many difficulties there are some obvious reasons about the justification of the use of interview in qualitative research. Clearly, interviews allow the researcher to generate a great deal of data relatively quickly, and allow people to express their views about a wide range of issues (Walford, 2004). In this way interviewers get closer to the meanings intended by participants (Coolican, 2003). Cohen et al (2008) affirmed that interviews enable researchers to gathering facts, accessing beliefs about facts, exploring present or previous behaviour, and realizing reasons and explanations. Consequently, to achieve the goals of interview some considerations must be taken into account at the stage of planning and recording of interviews, in order to generate valid and reliable data. Since the interview is not simply a conversation, careful preparation and steering are required. It should be designed to ensure clarity of the meaning between interviewer and interviewee (Cameron and Price, 2009; Cohen et al, 2008)

The personal interview can usually be organized around predetermined questions, and the interviewer may addresses a probing questions and requests additional information. In other words, interviewers allow interviewees to express their views and thoughts about a wide range of related issues (Mertler and Charles, 2005; Welford, 2004). Kvale (1996) identified some conditions that should be provided in interviews to make them more valuable. He suggested that skilled interviewers should be as follows:
Figure 3.2 Conditions of skilled interviews and interviewers

<table>
<thead>
<tr>
<th>Situation</th>
<th>Conditions and rules of interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interviewer</td>
<td>Should know the subject matter to be able to conduct an informed conversation.</td>
</tr>
<tr>
<td>Interview</td>
<td>Should be well structured to be clear to the participant in all stages of interview.</td>
</tr>
<tr>
<td>Interview</td>
<td>Should be well formulated to be clear in the terminology, and coverage of the researched subject.</td>
</tr>
<tr>
<td>Interviewer</td>
<td>Make participants feel comfortable by allowing them to take their time and answer in their own way.</td>
</tr>
<tr>
<td>Interviewer</td>
<td>Be good listener by using active listening and being sensitive to how something is said and aware about what the non-verbal communication means.</td>
</tr>
<tr>
<td>Interviewer</td>
<td>Be able to recall and refer to earlier statements made by the participant.</td>
</tr>
<tr>
<td>Interviewer</td>
<td>Should be flexible with participants by allowing them to clarify, confirm and modify their comments.</td>
</tr>
</tbody>
</table>

Generally, the interview can be with individuals or a group of individuals at the same time. Interviews can range between highly structured and unstructured.

A **structured interview** bears much similarity to a questionnaire in that they both address standardized questions to all respondents. The questionnaire is usually designed to be completed by the respondents themselves, it either face-to-face, or over the telephone which means the interviewer must be available, and be addressed to a large number of respondents (Coolican, 2003). Conversely, this increases the response rate relative to a questionnaire (Burton et al, 2008) and enables the interviewees to avoid any misunderstanding through the researcher availability.
The unstructured interview as described by Cameron and Price (2009) and Walliman (2006) also has a more flexible format, since a closed format is not used, the interviewer may allow the interview to 'ramble' to gain insights into the attitudes of the interviewee. This type of interview requires the researcher to possess more considerable background knowledge in order to guide the interview in useful directions (Burton et al, 2008).

The semi-structured interview:

The semi-structured interview:

"...contains structured and unstructured sections with standardized and open-format questions. (Walliman, 2006: 92).

The key questions should focus on the theme of the research to act as prompts, and then the researcher is able to ask further questions to pursue fruitful lines of enquiry (Burton et al, 2008).

Easterby-Smith et al (2006) stated that semi-structured and unstructured are the best and most appropriate to use when it is necessary to understand the background of the interviewee, such as their opinions and beliefs about a particular matter or situation. Therefore, the questions of a semi-structured interview are pre-arranged in an attempt to make the interview situation informal and relaxed for the interviewee. It aims to extract as much detailed and in-depth information from the interviewee as possible. The interviewee is free to talk for as long as s/he wants as well as to include details that s/he thinks are important (Coolican, 2003; Drever, 1997). Easterby-Smith et al (2006) stated that to achieve the interview aims interviewers need to be sensitive enough, and skilled enough to ensure that the interviewer understands the viewpoints of interviewee, and assists individuals to explore their own beliefs. They pointed out that the skills of an interviewer represent an ability to recognize what is relevant and remember it, as afterwards detailed notes can be made, be good listener, be able to refrain from projecting their own opinions or feeling into the situation as mentioned in the Figure 3.3.

Easterby-Smith et al (2006) stated that the type of the selected interview depends on the nature of the topic what exactly the researcher wishes to find out, and the degree of structuring depends on the nature of the research questions (Bell, 1989; Easterby-Smith et al 2006)
The degree of question structure of the interview should be taken into account when starting to design the interview. Therefore, after the consideration which has been given to the above argument about the types of interviews, the researcher realized that the semi-structured interview was the most appropriate for the nature and questions of the current research.

A semi-structured interview is a very popularly used interview technique. It is employed in qualitative research. Preparation of a schedule consisting of open-ended questions allows for digressions and expansions that can open up new perspectives and further investigation may then be undertaken (Cohen et al, 2008).

3.5 An overview of the research design and the used methodology in current research

Since the overall objective of the research is to investigate the level of time management as practised by heads of academic department in Libyan universities, it manifests itself in planning, organizing and control, the most descriptive methodology, the one that best allows the description of situations, phenomena, problems or specific issues. The descriptive methodology refers to the type of research question, design, and data analysis that is usually applied to a given topic. It involves gathering data that describe events and then organizing, tabulating, depicting and describing that data collection (Knupfer, McLellan, 2001). Descriptive methodology aims to find out “what is,” (Knupfer, McLellan, 2001). It can be either qualitative, quantitative, or a combination of the two. Those data are obtained through the use of tools that include interview and questionnaires as they are the most commonly used approaches in educational research (Mertler and. Charles, 2005). Therefore, in order to accomplish the main objective and its subsidiary aims, a mixed methods approach is considered the most appropriate for the current research. Mixed methods as the third research paradigm can also help bridge the schism between quantitative and qualitative research, both quantitative and qualitative research are important and useful. The mixed methods research aims not to replace either of these approaches but rather to draw from the strengths and reduce the weaknesses of single research method (Johnson and Onwuegbuzie, 2004). It combines the strengths of both qualitative and quantitative research. (Bergman, 2008) Crewell (2006) stated that the main features of mixed method research are represented in its
ability to provide answers to questions that cannot be answered by qualitative or quantitative approaches alone. On the other hand, it needs time, effort, skill, and resources to collect and analyse both quantitative and qualitative data. (Crewell, 2006)

In another context, Hyde (2000) and Creswell et al (2006) clarified some benefits that can be obtained by applying quantitative methods rather than qualitative. They reported that quantitative data might help refine a model based on larger numbers than could be interviewed. Johnson and Onwueguzie (2004) and Amaratunga et al (2002) added that data collected by quantitative methods could be analysed in relatively less time, especially in cases where statistics are aggregated from a large sample. On the other hand, qualitative research focuses on in-depth understanding of social and human behaviour and the reasons behind such behaviour, and it thus depends on the experiences that can be analysed by individuals through case studies and interviews (Hoy, 2010)

Easterby-Smith et al (2006) stated that the distinction between quantitative and qualitative methods is not clear, since some quantitative techniques can be used in either a quantitative or qualitative way, such as a highly structured interview or open-ended questionnaire. Hyde (2000) and Creswell (2003) asserted the key differences between the two methods can be represented as follows:
In order to gain the strengths of both methods, as well as obtain rich and in-depth information about the investigated subject, the mixed methods approach was implemented by using semi-structured interviews and a quantitative standardized instrument to measure the time management operations that are practised by Libyan heads of academic departments. The application of both qualitative and quantitative techniques should lead to:

- A more complete picture of the research problem (Brannen and Halcomb, 2009). Strauss and Corbin (1996) explained how mixed methods provide a fuller picture by clarifying the nature of interplay between both qualitative and quantitative methods; they affirmed that both methods supplement each other.
- A greater understanding of the topic under investigation.
- An improvement of the overall interpretation of the data analysed and presented in this research.

The qualitative method has been used in the current research to confirm and explain the quantitative findings. Within this context, Onwuegbuzie and Leech (2004) demonstrated that

<table>
<thead>
<tr>
<th>Quantitative approach</th>
<th>Qualitative approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantitative approach seeks to describe the General and to ignore the particular elements searched.</td>
<td>Qualitative approach seeks to explain the Particular, rather than reach a general profile about research population.</td>
</tr>
<tr>
<td>Quantitative researchers generally subscribe to deductive research process.</td>
<td>Qualitative researchers generally subscribe to an inductive process.</td>
</tr>
<tr>
<td>Quantitative researchers collect the data on instruments based on measures completed by participants themselves.</td>
<td>Qualitative researchers seek to understanding the context or setting of the participants through visiting this context and gathering information personally.</td>
</tr>
<tr>
<td>Quantitative methods produce a numerical and statistical data for a large sample in order to generalize the findings to the whole population.</td>
<td>Qualitative methods produce wealth of detailed data on a small number of individuals.</td>
</tr>
</tbody>
</table>
qualitative data can aid the interpretation of statistically significant data and quantitative data can play an important role in adding meaning to qualitative data.

3.5.1 Design of the questionnaire

The considerations that have been identified above about the questionnaire design related to question types, whether closed or open-ended questions or content for questionnaire items, and were taken into account in the questionnaire design phase. The items included in the questionnaire were obtained from two major sources of information. Firstly most of the items were formulated as a result of a wide review of the literature related to time management operations, time management principles, and wasting of time, including some previous studies that were carried out in the same field, whilst the second source was individual informal interviews conducted with some of the Libyan specialists interested in management science. Information was obtained from these informal interviews which assisted in the design of the questionnaire.

Questions were designed to be closed - as mentioned previously - such an approach saves respondents’ time in completing the questionnaire, as well as saving the researcher time in analysis (Collis and Hussey, 2003; Easterby-Smith et al, 2006)

Jones (2010:134) defined the questionnaire as:

'A scale is a series of questions designed to gain a single measure of concept, such an attitude towards or opinion on something'.

Walliman (2006) identified the types of scaling as nominal, ordinal, interval, and ratio. In order to meet the research objectives both nominal and ordinal scales were used. Nominal scales are simply those that are identified by names such as ‘religious affiliation’ (May, 2001) and this scale was used in order to obtain data about the backgrounds of participants.

With the ordinal scale, data can receive a number or values that can be rank-ordered. (Walliman, 2006). Therefore, a Likert scale has been adopted in the research questionnaire since it depends on the specific choice from among several rated options. One of the options
reflects the view of the respondent about a particular point under consideration. The Likert scale, or what is termed a summated rating scale, is more commonly used based upon the assumption that each item in the questionnaire has equal attitudinal value, importance or weight in terms of reflecting an attitude toward the issue in question, (Kumar, 2005.) Accordingly, questionnaire statements were designed and appended with five options progressively, beginning with 'strongly agree' to 'strongly disagree', from 5 to 1 for each statement. There are no incorrect or correct answers, but rather a point score is given to each option.

3.5.2 Description of the questionnaire content

The research questions were designed to determine to what extent heads of academic departments practise the overall principles of time management, according to the specific fields of planning, organizing and controlling over time, and to define the factors that impede the practice of time management. Therefore, the questionnaire statements were created to investigate these major issues in order to answer the research questions. Consequently, the questionnaire was divided into three sections (see Appendix 1). In more detail, the questionnaire was structured as follows:

Section one: The first part was designed to determine the demographic independent variables of the research sample. These independent variables were identified as: specialization, qualification, years of experience, gender, and the number of universities where the head of academic department is working. These variables represent the basic data about the research sample for the purpose of comparison, and to find out the differences in their views and opinions about the issue under investigation (Kumar, 2005). Therefore the researcher used nominal scales such as:

- **Experience**: Research sample was required to define their work experience in number.
- **Qualification**: Research sample required to define the qualification they hold around the research period whether Doctorate’s degree or Master's degree.
- **Specialization**: Respondents were required to determine their Specialization whether Humanities or Science.
- **Gender**: Respondents were required to indicate whether male or female.
• **Number of universities where the head of academic department is working:** Respondents were required to stating the number of universities they are working during the period of data collecting.

**Section two** was designed to determine the processes of time management that were practised by academic heads of departments. This section included three parts as the researcher asserted previously. Each part represented the principles of time management operations related to a specific process, which contains a number of items. Each included five options. The Likert scale (Progressive scale) was used. The three sections were:

**Time planning and its principles:** this section of the questionnaire was designed in order to determine the level of time planning practised by Libyan heads of academic departments, also to clarify the principles of time planning which are commonly used. This section included twelve statements reflecting the principles of time planning, these statements were divided as follows: The first, third, sixth and the eighth statements addressed the principle of advanced planning or goal setting, while the fourth, ninth, tenth, and eleventh reflected the principle of priorities and the second, fifth, seventh, and twelfth were formulated in order to reflect the principle of scheduling.

**Time organizing and its principles:** items in this section were addressed to determine the level of practice of time organizing, including several principles that reflect time organizing. The principle of delegation was represented in the first, third, sixth, eighth, and eleventh, while the principle of organizing of the work environment was represented in the second, fourth, seventh, ninth, and twelfth. The principle of dealing with work papers was illustrated in fifth, and tenth.

**Control over time and its principles:** The researcher adopted the definition of Taylor (2007) who asserted that control over time means changing those habits or activities that cause time to be wasted. Therefore, the first, fourth, fifth, sixth, seventh, ninth, tenth, and the eleventh item addressed the principle of control over time wasters, while the items of the second, third, eighth and twelfth were designed in order to depict the principle of time analysis.

**Section three:** was designed to highlight the main factors that impede time management practices by Libyan heads of academic departments whether external or internal factors. The second chapter posed many drawbacks with the heads of academic departments beginning with the culture that they hold, the social culture around them and the decisions and
regulations that allowed them to work in more than one university. The external factors were delineated as unexpected visitors, unarranged meetings, unnecessary phone calls, while the internal factors were identified as hesitation in decision making, lack of delegation to others, bad planning, reading newspapers during work.

3.6 Piloting the questionnaire

Piloting is used to determine whether the questionnaire is doing what it has been designed for. According to Sapsford and Jupp (1996) piloting is usually used to assess the adequacy of the research instruments to be used for data collections.

The success and value of research depends on the quality of the questionnaire (Evans, 1984). Bell (1989), Oppenheim (1992) and Remenyi (2002) clarified the aims of questionnaire piloting by stating that all instruments must be piloted to determine how long the questionnaire takes to be completed by respondents; to affirm that all questions and instructions are clear; to enable the researcher to remove any items which do not provide any usable data; and to avoid any shortcomings. By the piloting of the questionnaire before final administration the researcher can ensure that the questionnaire is reliable and valid (Oppenheim, 1992). Moreover, piloting of the questionnaire enables the researcher to be able to test the methodological techniques.

Therefore, the main objective of piloting is to assess the quality of the questionnaire, and to determine to what extent it addresses the research objectives. Thus, the researcher should take the following steps to piloting the questionnaire:

- Translation of the questionnaire.
- Reliability and validity of the questionnaire.

3.6.1 The first step: translation of the questionnaire

The translation of the questionnaire into different languages raises concerns about the content and meaning of the questions or items included. Hartas (2010) explained clearly that the transfer of the questionnaire items into another language might cause the loss of the real meaning of the questions or items during the translation process. Therefore, the translation of
the questionnaire is an important and challenging task because of the transfer of the concepts from one cultural context to another.

Hartas (2010) and Blaxter et al (2008) strongly recommended translation back into the original language in order to keep the same meaning of the items and to ensure accuracy of translation.

3.6.2 Reliability and validity of the questionnaire

The researcher should conducting both the validity and reliability of the questionnaire before final administration of the research tool. **Validity** is the extent to which the data collected truly reflect the phenomenon being studied. (Bell 1989) Creswell (2003) identified some major traditional forms of validity. **Content validity** refers to the ways in which the researcher aims to examine whether the content of the items measures what they were intended to measure. Borg and Gall (1983) note that content validity should not be confused with face validity which concerns whether the survey or questionnaire appears to be measuring what it is aiming to measure (Jackson and Furnham, 2001). In their view content validity refers to the evaluator’s appraisal of what the content of the test measure.

**Reliability** is the extent to which a questionnaire produces similar results under constant conditions on all occasions (Bell 1989). Oppenheim (1992) refers to **internal consistency** to determine whether item responses are consistent across the construct. Meanwhile, **test-retest correlations** means getting the same results over time when the questionnaire is administered a second time via the same sample Creswell (2003). Borg and Gall (1983) defined this as the **coefficient of stability** and they also stated that the main problem that can be faced by this method is to determine the correct delay between the two administrations of the measure. Borg and Gall (1983) stated that reliability may be computed via **the coefficient of equivalence**, which is often called alternate **reliability**. This is most commonly used in order to obtain an estimate of reliability for standardized measurements; the main idea of this method is computed by administering two parallel forms of the questionnaire to the same group and correlating the two scores obtained from the two forms in order to get a reliability coefficient. Evans (1984) indirectly clarified the relationship between validity and reliability.
by saying that a questionnaire can be reliable without being valid; however, it cannot be valid unless it is reliable.

3.7 The practical procedures employed in the piloting of the questionnaire

As mentioned earlier the researcher designed the questionnaire based on a review of the previous theoretical literature in the field of time management, in addition to the valuable information obtained through the discussion of the topic with a group of specialists and those interested in the science of management in Garyounis University. The questionnaire items were written in English and were subjected for evaluation by a supervisory team to get the approval for submission to the research sample. Then the questionnaire items were translated from English into Arabic in order to meet the research sample language and back again into English in order to ensure that the translation was accurate. All of this was accomplished with the help of some academic staff who are specialists in English language in Garyounis University. The researcher checked both translated versions with independent translators to ensure that the original and retranslated versions content had the same meaning. Both versions of the translated questionnaire and the original English versions were discussed in depth with some academic staff members in the Garyounis University Language Centre, and with some Libyan experts in management science to clarify the meaning of concepts contained in the questionnaire. Their comments were taken into account by the researcher and some minor amendments were made in the Arabic translation to meet the needs and nuances of the Libyan management culture.

With regard to validity the researcher used content validity to determine whether the questionnaire was valid, according to the process recommended by Jackson and Furnham (2001). Content validity covers the domain of content areas of the subject under research in questions; in other words, do the questionnaire items reflect the research objectives and cover the issue under discussion? Content validity is demonstrated by expert evaluation in order to evaluate and critique the instrument in terms of its content. Therefore, the questionnaire was evaluated by ten Libyan managerial experts interested in managerial issues who are working in the university of Garyounis. As mentioned earlier, this team was chosen from the first step in the questionnaire design process where the researcher discussed the research questions and aims with those experts to provide a good background about time management within the Libyan environment according to their managerial experience. This was also carried out to
confirm whether the content of the questionnaire questions was appropriate to Libyan culture. Consequently, the questionnaire was evaluated by the supervisory team at LJMU and the expert team were required to determine the clarity of the questions, providing suggestions for any needed revision of layout or content of the questionnaire, and to determine whether the questions were appropriate to the field under scrutiny. Furthermore, the Libyan management team were also required to record the time spent completing the questionnaire.

Test-re-test as an external consistency method was used to determine to what extent the questionnaire is reliable. According to (Kumar, 2005) test-re-test depends on administration of the questionnaire at two different times, under the same or similar conditions. The questionnaire was addressed to the same random sample twice under similar conditions. The first test was on 3rd of December 2009 and fifteen days later the same questionnaire was administered again to the same sample. The data obtained from the two administrations were correlated, the higher the correlation coefficient the more reliable the questionnaire, and we should note that the questionnaire correlation was 0.725 and significant at the 0.01 level (for more details see chapter 4).

3.8 Interview procedures of the current research:
In order to provide an in-depth understanding about time management within Libyan culture, and to confirm and discuss the findings obtained by the quantitative methods; semi-structured interviews were used to examine and elucidate the specific issue of "time management operations". Furthermore, the aim was to allow emergent themes from interviewees to be explored and developed by the interviewer. Consequently, an interview schedule was prepared to include the main questions and thoughts that addressed the key themes of the present research.

An interview form was designed to meet the needs of the research questions and aims (see Appendix 4) Initially questions and issues for discussion during the interview process were developed by using purposeful sample questions taking account of those issues that had already appeared in the questionnaire to enrich the information by generating further opinions related to the issues under investigation. The interview questions were at first prepared in English in order to be piloted with the supervisory team. Consequently several changes were
made to develop the final format of the interview. The English version was translated into Arabic which was evaluated by the same Libyan experts in management science who warmly welcomed the evaluation of the interview questions.

The piloting of the interview focused on wording, clarity of the questions, and whether the questions reflected and covered the research objectives and issues related to the research questions. Overall, most of the experts in management science indicated that the wording and questions were clear and reflected the research objectives and answer the research questions.

The semi-structured interview was conducted with a sample of heads of academic departments. The researcher conducted face-to-face interviews with fifteen randomly selected interviewees representing the variety of different departments. Selection was by use of a table of random numbers. The sample consisted of heads of department from the specific popular Libyan universities.

Interviews were conducted over three months due to the spread of the interviewees in several Libyan cities, which required travelling around those cities to collect the data in order to control and manage the interview effectively; the researcher did not use any other communications technologies, such as interviews over telephone or by email or Internet chat. Recording of the interviews was attempted; however only two of the interviewees found the process acceptable except since this interviewing method is rarely used within the Libyan research environment. Therefore only two interviews were recorded using a small tape recorder, whilst the rest of the interviews were face-to-face and note taking was used. The researcher addressed the questions to the interviewees, she gave them enough time to express their opinions, consequently, wrote their answers and their views directly. This cost the researcher much time, effort and money. Another feature of lack of cooperation from interviewees was represented in the lack of compliance with the time of the interview. Some of the interviewees did not attend at the specified start time of the interview and some of them cut short the interview because of other appointments. These factors affirmed that there is a poor investment and lack of attention given to time as a resource.
Interviews lasted about one hour and fifteen minutes. They began with a clear explanation of the research aims and the research questions. Furthermore, some related issues were discussed, such as ethics and confirmation about presenting the full transcript to the interviewee before any analytical procedures in order to enable the interviewee to make any alterations or deletions. All the fifteen interviews both recorded and written were held in the offices of the heads of academic departments by advanced arrangement.

Despite the interviews being semi-structured in format, some of the interviews lost their semi-structured nature and became unstructured when some interviewees explored unplanned issues relating to time management, such as the value of time within Islam and time within Libyan culture. Some of these discussions related to issues in a direct way and the answers obtained were mostly factual. In the final stage, all of the fifteen transcripts (both of recorded and written interviews) were sent to the interviewees in order to confirm their answers or carry out any deletions or further alterations. Some alterations were made to three of the transcripts, as well as the recorded interviews that had been transcribed to be transcripts ready for the analysis procedures.

3.9 Sampling method

Identifying the research population is the first and most important point in the social sciences in order to ensure the quality of data produced. The research population is the human environment within which the researcher seeks to obtain data and the researcher must select a sample or subject from the whole population that is both representative and manageable.

3.9.1 Overview of research community

A population contains all of the individuals within certain variables, such as sex, experience, and scientific qualification (Mertler and Charles, 2005). Moreover, it is suggested that the researcher should obtain data from participants who are often members in a chosen sample in order to learn about the population. Nisbet and Entwistle (1970) asserted that the definition of the population is one of the most important aspects of appropriate sampling.
Denscombe (1998) strongly recommended researchers to choose the right population to participate to get the represented sample of it. Therefore, according to the justifications of the research that were identified in the first chapter the researcher has chosen the Libyan heads of academic departments in Libyan universities as the population of current research, since she asserted recently heads of academic departments in Libyan universities spend much time in routine functions and most of them occupy many leading functions at the same time inside and out of the university. Therefore, the investigation of this subject is valuable and worthy topic for the research in Libyan environment especially. The Libyan heads of academic departments as educated and qualified people are able to make judgements about the subject under investigation, provide a clear background about the subject, and answer the researcher’s questions objectively. Accordingly, the population for the research included all the heads of academic departments in popular Libyan universities (academic leaders). The researcher defined the research population by analysing the Guides to Libyan universities available from the Libyan ministry of education and the researcher found that the number of heads of departments in the nine universities in Libya is 662.

3.9.2 Research sample procedures - selection and description

Researchers usually want to learn about whole populations, but it is usually impractical to study a whole population unless it is quite small. The first stage in sampling is to define the whole population clearly. Therefore, for the current research the sampling frame was determined by referring to the list of names of all heads of academic departments in the nine Libyan universities included within the Guides of Libyan universities employees. Consequently, it was proposed to use a sample drawn from the larger population. According to Mertler and Charles (2005), Cohen et al (2008) and Borg and Gall (1983) a sample is a subgroup of people selected to represent the much larger population in order to reduce factors such as expense and time. Therefore, the sample should be selected in order to gain information typically representative of the whole population.

that non-probability sample provides a better opportunity for collaboration with respondents than do probability methods. The non-probability sampling method may lead to greater error in the results of the survey, and participants do not have an equal chance to being selected.

To help ensure that the sample represents the population the sample must be selected randomly. Random selection of participants from the population is a preferred method for establishing such a sample (Mertler and Charles, 2005; Coolican, 2003). Cohen et al (2008) defined the main differences between the two approaches of probability and non-probability as below:

Figure 3.4 The key differences among of Probability and Non-probability sampling method

<table>
<thead>
<tr>
<th>Probability sampling method</th>
<th>Non-probability sampling method</th>
</tr>
</thead>
<tbody>
<tr>
<td>The chance of member of the wider population being selected for the sample are known.</td>
<td>The chance of member of the wider population being selected for the sample are unknown.</td>
</tr>
<tr>
<td>Every member of wider population has an equal chance to be selected within the sample.</td>
<td>Some member of wider population will be excluded and other definitely included.</td>
</tr>
<tr>
<td>Probability sampling is popular in randomised controlled trials. Therefore it seeks to represent the whole population.</td>
<td>Non-probability sample avoids representing the wider population, it only represent a particular group.</td>
</tr>
<tr>
<td>Probability sampling have less risk of bias</td>
<td>Non-probability sample may demonstrate bias.</td>
</tr>
</tbody>
</table>

By looking into the key differences between the two types of sampling method, giving careful consideration to the nature of the current research, the questions to be answered, and the nature and characteristics of the research population, it was found to be more economical with respect to both time and expense to use the probability method to select the research sample (Butcher, 1973; Nisbest and Entwistle, 1970). Cohen et al (2008) indicated that there are two factors that contribute to the definition of a random sample: firstly that every individual in the
population should have an equal chance of appearing in the sample, secondly that the selection of one individual should be independent of and not in any way linked with the selection of another.

Consequently, the equal opportunity for all population members to be within a sample that is chosen randomly, without omission, bias or making any further distinctions, was taken into account in determining the selection process. Unfortunately, there is no clear answer as to sample size since the optimum sample size depends upon the purpose of the study, and the nature of the population under scrutiny. Some methods are completely related to the size of the sample (Cohen and Lawrence, 1984; Gajendra and Kanka 1999; Burton et al 2008). Coolican (2004) argued about the sample size by saying that large samples "are very costly and time consuming", however, the larger sample size increases the 'power' of statistical testing, and provides a good representation of the population (Coolican, 2003). On the other hand Cohen et al (2008) asserted that too large a sample might become unwieldy and too small a sample might be unrepresentative of the whole population. However, they cited that the sample size also depends on the search pattern in addition to the size of the population. Moreover the material resources and time available for doing the research are influential factors in determining the size of the sample.

The aims of the research are to investigate time management practised by Libyan heads of academic departments in all Libyan universities. However, to learn about the whole population is impossible due to the large number and wide geographic distribution of the universities around many Libyan cities. Therefore, sampling is the best way to learn about a large population in order to achieve the research aims and to generalize the results obtained from the research. Consequently, a random sample was selected from the whole population of Libyan heads of academic departments in addition to implementing inferential statistics on the data in order to be able to make a claim for generalizable results. As mentioned previously, quantitative research largely subscribes to a deductive research process. According to Borg and Gall (1983) inferential statistics enable the researcher to make certain inferences about population values. A list of names of all heads of academic departments in
the nine Libyan universities was obtained in order to provide a base for the sample selection. A table of random numbers was used in order to identify the research sample randomly.

Regarding the sample size, the researcher took fifty per cent of the total number of heads of departments, noted above, to be representative of the population. A large sample was selected in order to reduce the probability of sampling error. Borg and Gall (1983) note that the larger the sample, the more likely it is that the mean and standard deviation of the sample will be representative of the mean and standard deviation of the whole population. Therefore 331 heads of academic departments were investigated. The extent to which they are representative the whole population is shown in the table below.

Table 3.1 Research sample

<table>
<thead>
<tr>
<th>University</th>
<th>Established</th>
<th>Heads</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1957</td>
<td>48</td>
</tr>
<tr>
<td>B</td>
<td>1955</td>
<td>54</td>
</tr>
<tr>
<td>C</td>
<td>1988</td>
<td>46</td>
</tr>
<tr>
<td>D</td>
<td>1989</td>
<td>48</td>
</tr>
<tr>
<td>E</td>
<td>1983</td>
<td>33</td>
</tr>
<tr>
<td>F</td>
<td>2001</td>
<td>9</td>
</tr>
<tr>
<td>G</td>
<td>1988</td>
<td>46</td>
</tr>
<tr>
<td>H</td>
<td>1988</td>
<td>24</td>
</tr>
</tbody>
</table>
The sample will be described in more detail in chapter 4 with the statistical processing of the data collected, in order to provide an accurate description of the sample in terms of variables and their distribution by university, and clarify the sample in statistical methods.

3.10 Distribution and return of the questionnaire

The questionnaire forms were posted out to the research sample. The researcher sent the forms to the recipients via the Office of Scientific Affairs at each university with the exception of the University of Garyounis where the questionnaire was handed out in person. Postal distribution was used due to the wide geographical distribution of universities, and the difficulty of distributing personally, moreover to save the researcher time and effort. A permission letter from the administration of each university was attached with each questionnaire and an agreement form for signature was also included. The sample members were required to sign this form and return it with the form of the completed questionnaire. Each distributed questionnaire had a personalised covering letter attached, which included details about how the questionnaire could be returned to the researcher and also included a covering letter describing the objectives of the research, the issue under investigation, and a brief explanation of the main topics covered by the research.

The process of the distribution and return of the questionnaire forms conducted in Libya lasted more than two months, starting in May 2010 and ending in late July 2010. The researcher received 309 questionnaires usable for analysis; the response rate was 93%. A summary of the numbers of distributed and returned questionnaires for each university was shown in the table 3.2.
### Table 3.2 Distributed and returned questionnaire form

<table>
<thead>
<tr>
<th>University</th>
<th>Number of distributed questionnaires</th>
<th>Lost</th>
<th>Uncompleted</th>
<th>Collected questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>48</td>
<td>7</td>
<td>0</td>
<td>41</td>
</tr>
<tr>
<td>B</td>
<td>54</td>
<td>2</td>
<td>0</td>
<td>52</td>
</tr>
<tr>
<td>C</td>
<td>46</td>
<td>0</td>
<td>0</td>
<td>46</td>
</tr>
<tr>
<td>D</td>
<td>48</td>
<td>1</td>
<td>1</td>
<td>46</td>
</tr>
<tr>
<td>E</td>
<td>46</td>
<td>1</td>
<td>3</td>
<td>42</td>
</tr>
<tr>
<td>F</td>
<td>33</td>
<td>3</td>
<td>2</td>
<td>28</td>
</tr>
<tr>
<td>G</td>
<td>23</td>
<td>1</td>
<td>0</td>
<td>22</td>
</tr>
<tr>
<td>H</td>
<td>24</td>
<td>0</td>
<td>1</td>
<td>23</td>
</tr>
<tr>
<td>I</td>
<td>9</td>
<td>0</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>331</td>
<td>14</td>
<td>04</td>
<td>309</td>
</tr>
</tbody>
</table>

### 3.11 Ethical considerations

All necessary ethical approval for the current research had been obtained before the data collection stage to protect the rights of the research participants and increase the level of trust between researcher and participants. Bryman and Bell (2003) mention general ethical codes for social research namely:
• **Harm to participants:** ensure to avoid any harm, risk or embarrassment whether physical or psychological.

• **Informed consent:** participants must agree voluntarily to participate; this agreement must be based on clear and full information.

• **Invasion of privacy:** the anonymity principle is a guarantee of participants’ privacy.

• **Deception:** the researcher should avoid any deliberate misrepresentation.

To ensure the participants rights, ethical principles have been considered from the first stage of the design of both questionnaire and interview schedule using the ethical principles guidance from Liverpool John Moores University. The researcher provided an information sheet for research participants in order to ensure a clear background about how they were selected, and full information about the nature of the research, its aims and the questions addressed to be answered. Furthermore, an agreement had been signed by participants to affirm their voluntary participation and their freedom to withdraw from the research at any time and any stage. The researcher clearly confirmed to the participants that their participation was strictly confidential. In addition permission was obtained from each university to meet the research sample and increase the trust level between researcher and participants.

### 3.12 Methods of data analysis

#### 3.12.1 Management of the quantitative data

Quantitative data collected via the questionnaire has been subjected to a transfer process from raw material into usable information to be ready for statistical analysis. As mentioned previously, the quantitative data is completely dependent on the actual numbers of responses, which can be used to produce numerical and statistical data. Therefore the researcher started by sorting out the useable completed questionnaires. These forms have been subjected to coding procedures Since the questionnaire was designed using summated rating scales the five options were appended with each item in the questionnaire and those five options coded into numbers in such a way that each option has a specific degree. The table below summarizes these issues in detail.
In order to prepare the data for the analysis process, verbal data was coded to digital in order to analyse statistically. Research variables were coded in order to transfer them from verbal data into numerical data as follows:

**The Specialization variable:** was divided into two groups:

- *Science group:* has been coded number 1
- *Humanities group:* has been coded number 2

**Qualification variable:** since the respondents - heads of academic department - either hold master degree or doctorate degree, therefore this variable was also divided into two main groups:

- *Master,* has been given the value 1
- *Doctorate group:* has been coded number 2

**Managerial experience:** The duration of respondents' experience ranged from eight months to nine years. They were divided into three groups in order to obtain three experiences levels namely low experience level, medium experience level, and high experience level, these groups are:

- *The first group:* Less than a year, coded number 1.
- *The second group:* from 1 year to 3 years coded number 2.
- *The third group:* more than 3 years has been coded number 3.

---

<table>
<thead>
<tr>
<th>The alternatives</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>I do not know</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The degree</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
Gender: to determine whether a respondent was male or female, consequently, this variable has been divided into two groups.

The first group: Male coded number 1.

The second group: Female has been coded number 2.

Number of universities at which the head of academic department is working:

since some aspects of legislation have allowed academic staff members to work as a co-operator at several Libyan universities at the same time, some participants work at several universities whether as an academic staff member or occupying more than one leadership position. Consequently, this variable has been divided into two groups:

The first group: work at only one university, coded number 1.

The second group: work at more one university, coded number 2.

According to the procedure explained above, the questionnaire became ready to be analysed. These numerical data were carefully inserted into the SPSS program Version17.

3.12.2 Management of the qualitative data

The qualitative data which was collected via semi-structured interviews was managed by the researcher starting with the two recorded interviews. The first phase was to transfer the recorded material into written material. According to King and Horrocks (2010) transcription is the process of converting recorded material into text. It is the main first precursor to commencing the analysis of the interview data. The main advantage of transcription according to Drever (1997) is providing a “true” record of the original interview. Moreover, King and Horrocks (2010) added that there may be a full verbatim transcription, or one can transcribe only the main areas of interest in full and summarize the rest. To save the researcher time and effort the researcher transcribed the only main areas of interest and summarized the rest. In addition, she identified certain respondents as key informants and used these key informants as guidance for her transcription of the recorded raw data. Consequently all fifteen transcribed interviews were available for content analysis.
3.13 Statistical procedures for analysis of the questionnaire

The raw quantitative data was transferred from verbal data to numerical data in order to be analysed statistically. The selection of a statistical approach to analyse the data largely depends on the questions and objectives of the research. In order to achieve the research objectives by answering the addressed questions, statistical procedures were applied such as those set out below:

3.13.1 Descriptive statistics

According to Szczerbinski and Wellington (2007) descriptive statistics are usually employed in order to describe and present the numerical data clearly. Furthermore, Teddlie and Tashakkori (2009) added that by employment of descriptive statistics, numeric data can be summarized in easily interpretable tables. Therefore, some descriptive statistics techniques were adopted to meet the research requirements. Descriptive analysis has been undertaken for certain different uses such as description of the characteristics of participants, summarizing features of gathered data and to meet the research objective by using mean and standard deviation to answer the first three questions (for more detail see chapter 4).

3.13.2 Parametric statistics

The researcher decided that parametric statistics would be the best way to determine that one group of the sample is similar to, or different from, another group, regardless of whether these two groups are independent or paired samples. Easterby-Smith et al (2002) and Plant (2007) defined some key assumptions that should be provided to enable researchers to use the parametric statistics such as one-way ANOVA:

- The dependent variable must be measured by using a continuous scale such as a Likert scale.
- The research sample should be selected randomly, and the population from which the sample is selected should be normally distributed.
The fourth question addressed was to determine the significant differences between independent samples with respect to duration of managerial experience and was divided into three groups. Specialization was coded into two independent groups. Qualifications were also divided into two independent groups, gender was also divided into two groups, and the number of universities at which the head of academic department is working was divided into two groups (as shown previously). The considerations defined by Easterby-Smith et al, (2002) and Plant (2007) were taken into account. Additionally, the researcher aimed to compare mean scores of each group and the t-test was employed in order to determine whether there were any significant differences between two mean scores of independent groups against the variables of specialization (group of Science and group of Humanities) qualifications (group of Masters’ degree and group of Doctorate), gender (group of males and group of females) and number of universities at which the head of academic department is working (group who is working in one university, and group who is working in more one university). While the one-way ANOVA was used to test whether the mean of scores of each group under the managerial experience differ from each other.

3.14 Textual analysis of qualitative data

The researcher used the semi-structured interview method in order to confirm and supplement the knowledge gained from the questionnaire. Material was obtained from interviews and the literature review. The semi-structured interviews were subjected to textual analysis, which is also known as thematic analysis due to its dependence on searching for key themes (Teddlie and Tashkkori, 2009). Theme implies some degree of repetition, indeed ‘an issue raised just once should not be called a theme’ (King and Horrocks, 2010). Thus, the data were examined in order to identify commonalities and differences in responses. According to Miles and Huberman (1994) material derived from qualitative data, such as interviews, must be examined for key nodal issues and a stem and branch analysis was carried out in order to identify commonalities and differences in responses.

The textual analysis method depends largely on an understanding and interpretation of material, since the skilled interviewer can obtains the key themes and meanings during the interview period. Punch (2009) stated that the words and their meanings depend on where they are used, by whom and to whom. Furthermore, the researcher reported at the beginning
of this chapter that within constructionism, issues under investigation can be constructed by researchers individually and collectively. Also, through the constructionist paradigm the researcher sees things as they really are and is able to realize the meaning of things through focusing and explanation. Denzin and Lincoln (2008) reported that by reading and re-reading the collected materials the qualitative researcher should identify the key themes in order to draw a picture of presuppositions and meaning that constitute the cultural world of which the textual material is a specimen.

To summarize, the researcher read the content of the interviews several times to achieve a wide and deep understanding of content. In addition to this the researcher summarized the content carefully to gain an understanding of the key themes. Summaries were examined in order to identify commonalities and differences, and the researcher organized the themes by dividing them into groups under main key themes to provide a degree of hierarchical relationship. The grouping process was conducted in order to gather answers from the different interview transcripts by topic included in the interview guide, in order to identify the extent of agreement and disagreement between respondents. Therefore quotations have been used in order to clarify thoughts about the discussed issues. Concepts obtained from the interview guide during the analysis process were interpreted according to the research framework. New themes or concepts that were raised in the interviews were considered in a flexible way and considered in relation to the research framework. The figure designed by Taylor and Bogdan (1998) describes the semi-structured interview.


3.15 Conclusion

In this chapter the researcher has outlined the methodology employed and the justification behind choosing a mixed method approach. Both quantitative and qualitative approaches were used in the current research in order to provide a clear and complete picture of the research problem and a greater understanding of the topic under investigation. The data from both methods was subsequently analysed, and will be presented in the next chapter. Both quantitative data analysis and qualitative data analysis will be provided in more detail in the next chapter. The researcher will clarify the sample in statistical methods, provide a description of the characteristics participants, summarize features of the gathered data and offer textual analysis of the qualitative data.
Chapter Four

Presentation of Quantitative and Qualitative Data Analysis

4.1 Introduction

In this part of the chapter the researcher aims to provide the findings obtained from the quantitative data analysis process by administering a large-scale survey. The questionnaire forms were distributed to the target sample as a part of data collection during the period between the beginnings of May 2010 to the end of July 2010, in order to answer the research questions in numerical form.

The analytical process of the questionnaire is presented according to the follows research questions:

1. To what extent do heads of academic departments practice time management according to the specific fields of planning, organising and controlling time?
2. What the principles of time management operations are more commonly used?
3. What factors impede the practice of time management?
4. Are there significant differences in the levels of the practice of time management processes as a result of key variables, including: managerial experience, specialization, qualifications, gender, and number of universities at which the head of academic department is working?

Consequently, the questionnaire items were formulated to answer the research questions, and covering the following areas:

- Time planning - TP (Items 1-12)
- Time organising - TO (Items 13-24)
- Control over time - COT (Items 25-36)
- Time wasters - TW (Items 37-48)

Furthermore, the first part of the questionnaire covered the fourth question in order to determine significant differences among the research variables that were identified by the
researcher including specialization, qualification, years of experience, gender, and number of universities at which the head of academic department is working.

The researcher distributed the 331 of the questionnaire forms to target sample. The number of returned forms was 309, which is a 93% rate of return. The researcher described the research sample statistically in order to meet the requirements of the first part of questionnaire, and piloted the questionnaire in order to determine whether the questionnaire is suitable for what it was designed to do.

4.2 Sample profile and piloting of the questionnaire

In the beginning of this chapter, the researcher provided an overview of the research sample description in order to obtain the profile of the respondents who were chosen to answer the research questionnaire, as well as piloting of the questionnaire to determine whether the questionnaire doing what it was designed for. The researcher implemented the correlation between the two tests (T-retest) in order to clarify the reliability of the questionnaire and the data obtained from the questionnaire forms were analysed to meet the research objectives and answer the research questions by utilising the SPSS software.

4.2.1 Overview of the research sample

The researcher noted earlier that problems of scale make it impossible to address the whole of population of Libyan heads of academic departments due to the large number, and wide geographic distribution of the universities around many Libyan cities. Therefore, she adopted a simple random sampling and 331 heads of academic department were chosen randomly to represent the whole population. In order to get the data the 331 of the questionnaire forms were distributed to the target sample during the period of the beginnings of May 2010 to the end of July 2010. 309 questionnaires out of the 331 were deemed usable for analysis which equates to a 93% response rate.
In order to meet the questionnaire requirements in the first section, the researcher provided an overview of research sample features according to the research variables such as a specialization variable, qualification variable, sex variable, managerial experience, and number of universities head of department.

4.2.1.1 Specialization

By this variable, researcher aimed to investigate whether there are any differences between respondents according to their specialization.

<table>
<thead>
<tr>
<th>University</th>
<th>Specialization</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Science (1)</td>
<td>Humanities(2)</td>
</tr>
<tr>
<td></td>
<td>No %</td>
<td>No %</td>
</tr>
<tr>
<td>B</td>
<td>24 15.79</td>
<td>28 17.83</td>
</tr>
<tr>
<td>A</td>
<td>21 13.82</td>
<td>20 12.74</td>
</tr>
<tr>
<td>C</td>
<td>22 14.47</td>
<td>24 15.30</td>
</tr>
<tr>
<td>D</td>
<td>24 15.79</td>
<td>22 14.01</td>
</tr>
<tr>
<td>F</td>
<td>15 9.87</td>
<td>13 8.28</td>
</tr>
<tr>
<td>I</td>
<td>4 2.63</td>
<td>5 3.18</td>
</tr>
<tr>
<td>E</td>
<td>21 13.81</td>
<td>21 13.38</td>
</tr>
<tr>
<td>H</td>
<td>11 7.24</td>
<td>12 7.64</td>
</tr>
<tr>
<td>G</td>
<td>10 6.58</td>
<td>12 7.64</td>
</tr>
</tbody>
</table>
By looking at Table 4.1 it can be seen that there are no observable large differences in number between science and humanities. The number of heads of science departments was 152 of 309, which equates to 49.2%. On the other hand, the number of heads of humanities departments was to some extent more than that of the heads of science departments. They were 157 of 309, which equates to 50.8%. This similarity between the two specializations means that the opening up of Libya in recent years has led to a remarkable expansion in the capacity of Libyan universities and has led to providing all the specializations equally in all new universities in order to meet the social demand for Higher Education in Libya.

4.2.1.2 Qualification

Through this variable the researcher aimed to determine if there are any differences between respondents according to their qualification. Since the heads of academic departments hold either Masters degrees or Doctoral degrees, the table below defines the respondents according to their qualification.

Table 4.2 demonstrates the respondent’s qualification

<table>
<thead>
<tr>
<th>University</th>
<th>Qualification</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Master (1)</td>
<td>Doctorate (2)</td>
</tr>
<tr>
<td></td>
<td>N0      %</td>
<td>N0      %</td>
</tr>
<tr>
<td>B</td>
<td>22      15.10</td>
<td>30      18.40</td>
</tr>
<tr>
<td>A</td>
<td>13      9.00</td>
<td>28      17.00</td>
</tr>
<tr>
<td>C</td>
<td>26      17.80</td>
<td>20      12.30</td>
</tr>
<tr>
<td>D</td>
<td>25      17.10</td>
<td>21      13.00</td>
</tr>
<tr>
<td>F</td>
<td>16      11.00</td>
<td>12      7.40</td>
</tr>
</tbody>
</table>
By looking into the table No 4.2 it can be recognized that there was no big differences between heads of academic departments who hold a Masters degree, and others who hold a Doctorate. The total number of holders of Masters degrees was 146, which equates to 47.2%, while the number of holders of Doctorate was 163 of 309, which equates to 52.8%. This numerical similarity between the holders of Masters and Doctoral degrees refers to the adopted policy of choosing the head of the department in the Libyan universities. The selection process largely depends on the collection of the largest number of votes without giving any regard to the highest degrees.

4.2.1.3 Managerial experience

Through the variable of years of managerial experience, the researcher aimed to determine whether the heads who have a long managerial experience practise time management better than others who have a short period. The researcher realized that the length of experience gives an indication of heads of academic departments' accumulated knowledge and background and thus their ability to deal with various managerial activities and tasks. In essence, what it proposed here is that those with more experience are expected to have a greater ability to manage time than others.

<table>
<thead>
<tr>
<th>University</th>
<th>Managerial experience years</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt;1year (1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1-3years (2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&gt;3years (3)</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>18 20.45 23 15.65 11 14.86 52 16.83</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>11 12.5 18 12.24 12 16.21 41 13.27</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.3 The respondents’ managerial experience
It can be seen from the above table that the managerial experience was divided into three groups. The majority of the respondents were involved within the second group which ranged from 1-3 years. This group totalled 147, which equates to a 47.6% of the population. This picture indicates that the number of heads of department whose experience consisted of 1-3 years was twice that of others whose experience was less than one year and more than three years. The first group was 88 of 309, which equates to 28.4%, while the third group was 74 of 309, which equates to 24%.

4.2.1.4 Number of universities that the head is working in

By this variable the researcher attempted to determine whether the practice of time management differed among heads who are working with only one university and those who are working with more than one university.

The researcher did not examine whether working in multiple institutions became more problematic the greater the number of universities where people were employed. The examination was thus limited for ease of analysis and because the research was already complex in terms of the distribution and collection of questionnaires to and from a number of institutions and also in terms of arranging and carrying out interviews in a wide range of setting. The analysis of data relating to whether working in multiple institutions added to the problems faced by respondents in terms of time management would also have added significantly to the complexity of the analysis of data.
Table 4.4 Shows the respondents according to the number of universities

<table>
<thead>
<tr>
<th>University</th>
<th>Number of universities</th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Only one university (1)</td>
<td>More than one university (2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N0</td>
<td>%</td>
<td>N0</td>
</tr>
<tr>
<td>B</td>
<td>27</td>
<td>13.85</td>
<td>25</td>
</tr>
<tr>
<td>A</td>
<td>22</td>
<td>11.28</td>
<td>19</td>
</tr>
<tr>
<td>C</td>
<td>32</td>
<td>16.41</td>
<td>14</td>
</tr>
<tr>
<td>D</td>
<td>32</td>
<td>16.41</td>
<td>14</td>
</tr>
<tr>
<td>F</td>
<td>20</td>
<td>10.26</td>
<td>8</td>
</tr>
<tr>
<td>I</td>
<td>4</td>
<td>2.05</td>
<td>5</td>
</tr>
<tr>
<td>E</td>
<td>26</td>
<td>13.33</td>
<td>16</td>
</tr>
<tr>
<td>H</td>
<td>15</td>
<td>7.69</td>
<td>8</td>
</tr>
<tr>
<td>G</td>
<td>17</td>
<td>8.72</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>195</td>
<td>100</td>
<td>114</td>
</tr>
</tbody>
</table>

As shown in the table above, the researcher divided the sample according to the variable of the number of universities into two groups. The first group contained 195 members, which equates to 63.1%. Whilst the second represent in the heads who were working at more than one university are 114 out of 309 which equates to 36.9%. Thus, it can be stated that the number of those who worked with only one university was almost twice that of workers who worked at more than one university.

4.2.1.5 Gender of respondents
Through this variable the researcher aimed to understand whether there are any differences between males and females in practice of time management, and especially address the issue of the growing number of Libyan women that have been introduced into administrative
positions based on the growing numbers of women who have gained Masters and doctoral degrees, and their entry to the field of academic work in universities in recent years.

Table 4.5 The gender of respondents

<table>
<thead>
<tr>
<th>University</th>
<th>Sex of respondents</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male (1)</td>
<td>Female (2)</td>
</tr>
<tr>
<td></td>
<td>N0</td>
<td>%</td>
</tr>
<tr>
<td>B</td>
<td>49</td>
<td>17.82</td>
</tr>
<tr>
<td>A</td>
<td>37</td>
<td>13.45</td>
</tr>
<tr>
<td>C</td>
<td>40</td>
<td>14.55</td>
</tr>
<tr>
<td>D</td>
<td>42</td>
<td>15.27</td>
</tr>
<tr>
<td>F</td>
<td>25</td>
<td>9.10</td>
</tr>
<tr>
<td>I</td>
<td>9</td>
<td>3.27</td>
</tr>
<tr>
<td>E</td>
<td>33</td>
<td>12.00</td>
</tr>
<tr>
<td>H</td>
<td>20</td>
<td>7.27</td>
</tr>
<tr>
<td>G</td>
<td>20</td>
<td>7.27</td>
</tr>
<tr>
<td>Total</td>
<td>275</td>
<td>100</td>
</tr>
</tbody>
</table>

By examining the table above we can observe that the males constituted 275 of the sample which equates to 89%, while females consisted of 34 individuals or 11%. Thus, the number of males was eight times that of females. In general the number of females in all Libyan universities is less than the number of males by several times due to the nature of Libyan women's role, which tends to make women avoid administrative and leadership positions.
Moreover, administrative and leadership tasks are usually correlated with men according to Libyan culture in particular and developing countries generally (Al-tohami, 2008).

### 4.3 The validity of the questionnaire

As mentioned in previous chapter there are many ways to determine to what extent the questionnaire is valid. The content validity was utilized to determine the questionnaire validity, in order to confirm whether the content of questionnaire meets the researcher questions, and is appropriate to the Libyan culture. The questionnaire had been evaluated by the supervisory team at LJMU, as well as was subjected to evaluation by the ten Libyan managerial experts in managerial issues who are working in the university of Garyounis. As mentioned in the previous chapter, the questionnaire items were obtained from two major sources of information; firstly by a review of the literature related to time management operations, time management principles, and time management wasters including some previous studies that were done in the same field; and, secondly, by the individual informal interviews that were conducted with some of the Libyan specialists and interested in management science. Therefore, the experts within the team were required to determine the clarity of the questions, provide suggestions for any needed revision, layout of the questionnaire, and determine whether question is appropriate to the field under scrutiny. The respondents were tasked with completing the whole questionnaire and making comments about it, and to record the time spent completing the questionnaire. The table below summarizes the content validity of the questionnaire.

<table>
<thead>
<tr>
<th>The questionnaire items</th>
<th>The content validity of the questionnaire items</th>
<th>Any comments-revision</th>
<th>The validity rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Time planning</strong></td>
<td><strong>Are the items clear in instruction and content?</strong> N=10</td>
<td><strong>Do you agree the items belonged in appropriate fields?</strong> N=10</td>
<td><strong>Do you agree the items reflect the research objectives?</strong> N=10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>-----------------------------------------------------------------</td>
<td>-----</td>
<td>----</td>
<td>-----</td>
</tr>
<tr>
<td>1- I have a clearly defined set of written objectives for work.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2- I plan and schedule my time on a weekly and daily basis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3- I take time each day to think about what I am doing relative to what I am trying to accomplish...</td>
<td>8</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>4- I carry out work on the basis of my priorities.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5- I control my schedule so that others do not waste time waiting for me.</td>
<td>7</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>6- I have a clear idea of what you want to accomplish during the coming week.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7- I use an effective &quot;list&quot; system</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8- I attempt to take time to short term planning (daily planning) in order to achieve the long term plans in my work schedule.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9- My daily activities are linked to faculty priorities.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10- I usually work according to priorities were defined in earlier.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>
| 11-| I periodically re-assess my personal activities in relation to my work goals. | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 100%
| 12-| I keep my important dates on a single calendar. | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 100%
| **Time organizing** |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 1-| I usually delegate as much as possible. | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 100%
| 2-| My desk and office well organized and free of clutter. | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 100%
| 3-| I identify the critical tasks that account for the majority of my results. | 8 | 2 | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 80%
| 4-| I become a good organised and accomplishing more than I were in six weeks ago. | 9 | 1 | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 90%
| 5-| I am able to reduce the amount of time I spend on routine paperwork. | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 100%
| 6-| The secretary screens the telephone calls and knows when to make an exception. | 8 | 2 | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 80%
| 7-| The secretary makes my appointments. | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 100%
| 8-| The secretary opens, reads, and puts important mail on top of my correspondence. | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 100%
<table>
<thead>
<tr>
<th>9- I use a computer to generate my correspondence.</th>
<th>9 0 10 0 10 0</th>
<th>I use a new technologies such computer and fax machine to save my time</th>
<th>%90</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-I have created “form letters” to assist me with routine correspondence.</td>
<td>10 0 10 0 10 0</td>
<td></td>
<td>%100</td>
</tr>
<tr>
<td>11- I allow my assistants to make decisions related to their area(s) of responsibility.</td>
<td>10 0 10 0 10 0</td>
<td></td>
<td>%100</td>
</tr>
<tr>
<td>12- I attempt to keep my desk clear of materials except those necessary for completing my top priorities.</td>
<td>10 0 10 0 10 0</td>
<td></td>
<td>%100</td>
</tr>
<tr>
<td><strong>Control over time</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-I attempt to reduce or eliminate recurring crises from my work stress.</td>
<td>10 0 10 0 10 0</td>
<td></td>
<td>%100</td>
</tr>
<tr>
<td>2-I attempt to eliminate any time wasters and during the past week.</td>
<td>8 2 10 0 10 0</td>
<td>I can face any time wasters were happened during the past week.</td>
<td>%80</td>
</tr>
<tr>
<td>3- I develop a specific performance standards to the level of planned performance at the beginning of each term.</td>
<td>10 0 10 0 10 0</td>
<td></td>
<td>%100</td>
</tr>
<tr>
<td>4- I resist the temptation to get heavily involved in non-productive activities.</td>
<td>7 0 10 0 10 0</td>
<td>I can avoid any non-productive activities.</td>
<td>%70</td>
</tr>
<tr>
<td>5- I can meet the deadlines of department plans.</td>
<td>10 0 10 0 10 0</td>
<td></td>
<td>%100</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>6-</td>
<td>I am able to say “NO” whenever i must to say.</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>7-</td>
<td>The secretary protect my time from walk-ins and know when to make an exception.</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>8-</td>
<td>I keep a time log to monitor all time wasters every day.</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>9-</td>
<td>I can deal with an unannounced visitors through ending the unarranged meeting quickly.</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>10-</td>
<td>I often utilization the closed-door policy with others.</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>11-</td>
<td>I spend a lot of time to do my personal enjoyments.</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>12-</td>
<td>I have time to renew and improve yourself.</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td><strong>Time wasters</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-</td>
<td>I can find large blocks of uninterrupted time when i need to.</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>2-</td>
<td>I refuse to answer the phone when engaged in important conversations or activities.</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>3-</td>
<td>I reduce or eliminate time wasted in meetings.</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>4-</td>
<td>I can effectively control over interruptions and unexpected visitors.</td>
<td>9</td>
<td>1</td>
</tr>
</tbody>
</table>
5- On an average work day I spend more time with personal enjoyments activities than doing managerial duties.

6- I continue productive routines or activities. I am interested in implementation of all department business including the routine business in order to ensure the accuracy of the achieving.

7- I am interested to implement of all the department business on time without advanced planning I usually achieve all the department business without advanced planning.

8- I define the purpose of meetings prior to starting. %100

9 - I start and end meetings on time. %100

10 - I face a problem of Poor channels of communication between department chair, faculty and me. %100

11 - I cannot reduce any wasteful or unprofitable activities or routines. %100

12 - I usually delay in making a decision for fear that you might make a mistake. %100

By looking at the table above, we can see that there were some changes made in some items. The researcher revised some items according to both views of supervisory team and Libyan expert team. Their comments were about the clarity of instructions and content of items. Their comments have been carefully considered and discussed to make the changes. They all agree that all items belonged in appropriate fields and reflect the research objectives. In conclusion, the researcher obtained the following main points as a result of their comments as mentioned in the summary below:
• **Clarity:** some changes were made in items due to their lack of clarity in instructions and content.

• **Layout:** the questions were considered clear and the appropriate to the fields.

• **Scaling:** the team confirmed the use of system that was ordinal from strongly agree to strongly disagree,

• **Timing:** it was noted that questionnaire completion took between 15-20 minutes to be completed.

• **Language:** was considered to be clear and easy to understand.

• **Content of Questions:** questions were deemed to reflect the research objectives.

### 4.4 The reliability of the questionnaire

Reliability is the degree of accuracy or precision in the measurements made by a research instrument (Kumar, 2005). According to Borg and Gall (1983), Saunders et al (2003) and Kumar (2005), reliability of the measurements can be obtained through either internal or external consistency procedures. Test-re-Test and parallel forms of the same measurement (alternative form) are both the two procedures to obtain the external reliability. On the other hand, the split-half and Cronbach's alpha are a variety of methods for calculating the internal reliability.

As mentioned in the third chapter, test-re-test as an external consistency method was implemented to calculating the reliability of the questionnaire. This method largely depends on administration of the questionnaire twice in two different periods under the same or similar conditions. Consequently, the questionnaire addressed to the same 20 member of random sample twice under similar conditions. The first distribution was on 3rd of December 2009 and 15 days later the same questionnaire was addressed again to the same sample. The data obtained from two administrations were correlated. The higher the correlation coefficient the more reliable the questionnaire. The Pearson correlation coefficient was calculated in order to verify of the reliability of the questionnaire as shown in the table below.
Table 4.7 The reliability of the questionnaire

<table>
<thead>
<tr>
<th>The Fields of the questionnaire</th>
<th>Sig</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time planning field</td>
<td>0.01</td>
<td><strong>0.796</strong></td>
</tr>
<tr>
<td>Time organising field</td>
<td>0.01</td>
<td><strong>0.836</strong></td>
</tr>
<tr>
<td>Control over time field</td>
<td>0.01</td>
<td><strong>0.896</strong></td>
</tr>
<tr>
<td>Time wasters field</td>
<td>0.01</td>
<td><strong>0.763</strong></td>
</tr>
<tr>
<td>Whole questionnaire</td>
<td>0.01</td>
<td><strong>0.725</strong></td>
</tr>
</tbody>
</table>

N=20

Through the table above it can be recognized that the questionnaire correlation was 0.725. It is high in the whole of the questionnaire and significant at the 0.01 level. Regarding each field, the correlation rates ranged between .0725 to .0896 and they were significant at the 0.01. According to Hair et al (2010) the score 0.6 or 0.7 is deemed to be acceptable at the minimum level in the social sciences. Consequently, researcher realized that the questionnaire is valid and reliable, and is appropriate to answer the research questions.
Part I: Presentation of Quantitative Analysis

4.5.1 Introduction

As mentioned in the third chapter, the questionnaire was divided into three sections in order to investigate the operations of time management practised by the heads of academic departments in higher education institutions in Libya. Furthermore, the data derived from the respondents was subjected to a transfer process from raw material into usable information to be ready for statistical analysis. Therefore, the five options that were appended with each item in the questionnaire were coded into numbers in such a way that each option had a specific degree. In addition, the research variables were also coded in order to transfer them from verbal data into numerical data.

The questionnaire analysis allows the researcher to obtain a broad view about time management practiced by Libyan heads of academic departments in scientific manner in order to generalising the obtained findings. The researcher realised that the statistical analysis was dependent on the nature of the research questions and objectives, since the researcher adopted the descriptive methodology in order to answer the major research questions. Therefore, the descriptive statistical approach was adopted in order to provide details about respondents’ attitudes to time management operations. The succeeding sub-sections in this chapter present the data that was elicited in relation to each question asked.

4.5.1.1 The first question - To what extent do heads of academic departments practice time management according to the specific fields of planning, organising and controlling time?

This question was designed to define the level of time management operations based on specific fields of planning, organising, and controlling. In addition, to identify which operation is practised more frequently by heads of academic department the researcher implemented descriptive statistics such as the arithmetic mean and standard deviation to assertain the level of time management operations as shown in the following table.
Table 4.8 Determine the level of time management operations

<table>
<thead>
<tr>
<th>The operation</th>
<th>The sample</th>
<th>M of 12 items</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time planning</td>
<td>309</td>
<td>34.95</td>
<td>3.84</td>
</tr>
<tr>
<td>Time organising</td>
<td>309</td>
<td>31.21</td>
<td>3.89</td>
</tr>
<tr>
<td>Control over time</td>
<td>309</td>
<td>39.69</td>
<td>4.73</td>
</tr>
</tbody>
</table>

It has been clearly demonstrated from the table above that control over time has gained the highest mean of all operations at 39.69, while the lowest mean is the operation of time organising at 31.21. This result means that heads of academic departments control over their time very often. The researcher through this result realized that the ability of control over time refers to the ability of time analysis as a first step to control time. Moreover, the researcher recognized that there is a strong relation between two operations of control over time and time planning since they gained the highest two means.

According to each university, the researcher analysed the delivered data from respondents by use the descriptive statistics as arithmetic mean and standard deviation in order to assert the level of time management operations, and to determine the difference between responses according to circumstances and privacy of respondents according to each university as shown in the below table:
Table 4.9 Shows the level of time management operations according to each university

<table>
<thead>
<tr>
<th>University</th>
<th>Sample</th>
<th>M Across of 12 items</th>
<th>SD</th>
<th>Sample</th>
<th>M Across of 12 items</th>
<th>SD</th>
<th>Sample</th>
<th>M Across of 12 items</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Garyounis</td>
<td>52</td>
<td>35.71</td>
<td>3.79</td>
<td>52</td>
<td>33.46</td>
<td>3.63</td>
<td>52</td>
<td>40.06</td>
<td>4.92</td>
</tr>
<tr>
<td>Al-fateh</td>
<td>41</td>
<td>34.71</td>
<td>7.01</td>
<td>41</td>
<td>30.27</td>
<td>3.93</td>
<td>41</td>
<td>38.88</td>
<td>4.65</td>
</tr>
<tr>
<td>Seventh of April</td>
<td>46</td>
<td>34.70</td>
<td>3.44</td>
<td>46</td>
<td>30.28</td>
<td>3.20</td>
<td>46</td>
<td>39.46</td>
<td>4.20</td>
</tr>
<tr>
<td>Omar El-Mukhtar</td>
<td>42</td>
<td>34.77</td>
<td>3.62</td>
<td>42</td>
<td>30.93</td>
<td>3.74</td>
<td>42</td>
<td>39.76</td>
<td>4.84</td>
</tr>
<tr>
<td>Sebha</td>
<td>28</td>
<td>35.86</td>
<td>4.05</td>
<td>28</td>
<td>31.32</td>
<td>4.79</td>
<td>28</td>
<td>39.25</td>
<td>4.68</td>
</tr>
<tr>
<td>The Nation Nasser</td>
<td>9</td>
<td>35.67</td>
<td>4.12</td>
<td>9</td>
<td>29.33</td>
<td>4.50</td>
<td>9</td>
<td>42.00</td>
<td>4.85</td>
</tr>
<tr>
<td>Seventh of October</td>
<td>46</td>
<td>34.69</td>
<td>3.44</td>
<td>46</td>
<td>30.28</td>
<td>3.20</td>
<td>46</td>
<td>39.46</td>
<td>4.20</td>
</tr>
<tr>
<td>Mergeb</td>
<td>23</td>
<td>35.70</td>
<td>4.45</td>
<td>23</td>
<td>31.13</td>
<td>2.70</td>
<td>23</td>
<td>38.30</td>
<td>4.19</td>
</tr>
<tr>
<td>AL-Tahadi</td>
<td>22</td>
<td>34.05</td>
<td>3.24</td>
<td>22</td>
<td>30.68</td>
<td>3.97</td>
<td>22</td>
<td>41.14</td>
<td>5.40</td>
</tr>
</tbody>
</table>

By looking at the table above it can be recognized that the process of control over time gained the highest mean in all universities comparing with the other two processes, while time organising obtained the lowest mean in all universities.

With regard to each university the Internationalism Nasser University gained the highest level in process of control over time it is 42.00, while the University of Sebha obtained the highest
mean in time planning process. Garyouins University gained the highest mean in time organizing process comparing with other Universities. The university of AL-Tahadi gained the second highest mean in the process of control over time. On the other hand, the University of Al-tahadi got the lowest level in time planning, while lowest mean in process of time organizing was gained by heads of academic department in the International Nasser University (29.33), in addition to the lowest level in operation of control over time obtained by heads of academic departments in the University of Mergeb.

4.5.1.2 The second question

What principles of time management operations are more commonly used?

Via this question the researcher aims to investigate which principles of time management are commonly used by heads of departments in Libyan universities. Since the first question was addressed to determine which operation of time management is more practised by heads of academic departments, the researcher realises that the findings obtained from this question might support the findings obtained from the first question.

To analyse the data obtained from the answers of respondents about this question, some descriptive statistics as arithmetic mean and standard deviation have been implemented to assert that the time management principles are commonly used, as shown in the following table.

Table 4.10 Affirms the principles of time management operations which are commonly used

<table>
<thead>
<tr>
<th>Id</th>
<th>Items</th>
<th>M</th>
<th>SD</th>
<th>SDA</th>
<th>DA</th>
<th>DK</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>TP1</td>
<td>I have a clearly defined set of written objectives for work.</td>
<td>2.8</td>
<td>1.1</td>
<td>38</td>
<td>84</td>
<td>100</td>
<td>57</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6</td>
<td>5</td>
<td>12.3</td>
<td>27.2</td>
<td>32.4</td>
<td>18.4</td>
<td>9.7</td>
</tr>
<tr>
<td>TP2</td>
<td>I plan and schedule my time on a weekly and daily basis</td>
<td>3.1</td>
<td>1.0</td>
<td>24</td>
<td>55</td>
<td>112</td>
<td>90</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>6</td>
<td>7.8</td>
<td>17.8</td>
<td>36.2</td>
<td>29.1</td>
<td>9.1</td>
</tr>
<tr>
<td>TP3</td>
<td>I spend time each day to think about what I should do to accomplish the department goals.</td>
<td>2.6</td>
<td>2</td>
<td>38</td>
<td>10</td>
<td>32.7</td>
<td>112</td>
<td>36.2</td>
</tr>
<tr>
<td>TP4</td>
<td>I carry out work on the basis of my priorities</td>
<td>2.9</td>
<td>1.1</td>
<td>42</td>
<td>13.6</td>
<td>60</td>
<td>19.4</td>
<td>100</td>
</tr>
<tr>
<td>TP5</td>
<td>I can control over my schedule so that I achieve the department plans within the allocated time.</td>
<td>2.9</td>
<td>1.0</td>
<td>32</td>
<td>10.4</td>
<td>80</td>
<td>25.9</td>
<td>109</td>
</tr>
<tr>
<td>TP6</td>
<td>I have a clear idea of what you want to accomplish during the coming week.</td>
<td>3.1</td>
<td>1.0</td>
<td>24</td>
<td>7.8</td>
<td>62</td>
<td>20.1</td>
<td>110</td>
</tr>
<tr>
<td>TP7</td>
<td>I use an effective “list” system</td>
<td>3.1</td>
<td>1.0</td>
<td>20</td>
<td>6.5</td>
<td>64</td>
<td>20.7</td>
<td>114</td>
</tr>
<tr>
<td>TP8</td>
<td>I attempt to take time to short term planning (daily planning) in order to achieve the long term plans in my work schedule.</td>
<td>2.9</td>
<td>1.0</td>
<td>24</td>
<td>7.8</td>
<td>81</td>
<td>26.2</td>
<td>118</td>
</tr>
<tr>
<td>TP9</td>
<td>My daily activities are linked to faculty priorities.</td>
<td>2.8</td>
<td>1.0</td>
<td>19</td>
<td>6.1</td>
<td>89</td>
<td>28.8</td>
<td>134</td>
</tr>
<tr>
<td>TP10</td>
<td>I usually work according to priorities were defined in earlier.</td>
<td>2.8</td>
<td>1.0</td>
<td>36</td>
<td>11.7</td>
<td>73</td>
<td>23.6</td>
<td>123</td>
</tr>
<tr>
<td>TP11</td>
<td>I periodically re-assess my personal activities in relation to my work goals.</td>
<td>3.0</td>
<td>1.1</td>
<td>40</td>
<td>12.9</td>
<td>49</td>
<td>15.9</td>
<td>99</td>
</tr>
<tr>
<td>TP12</td>
<td>I keep my important dates on a single calendar</td>
<td>2.5</td>
<td>1.2</td>
<td>71</td>
<td>23.0</td>
<td>93</td>
<td>30.1</td>
<td>71</td>
</tr>
<tr>
<td>TO1</td>
<td>I usually delegate as much as possible.</td>
<td>2.5</td>
<td>1.2</td>
<td>75</td>
<td>24.3</td>
<td>92</td>
<td>29.8</td>
<td>75</td>
</tr>
<tr>
<td>TO2</td>
<td>My desk and office well organized and free of clutter.</td>
<td>2.4</td>
<td>1.1</td>
<td>78</td>
<td>25.2</td>
<td>93</td>
<td>30.1</td>
<td>79</td>
</tr>
<tr>
<td>TO3</td>
<td>I identify the critical tasks that lead to the majority of my results</td>
<td>2.5</td>
<td>1.2</td>
<td>94</td>
<td>30.4</td>
<td>47</td>
<td>15.2</td>
<td>95</td>
</tr>
<tr>
<td>TO4</td>
<td>I become a good organised and accomplishing more then I were in the last weeks.</td>
<td>2.5</td>
<td>1.1</td>
<td>70</td>
<td>22.7</td>
<td>71</td>
<td>23.0</td>
<td>100</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>TO5</td>
<td>I am able to reduce the amount of time i spend on routine paperwork</td>
<td>2.5</td>
<td>1.1</td>
<td>69</td>
<td>22.3</td>
<td>77</td>
<td>24.9</td>
<td>10</td>
</tr>
<tr>
<td>TO6</td>
<td>the secretary answers the telephone calls and knows when to make an exception</td>
<td>2.6</td>
<td>1.2</td>
<td>80</td>
<td>25.9</td>
<td>56</td>
<td>18.1</td>
<td>88</td>
</tr>
<tr>
<td>TO7</td>
<td>The secretary makes my appointments.</td>
<td>2.7</td>
<td>.95</td>
<td>30</td>
<td>9.7</td>
<td>93</td>
<td>30.1</td>
<td>130</td>
</tr>
<tr>
<td>TO8</td>
<td>The secretary opens, reads, and puts important mail on top of my correspondence.</td>
<td>2.6</td>
<td>1.1</td>
<td>79</td>
<td>25.6</td>
<td>54</td>
<td>17.5</td>
<td>98</td>
</tr>
<tr>
<td>TO9</td>
<td>I use a new technologies such computer and fax machine to save my time</td>
<td>2.5</td>
<td>1.2</td>
<td>92</td>
<td>29.8</td>
<td>58</td>
<td>18.8</td>
<td>90</td>
</tr>
<tr>
<td>TO10</td>
<td>I have created “form letters” to assist me with routine correspondence.</td>
<td>2.6</td>
<td>1.2</td>
<td>75</td>
<td>24.3</td>
<td>62</td>
<td>20.1</td>
<td>87</td>
</tr>
<tr>
<td>TO11</td>
<td>I allow my assistants to make decisions related to their area(s) of responsibility.</td>
<td>2.9</td>
<td>1.0</td>
<td>31</td>
<td>10.0</td>
<td>61</td>
<td>19.7</td>
<td>123</td>
</tr>
<tr>
<td>TO12</td>
<td>I attempt to keep my desk clear of materials except those necessary for completing my top priorities.</td>
<td>2.6</td>
<td>1.2</td>
<td>83</td>
<td>26.9</td>
<td>48</td>
<td>15.5</td>
<td>102</td>
</tr>
<tr>
<td>TC1</td>
<td>I attempt to reduce or eliminate recurring crises from my work stress.</td>
<td>3.2</td>
<td>1.2</td>
<td>26</td>
<td>8.4</td>
<td>76</td>
<td>24.6</td>
<td>71</td>
</tr>
<tr>
<td>TC2</td>
<td>I can face any time wasters were happened during the past week.</td>
<td>3.5</td>
<td>1.3</td>
<td>26</td>
<td>8.4</td>
<td>55</td>
<td>17.8</td>
<td>55</td>
</tr>
</tbody>
</table>

155
| TC3     | I develop a specific performance standards to the level of planned performance at the beginning of each term. | 3.1 | 1.2 | 3.0 | 9.7 | 68 | 22.0 | 80 | 25.9 | 77 | 24.9 | 54 | 17.5 | 5 |
|---------|----------------------------------------------------------------------------------------------------------|-----|-----|-----|-----|----|------|----|------|----|------|----|------|   |
| TC4     | I can avoid any non-productive activities.                                                               | 3.1 | 1.3 | 31  | 9.7 | 81 | 26.2 | 69 | 22.3 | 58 | 18.8 | 71 | 23.0 | 0 |
| TC5     | I can meet the deadlines of department plans.                                                             | 3.2 | 1.3 | 34  | 11.0| 68 | 22.0 | 79 | 25.6 | 44 | 14.2 | 84 | 27.2 | 4 |
| TC6     | I am able to say “NO” whenever I must to say.                                                            | 3.5 | 1.2 | 24  | 7.8 | 52 | 16.8 | 70 | 22.7 | 69 | 22.3 | 94 | 30.4 | 6 |
| TC7     | The secretary divides my correspondence into groups before bringing it to me.                           | 3.2 | 1.2 | 25  | 8.1 | 69 | 22.3 | 84 | 27.2 | 52 | 16.8 | 79 | 25.6 | 6 |
| TC8     | I keep a time log to monitor all time wasters every day.                                                 | 3.3 | 1.3 | 29  | 9.4 | 73 | 23.6 | 62 | 20.1 | 47 | 15.2 | 98 | 31.7 | 7 |
| TC9     | I can deal with an unannounced visitors through ending the unarranged meeting quickly.                  | 3.3 | 1.4 | 40  | 12.9| 65 | 21.0 | 56 | 18.1 | 36 | 11.7 | 11 | 36.2 | 2 |
| TC10    | I often utilization the closed-door policy with others.                                                   | 3.1 | 1.4 | 39  | 12.6| 77 | 24.9 | 71 | 23.0 | 34 | 11.0 | 88 | 28.5 | 5 |
| TC11    | I spend a lot of time on my personal interests.                                                          | 3.3 | 1.3 | 86  | 7.1 | 40 | 24.3 | 86 | 27.8 | 75 | 12.9 | 22 | 27.8 | 8 |
| TC12    | I have time to renew and improve myself.                                                                | 3.2 | 1.2 | 21  | 6.8 | 71 | 23.0 | 92 | 29.8 | 47 | 15.2 | 78 | 25.2 | 2 |

Sample size (N) = 309  M=Mean  SD= Standard deviation

SA= (Strongly agree), A= (Agree), DK= (Do not know), DA= (Disagree) and SDA= (Strongly disagree).
The previous table illustrates the mean of each item related to a principle of time management. The means of items ranged between 3.51 as the highest mean and 2.40 as the lowest mean. By examining the table above it can be recognized that the principles most commonly used are the principles of control over time, determining time interruptions, the ability to say ‘no’ and dealing with unexpected visitors. It should be noted that these principles are related to control over time processes. The principles that are least used are related to time organising and include the principles of the keeping a tidy desk and office free from clutter, the use of new technologies such as computer and fax machine to save time, and delegation as much as possible.

This findings asserts that the Libyan heads of academic department practise control over time more than operations of planning and organising.

4.5.1.3 The third question - What factors impede the practice of time management?

Through this question the researcher aimed to find out about which time wasters are being faced by heads of academic departments in Libyan universities during work time. To achieve this aim the researcher found the mean of each factor, since these factors were divided by the researcher into external and internal factors. Table 4 demonstrates the means and standard deviation of each item and describes the time wasters identified in the questionnaire.

<table>
<thead>
<tr>
<th>Id</th>
<th>Factors</th>
<th>M</th>
<th>SD</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SDA N(%)</td>
<td>DA N(%)</td>
<td>DK N(%)</td>
<td>A N(%)</td>
</tr>
<tr>
<td>1</td>
<td>Lack of modern technologies that help us to save time such as the Internet and modern fax machines.</td>
<td>3.11</td>
<td>1.27</td>
<td>45(14.5)</td>
</tr>
<tr>
<td>2</td>
<td>I refuse to answer the phone when engaged in important conversations or activities.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>External</td>
<td>3.31</td>
<td>1.16</td>
<td>28(9.1)</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>I am unable to manage the meetings well which lead to waste more time.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| 3 | Internal | 3.08 | 1.21 | 35(11.3) | 63(20.4) | 99(32.0) | 65(21.0) | 47(15.2) |
|---|---|---|---|---|---|---|---|
| I am unable to control over interruptions and unexpected visitors. |

| 4 | External | 3.38 | 1.27 | 34(11.0) | 43(13.9) | 71(23.0) | 94(13.9) | 67(11.0) |
|---|---|---|---|---|---|---|---|
| On an average work day, I spend more time with personal enjoyments activities than doing managerial duties. |

| 5 | Internal | 3.55 | 1.18 | 17(5.5) | 45(14.6) | 76(24.6) | 92(29.8) | 79(25.5) |
|---|---|---|---|---|---|---|---|
| I am interested in implementation of all department business including the routine business in order to ensure the accuracy of the achieving. |

| 6 | Internal | 3.04 | 1.13 | 28(9.0) | 75(24.3) | 95(30.7) | 79(25.6) | 32(10.4) |
|---|---|---|---|---|---|---|---|
| I usually achieve all the department business without advanced planning. |

| 7 | Internal | 3.25 | 1.08 | 20(6.5) | 52(16.8) | 107(34.6) | 90(29.1) | 40(13.0) |
|---|---|---|---|---|---|---|---|
| I define the purpose of meetings prior to start. |

| 8 | External | 3.22 | 1.20 | 30(9.7) | 56(18.1) | 90(29.1) | 83(26.9) | 50(16.2) |
|---|---|---|---|---|---|---|---|
| I start and end meetings on time. |

| 9 | External | 3.28 | 1.15 | 20(6.5) | 60(19.4) | 96(31.1) | 81(26.2) | 52(16.8) |
|---|---|---|---|---|---|---|---|
| I face a problem of poor channels of communication between department chair, faculty and me. |

| 10 | External | 3.85 | 1.08 | 10(3.2) | 27(8.7) | 65(21.0) | 103(33.3) | 104(33.7) |
|---|---|---|---|---|---|---|---|
| I can not reduce any wasteful or unprofitable activities or routines. |

| 11 | Internal | 3.34 | 1.26 | 31(10.0) | 49(15.9) | 81(26.2) | 81(26.2) | 67(21.7) |
|---|---|---|---|---|---|---|---|
| I usually delay in making a decision for fear that you might make a mistake. |

| 12 | Internal | 3.65 | 1.15 | 21(6.8) | 25(8.1) | 74(23.9) | 110(35.6) | 79(25.6) |
From this table it can be concluded that the most wasting due to external factors. Poor channels of communication between department chair and faculty gained the highest mean 3.85. While hesitation in decisions making due to poor information systems gained 3.65, spending more time with personal enjoyments activities through work hours gained an average 3.55. On the other hand, poor delegation obtained the lowest average at 3.04. In general, the greatest time wasters refer to the internal factors.

4.5.1.4 The fourth question - Are there any significant differences in the levels of the practice of time management processes as a result of key variables, including: managerial experience, specialization, qualifications, number of universities that the head is working, and gender?

Through this question, research aims to define whether there are any significant differences among research sample according to research variables as follows.

4.5.1.4.1 Managerial experience

The years of experience play a main role in the development of the managerial skills as confirmed by some previous researchers. Therefore the researcher attempted to examine whether managerial experience develops and supports the managerial skills of Libyan academic leaders. Since the researcher divided the managerial experience of the sample into three groups, one way ANOVA was used to determine whether the managerial experience is influent in time management practised by heads of academic departments in Libyan universities as affirmed in the table below.

Table 4.12 Time management according to managerial experience variable

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>18.01</td>
<td>2</td>
<td>9.00</td>
<td>.159</td>
<td>.853</td>
</tr>
<tr>
<td>Within groups</td>
<td>17298.54</td>
<td>306</td>
<td>56.53</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
It can be realized that the differences between the groups are not significant. This means that the managerial experience is an ineffective variable in time management within the culture of Libyan administration. In order to provide more details, the research applied the one-way ANOVA statistical technique to define whether there are any significant differences between groups according to each of the time management operations: time planning, time organising, and control over time. The results are reflected in the 12 items for each operation as shown in the table below.

<p>| Table 4.13 Time management operations according to managerial experience variable |
|-----------------------------------------|---------------|---|---|---|---|</p>
<table>
<thead>
<tr>
<th><strong>Time planning process</strong></th>
<th>Source of variation</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>34.39</td>
<td>2</td>
<td>17.20</td>
<td>1.170</td>
<td>.312</td>
<td></td>
</tr>
<tr>
<td>Within groups</td>
<td>4498.78</td>
<td>306</td>
<td>14.70</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4533.17</td>
<td>308</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Time organising process</strong></td>
<td>Source of variation</td>
<td>Sum of squares</td>
<td>df</td>
<td>Mean square</td>
<td>F</td>
<td>Sig</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>---------------------</td>
<td>----------------</td>
<td>----</td>
<td>-------------</td>
<td>---</td>
<td>-----</td>
</tr>
<tr>
<td>Between groups</td>
<td>3.11</td>
<td>2</td>
<td>1.55</td>
<td>.102</td>
<td>.903</td>
<td></td>
</tr>
<tr>
<td>Within groups</td>
<td>4645.64</td>
<td>306</td>
<td>15.18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4648.74</td>
<td>308</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
By looking at the table above, it can be seen that there were no significant differences between heads of academic departments according to time management operations. This means that the managerial experiences do not play any role in Libyan leaders' behaviour.

4.5.1.4.2 Specialization

Through this variable the researcher aims to know whether there is any difference in practice of time management operations between heads of humanities departments and heads of science departments, in other words, to determine whether specialization is an influential factor in the practice of time management in general. To achieve this objective a T-Test was used in order to answer this question. The table below shows this result.

Table 4.14 Time management according to specialization variable

<table>
<thead>
<tr>
<th>Specialization</th>
<th>The sample</th>
<th>M across of 36 items</th>
<th>S D</th>
<th>t</th>
<th>Df</th>
<th>Sig(2-tailed )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities</td>
<td>152</td>
<td>106.04</td>
<td>7.09</td>
<td>.449</td>
<td>307</td>
<td>.654</td>
</tr>
<tr>
<td>Science</td>
<td>157</td>
<td>105.66</td>
<td>7.89</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table above illuminated that the differences between the heads of humanities and science was not significant at level α .05 in practice of time management.
In order to obtain more details about each operation and define whether there are any significant differences at level $\alpha .05$, a T-Test was used to provide more details about each process separately, as shown in the table below:

**Table 4.15 Time management operations according to specialization variable**

<table>
<thead>
<tr>
<th>Specialization</th>
<th>The sample</th>
<th>M across of 12 item</th>
<th>S D</th>
<th>t</th>
<th>df</th>
<th>Sig(2-tailed )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time planning process</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>152</td>
<td>35.26</td>
<td>3.84</td>
<td>1.422</td>
<td>307</td>
<td>.156</td>
</tr>
<tr>
<td>Science</td>
<td>157</td>
<td>34.64</td>
<td>3.82</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time organising process</th>
<th>The sample</th>
<th>M across of 12 items</th>
<th>S D</th>
<th>t</th>
<th>df</th>
<th>Sig(2-tailed )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities</td>
<td>152</td>
<td>31.07</td>
<td>3.67</td>
<td>-.629</td>
<td>307</td>
<td>.530</td>
</tr>
<tr>
<td>Science</td>
<td>157</td>
<td>31.34</td>
<td>4.09</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Control over time process</th>
<th>The sample</th>
<th>M across of 12 item</th>
<th>S D</th>
<th>t</th>
<th>df</th>
<th>Sig(2-tailed )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities</td>
<td>152</td>
<td>39.71</td>
<td>4.55</td>
<td>.077</td>
<td>307</td>
<td>.938</td>
</tr>
<tr>
<td>Science</td>
<td>157</td>
<td>39.67</td>
<td>4.92</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

By looking at the table above it can be seen that there were no significant differences between the heads of humanities departments and heads of science departments according to their practice of process of planning, organising and control over time at level $\alpha .05$. 

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4.5.1.4.3 Qualifications

Due to the method of selecting the heads of academic departments in the Libyan universities, which completely depends on popular voting by members of department board, candidates are often chosen who obtain more votes, regardless of any other considerations. Therefore, the researcher attempted to determine whether the qualification variable has any effect on the practice of time management. In order to achieve this aim a T-Test was implemented as defined in the table below.

Table 4.16 Time management according to qualifications variable

<table>
<thead>
<tr>
<th>Qualifications</th>
<th>The sample</th>
<th>M</th>
<th>S D</th>
<th>t</th>
<th>df</th>
<th>Sig(2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master</td>
<td>146</td>
<td>105.75</td>
<td>7.20</td>
<td>-.202</td>
<td>307</td>
<td>.840</td>
</tr>
<tr>
<td>Doctorate</td>
<td>163</td>
<td>105.93</td>
<td>7.78</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

By referring to the above table it can be recognized that there were no significant differences in the practice of time management between Masters holders and Doctorate holders.

To provide more details about the significant differences between two groups according to their qualifications based on each operation, a T-Test was used as is presented in the table below.

Table 4.17 Time management operation according to qualification variable

<table>
<thead>
<tr>
<th>Qualification</th>
<th>The sample</th>
<th>M across of 12 items</th>
<th>S D</th>
<th>t</th>
<th>df</th>
<th>Sig(2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master</td>
<td>146</td>
<td>35.76</td>
<td>3.76</td>
<td>.640</td>
<td>307</td>
<td>.523</td>
</tr>
<tr>
<td>Doctorate</td>
<td>163</td>
<td>34.83</td>
<td>3.91</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Time planning process

Time organising process

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The table above affirmed that there were no differences between heads who hold a master degree and who hold a doctorate degree at level $\alpha .05$. In other words, the qualification variable is ineffective in the time management practice by heads of academic department.

### 4.5.1.4.4 Number of universities that the head is working in

Some legislations of Libyan higher education have allowed academic staff members to sign contracts with several universities in order to work with them at the same time, to improve their living standards. The negative consequences resulting from this legislation are problems of loss balance between administrative research and teaching. Therefore, the researcher realized that it is necessary to search whether the variable of number of universities is influential in the time management practised by heads of academic department. In order to achieve this aim a T-Test was used to affirm whether the heads of academic department working at one university are able to manage their time better than others who work at more than one university, as shown the table below.
Table 4.18 Time management according to number of universities variable

<table>
<thead>
<tr>
<th>Number of universities</th>
<th>The sample</th>
<th>M</th>
<th>S D</th>
<th>t</th>
<th>df</th>
<th>Sig(2-tailed )</th>
</tr>
</thead>
<tbody>
<tr>
<td>one university</td>
<td>195</td>
<td>105.59</td>
<td>7.51</td>
<td>-.781</td>
<td>307</td>
<td>.435</td>
</tr>
<tr>
<td>More one university</td>
<td>114</td>
<td>106.28</td>
<td>7.50</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

By looking at the table above, it can be recognized that there were no differences between heads who work at one or more universities. To get more details, the researcher attempted to define whether there were any differences according to each operation, as outlined in the table below:

Table 4.19 Time management operations according to number of universities variable

<table>
<thead>
<tr>
<th>Time planning process</th>
<th>Number of universities</th>
<th>The sample</th>
<th>M</th>
<th>S D</th>
<th>t</th>
<th>df</th>
<th>Sig(2-tailed )</th>
</tr>
</thead>
<tbody>
<tr>
<td>one university</td>
<td>195</td>
<td>34.67</td>
<td>3.75</td>
<td>-1.661</td>
<td>307</td>
<td>.098</td>
<td></td>
</tr>
<tr>
<td>More one university</td>
<td>114</td>
<td>35.42</td>
<td>3.94</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time organising process</th>
<th>Number of universities</th>
<th>The sample</th>
<th>M</th>
<th>S D</th>
<th>t</th>
<th>df</th>
<th>Sig(2-tailed )</th>
</tr>
</thead>
<tbody>
<tr>
<td>one university</td>
<td>195</td>
<td>31.22</td>
<td>3.95</td>
<td>.079</td>
<td>307</td>
<td>.937</td>
<td></td>
</tr>
<tr>
<td>More one university</td>
<td>114</td>
<td>31.18</td>
<td>3.79</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Control over time process</th>
<th>Number of universities</th>
<th>The sample</th>
<th>M</th>
<th>S D</th>
<th>t</th>
<th>df</th>
<th>Sig(2-tailed )</th>
</tr>
</thead>
<tbody>
<tr>
<td>one university</td>
<td>195</td>
<td>39.70</td>
<td>4.73</td>
<td>.039</td>
<td>307</td>
<td>.969</td>
<td></td>
</tr>
<tr>
<td>More one university</td>
<td>114</td>
<td>39.68</td>
<td>4.76</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table above affirmed that there were no significant differences between heads of academic departments regardless whether they are working at one university or more.
4.5.1.4.5 Gender

Within the Libyan culture the female plays many roles at the same time regardless of whether she is in full-time employment or not. She is a wife, a mother, and a worker, and consequently, she plays a social role inside home looking after her family, as well as she plays a functional role outside the home. Therefore, the researcher notes that females face a lack of time more than males due to their different roles. In order to examine this opinion a T-Test was used as shown in the table below.

Table 4.20 Time management according to gender variable

<table>
<thead>
<tr>
<th>Gender</th>
<th>The sample</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>Sig(2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>275</td>
<td>105.89</td>
<td>7.49</td>
<td>.332</td>
<td>307</td>
<td>.740</td>
</tr>
<tr>
<td>Female</td>
<td>34</td>
<td>105.44</td>
<td>7.66</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Since the Sig (2-tailed) was greater than the level of α .05, the researcher realized no significant differences between males and females as heads of academic departments in managing their time. In order to provide more details according to each operation a T-Test was also used in this case, as affirmed in the table below.

Table 4.21 Time management operations according to gender variable

<table>
<thead>
<tr>
<th>Gender</th>
<th>The sample</th>
<th>M across of 12 items</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>Sig(2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>275</td>
<td>34.93</td>
<td>3.88</td>
<td>-.225</td>
<td>307</td>
<td>.822</td>
</tr>
<tr>
<td>Female</td>
<td>34</td>
<td>35.09</td>
<td>3.50</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>The sample</th>
<th>M across of 12 items</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>Sig(2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>275</td>
<td>34.93</td>
<td>3.88</td>
<td>-.225</td>
<td>307</td>
<td>.822</td>
</tr>
<tr>
<td>Female</td>
<td>34</td>
<td>35.09</td>
<td>3.50</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Time planning process

Time organising process
It can be noted that there were no significant differences between males and females in the practice of time management operations; consequently, they manage their time at the same level.

**4.6 Summary of quantitative findings**

To summarize the results that have been gained by the researcher, a number of key issues can be pointed out: Firstly, the time management operation which is the most practised by Libyan heads of academic departments according to the specific fields of planning, organising, and control over time. Secondly, according to the findings obtained from the sample answers, it has been realised that the control over time has gained the highest level as one of time management operations practised by Libyan heads of academic departments. This was indicated by examining the mean of answers of the research sample. The researcher recognised that the principles of control over time got the highest means, which means that the principles of control over time are commonly used. Thirdly, with regard to time wasters who were indicated by the researcher, it can be affirmed that internal factors are the most frequent time wasters based on the average of research sample answers. Fourthly, the significant differences in the levels of the practice of time management processes according to the research variables included managerial experience, specialization, qualifications, number of universities at which the head is working, and gender. The unexpected finding was gained by the researcher that there have not been any significant differences in the level of time management operations practised by Libyan heads of academic departments according
to managerial experience, specialization, qualifications, number of universities that the head is working, and gender.

The quantitative findings, which were obtained from the analysis of the questionnaire, will be compared and supported with the qualitative findings which were gained from interview analysis in the next chapter.

4.7 Conclusion of quantitative presentation

In this section the researcher presented the findings obtained from quantitative data. This section began by presenting a profile of the respondents who were chosen to answer the research questionnaire. The research variables were outlined and the process of piloting the questionnaire to determine whether the questionnaire was doing what it had been designed for was explained. In this way the researcher attempted to present her claim for the validity and reliability of the questionnaire. In addition, she offered the findings obtained from quantitative data to meet the research objectives and answer research questions. The researcher went on to explain how the data was analyzed by applying descriptive statistics through use of the SPSS programme.
II: Presentation of Qualitative Analysis

4.8.1 Introduction

In this part from the fourth section of the thesis, the researcher aims to present the data obtained from the qualitative research undertaken in the study, which reflected the main issues derived from the main objectives of the research. As mentioned earlier, the semi-structure interview approach was used in order confirm and supplement the knowledge gained from the quantitative research. The semi-structured interviews were conducted with a sample of the heads of academic departments. The researcher undertook 15 such interviews, so that a strong and relevant sampling was carried out with those who have experience on the topic of the research. The respondents were interviewed face-to-face having been chosen randomly from heads of academic departments at Libyan Universities. They had been selected to represent the range of different departments in Libyan universities.

The analytical approach adopted is according to that recommended by Miles and Huberman (1994) and was developed through continuously reading and re-reading the responses of the respondents. In essence, by employing the reading and re-reading method, the collected materials enable the qualitative researcher to identify key themes (Denzin and Lincoln, 2008). This chapter has been organized into two sections; the first one; has been addressed to the objectives of the semi-structured interview, while the second section attempts to identify the key themes of the interview.

4.8.2 The objective of the interview

According to Smith et al (2002) the semi-structured interview is an appropriate method when it is necessary to understand the constructs that the interviewee uses as a basis for the opinions and beliefs about a particular matter or situation. This kind of interview allows the researcher to probe and obtain more in-depth information. This in-depth information can enhance the findings that will be obtained from the quantitative method. Consequently, semi-structured interviews were implemented in order to provide in-depth understanding the specific issue “time management operations, time planning, time organising, and control over
time, in addition to 'time wasters' within the Libyan culture and society, and to confirm and
discuss further findings that had been obtained by quantitative method, as well as, to allow
emergent themes from interviewees to be explored and developed by the interviewer. Some
questions were addressed to reflect the opinions and thoughts of interviewees. Therefore, the
researcher asked respondents to express their opinions about the specific issues, while other
questions were addressed in order to obtained information, which represented their opinions
and views about the managerial environment they are working within. Within this context,
Saunders et al (2003) indicated that the interviewer should ask interviewees to provide
justifications about their opinions in order to reveal what, how and also why the respondents
held their views.

4.8.3 Key themes of the interviews

The semi-structured interview schedule was prepared to include the main questions and,
thoughts that reflect the key themes of the study. In other words, an interview form was
prepared based on the research questions and aims, and similar to those issues that were used
in the self-administered questionnaire, in order to gain rich information by seeking further
opinions and in-depth experiences on related issues under investigation. Therefore, the
researcher translated the research objectives into the questions to construct the main body of
the interview form. Moreover, further questions were addressed to pursue other related issues
in more detail (see appendix). Consequently, the semi-structured interview was organised
around the following key themes:

- Time management operations practiced by Libyan heads of academic departments.
- Operation of time planning, and principles of time planning.
- Process of time organising, and the principles that adopted to organise of time
- Control over time, and the principles under the control process.
- The internal and external time wasters experienced by respondents.
- Investigation whether the level of experiences, specialization, quantification, gender,
  and the work overload with more one university provide different levels of practice of
time management.
As mentioned earlier, the interviews were semi-structured in format and nature, however, some of the interviews moved beyond the questions outlined in the schedule when interviewees focused on such as the value of time in Islam, and time within Libyan culture. The researcher realized that such new issues should be discussed in order to gain more in-depth information about them.

4.8.4 Analysis of interviews responses

The researcher addressed the main six questions in the interview schedule to all interviewees. However, some interviewees were subjected to more questions since the discussion expanded to take in other related issues that researcher realised were of importance and relevance to the study. Therefore, the main key themes and sub-themes will be presented in the succeeding sub-sections.

**Management of time resource by Libyan heads of academic department:**

Time management is a range of skills and techniques used to manage time effectively in order to accomplish specific tasks or major objectives. In order to discuss this issue some questions were administered to gain more and richer details about what time management means to heads of academic department and how they are managing their own time. Furthermore, the respondents were required to justify why they manage their time, this issue was highlighted some interesting responses.

**What does the term of 'time management' mean for you?**

The fifteen sets of answers were divided into two different groups. The first group of respondents revealed that they had never known anything about time management theory and were few in number. The second group revealed that they had some experience of time management theory and practice.

Some of interviewees No 3, 7, 12, 13 and 15 agreed that they have not realised the theoretical meaning of time management, since they stated that they had never read about time management in books or journals or by searching by websites online. Furthermore, they had never been subjected to any workshops or training programmes about time management.
Head No 3, 7 and 13 stated that they had some knowledge about time management but dismissed the topic by saying:

"I am not interested what time management means. I am not a specialist in management science, and not interested in issues of management theories." (Head No 3)

Head No 12 and 15 provided similar answers. They expressed their thoughts in different ways; the following quotations reflect their views.

"Management of time is a very important management issue. It is as important to managed as any other managerial resource. However, some of us are not interested in developing themselves in time management skills because of ignorance of time management importance in particular and time value in general." (Head No 15)

On the other hand the rest of interviewees (No 1, 2, 4, 5, 6, 8, 9, 10, 11, and 14) have good experience about time management, indirectly, they identified some benefits of time management, since they stated that time management has been practiced in order to achieve the department objectives. Furthermore, they indicated that time management is utilized to reduce the work stress, they stated:

"... The successful plans are usually achieved on allocated time; therefore, the great value should be given to the work time in order to achieve the objectives of universities." (Head No 1)

Another response obtained from head No 5 was as follows:

"Managing of time effectively, certainly, reduces work stress, majority of heads of academic departments work with more than one university at the same time, this make them under stress, the best solution is time management." (Head No 5)

By looking at the above responses, we can see that most of heads of academic departments have a good background about the meaning of time management, regardless whether they practice time management effectively or not.
Is time management important, and if so, why?

In order to clarifying to what extent time management is important to the Libyan heads of academic departments, the researcher addressed the above question which generated interesting responses. The answers of the interviewees generated new issues related to time management such as the value of time and Islam, and time in developing countries. These new issues were discussed to provide a clear statement of their thoughts about themes as outlined under the following subheadings.

Time in Islam:

The question above created a new important issue – time in Islam. The researcher realized that time within Islamic culture should be discussed in order to provide a clear understanding about the value of time in Islam, and how Muslim people manage their time. The researcher realized also that there are changes in the lives of Muslims because of new social and culture conditions. Therefore, the researcher addressed one question to determine whether heads of academic departments deal with work time as Islam asked us to do, and to determine the importance of time importance accordingly.

Strangely, some interviewees were agreed that they never dealt with their work time in the way that Islam has asked us to do. Some of them (heads No 2, 5, 6, 8, 10, 11, 12) did not give any justification. Rather, they just stated that:

"..despite of our religion has organised our life, and provided the clear rules and principles to deal with time, however, we have never spent our work time in effective way, we also have never taken time into our account in our business and daily lives, I sadly say that but this the fact .." (Head No 5)

On the other hand, some respondents (head No 1,4,9,14,15) justified why they have never deal with time effectively according to Islam rules, heads No 1,4, 9, 15 referred to the social factors. Moreover, they pointed out that these factors whether family or friends, have negatively impacted in business time, and make them unable to deal with it according to
Islam rules. The following quote is an expression of the importance of time according to Islam, it says:

"Time in Islam as the money. We are required in the judgement day to answer some questions about how we spent our time, as well as how our money was spent, this means that the value of time as value of the money in Islam. Nevertheless, currently we save and spend the money well, and never save and spend our time because of our social life style, and our social relationships are completely impacted in our way of time spending, we spend long time in courtesies rather than business" (Head No 9)

Another response identified the importance of time by saying:

"...Time is a very valuable resource; it must be spent effectively as Islam asked us to do" (Head No 14)

While the heads No 3, 7, 13 referred to the lack of awareness as regards the value of time, Head No 13 indicated:

"... although Islam strongly recommends people to spend time effectively, however, we are unable to spend it effectively due to lack of awareness about time value, we have never invest time. And we do not give any attention to the resources that have not made any efforts or material resources in provision it. We in Libya are not differing from other people in other developing countries; we do not care about time as an intangible resource" (Head No 13)

Time in developing countries:

Another related interesting issue was raised as time in developing societies. This new issue was discussed to provide a clear background about it.

Interviewees No 2,3,6,9,11,112, and 15 stated that they face some factors which make them unable to manage their time, such as social factors, lack of awareness of time, and absence of law. The following quote reflect their views:
"Despite of we have been demanded by Islam to save time and spend it effectively, however, Libya -as a Muslim and one of the developing country has the two cultures- is weak in management of resources as time, because of the social relationships that negatively affect on the organisations work, as well as the lack of understanding of the time value "(Head No 6)

Similar responses obtained from other interviewees No 1, 4, 5, and 13 who agreed that the social systems in developing countries negatively affect in using of time. The clearest response has been obtained from head No 4 by saying:

"The social systems in developing countries reflects negatively in the behaviour of administrators who work there. The characteristics of the developing community negatively affects in the behaviour of individuals about time. The individuals in developing countries have some bad characteristics such as dependency, poor planning, and dominance of social relationships and courtesies which are often the cause of the lack and poor time management" (Head No 4)

Head No 11 added:

"Libya and other developing countries are facing some serious problems as administrative corruption and the absence of law which should be punished workers - whether manager in the top of organizational structure or in the bottom of the organizational structure - for their negligence, and force them to do what must they to do during working hours according to their position . In one word, Libya is facing absence of both control and law what led to administrative corruption in Libyan universities, as well as other organisations in Libya and other developing countries” (Head No 11)

It can be seen that most of heads of academic departments strongly argue that time is a very important and valuable resource. They stated that time can be analogous to money in Islam in the sense that it is a precious commodity. However, they never deal with their work time as Islam recommends us to do, because of social factors, a lack of awareness about time management, and the absence of supportive laws or institutional codes. They added that Libyan organisations including universities are all facing problems such as administrative corruption, dependency and bad planning, which lead to poor time management.
Do you manage your work time? Which strategies do you adopt to spend your time effectively?

The interviewees were required to express their opinions in order to discover the strategies adopted by them to manage their work time. Most of them (heads No 2, 3, 5, 6, 9, 10, 11, 12, and 13) indicated that they have not any specific strategies to manage their time due to their inability to provide rich plans to manage time effectively. Commenting on the discussed issue the following responses presented some of the interviewees' opinions:

"...actually, I do not have any specific strategies to manage my work time, I hate the routine, consequently, I have never drawn any strategies in both my personal and work life, this do not mean that I am an unorganized person, but, I always like to renew myself rather than abide by the specific plans or strategies to achieve my work." (Head No 6)

Other interviewees agreed that the problem of instability of management negatively affect in managing time effectively. The following quote presented their opinions by giving a more detailed:

"....we are facing problem of instability of management. This means that there are instability in regulations, and the faculty committee and university administration, consequently universities goals are usually changed, as well as department goals, which make us unable to control over our work time." (Head No 9)

While the head No 12 provided another but rather similar explanation by stating:

"... I tried to identify some strategies or methods to spend time effectively by identifying the urgent and important things that should be achieved first, however, I am usually shocked with some external factors which completely change my plans and make me an unbalanced person even in making my administrative decisions" (Head No 12)

On other side some of interviewees (No 1, 4, 7, and 8) have specific strategies to deal with their work time. This differs from one interviewee to another and it largely depended on their administrative experience or their ability to exert control over time wasters. Most of their
strategies refer to principles of time planning; the following thoughts reflect the interviewee’s opinions:

“To be honest, I have never identified any plans or specific strategies in advance to invest the work time, what I am doing is to determine what things should be done tomorrow, and then order them according to their importance and how long it take to be achieved, in order to start my work with that the most important tasks, then other important tasks” (Head No 4).

A similar answer was obtained from head No 8 who said:

“...I manage my work time by defining the most urgent tasks which should be achieved first, and then look at other important tasks, whilst the routine tasks are usually delegated to the appropriate person ...” (Head No 8)

In general, the above discussed issue generated two views about time management strategies. Most of the interviewees identified some problems such as instability of management, hating the routine as the major reasons behind the lack of adoption any specific strategies to manage time well. On the other hand, some of heads of academic departments stated that they use some strategies, such as time planning and control over time. They stated that a list of activates and time analysis are commonly used to manage time effectively. As noted earlier, this issue generated other perspectives on time in Islam and time in developing countries. Some of the interviewees agreed that the practice of time management make them able to achieve their objectives and reduce time wasters. The other related issues are time in Islam, and time in developing countries also discussed in depth with interviewees. Regarding time in Islam most of them agreed that they did not use time effectively as Islam asked them to do. Some of interviewees provided reasons about poor time management, such as social factors that negatively affect business time and lack of awareness of the value of time. Whilst the second issue was also discussed in depth and provided interesting responses, most of the interviewees confirmed that time has not been managed well in developing countries due to absence of law and administrative corruption. With regard to the specific strategies that have been adopted to manage their time some of interviewees mentioned that problems such as
inability or lack of training and knowledge in management and dislike of routine are the major reasons behind the lack of adoption of the specific strategies to manage time well.

**The time planning operation, and principles of time planning**

Planning is the most important process in the development of time management through the effective use of time available. This section was designed in order to determine how do heads of academic departments plan their work time? To what extent is time planning important to them? It also and sought to examine which principles of time planning are commonly used and why? These questions generated different interesting responses as follows:

**How do heads of academic department plan their work time? In other words, which principle of time planning is commonly used and why?**

By analysis of the fifteenth interviews the researcher realized that some of interviewees practise the operation of time planning without any theoretical background about time planning. All interviewees recognized the importance of planning, and that it is needed before starting any project achievement or process of managerial development. Heads No 1,3,4,6,8,9,10,11 and 14 stated that they plan their time by implementing some principles, and setting of priorities. One of the most interesting answers was given by head No (6):

"I often determine my managerial goals earlier, in order to take into my account the available resources to achieve these goals starting with the most important one” (Head No 6)

A similar answer obtained from Head No 10 was:

"Although the one of the success factors of any plan is its application within a specific timeframe, however, I personally never estimated the required time to implement each objective even upon the short term level “the daily plans”. I just order my daily goals and arrange them based on its importance and determine which one must be achieved first” (Head No 10)
On the other hand, heads No 2, 5, 7, 13 and 15 had completely different opinions. They indirectly identified some problems as favouritism and the personal relationships and its bad effect on Libyan management. The following quote reflects their views:

"I often achieve the department objectives regardless to the allocated time, the goals are achieved through good relationships between the management team. In Libyan management the good relationships play the important role in achieving management objectives without regard to any other factors" (Head No 5)

Heads No 12 and 15 asserted that they plan their time by using the prioritisation principle by saying:

"I plan my work time by applying the setting of priorities without any regard to importance of goals, and to how long it will be take to be achieved." (Head No 15)

Is time planning important? If so, why?

All interviewees agreed that planning is a very important process for management success. Some interviewees mentioned some reasons. The most important responses obtained from Heads No 3, 4, 8, 9, 10, 11 and 14 stated that the structured framework is a first step to successful strategic planning. A more clear explanation was reflected by the personal opinion of Head No 11:

"... time planning provides a framework for the action plan, the head of the department organizes the goals and activities based on its importance, to start with the most important one. Time planning process provides a framework to move form the most important goal to the least important. In my personal opinion this is the beginning of good planning for Long-term in other words, this is the starting point for strategic planning" (Head No 11)

Another explanation was obtained by head No 3:
"The managerial activities and goals can not be equated in importance with each other. Since there are some tasks should be done firstly, and the other could be postponed, and not linked to other goals, while, other possible delegated to someone else. Therefore, on my personal opinion the time planning process can reduce time wasters" (Head No 3)

According to the above responses it can be seen that most of the interviewees agreed that time planning is a very important process in development of their departments management regardless of the lack of theoretical background about the planning of time. The respondents stated that time planning can reduce time-wasting, as well as being the first important point for strategic planning, they also agreed that setting of goals and determining of priorities are the most commonly used strategies. However, scheduling is not commonly used.

**Organising of time, and the principles that adopted to organise of time**

In order to discuss this issue some questions were addressed to cover the topic under investigation. The researcher asked interviewees to express their thoughts and opinions about time organising to get more in depth information about how they organize their time, as well as determining which principles are commonly adopted in the organisation of time. Furthermore, the researcher addressed some questions about delegation to provide more details. These questions created differing responses but all answers were interesting and relevant. By reading and re-reading the fifteen interviews the researcher realized that the interviewees have different opinions and thoughts about time organisation, but all of them confirmed the importance of organisation as a key management issue generally.

**How do you organize your work time? In other words, which principles do you and other heads of departments always use to organize your time?**

The quotations below explain and reflect the different opinions derived from the interviewees. The interviewees explain how they organise their time through mentioning some principles which are commonly used.

Several of the heads (No 2, 5, and 10) asserted that the delegation principle is known as the most important one to organise of time. However, it is not commonly used and the following quotation reflects the opinion of many respondents:
"The delegation process requires giving some authorities to others, and heads of academic departments unable to delegate their authorities because they lose the trust in others, and fear from who are delegated to" (Head No 10)

Interviewees No 3, 8 and 11 affirmed that the organisation of time completely depends on the use of both principles, division of tasks and delegation to provide best organisation. The best explanation that reflects their opinion was obtained from Head No 8, who said:

"Organizing of time largely depends on the dividing of administrative work into parts, then arrange them based on its importance, and assign of responsibilities to suitable individuals to do such tasks with needed powers" (Head No 11).

On the other hand, different responses were given by heads No 1, 4, 7, 12, 13, and 15, who referred to dealing with paperwork and work environment as uncommon principles by saying:

"...Regarding to the paperwork; we suffer from accumulating of documents as a result of repeated copying, we fear from absence of important document what leads to the accumulation of more large amounts of paperwork, this make us lose the specific papers we looking for" (Head No 7)

Respondents No 6, 9 and 14 offered similar opinions. They focused on the classic ways that are usually used in their administrative correspondences, and they indirectly stated that they never used modern techniques to save their work papers. The following quotation reflects their opinions:

"We miss the modern technique systems for correspondence, the administrative correspondence in developed organisations and universities are sent and signed electronically, on other side, we are unable to use an email in our administrative correspondence because of lack of internet services for all offices in the University" (Head No 6)

Is organising of time important? And why?
The responses derived from interviewees divided into three groups. Each group clarified their own view about the importance of time organisation through their own thoughts about this issue. Heads No 2, 5, 6, 8, 9, 10 and 14 recognised that the organisation of time provides the best method for best delegation. They said:

"The process of time organizing indirectly motivates us to delegate some tasks to others, since we can not deal with everything in the department administration, therefore, we are required to determine the tasks which should be done by others, this should be supported with identifying the needed resources to achieving the departments plans, in order to organise them effectively, and consequently save work time." (Head No 5)

Whilst heads No 3, 7, 11, and 12 said:

"....organising of time requires dealing with what actually available - whether staff who work with us, material resources which we working through it, in order to achieve our goals. Therefore, we must determine the right time for deal with each task, and managing each resource effectively." (Head No 7)

On the other hand, some of interviewees No 1, 4, 13 and 15, clarified time organisation as a form of self-organising by saying:

"The process of time organising helps us in organising ourselves. Self organising is the first and most important step to organising time, people, paper, and dealing with them effectively. On the other hand, being weak in self organising certainly leads to time wasting." (Head No 13)

Overall, the interviews generated different opinions about the discussed issue. Most of them affirmed that the organisation of time depends on principles of dealing with what actually exists as people and papers, dividing of administrative work. Regarding the delegation process the researcher realized that delegation is uncommonly practised by heads of academic departments due to lack of confidence in others. Furthermore, other principles were not well known by interviewees, since some of them do not have any idea about dealing with paperwork by use of modern techniques and organising of the work environment. With
regard to the importance of time organisation the interviewees directly mentioned some benefits of organising time, such as save time.

Control over time operation, and the adopted principles by heads of academic department

Control over time is a major managerial process. Some researchers stated that the best starting place to improve the use of time is determining the extent to which you control the time available to you. To discuss this issue some questions were addressed to determine how do heads of academic departments control their work time, to what extent is control over time important to them, and to examine which principle of control over time is commonly used, and why? By analysis of the fifteen interviews the answers generated different interesting responses.

How do you control over your work time? Which principles do you use to control over time? And why?

The research aimed to identify which principles are commonly used by heads of academic departments to control their work time, and why? The following responses reflect the different opinions of the interviewees. Some of the answers have addressed time analysis issues, to determine how time is spent. Other answers addressed the definition of time wasters and what they do to avoid or reduce it, as shown below:

Heads No 2, 5, 8, and 10 offered an explanation of how they control their time through time analysis. The following quote reflect their opinion about the investigated issue:

"... in order to control over time effectively, we must analyze how we spent our time objectively in the past and present time, in order to reduce any bad habits and non-productive activities...” (Head No 8)

Similar answers were gained from heads No 4, and 13 who said:

“... We can practise the process of control by comparing between the achieved goals with the plan that previously identified, in order to finding out any deviation or ineffective activities may cause to waste time and
other managerial resources. Therefore, we can control over time by identifying the time wasters and ineffective activities, time analysis is the most principle used by heads of academic department in Libyan universities according to my opinion” (Head No 13)

Heads No 1, 3, 11, 15 asserted that they can control their work time through controlling wasters’ time. The following response reflects their views.

“...yes, the most principles are used to control over time wasters is the management of time wasters, in order to reduce them at the lowest level whether internal wasters around the heads of academic department themselves, or external wasters around their managerial environment.” (Heads No 11)

On the other hand, other responses were gained from interviewees No 6, 7, 9, 12, and 14, which reflect their opinions about control over time, since they are not convinced about what is called control over time. Their responses are outlined in the statement below:

“Control over time is existent only in administrative fantasy; time is not an aware resource. We only able to control ourselves through reducing unproductive activities that lead to waste of our work time” (Head No 9)

A similar response was gained from head No 7, who indicated that there are no specific principles or basics for control over time, since time is not a resource. In his view control over time equates to control over ourselves, as indicated in the outline below.

“...there were no principles for process of control over time, since time is not aware resource, and it is available for everyone equally, therefore, to control over time we must to control over ourselves.” (Head No 7)

Another answer gained from head No 6, referred to the weakness in the operation of control over time in relation to the nature of Libyan culture, by saying:

"...we cannot control all time wasters, especially within the Libyan culture. However, we are able to define time wasters without any attempt to find the best solutions to control over all time wasters...” (Head No 6)
Head No 14 added that:

"... We are unable to exert control over time, because of we have never analyzed the ways of spending of our time, and we also never thought in terms of department goals within its timeframe in our work practices" (Head No 14)

Do you think that the controlling over time is necessary for academic leaders?

In order to find out whether the process of control over time is important to respondents, the researcher discussed this issue in depth with the interviewees. She gained agreement about the importance of control over time from all with different responses. For example Heads No 4, 5, and 13 said:

"...of course process of control over time is very important since it largely relates to time planning and time organizing, at the same time it is the effective tool to achieve department goals." (Head No 13)

Some of the interviewees (No 1, 2, 6, 10 and 11) linked the process of control over time with the size of spending. The researcher attempted to discuss this issue that appeared as a new issue, which needed to be discussed in depth. The following response reflects their opinions:

"Process of control over time provides standards for control over the ways of achieving the goals of department, since the department goals are completely depended on a specific plan within timeframe. Therefore, achievement of department plans within the specific timeframe certainly reduces the size of spending". (Head No 10)

Within the same context heads No 3, 7, 12 and 15 indicated briefly that:

"... Control over time as a resource is one of the economic principles, as well as it is one of the administrative processes, the more effective in process of control over resources is providing the great effectiveness in achievement of objectives with less losses ..." (Head No 3)

Other answers were gained from heads No 8, 9, 14 who support the above opinion by saying:
"Control over time reduces the rate of spending whether material or human resources, because, this process aids to achieve the goals in the specific time, furthermore, it aids to analyze how time of work is usually spent? In order to know whether it has been spent in implementing the goals that were identified earlier or no, and to discovery any weaknesses or wastage of time which cause to deviation of the plan and goals of the department" (Head No 9)

In conclusion, it is seemed clearly through the above responses that most interviews revealed that heads of academic departments in Libyan university agree that the most used principles by heads of academic departments is time analysis. They added that this principle is used in order to identify ineffective activities and habits that cause the wastage of time. Control over time wasters is another important principle for the process of control over time. On the other hand, some of respondents could not agree about what the so-called ‘control’ over time actually meant. For instance, they stated that no specific principles or basics for control over time exist in spite of the fact that they were fully aware of the importance of the process of control over time. In addition, despite such conceptual confusion, it was clear that they also made efforts to exert control over time through control over themselves, since they stated that the most important point feature of time management is achieving department plans within a specific timeframe, and reducing of the size of spending.

**Time wasters**

Time wasters are things that prevent the use of time effectively, such as unclear objectives, unexpected visitors, and unnecessary and unplanned meeting, and other wasters that may differ from environment to other according to its condition, and culture. Within the culture of the Libyan administration there are many time wasters (as in other administrations), therefore, the researcher aimed to identify time wasters within the Libyan universities context. In order to achieve this goal some questions were addressed to respondents to give coverage and and enable discussion of this issue in depth with interviewees as outlined in the succeeding subsections.
Do you analyze the ways of spending your time? If so, what are the main problems that impede use of your time every work day?

This question was addressed to discover whether heads of academic departments in Libyan universities analyze the ways of spending of their work time. The answers from interviewees divided into two groups, the first group agreed that they usually analyse the ways of spending their work time. In addition to, they identified the main problems that lead to wastage of their time. Whilst the second group indicated that they had never analyzed the ways of spending their work time. Some of interviewees (Nos 3, 10, 13) stated that they usually analyse their work time said:

"Yes, I analyze the time as a major activity in order to invest my time effectively, the process of analyzing the time is done regularly, in order to define the deviant practices from the identified goals" (Head No 13)

While other interviewees No 1,2,11, stated that they usually analyze work time to avoid ineffective activities in save their time. The following quote reflects their opinion:

"Yes, the analyzing of work time provides a list of daily activities in order to arrange those activities for the best implementation. In addition I can remove any ineffective activities to save time" (Head No11)

Regarding the main problems they face through analysis of their time, most heads of academic departments agreed that unexpected visitors are the biggest problem they face during work time, while others added other problems, such as the instability of Libyan universities’ management. The following statement reflects the views of heads No 3, 5, 8, 10, and 13 about the issue under investigation:

" through time analysis process I find out that the biggest problem I often face during my work hours is unexpected visitors whether friends, cousins or colleagues, and I have never found the best solution to deal with it, because of shame, the nature of social relationships which make us unable to reject or end any unscheduled visits for fear of social criticism" (head No 13).

A similar response was gained by head No 13, who said:
The most difficult problem we are facing during work hours is our strong social relationships, these relationships - whether in our personal life (family) or in our work environment with colleagues or friends - are negatively influential in our work, and usually cause us to waste time.” (Head No 13)

On the other side, some of the interviewees (Nos 4 and 11) identified another problem: the instability of administration of Libyan universities. They stated:

“I strongly believe that the instability of administration of Libyan universities is the most difficult problem for me and other heads of academic departments. We cannot control over it, because this matter completely depends on the Libyan government policy, and we can not deal with it to reduce time wastage. Time is usually wasted because of the instability of our decisions which are changed to meet the new requirements of new administration, new rules, and consequently new higher decisions.” (Head No 4)

On the other hand, the second group of the interviewees No 6, 9, 12 and 14 stated that they have never analyzed their time at work because of their conviction that time analysis is a wastage of time and that there is not enough time to review the ways of spending of time. Heads No 6 and 12 provided a clear explanation about their opinions by saying:

“Actually, I am not interested to analyse my work time, how it is spent. Because I am completely convinced that time that will be spent for the analysis process is in fact a time consumer for nothing.” (Head No 6)

Another answer provided by head No 12 is no less importance:

“In fact, I do not see any need to analyze time which has been spent, as I consider it a wastage of time, particularly I know well the most important obstacles hindering the investment of time effectively, as well as the solutions for these obstacles, which not available so far, especially the obstacles relating to the social side, or those related to instability in the universities administrative.” (Head No 12)

How do you deal with difficulties of managing your work time?
This question addressed the difficulties and problems which lead to time wasting. Since some of interviewees stated that unexpected visitors and instability of Libyan universities administrative are the most problems they face during their work time according to their time analysis. Some of interviewees (heads No 2, 4) who are facing the problem of unexpected visitors stated that they tried to deal with this problem, but they are still unable to overcome it. The following quote reflects their opinions:

"The main problem I often face, and leads to waste my work time is unexpected visitors, despite of I try to arrange and schedule all my meetings with others. However, I am still unable to control over it, furthermore, the policy of closed door is still unused in our Libyan organisations " (Head No 7)

Heads No 6, 9, have similar view by saying:

"Despite my attempts to deal with problem of unexpected visitors which I usually face during my work time, however, I am often criticized by some of them that I am arrogant and bumptious, this led to negative influences in my social relationships with them. They are unable to separate between the social relationships and work relationships" (Head No 6)

A similar response was gained by other interviewees No 1, and 3 by saying:

"Unfortunately, although I am fully aware that there is a wastage in my work time, however, I have never tried to find a clear method to face these difficulties, I am unable to control over the unexpected visitors since I can not end the meeting with other , because of shame, as well as the nature of social relations that impact negatively on the nature of the work, and reduce our managerial skills" (Head No 3 )

Another explanation which is no less important; was gained by head No 13 as following:

"Since the most difficulties faced by heads of academic departments related to social life and managerial difficulties as instability of administration of Libyan universities and weakness of communication channels between departments chairs an higher administrative levels, therefore, we are unable to deal with these difficulties because of central administration in Libya - especially in the Libyan higher
education ministry, where our voices have never been heard, consequently our opinions have never been recognised by higher administrative levels.” (Head No 13)

On the other hand, some of the interviewees stated that they tried to deal with these problems through their own methods. Head No 10 and 11 said:

“...actually, I always try to overcome the difficulties that I face in managing of my time through implement of time analysis principle. That principle depends on determining the list of completed actions, and activities during the work day, in order to determine the most important activities that are not productive, to avoid them in the future, for example. I provided a fax machine and internet in my office - through personal effort - to ensure fast correspondence, I also try to organizing and scheduling to meet others, and avoid open-door policy.” (Head No 10)

By looking into the responses above, we can conclude that the interviewees have been divided into groups. The first group analyzes their work time and identified the main problems that lead to wastage of time as unexpected visitors, and instability of administration of Libyan universities. The second group indicated that they have never analyzed the ways of spending their work time, because they believe that they do not have an enough time to analyse their work related time.

Some of Libyan heads of academic departments do not have any clear strategies to deal with time wasters, whilst others tried to deal with time obstacles by using the method of time analysis as the best way to identify these obstacles in order to find the best solutions.

**Time management according to demographic variables**

Some of the questions were directed to identify the view of the respondents about whether there are any differences between the heads of academic departments according to demographic variables, such as experience, gender, qualification specialization, and the number of universities that the head is working in. These topics were identified in the literature review as relevant to the results of previous research that indicated that there are differences in the administrative skills and capacities in relation to such variables. Therefore,
the researcher addressed some questions to confirm or dismiss the importance of these issues in the Libyan context. These issues are explored in some detail in the next sub-sections.

**Years of experience**

According to some previous researchers the managerial experience plays an important role in the effectiveness of management, as well as, achieving the objectives of the departments. Therefore, the researcher is interested to examine to what extent managerial experience plays a major role in the managing of time effectively in a Libyan organisational environment by posing the following question:

*Do you think the heads of departments who have long experience manage their time better than those who have short period of experience? And why?*

The answers obtained from interviewees divided into two groups. Most of them agreed that heads of academic departments who have a long experience are better than others who have a short period of experience in time management. Whilst another group disagreed about these differences, two of heads No.3 and 11 mentioned the differences between long and short experience as follows:

"... Yes, I fully believe that there are main differences between experiences of heads of academic departments, experience is a major factor in time management, whenever the accumulated experience increased, the effective practices at work will increase as well, moreover, new skills will be gained to aid him to do his job very well, and avoid repeating mistakes and unacceptable practices." (Head No 3)

Within the context of accepting the differences between the heads of departments in relation to their variable experience, a similar answer was given by interviewee No. 8 by saying:

"Although all the heads of academic departments in the Libyan universities are working under the same organisational and administrative conditions, as well as, they are living within similar social environment, however, I completely believe that there are differences between the leaders according to the experience, it is a very natural to find the differences among individuals in their skills, abilities, and willingness to learn and develop their skills, thus, years of experience is..."
an influential factor in the development of these skills and capabilities, therefore, I believe that the longest experience more ability to manage time than those who have a less experience" (Head No 8)

On the other hand, the opinion of head No 12 is in the middle between acceptance and rejection in relation to the idea that long experience is better than less experience in time management as he said:

"It must be noted that, the longer experience is more capable to manage time than the least experience because they have practiced the administrative work for a long time which enabled them to develop their skills, but in fact, the case of instability of university administration made the regulations and decisions constantly changeable, these changes usually make all the heads of academic department confusing about how to deal with this new decisions. Personally, I see that years of experience are just an accumulation of a number of years." (Head No 12)

Directly, head No 14 motioned that:

"...There is no significant difference between heads of academic departments in the time management, the reason behind this opinion is that they subject to the same rules and regulations, and they applied equally, in this case is not a great difference between them ..." (Head No14)

Consequently, it can be seen that most of interviewees agreed that longer experience is better than a lack of experience in applying effective time management.

Specialization

The next question addressed the fact that according to the initial results, which were obtained from the quantitative data at the earlier stage of the current research (MPhil stage), there was no difference between heads of department in time management based on their specialization. Respondents were asked whether they agree with this result and, if so, why?

The answers derived from the interviewees clarified that most of heads of academic departments agreed with this result whilst some of them disagreed quite strongly.

Ten of heads (No 1,3,4,6,7,8,10,11,12,13) which is reflected in the following response:..
"Yes, I agree with that result. I do not think that specialization can affect on the effectiveness of time management, according to my personal view, the effectiveness of time management depends on administrative and subjective abilities and skills. I do not see that specialization whether humanities or scientific is a major factor in determining the level of management performance in general and managing of administrative resources (as time resource) specially .... It depends on the personal skills which differ from one person to another regardless of his/her specialization" (Head No 11)

The following response supports the previous answer. It was gained from head No 7 who stated:

"Certainly, the specialization is ineffective factor due to the nature of academic departments in Libyan universities. They are almost under the same or similar conditions, so, there is no importance in specialization in the effectiveness of time management ... I see that the full knowledge about methods and manners of time management is the most success factors in effectiveness of department performance and time management especially..." (Head No 7)

In opposition to the previous responses it is largely believed that specialization is a major factor in determining the effectiveness of time management. Accordingly heads of humanities departments are more capable in time management than heads of scientific departments. The next quote reflects this opinion:

"I reject this result, we all have never subjected to any development or training programmes or any workshops to develop our managerial skills, the heads of humanities academic departments are more capable in time management than others. I see that they are more fortunate than others, because they have (somewhat) some theory experience which was got during their studies of some issues relating to concepts and theories of management, as well as some associated behavioural sciences which may help them to develop and obtain the facts that can be used in the administrative work." (Head No 4)

Another similar response was provided by Head No 8:
"I disagree; I see that the heads of humanities departments are better in their time management than other, because of their simple and limited theory background which may aid them to manage their department better than others." (Head No 8)

In conclusion, the researcher obtained the view that most of heads agree with the fact that there is no difference between heads of departments based on their specialization.

**Qualification**

Since heads of academic departments in Libyan universities are usually chosen via election, regardless of their qualification - whether Master or Doctorate, the researcher addressed the question below to determine whether the level of qualification has any impact on time management operations. Respondents were asked whether they thought that the qualification has no effect in the management of department’s resources (as time resource). In other words, the heads of scientific departments who hold a Masters degree do not differ from the heads of departments who hold a Doctoral degree in the management of their time. Most respondents agreed that there is no impact of qualifications on effectiveness of time management. The following quotes reflect their opinions in this respect: Heads No 1,3,4,6,7,8,10,11,13,14, and 15 all agreed that the qualification has not impact on their administrative work. The researcher summarised their opinions in the following words:

"...Yes, I agree, because I believe that the qualification is not important factor in effectiveness of time management, I largely believe that the experience and administrative skills and subjective capabilities are more important... "(Head No 3)

Another answer provided by head No 14, gave support to the above response as follows:

"... according to my personal opinion; qualification is not important in the administrative field, it has no effect in effectiveness of administrative work of heads of departments, it just...

On the other hand, other heads, Nos 2, 5,9, and 12 completely disagreed with that view. Their opinions can be seen in the following quotation
"... I strongly disagree with that result; qualification should not to be ignored as one of the major factors, which create differences among individuals. There is no doubt that higher qualification provides a special potential for individual, as well as developing the administrative skills to make heads able to deal with time effectively ..." (Head No 2)

Within this context head No 9 added:

"...I personally see that heads who hold higher qualifications are more capable to managing their time, because of their awareness and understanding for the methods of time management, as a result of knowledge gained within this subject which increase their abilities in practicing of time management effectively ..." (Head No9)

Overall, it would appear that there is near-consensus in the views of respondents to confirm that there are no differences between Master and Doctorate holders in managing their work time effectively.

**Gender**

Within the culture of Libyan society the female plays many roles at the same time, she is a wife, a mother, and sometimes is a worker, she plays a social role inside home, doing many things such as visiting friends, neighbours and families and their reception as well. In general, she looks after her family as a housewife and she plays a functional role outside home as a worker. Meanwhile, many males work in more than one university, which leads to an increase in their complaint about lack of time, therefore, in order to remove the doubts about who is more capable to manage time (males or females) the researcher addressed the following question.

*Within culture of Libyan management do you think that no differences between males females in managing of work time? And why? Please justify your answer.*

As usual, the question which had been asked to gain a specific answer about whether there is any agreement on a particular issue. It was answered either in the positive or negative and the answers derived from respondents divided into two groups, agreeing and disagreeing, but in general most of them agreed about the above issue.
Heads No 4, 5, 7, 9, 10, 11, 12, 14 and 15 all agreed that no difference between males and females in managing their work time with some differences in their justifications as following:

“Yes. I agree, I do not see any differences between males and females in managing of their work time, because of the endogenous capacity of each of them. They are going through similar legislations and rules within universities administrations. Women play many tasks at the same time inside and outside home, while men are suffering from stress which has never faced by women in the work, as we know that Libyan women in our society are not responsible within work frame as men who are the most responsible, therefore, I see that both men and women face the lack of time within his/her own frame.” (Head No 10)

Another similar response was obtained from Head No 4 who stated:

“... There is no significant difference between men and women in managing their time, because of they are under the same rules and regulations, as well as following the same central management of Libyan universities. I see that time management needs to specific skills depend on personal capabilities regardless of the gender ... ” (Head No 4)

On the other hand, there were other respondents - they represent the few of interviewee- who have different views. The following quote reflects the opinions of heads No 1, 2, 3, 6, 8, and 13:

“... I strongly disagree, there are a natural differences, because of differences between individuals and their composition, and their accumulated expertise around administrative work, I see that women are better than men in managing of time, because women are more organiser than men since the time management is a self management, men would not have been capable to play those roles that you mentioned above at the same time... ” (Head No 8)

In more detail and depth explain head No 2, 13 offered their answers within the following quote:
“Although I did not go into competition with the women in the examination of time management. However, I answer the question according to social reality for both women and men. I see that the difference between males and females in the management of time refers to the nature of each one. Women more capable to managing of many tasks at the same time, they play - in our Libyan society and within our social culture – many roles inside home and outside home as an employee. Whilst, men work only outside home, within our culture men have nothing to do with what goes on inside home. So according to my view, woman is more capable than man to manage time due to her ability to control over many things at same time.” (Head No 2)

In conclusion, most heads of academic department in Libyan universities agreed that no differences exist between males and females in the practice of time management.

The effects caused by the number of universities that the head of academic department is working in

The researcher mentioned previously that some aspects of legislation and resolutions in Libyan universities have encouraged faculty members to cooperate in teaching some courses at other universities and institutes of Higher Education departments in order to improve their living standards. This situation leads to a lack of time because of the variety of duties including teaching, academic research and academic administrative duties. Therefore, the researcher investigated this variable which has not been investigated by other researchers to determine whether there any significant differences between the heads of academic departments in the practice of time management according to this variable by addressing the following question: Since the legislation and laws of higher education have allowed you to work in more than one university, in addition to your main university where you work as head of academic department. Do you think that the working with more than one University as an academic staff member or as a head of another academic department, as well as your duties in your main university - as teaching, research and run your department - negatively affect in your practice of time management. In other words, do you think heads of academic departments who are working with more than one university are less ability to manage and invest the time?
Respondents were divided into two groups. Most of them indicated that there was no impact on their ability to manage time in relation to the number of institutions they worked for. The following quotes reflect their opinions about the investigated issue.

Heads No 1, 2, 5, 6, 7, 9, 10, 11, 12, 14, and 15 all disagree that the variable of the number of universities has a negative effect on their ability to manage time. Their opinions are summarised in the following quotation.

"I do not think that number of universities - where we work - has a negative effect on our ability of time management, since the complaint of lack time exists even among academic staff members who do not work as head of academic department, and work with only one university. The reason as I see it is not in the number of tasks that we have to do as much as the poor organizing of our selves, managing our time and setting priorities which should be achieved according to its importance." (Head No 6)

Another justification has been obtained through the response of head No 9:

"The weakness of time management at the heads of academic department is not only due to number of universities they are working at the same time, this weakness refers as I think to the central university administration, heavy workload, lack of management techniques" (Head No 11)

On the other hand, some heads of academic departments, No 3, 4, 8, 13, agree with the above issue, since they stated that the nature of their academic and administrative duties lead to more stress and the problem will become more complex with the increase of tasks through work with more than one institution. Their opinions are reflected in the words of head No 8 as follows:

"Yes, I agree that heads of academic departments who are working with more than one university are less ability to managing of their time, since we complain of lack of time due to academic and administrative tasks, in addition to the social duties which negatively affect on allocated work time. The problem will be more complication if we work with more one institution." (Head No 8)
Overall, it would appear that there is near-consensus in the views of the interviewees, which confirms that there is no impact on their ability to manage time, regardless of the number of universities where they are working at the same time.

4.8.5 Summary of qualitative findings

The semi-structured interview generated new issues related to time management, such as value of time in Islam, and time within Libyan culture. The researcher discussed these new issues with respondents to get more and in-depth information about them. To obtain valuable results, the analytical approach was adopted by reading and re-reading and the researcher found that most of heads of academic departments have a good background about what time management mean, regardless whether they are practiced time management effectively or not. Some of them agreed that time is a very important resource according to Islamic rules; however, some of them informed that they never deal with their work time as Islam recommended, because of social factors, lack of awareness to time value, and absence of law as common problems in developing societies. They added that Libyan society with its organisations - including universities - are all facing some problems as administrative corruption, dependency, and bad planning which led to poor time management.

Regarding the adopted strategies the researcher found that time planning and control over time are the most frequently used operations, since some of the interviewees informed the researcher that the list of activities and time analysis are the most commonly used principles to managing their time effectively. With regard to the time planning process, the researcher realized that setting of priorities and to do lists are the most commonly used approaches. However, time analysis is not used, they all agreed about the importance of time planning where they asserted that time planning can reduce time wasting, as well as being the first important point for strategic planning.

The researcher realized that dealing with people and papers and dividing administrative work are the most used, whilst the delegation process was not used, because of lack of confidence in others. On the other hand, dealing with paperwork - by use of modern techniques - and organization of the work environment were known but not used. Regarding the importance of time organizing the heads of academic departments stated that the organization of time
supports us in using effective delegation and in dealing with managerial resources, such as people, papers, and organizing ourselves, and consequently saves time.

Most of the heads of academic departments in Libyan universities agree that the most used principle to control time is the principle of time analysis. This principle is used in order to identify ineffective activities and habits, and to find out the best way to face them. Most Libyan heads of academic departments realized that the process of control over time is very important. They also stated that the most important issues to gain control over time are achieving department plans within the specific timeframe and reducing the size of spending.

Most of Libyan heads of academic departments analyze their work time and identify the main problems that are faced by them that lead to wastage of their time. They pointed out that unexpected visitors and instability of Libyan universities administration cause the most wastage of time, whilst some of them believe that they do not have enough time to analyse the spent time. Furthermore, heads of academic departments stated that they do not have any clear strategies to deal with time wasters, whilst others attempted to deal with wasters of time by the use of time analysis as the best way to identify these obstacles in order to find the best solutions.

Some responses indicated that there are differences according to the variability of experience. The reason for this is - of course- that the accumulated experience will increase the efficacy of time management and other managerial skills. Other responses stated that there are no differences because they are all subject to the same rules and regulations. Regarding to specialization variable, it appeared through the responses that there is no differences between heads of humanities and scientific departments. Some respondents stated that heads of humanities departments are more capable to manage their time, because of the limited theoretical background to their subject, which was presumably an attempt to suggest that the complex technical challenges in Science departments caused more problems with time. The researcher found that the type of qualification that is held by heads of departments does not impact on the practice of time management. Indeed, no major differences were found between types of qualifications held by Libyan heads of academic departments. Moreover, most of the responses indicated that there are no differences between males and females in managing their time. Regarding the number of universities where they are working, most of the participants confirmed that there was no impact caused by the number of universities where they are
working at the same time on their ability to manage time. Although, some stated that the duplication of their duties leads to more stress and, consequently, working with more than one university will weaken their ability to deal with time effectively.

4.9 Conclusion of the fourth chapter

Overall, this chapter investigated the issue of the operations of time management practised by heads of academic departments in Libyan universities and reflected on the process of time planning, time organizing, and control over time. In addition, specific variables such as experience, specialization, qualification, gender and the number of universities that the head of academic department is working in were investigated. Both qualitative and quantitative data have been analyzed by use the suitable analytical methods and the analysis of both types of data showed that the control over time is the more often practised by Libyan heads of academic departments. However, respondents stated that they never invest and manage their time effectively due to social factors, lack of awareness to time value, and the absence of law, since they are common problems in developing societies. Some respondents added that Libyan society, with its organisations including universities, are all facing some problems such as administrative corruption, dependency and bad planning which led to poor time management. As well as this they affirmed that the principles related to control over time are more commonly used then other principles. According to their opinions time wasting is related to external factors, such as poor communication channels, unexpected visitors, as well as poor information systems. All this findings will be discussed and interpreted in the next chapter.
Chapter Five
Discussion of findings

5.1 Introduction
Throughout this chapter, the researcher aims to present a discussion and interpretation of the findings obtained from both quantitative and qualitative data that have been presented in previous chapters. Equally, the findings and literature review built the rationale for discussion and interpretation of the topic of time management operations within the context of Libyan organizational culture. Discussion and interpretation of those findings were designed in line with the researcher's objectives and research questions which were discussed in depth in the literature review. Furthermore, the researcher provides in this chapter, lengthy discussion and interpretation of some of the themes that were identified in the previous findings about time management operations practised by Libyan heads of academic department in Libyan universities as follows:

*Time planning*, refers to the extent to which Libyan head of academic department provides a clear plans to use time effectively, it is reflected in their determining of the departmental needs and setting goals to achieve these needs, consistent with the available time.

*Time organizing*, refers to the extent to which the head of department provides a clear understanding about how he or she identifies all possible activities in their department and classifies them into sets of tasks, as well as organizing the work environment and deal with paperwork appropriately.

*Control over time*, refers to the methods used by Libyan head of academic department to ensure that management activities are satisfactorily directed toward the defined goals and to identify and correct errors and deviations that cause time wasting.

The gathered findings from both quantitative and qualitative data provided rich information about time management operations according to the specific fields of planning, organizing and controlling time, and attributed to variables of managerial experience, gender, specialization, qualification and the number of universities that the head of academic department is working. The researcher obtained useful results, which may play a major role in
providing a good and clear background about time management operations as the most important issue to be discussed within Libyan cultural institutions. Consequently, the main findings will be discussed in line with the research questions. The researcher attempts to provide a conceptual framework related to concepts and issues outlined in the literature review - through a discussion process. As indicated in the last chapter many different themes were discovered, some of which have already been addressed in both quantitative and qualitative methods to collect data to reflect the research objectives and answer research questions. Meanwhile, other themes were derived from the answers of respondents and the researcher has not ignored these themes which were subjected to discussion and interpretation together with the main themes within a coherent conceptual context to provide a theoretical system with reference to what has been written and researched previously in the managerial literature. Thus the researcher has employed basic and secondary resources, as well as the researcher's own experience and background about the investigated subject.

5.2 The first question: To what extent do heads of academic departments practice time management according to the specific fields of planning, organizing and controlling time?

In general, this question was addressed to determine the extent of the practice of time management operations of Libyan heads of academic departments. Since most of the previous researches confirmed that some attention is paid to the practice of time management operations but this differs in the level of practice according to several considerations, such as managerial experience, social system, level of civilization of a society, the institutional culture and its impact on the behaviour of workers, and the rules, regulations and legislations of the organizations and extent of the respect for them by workers. These considerations vary considerably depending on societies and organizations as well as within the same organization over time. Accordingly, it is argued that political, social, cultural and economic matters influence this issue and work together in one integrated system within the same society and at specific times when one perceives time management operations as the ability to use time effectively (Clark, 2007).

The researcher indicated earlier that time management operations reflected in planning, organizing and control; are the basis for success of any resources management, due to the
nature and characteristics of time that were identified previously. Time management processes still need more research, especially within the management of higher education because it is a relatively new topic in the field of higher education management. As stated in the first chapter, the real problem that is faced by the managers of higher education in Libya is the lack of clear information that can be used in order to assess the level of administrative functioning of the heads of departments in the Libyan universities, whereas the studies and research conducted previously were directed largely to the administrative leaders in primary and secondary schools.

According to Elabbar (2001), Murray (1994) and Thomas (1990) the head of an academic department is an academic executive leader who practices both administrative functions, such as planning, organizing, control and decision making in addition to teaching and researching, as well as managing and developing the department and its staff through the most effective use of resources within the general strategic aims of the university. This question was addressed particularly to heads of academic departments in Libyan universities due to their roles in Libyan society, as well as the changes that have recently been made in the structure of higher education without any advanced planning. These changes have caused some 'invisible' problems that have emerged recently, such as bureaucracy and the dominance and ubiquity of administrative chaos in the Libyan universities.

The research sample comprised 309 participating heads of academic departments. The main finding obtained from the participants' answers was that control over time has gained the highest level among time management operations practised by Libyan heads of academic departments. In other words, control over time is practised more than other processes such as planning and organizing.

The researcher notes some shortcomings in the ability of heads of academic departments to balance among work requirements and surrounding circumstances. CAL and Tucker (1984) asserted that the biggest problems for academic administrators are not a lack of training but an overly heavy workload and not enough resources. Academic administrators struggle to balance their research, teaching, administrative duties and personal life.
Kassab (2010), Al-astal (2009) and Al-Ghamdi (2008) have stated that time management was practised well with great attention paid to recognizing the value of time. All these commentators agreed that awareness of the importance of time leads to good practice in time management, some of the evidences obtained from the qualitative data indicated that time is a very important resource according to Islamic rules. However, many respondents stated that they never dealt with their work time as Islam recommended, because of social factors, lack of awareness of time's value, and the absence of law as common problems in developing societies. This has been confirmed at the practical level that time management operations in general have not been practised well by heads of academic departments in Libyan universities.

This finding may not be far from what was expected in accordance with what was presented in the previous related literature review, especially in Arabic societies. Some of the previous findings obtained by those such as Adayleh (2004) and Al-Jeraisy (2004) have confirmed that there was a great recognition of time management, but on the practical level there was a poor practice of time management by managers. Malaika (1991) who conducted a comparative study between Arab and Western managers at governmental institutions in Jiddah city affirmed that all western managers seem to recognize the value of time, and its necessity which motivated them to manage it well more than Arab managers who work together at the same institutions. Moreover, Al-Mulla (1991) and Adcock and Lee (1971) reached similar conclusions. Boyd and Wylie (1994) found that 80% believed their workload had increased in recent years, and many more believed it would continue to increase in the years to come. Al-Qaryouti (1985), Shehata (2005), Abdu Al-Jawad (2000), Alharfa (1991) and Muhsen (1997) all affirmed that there are weaknesses in practice of operations of time planning and time organizing, whilst, control over time is practised better than other operations. Within Libyan culture, Elkadiki (2003), Al-Zwai (2004), Khawaja (2002), Mansouri (1996), Naieli (2001), Beltamer (2001) and Alawod (2001) all affirmed that poor attention has been given to time as a resource. Consequently, time management operations have not been practised effectively by Libyan managers. Hamami and Abd Alhalim (1996) also reported that the poor use of time management by the heads of academic departments in Jordanian universities was due to the lack of training programmes that aim to raise the level of management skills. Furthermore, Taha (1996) related the weakness in time management to overlapping functions and responsibilities, lack of clarity of goals, and the lack of training courses to raise administrative efficacy.
This conclusion has been reached by the researcher through the qualitative data. The main finding affirmed that time is a very important resource according to Islam rules, however, Libyan heads of academic departments stated that they never dealt with their work time as Islam recommends, this lack of use of time due to some factors as lack awareness of the value of time, and social relationships, as mentioned above; they added that Libyan society with its organizations including universities are facing problems such as administrative corruption, dependency, and bad planning which lead to poor time management.

The researcher clarified that the weakness of the practice of time management by the heads of academic departments in Libyan universities due to the great attention that is given to teaching performance, and an extensive hours of teaching which can undermine managerial performance. Thus, leaders tend to neglect the tasks of leadership and management. Moreover, it can be noted that the legislations of higher education in Libya allows faculty members to work in more than one university which leads to neglect of management issues in any other institution.

Consequently, the researcher has noted that heads of academic department gained higher average only in the process of control and planning in order to ensure and provide time for teaching in other universities. Hamad (1998), Dhaoy and Qatami (1997), explained through their research that weakness of management skills including time management is often because of managerial chaos combined with the lack of sanctions against the heads of departments who failure in achieving the goals of the department. In addition, Momani (2010), Hamad (1998), and Tucker (1984) also confirmed that there is an inability in the balancing process between administrative and academic duties for academic leaders. Alakchr (1992) cited that poor time management in general is usually be as a result of the adopted policy of the Yemen higher education ministry.

According to the researcher’s view; these disappointing results are due to the inadequate policies of the Libyan higher education ministry, such as the unclear legislation that has not been subject to discussions and consultation that leads to instability in university management structures and the implementation of traditional rather than innovative philosophies in university management systems as a result of unclear vision for the future of university education. In addition, Libyan universities suffer from a lack of modern management methods, which could improve skills in planning and organizing.
5.3 The second question: What principles of time management operations more commonly used?

This question has been addressed to confirm the findings of past researches, and to determining which principles are most commonly used by heads of academic departments in Libyan universities. In addition, it was realized that determining the most used principles would provide more detail about which specific strategies are implemented to manage time. These principles are reflected in a series of items that were included in the questionnaire, which was administered to the research sample. The descriptive statistics through the averages and standard deviations affirmed that the principle of control over interruptions of time gained the higher average than the other issues that related to principles of time planning and time organizing. In other words, we may conclude that the principle of control over interruptions of time is commonly used by the heads of academic departments or, at least that heads of departments feel more confident in this area. This principle related mainly to process of control over time. This principle, as mentioned previously, is often seen as the key to effective time management more generally.

On the other hand, we must note that unless principles are used that are related to organizing of time such as the well-organized desk, an office free of clutter, or the use a new technologies such as computers and fax machines to save time, then the overall approach to time management will always be inadequate. Since the principles of planning gained only the medium level in responses this must be an area for concern. For more detail, the researcher provides a clearer and wider interpretation for this result according to each operation separately, as follows:

5.3.1 Time planning:

The planning of time as previously noted; includes the setting of goals ranked according to their importance, and scheduling them within a timeframe according to priority. The good practice of time planning includes making a functions list, which must be achieved and setting goals and priorities. According to Dobbins and Pettman (1998) planning is a list of activities and actions which must be carried out, and defining the responsible person for each action at each stage of the planning is essential for good management, yet leaders in Libya seemed to lack confidence in this area.
This result agrees with findings, which were gained by many researchers such as Al-Hayali (1990), Al-Mulla (1991), Adcock and Lee (1971), Nassef and Hashim (1998), Elkadiki (2003), and Kotter (1983). Accordingly, academic leaders do not believe in the time planning process, because of unexpected assignments that make it difficult to stick to their plan and result in delays to work. Moreover, Alakchr (1992) affirmed that time management was practised poorly by heads of department in Yemen, especially in the process of time planning and organizing of time because of the unclear policy which is adopted by the Yemeni education ministry. Further, Jaber (2001) in his study reached similar conclusions, he confirmed that there is a weakness in the process of time planning due to the lack of a database and clear information for decision-making process what leads to wastage of time and weaknesses in decision-making skills. Equally, Abu Kahf (1987) noted poor practice in time planning due to the lack of available information, poor work habits, unclear vision about the nature of work, and the lack of clarity in procedures, policies and regulations.

We should note, however, that these findings contradict the results that were obtained by Tanrogen and Iscan (2009) and Cemaloglu and Filiz (2010) who felt that planning and prioritizing were practised at a reasonably high level, they stated that despite of their research samples do not have enough background about the techniques of time planning, however, the time planning skill has got moderate level in their academic performance, and have a positive impact on effectiveness and morale.

According to Kearns and Gardiner (2007) activities of planning were practised well and aided to avoid unnecessary distractions, as well as to alleviate stress. Therefore, it was recognized that clear information must be provided to encourage good practice in time planning. As pointed out above, Libyan heads of academic departments suffer from a lack of information, which leads to weakness in the practice of time management, especially in the time planning process.

The leaders in Libyan universities suffer from weakness in practice of the principles of time planning represented by setting goals, prioritizing, and scheduling concern the lack of clarity in the general goals of the university, as well as the lack of information about leaders of universities, and the instability of the organizational structure. Baira and Baira (2010) noted that the Libyan universities lacked clarity in their aims and Khalf (2008) added that most Arab universities apply central models of performance, therefore, the objectives of the
academic departments are issued by a 'higher' authority. This dominance of a centralized bureaucratic authority in Libyan administration led to chaos in the universities.

Not surprisingly, the planning role is not practised at a high level by heads of departments in Libyan universities. Since Tohamy (2006) concluded that the principle of prioritising work is not used by Arab managers, because Arab managers simply attempt to complete their duties whenever they obtain them as directives. Khalf (2008) supported this opinion by saying that the implementation of the goals of academic departments is usually carried out whenever they have been already issued by the senior university management. Al-Hayali (1990) added that lack of the necessary resources is the main reason for poor time planning. In another context, Nassef and Hashim (1998) said that weakness in the planning process due to the rigidity of administrative procedures, and the preference for self-interest by heads of departments rather than the public interest. In other words, they prefer to achieve their personal goals without regard for the general objectives of the department. According to Sharif and Ismail (2010) heads of academic departments suffer from weaknesses in managing their time to perform their responsibilities, as well as in finding time for other social responsibilities. In addition to the personal endeavours, they added that it is difficult to balance between all of these duties and activities, especially in the Arab community where social values are not less importance than work tasks, which have caused the prevalence of a culture of indifference towards time.

Thus, the researcher believes that the weakness in the practice of administrative principles such as principles of time planning is due to several issues, such as poor performance of administrative work, and focus on personal goals rather than the objectives of the department. Other researchers, such as Baira and Baira (2010), Muhammad (2008) and Ramadan (2005), noted that the heads of departments are unable to create a balance between their research, teaching and administrative duties, They focus on teaching work since it achieves the highest rate of revenue. The researcher also sees that poor operation of time planning is due to the instability of the university system, which leads to chaotic management systems and the absence of sanctions for any failure in achieving the objectives of the department. In addition, the lack of clear information that can be invested by heads of department in setting goals is highly problematic when combined with the weak administrative capacity of heads of department in the field of planning. Furthermore, this result was confirmed by the findings obtained from the qualitative data in the current research, since most responses pointed out that the planning process is practised randomly and without prior theoretical awareness for
the effective steps of planning. Indeed, most of the respondents indicated they define their goals without regard to the overall objectives of the university or to the time that should be allocated for each objective.

5.3.2 Time organizing:

Time organizing is a process that provides time for a leader to work within a good organizational work environment through effective delegation. According to Salama (1988) effectiveness of time organizing generally appears through the identification of the functions of staff and division of labour carried out objectively to reduce conflict and duplication in both functions and powers. Organizing of is 'self organizing', and it is the first and most important step to organizing people, papers, and dealing with them effectively. By referring to the related literature that was presented in a previous chapter, we may note that the principles of time organizing include the organizing of the work place, organizing of paperwork, and delegation. Those principles were translated into many items included in the research questionnaire, in order to investigate which principles of time management are commonly used. The quantitative findings showed that the principles of time organizing have a lower priority and confidence level than principles of control over time and principles of time planning.

As mentioned above, the principles least used by heads of academic departments are related to the organizing of time, ensuring a well-organized desk, and the use of new technologies such as computers and fax machines to save time, as well as delegation.

These findings are consistent with results of Al- Mulla (1991), Elkadiki (2003), Muna (1980) and Abu Kahf (1987) who all affirmed that managers did not organize their time effectively, and that they do not delegate their powers and tasks to others. Al-hloani et al (1995) stated that the weakness in delegation and dealing with work matters is due to the adoption of central management systems. According to Abu Qudais (1993), the weakness in the practice of delegation is because of the lack of confidence in the abilities of followers. This opinion has been affirmed by the qualitative findings of the current research which stated overall that the heads of academic department were unable to delegate their authority, because they lost trust in others; they also were unable to deal with paperwork due to lack of a suitable work place. Equally, there was a lack of expertise in managerial techniques that aid leaders in reducing the amount of paperwork. Within this context, Diaz (1994) also stated that managers
suffer from a lack of time due to the accumulation of paperwork, and their inability to deal with it effectively. Notably, Sharif and Ismail’s (2010) respondents did not ask for more time, but for a healthy work environment where they could make better use of their available time, and thus become more productive. Hani (2008) noted that plans can fail because of an unsuitable work place, whilst Frostberg et al (2010) stated that an appropriate work environment leads to job satisfaction and commitment, avoidance of stress, disruptions and losses, and to greater throughput efficiency. The Canadian Union of Public Employees - Health and Safety Branch (2003) - added that whether the physical features of workspaces, such as minimization of noise, natural lighting and proper ventilation are in place must be taken into account when work areas are designed and management tools such as fax machines, internet access and other communication systems must be provided to ensure faster and easier work.

Muhmmod (2008) and Taylor (2007) agreed that managers suffer from overwhelming papers on their desks which leads to a cluttering of papers and prevalence of chaos. Whilst Moomni (2010) concluded through his study that heads of academic departments are unable to file their paperwork in the right place. The researcher realized that a disorganised work place is a natural result of the cluttering of paper and a lack of modern techniques as helpful tools to save time. The researcher identified previously some useful strategies to deal with paperwork that have never used by Libyan heads of academic departments. The qualitative findings of the current research affirmed that they suffer from an accumulating and overwhelming mass of documents as a result of repeated copying. It seems that they fear the absence of important documents which leads to the accumulation of large amounts of paperwork, and makes them lose the specific important papers relating to the present task. There is also a lack of understanding of the modern techniques and systems for correspondence. Thus, they are unable to use email in their administrative correspondence, because Internet service is not available for all offices at the university. Baira and Baira (2010) and Kamil (2008) confirmed this finding by saying Libyan universities suffer from a lack of modern management techniques which leads to backwardness and makes them unable to deal with actions and techniques of the modern age. According to Faid (2008) heads of academic departments should use the modern technology such as the Internet and other communications means effectively to be able to manage their work effectively.
In general, the researcher interprets this finding by saying that Libyan heads of academic departments are not interested in delegation, although duplication of roles that are faced by the heads of academic departments in Libyan universities is common. However, the process of delegating - with its requirement of giving certain powers to the commissioned worker - is an unacceptable idea according to the views of the heads of academic departments in Libyan universities (Faid, 2008). The head of academic department does not delegate his powers to others due to the lack of confidence in the ability of performance of others, in addition to the fear of the possibility of acquiring the skills and experience, which might threaten his position in the future. These reasons make the delegation process dangerous and unacceptable.

With regard to the principles of the organizing of the workplace and the organization of paperwork, the researcher recognized that there are deficiencies in workplace processing, as well as a clear lack of the needed equipment which aid time saving.

In this regard, Talba (1999) pointed out that in poor Arab countries, including Libya, political reasons and the unclear goals of government cause a weakness in supporting higher education institutions. Thus heads of departments suffer from a lack of technology to manage their work. The researcher adds - as indicated by Ghamry (1985) - that the allocation of spending budgets for higher education institutions is negligible compared to the military budget. In this context, the researcher sees that this shortcoming and the paucity of spending on higher education leads to a poor working environment which negatively affects the work of academic leaders. Academic leaders, such as heads of academic departments in the Libyan universities, complain of the lack of modern communications equipment such as fax machines that help speed communications, as well as computers and internet services (Talba, 1999). The researcher in the current study confirmed this result.

5.3.3 Control over time:

By referring to the literature review; we may note that control over time is the essential element in time management, and an integral stage of good management. It aims to ensure that management activities are directed toward the defined goals and should be applied by managers to identify and correct errors and deviations that cause wasting of time. Principles of control over time were represented in the time analysis, and the analysis of control over interruptions of time. Both principles are linked to each other, since time analysis aims to
identify unproductive activities. Therefore, time analysis is a first step towards control over interruptions of time, and towards identifying new goals.

As mentioned above, both principles have been represented in a number of items that were included within the list of the questionnaire in order to determine which of the principles are more practised than the others. The implemented descriptive statistics, using averages and standard deviations, affirmed that the principle of control over interruptions of time gained a higher average. In other words, the heads of academic departments commonly used the principle of control over interruptions of time. This principle, as mentioned previously, is the key to control over time in particular and the way to ensure effective time management generally.

This result completely agrees with Al-Mulla (1991), Elkadiki (2003) and Al ithawi (1990) who tried through their studies to determine the principles that are commonly used to manage their time. Al-Mulla (1991) and Albadri (2001) affirmed that Arab managers usually avoid the problems hindering their work for fear of punishment, not for commitment of work. Al-Zwai (2004) added that control over interruptions of time is a major method that has been used to avoid any obstacles that could hinder the implementation of future plans. Kassab (2010) affirmed that the heads of academic departments managing their time wasters well, and they are able to reduce them in order to providing more time for other activities.

According to the view of the researcher the wide use of the principle of control over time wasters by heads of academic departments in Libyan universities was due to a rejection of all activities that would be a possible waste of time, since heads of departments need more time for teaching in other universities. It was affirmed previously that the planning and organizing of work time with its specific principles are not practised well, because they are related to the managerial activities, and require a high level of management skills. Therefore, leaders are weak in dealing with paper work, the organization of the work environment, and in determining the objectives of the department. Green (1988) affirmed the weakness of heads of academic departments in management skills because of the lack of training programs, while Rohrer (1990) stated that most of heads of academic departments prioritise managerial duties, depending on previous experience.
Libyan universities suffer from the lack of training and development programs, as well as the lack of administrative sanctions for any failure in achieving administrative tasks. The weakness of heads of departments in the Libyan universities in the practice of management is due to administrative, legislative and personal factors. Legislations that were issued by the Ministry of Higher Education have allowed the heads of academic departments to work with several universities at the same time. This leads to the neglect of administrative tasks, planning and organizing because they focus on teaching at other universities. Therefore, control over interruptions of time has gained the highest level in order to create more time for teaching in other universities. This problem has increased with the lack of attention given by Libyan universities to providing workshops, conferences, seminars and training courses to develop these skills.

Overall, the principle of control over interruptions of time has been given the highest priority. This principle is usually listed within the process of control over time, where the operation of control over time already had the highest level. This finding agreed with those of many previous studies such as those by Muhsen (1997), Al-Mulla (1991), Al-Qaryouti (1985), and Shehata (2005). The findings obtained in the study of Al-Jeraisy (2004) about effective use of time by Saudi managers from an Islamic perspective affirmed that the attitudes and views of most managers highlights the importance of time as being an valuable resource that must be invested in the work. However, such processes have never been practised effectively. Time organizing and planning were very poor, especially the principles of organizing of paperwork, setting goals, and priorities, supplying information, and delegating to colleagues. These features were also apparent in the current study.

5.4 The third question: What factors impede the practice of time management?

This question was addressed to determine which time wasting practices are confronting heads of academic departments in Libyan universities during work time. Referring to the literature it can be recognized that the concept of wastage of time is a relative concept, changeable according to the individual, time and location. The literature review presented different views about classification of time wasters, some previous researchers classify time wasters according to poor time management operations (Al-Mulla, 1991). Whilst others stated that wastage of time due to experience, gender, qualification level, economic and standard of living, social habits, level of civilization, lack of awareness of behavioural and social values...
about the importance of time. Accordingly, researchers divided time wasting as being due to two groups of factors, as shown in the literature review: external and internal factors. External factors are the factors that are outside the control of heads of department, whilst internal factors are the factors that can be controlled by heads of academic departments.

According to the quantitative findings the greatest time wasters are external factors, such as poor channels of communication between department chair and faculty, hesitation in decision making due to lack of essential information. These findings are consistent with the work of Al-Zwai (2004), Al-Mulla (1991), Baira and Durra (1998) and Al-Jeraisy (2004). The qualitative findings referred time wasters also to external factors reflected in unexpected visitors as a social factor, as well as the instability of Libyan universities management as a managerial factor. Respondents also stated that it is hard to deal with these factors due to the nature of social relationships that makes it difficult to reject or end an unscheduled visit for fear of social criticism, and they cannot deal with the instability of Libyan universities' management due to dependence on Libyan government policy.

On the other hand, Sharif and Ismail (2010), Cemaloglu, and Filiz (2010), Oshagbemi (1995) and Malaika (1991) related time wasters to internal factors, as well as poor implementation of management operations such as poor delegation, inability to say no, and an inability to deal with unexpected visitors, poor planning, instability, irresponsibility, and uncertainty of purpose, failure to determine priorities, phone calls, and unplanned meetings. They all agreed that those factors make it difficult for managers to stick to their plan and result in delay of work. According to Dora (1991) and Baira and Durra (1998) time wasters in Arab societies due to weakness in practice of time management operations - which indirectly supports the first and second findings in the present research. Dora (1991) added that the greatest time wasters in Arab organizations are related to poor time organizing, since Arab managers avoid delegation because they do not trust their followers. Baira and Durra (1998) identified time wasters of Arab managers as the lack of trust in followers, lack of desire in the delegation process, bad filing systems, and bad communication systems.

As stated previously, the political system in Libya has negatively affected the organizations because the Libyan political system makes its decisions without prior clear studies on the
nature, the needs and circumstances of institutions including universities. The Libyan universities suffer from constant instability that negatively affects performance. In addition the organizational aspect in Libyan universities suffers from the lack of clarity in procedures, policies and regulations, as well as poor communication channels and weakness of delegation processes because of lack of trust in followers. Collectively these reasons lead to wastage of work time.

5.5 The fourth question: Are there significant differences in the levels of the practice of time management processes as a result of key variables, including: managerial experience, specialization, qualifications, gender and number of universities they are working with?

This question was addressed to participants in order to achieve one of the research objectives, which was to identify significant differences in the practice of time management according to several variables, as well as discussion it in light of previous related researches as follows in the next sub-sections

5.5.1 Managerial experience

Managerial experience plays a major role in the effectiveness of managerial performance, and has a positive impact in management work. Many researchers affirmed that it is expected to contribute to the long experience in distinction of the performance of the heads of academic departments in the practice of time management. Long experience is more important than the rest of the other categories of experiences due to the different administrative and academic positions that are faced and since experience improves the ability to support others, and invest management resources to improve their performance in the practice of time management. Therefore, the researcher attempted to examine whether the managerial experience of heads of academic departments in Libyan universities develops and supports the managerial ability to manage their work time within Libyan culture. By applying one-way ANOVA where the research sample had been divided into three categories, because most of heads of academic department were from younger groups and most of them ranged between low and medium level.
It is important to indicate that this finding affirmed that there are no significant differences according to years of experience. The finding contradicted those of others such as Kinkley (2003), Al-Ghamdi (2008), Robertson (1999), Jaber (2004), and Rohrer (1990) who all agreed that long years of experience positively impacts on practice of time management and increases the ability to manage time well. On the other hand, the finding is consistent with the work of Souri (2008), Al Babtain (2008), Heydar and Bayoumi (2006), Al-Zwai (2004), Edward (1991) and Taylor (2007) who all agreed that the experience period has no effect on time management in practical, and managerial skills generally. Furthermore, the participants in the interviews also divided into two groups; one of them stated that longer experience is better in time management; meanwhile the other group stated that all managers are subject to the same rules and regulations, and they applied equally whatever the level of experience. In addition, the researcher interprets this finding by saying that the years of experience are just an accumulation of the number of years in the administrative field, since Libyan universities have never arranged any training courses or development programmes to develop and improve their managerial performance.

5.5.2 Specialization:

Regardless of specialization, all heads of academic departments as academic leaders are required to have leadership skills that enable their followers to implement the department strategies, and to achieve the department objectives at the highest level, since the specialization is a special knowledge within a specific scientific frame (Ramdan, 2005). Therefore, participants were divided into two groups according to their specific scientific specialization (for more details see chapter four) in order to examine whether there is a difference among heads of academic departments according to their specialization. The quantitative findings affirmed that there are no significant differences between heads of Humanities departments and heads of Science departments. Also, the qualitative findings were consistent with this; since respondents agreed that the specialization does not affect on the effectiveness of time management. Rather, it was suggested that the effectiveness of time management depends on administrative and subjective abilities and skills that differ from one person to another regardless of their specialization. All are subject to the same management methods and strategies in their work, therefore, as Al-Ghamdi (2008), Ramadan (2005), Al-Zwai (2004), Dhaoy and Qatami (1997), and Muftah (1996) noted that the difference in specializations has no impact on the practice of time management.

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5.5.3 Qualifications:
As noted by previous researchers; the level of qualification is an effective factor in the practice of time management (Abu al-Kheir, 2008; Al-Ghamdi, 2008) since the higher-level qualifications provide some experience of generic skills in this area. In Libyan universities the process of selecting the heads of departments does not depend on qualification factors. In this research both the quantitative and qualitative findings agreed that the qualification does not support the ability to practice time management well, since the findings affirmed that there are not any significant differences between heads of academic departments whether holding Masters’ or Doctorate degrees. This finding has been suggested provisionally by other researchers, such as Sharif and Ismail (2010), Al Babtain (2008), Ramadan (2005), Al-Zwai (2004), and Alrasbi (1999). In order to justify this finding the researcher adopts the view of some participants that qualification is not important in the administrative field, and has no effect in terms of administrative work of heads of departments. Rather, it is just the increase in the balance of scientific knowledge in the field of the specialization that is relevant. Time management depends on managerial skills that enable heads of academic departments to invest their work time by adoption of time management operations effectively.

5.5.4 Gender
As mentioned previously, females within Libyan culture as well as other cultures around the world play many roles at the same time. Therefore, the researcher notes that the female faces the lack of time more than males due to these different roles that mentioned in the previous chapters.

This fact was proved by some researchers from different cultures such as Taylor (2007, Garni, 2007), Gouging and Yonzin (2000), Baydas (1995) and Wells (1993) concluded from their researches that females are less able than males at efficient use of time. On the other hand, the present qualitative and quantitative findings confirmed that there is no significant difference between males and females in the practice of time management, some of the participants stated there were no differences since they follow the same rules and regulations under the central management of Libyan universities. Others added that time management needs specific skills dependent on personal capabilities regardless of gender. Therefore, the researcher justifies this finding by saying that within Libyan institutions there are no differences in practice of time management. Women have many duties outside and inside home, and the men do more than one job as heads of academic departments, and work at
more than one university. Thus both suffer from lack of time because of the many duties they do in their work life. This finding is consistent with those of Elsori (2008), Heydari and Bayoumi (2006), Al-Zwai (2004), Edward, (1991) and Ramadan (2005).

5.5.5 Number of universities that the head is working in

This variable has not been examined by other researchers and it was created in this research due to some aspects of legislation that allowed academic staff members to work as a co-operator at several Libyan universities by the signature of many contracts with several universities at the same time. This situation led to the problem of loss of balancing roles to provide the necessary time for administrative duties and time for research and teaching. Therefore, it is necessary to determine whether the variable of the number of universities has any impact on practice of time management of heads of academic departments. Participants were divided into two groups (for more details see chapter four).

The expected finding according to this variable was there would be a difference in the practice of time management in accordance with this variable, and that heads of academic department who worked in more than one university would have less ability to practice of time management than others who work in only one university. It is interesting and notable that respondents to the questionnaire did not indicate that working in more than one institution added to the complexity of time management. This is counter-intuitive and belies the logic that working in more institutions must cause problems in terms of travel, organization and curriculum, all of which affect time management. One can only conjecture why this response was made. It may be that heads of department did not wish to criticise such a common practice since it is only by working in more than one institution that they can derive a sustainable income. It is important to note that several respondents contradicted this response in the interview phase of the research when the researcher was able to explore the issue in more depth.

Most of them agreed that the overload of work certainly would lead to poor use and investment of time resource. Consequently, heads of academic departments are less able to manage their time effectively due to the burdens and tasks that are performed at various universities, as well as their social lives and responsibilities. According to the view of the researcher it is hard to find an explanation about this fact. The researcher noted no differences between heads of academic departments according to the number of universities due to the
pressure that they face during their work time. Even with those who work at only one university, heads of academic departments, regardless of the number of universities face several problems such as teaching load, number of students, central university management systems, the instability of the organizational structure of universities as a result of the constant change of the academic leadership.

5.6 Conclusion

Both qualitative and quantitative findings indicated that control over time is the most common operation practised by Libyan heads of academic departments in order to ensure and provide time to work on teaching in other universities. Some evidences gained from qualitative data suggested that time management operations are not practised well by heads of academic departments in Libyan universities. However, control over time is practised better than the other two operations under scrutiny, because of the attempts of heads of academic departments to provide more time for other duties at other universities. Another finding related to the principles of time management is that control over interruptions of time is commonly used by the heads of academic department. This principle largely related to process of control over time, whilst the other principles used less frequently, they were related to time organizing such as having an organized desk, and office free from clutter, the use of new technologies such as computer and fax machine to save time, and delegation.

Both the qualitative and quantitative findings indicated that most time wasters related to what can broadly be defined as social issues since heads of academic departments in Libyan universities are living and working within a social system which cannot be controlled due to the nature social relationships in Libyn contemporary culture. Also, there are some organizational factors in Libyan universities, such as weakness in the practice of managerial operations represented in poor planning, delegation, lack of effective channels of communication, and inability to make decisions because of the lack of proper information systems. In addition the social and cultural framework in which Libyan heads of academic departments live includes weakness of the inherited cultural and civilizational attitude toward time, as well as a lack of awareness of the value of time and compliance with customs and traditions. All these challenges negatively affect the practice of time management by the heads of academic departments. Furthermore, the political environment in which the Libyan universities are working is an influential factor in the management of time through the
prevalence of centralization, instability in Libyan administration and structures because of dominance of a bureaucratic Libyan administration.

Regarding the research variables - which were identified above - whether there are any differences in the practice of time management operations, the obtained findings affirmed that there were not any significant differences between heads of academic departments in Libyan universities in the practice of time management operations. The researcher supported this finding by referring to other previous research in the same field, and attempted to provide a clear explanation of the results in light of the facts and circumstances of the heads of academic departments in the Libyan universities.
Chapter Six
Conclusion of thesis

6.1 Introduction
In this chapter, the researcher aims to remind the reader of the importance of the objectives which were outlined in the first chapter and summarize the results which have been obtained through the analysis of quantitative and qualitative data in the light of their importance to the heads of academic departments in Libyan universities in particular, and academic leaders in general. The researcher also aims to determine the scientific contributions of this findings to knowledge as well as identify the gap in this subject whether in literature or in the line of further research, in addition to the challenges faced by the researcher during the period of work to research, and finally the researcher explains its recommendations in light of the obtained findings.

6.2 An overview of the research
This research aimed to provide a clear background to the practice of time management operations of heads of academic departments in Libyan universities which was reflected in the planning, organizing and control over work. These administrative processes are the basis of success in the management of any resources; especially time resources, the nature and characteristics of which were identified previously.

The justifications and motives for choosing this topic to be researched, as mentioned in the first chapter, lies in the nature and strategies of university administration in Libya and the circumstances of the academic department heads in the Libyan universities compared with their counterparts in other universities. Furthermore, departments heads play a greater role when compared with other leaders since the heads of departments act as executive leaders and are responsible for the preparation of plans and projects which have been defined by the university board. Equally, they are responsible for the accomplishment of these plans through the provision of all the necessary requirements for the successful completion of strategic plans.
The department head position remains one of the most challenging and important jobs at any university. The head of department faces a myriad of issues that range from curriculum development to hiring faculty, and from managing resources to establishing a vision (Welch, 2007). Heads of departments represent the academic and administrative leadership, and have multiple tasks and overlapping roles. They face many different challenges since their work is not limited to running and managing of the affairs of departments routinely and conducting only its organizational issues. Indeed, the role must include two interconnected and integrated sets of activities: the first is the academic one reflected in the educational and research processes which are the main objectives of the university; the second is administration, which is responsible for creating the right climate for the implementation of both teaching and research. Therefore, the researcher realized that the academic department head occupies a complex administrative position with duties towards students, colleagues, other managers and the local community.

Most of the interested researchers agree that the heads of departments usually work on two inter-connected sets of issues. Therefore they divide their duties into academic, educational and teaching affairs, as well as the managerial and leadership role. For instance, Earley and Campbell (1998) indicated that the main difficulty that the heads of department face is the lack of time, because of the variety and complexity of their tasks. The challenges in dealing with time within the Libyan institutions are increased, especially within institutions of higher education due to the major and rapid changes that have taken place in the sector in the last ten years. These new challenges and the change in the Libyan environment have put the focus on leadership in higher education. This change was a consequence of the instability in the organizational structure of higher education.

For these reasons the researcher argues that this research is both necessary and helpful in order for university administrators at the executive level to identify the problems and shortcomings that hinder their work and especially those which are related to the administrative skills relating to the investment of time. Accordingly, this study highlights the importance of establishing a local study based on the particular circumstances, needs and problems existing in Libyan universities. It sought to examine the nature of time management, and to identify those factors that impede effective time management.
Thus, this study aimed to identify and determine the extent of practice of time management by heads of academic departments in Libyan universities according to the specific fields of planning, organizing and controlling time in order to identify which operation is more practised by heads of academic department. The researcher observed that due to the nature of university objectives, the complex roles, responsibilities of heads of academic departments in Libyan universities, and issuance of decisions that allow academic staff members to work at more than one university, work pressures have been exacerbated. In addition, social and political pressures have affected and are still affecting negatively the policies of universities, and have contributed to the instability of their organizational structures. This has led to continuous change in leadership and the issuance of the contradictory decisions. Moreover, poor funding has led to a poor work environment and a lack of the resources that could contribute to saving time. However, the examination of activities which are undertaken by Libyan heads of academic department in order to achieve the departmental goals carried out in this study suggests there are no differences in the practice of time management according to the research variables.

6.3 Summary of the main research findings

Since the researcher used the mixed approach in the current research she obtained both quantitative and qualitative findings to achieve the objectives of the research. The gathered findings obtained from both quantitative and qualitative data provided rich information about time management operations according to the specific fields of planning, organizing, and controlling of time when attributed to the variables of managerial experience, gender, specialization, qualification and the number of universities that the head is working. These findings are useful in providing a good and clear background about time management operations as the most important issue to be discussed especially within Libyan institutions as mentioned previously. Through the analytical process, the researcher discovered many different findings, which were subjected to discussion and interpretation together with the main findings within a coherent conceptual context.

As mentioned in the analysis chapter, the main finding obtained affirmed that control over time is the most commonly practised part of time management operations by Libyan heads of academic departments, whilst the other defined operations are at a lower level. Some evidence gained from qualitative data suggested that time management operations are not
practised well by heads of academic departments in Libyan universities. However, control over time is practised better than the other two operations under scrutiny and some of the evidences obtained from the qualitative data indicated that time is considered a very important resource according to Islamic rules. Yet heads of department do not appear to deal with time well because of social factors and a lack attention to the value of time. Some respondents added that Libyan society, including universities, is facing other managerial problems such as administrative corruption and dependency.

Another finding relating to the principles of time management is that control over interruptions to time is commonly used by the heads of academic department. This principle is related mainly to process of control over time. On the other hand, the researcher also concluded that the principles related to time organizing have been poorly used by Libyan heads of academic department and it was felt by the researcher that the determining of the most used principles would provide more details about the specific implemented strategies to manage time.

With regard to the most impeding factors in the practice of time management, the researcher affirmed that the most significant time wasters are due to external factors. In more detail, the quantitative finding referred time wasters to external factors such as poor channels of communication between department chairs and faculty, hesitation in decision making due to the lack of clear information. The qualitative findings also affirmed that the greatest impediments to effective time management are external factors such as unexpected visitors and the instability of Libyan university management. Respondents also stated that it is hard to deal with these factors since they are part of the nature of social relationships. In addition, the instability of Libyan university management cannot be dealt with due to its dependence on the Libyan government policy.

According to the research variables which were identified as managerial experience, specialization, qualifications, gender and the number of universities that the head is working in, the obtained findings affirmed that there were no significant differences between heads of academic departments in Libyan universities in the practice of time management operations according to the above variables. The qualitative findings also affirmed the quantitative findings. The respondents interpreted this by saying the effectiveness of time management depends on administrative and subjective abilities and skills which differ from one person to
another regardless of their managerial experience, specialization, qualifications, gender and the number of universities they are working with, since they follow the same rules and regulations under the central management of Libyan universities.

6.4 Key themes

The practice of time management is the best strategy to overcome the work stresses that are faced by the heads of academic departments in particular at Libyan universities as a result of the dual role played by the head of academic department as well as the tendency to work at more than one institution. However, Arab societies including that in Libya are still carrying the distinctive features reflected in the backwardness, frustration and apathy in estimating the value of time (Najm al-Din, 2004). This fact was proved by Oweidat (2008), Imam (2003) Asta (2001), and Barakat, (1996) who all agreed that most Arab societies suffer from chaos in social structure, economy, and politics, thus negatively affect on investment of resources, which leads to the prevalence of the features of underdevelopment, chaos, and randomness of organizational processes. Consequentially, the researcher concluded that the cultural, social, political and organizational aspects have an influence on investment in time as a managerial resource, which leads to poor time management. As mentioned earlier, the social and cultural factors are represent by a procrastination pattern, and a lack of respect for deadlines. All of these problems relate to the prevalence of a culture of indifference towards time. Whilst the economic factors are reflected in the economic poverty and low standard of living of Libyan people as a result of the poor distribution of production and income, and economic dependency. This has made a society that lurches between subordination, isolation and confrontation. All these economic factors have encouraged the Libyan heads of academic department to implement decisions issued at a central level regarding working with more than one institution, which has led to weak investment of official work time in their main universities whilst the organizational factors represented in the poor use of management operations include an absence of good planning, lack of clear information, poor communication channels, and weakness of delegation processes.

Asfour (2000) and Alian (2005) noted that there are no job descriptions in Arab institutions and that it is difficult to determine the responsibilities, rights, lines of communication and authority in the organizational structure at the institutions. Along with this there is a lack of
understanding of the applicable laws. All of this leads to many arguments, discussions and evasion of responsibility. Abu Kahf (1987) affirmed that there is weakness in managerial experience, regarding the political factors inherent in the policies of the Libyan government, In addition, there is a culture of underdevelopment, dependency, and corruption, which tends to create confusion at the institutional level. Imam (2003) pointed out that the Arab regimes adopt a system that is not familiar in other societies and this system depends on a manner of buying time through procrastination and indifference to provide more time in order to stay longer in office. In addition the researcher sees that centralization, instability and the dominance of bureaucracy in Libyan administration has led to chaos and the absence of sanctions for any failure in achieving the objectives which have been set for heads of department.
Factors influencing time management processes

Economic
- Economic poverty
  - Low standard of living
    - Poor distribution of production and income
      - Economic dependency

Organisational
- Absence of good planning
  - Lack of clarity of procedures, policies
    - Lack of policies of employment
      - Poor job description

Adopted policies
- Procrastination and indifference
  - Underdevelopment, dependency, and corruption

Social and cultural
- Courtesies at the expense of work time
  - Random and procrastination pattern
    - Weakness of the cultural and civilization
      - Use of open door policy

- Instability of administration
  - Centralization

- Poor communication channels
  - Weak of delegation process
6.5 The contribution of the research to current knowledge

The subject under scrutiny is one of the topics that have not been investigated widely in the Arab and Muslim societies. However, the researcher noted the importance of time in Islam and the interpretation of some Quran verses and prophetic Hadiths. Therefore:

- The research provides a broader concept for time management operations reflected in the planning, organizing, and control practised by Arab-Muslim leaders who work in organizations within in Islamic and Arabic culture in the context of a comparison with the concept of time management within western culture.

- The research contributes to providing a theoretical background in English to the faults and problems of the Libyan administration in general, and the challenges faced by the Libyan universities in the light of their instability and dependence on the policy of government. Most of the previous studies conducted by Libyan researchers on higher education did not refer to these challenges and problems.

- This research contributes to provide a comparative theoretical background in English related to time management according to time and place. The second chapter dealt with the concept and importance of time in the ancient Arab-Islamic culture and western culture, and recently in the Arab-Islamic culture and western culture.

6.6 Professional implications and recommendations

The current research discovered that the practice of time management operations overall is considered low, and the control over time has gained the highest level as one of time management operations practised by Libyan heads of academic departments when compared with other processes such as planning and organizing.

The other main finding relating to the principles of time management showed that the heads of academic departments commonly use control over interruptions of time, on the other hand, it was also concluded that the principles related to time organizing poorly used by Libyan heads of academic departments. Furthermore, the researcher also found that the external factors are the most significant time wasters.

In addition, the findings showed that there were not any significant differences between heads of academic departments in Libyan universities in practice of time management operations according to the managerial experience, specialization, qualifications, gender and the number

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of universities that the head is working. This finding and careful analysis and interpretation within previous researches made the researcher able to provide a range of recommendations which it is hoped will help responsible and senior leaders in higher education, as well as academic leaders in the Libyan universities to develop time management operations practised by the heads of academic departments in Libyan universities in ways which make them distinct in their administrative and educational performance, as well as to improve the administrative and academic reputation of universities in Libya. The recommendations can be summarized as follows:

1- Reconsideration is needed about certain provisions of current articles relating to the duties of heads of the academic department in universities in Libya in the light of global experience and contemporary trends, as well as defining the powers and duties of the head of department accurately.

2- Reconsideration is needed of certain provisions of current legislation and articles, which allow the academic staff members to work as a co-operator at several Libyan universities at the same time in order to reduced the teaching and academic workload and other administrative burden.

3- The process of selection of the heads of academic departments should be in accordance with clear and specific criteria and the leadership and administrative skills are required to manage the academic department.

4- The roles and responsibilities of the heads of department in Libyan universities should be defined whether academic or administrative responsibilities , and should be stable, unaffected by the changes that occur normally in the managerial environment due to their sensitive, critical and executive position in the organizational structure.

5- Activation and creation of the channels of internal and external communication within the departments and committee of faculty and the top university management are needed through the use of modern technologies in order to save time of the head of academic department.

6- Libyan universities should move away from centralized policies and re-consider about the applied policy in respect of decisions and communication as influential factors in time management.

7- In the light of the findings of the current research, the researcher recommends development of the human resources in Libyan universities, creation and provision of workshops, training courses and development programmes to improve, develop and
raise the managerial level and leadership skills of heads of academic departments to contribute to raising the performance levels of Libyan universities.

8- The senior university management should conduct the training and development courses for professional and managerial growth of department heads in order to:

- Enlighten heads of departments about the nature of the academic institution, the nature of their roles and responsibilities and the different aspects of these responsibilities.
- Provide the heads of departments with the necessary skills and attitudes to perform their roles and face the sudden changes as a necessary requirement to fit of the nature of the academic and managerial roles of heads of academic departments.
- Increase awareness of Libyan heads of academic departments about rules and regulations of the higher education relating to their responsibilities and functions.
- Inform heads of departments about the modern management styles, which lead to saving time; such as management by objectives and management by delegating.
- Increase the capacity of heads of academic department to deal with tension, and conflicts, reducing of stress, and other work problems that may arise within the department, and making a closer relationship with the heads and members of other departments, as well as access to assistance and support of top university management.

6.7 Research challenges and limitations

It has already been demonstrated that the current research applied both quantitative and qualitative methods in order to obtain rich data from the participants about the investigated topic and his point has been considered to be a strength of the current research. The population of the research contained all Libyan heads of academic departments in Libyan universities and the field of research covered a large proportion of the population due to the selection of a sizeable random sample using a wide geographical distribution of the questionnaire forms to cover all Libyan universities.
The researcher has also faced other challenges due to the implementation of the qualitative method. Although, interviews allow the researcher to generate a great deal of data relatively quickly and allow people to express their views about a wide range of issues (Walford, 2004), this method is rarely used within the Libyan research environment. Since the researcher used face-to-face interviews and never used any communications technologies, interviews were conducted over three months. It is to be noted that the spread of the interviewees in several Libyan cities that travel to and around those cities to collect the data and this cost the researcher much time, effort and money. Another challenge appeared at the interview stage relating to the level of cooperation of the interviewees. Where it was deemed unacceptable to record interviews, which was frequently the case because of Libyan cultural customs, this led the researcher to use note taking at great cost in time and effort. Another feature of lack of cooperation of interviewees was represented in the lack of compliance with the time of the interview. Some of interviewees did not attend at the specified start time of the interview and some of them cut the interview short because of other appointments, which again caused problems in the research process.

The researcher has critically presented and discussed themes relating to time management in Islam, which required presentation of some of the Quran verses and prophetic Hadith. She also discussed the topic of time management in developing societies and time management in Libyan universities, in addition to other topics related to the challenges and circumstances of the Libyan administrative environment. Thus, another challenge was faced by the researcher relating to the lack of English references on these topics, which required the researcher to undertake extra effort and time to translate facts and ideas and to transfer them from Arabic into English in a formulation to be understood by the reader.

6.8 Further research
The obtained findings of the current research discovered some new ideas and facts relating to management theory in general and organizational behaviour in particular. Therefore, the researcher aspired to cover a lot of areas that are included in this vital issue, but it is not possible to cover all these areas in one thesis. The researcher would hope that other researchers in the subject of time management will go on to cover the following fields in future research:
1. A study aiming to investigate the impact of environmental factors, whether political or social, on the effectiveness of time management for Arab managers.

2. A study aiming to investigate the impact of organizational factors surrounding academic leaders in Libyan universities such as organizational structure, administrative instability and the central administration on the effectiveness of time management.

3. A similar study aiming to determine the level of time management operations from the viewpoint of the academic staff in the department and other academic leaders in the university.

4. A similar study aiming to determine the relationship between the level of practice of time management of heads of academic departments and leadership level or leadership style.

5. A similar study aiming to investigate the impact of development programmes and training courses on the practice of time management operations of academic heads of departments in Libyan universities.

6. A study examining whether working in more than one institution became more problematic. This is a limitation of the current study and further research into this topic would be welcome.

The researcher believes that the findings that will be obtained from further research related to the above topics would have important implications for the academic leaders, time management, and university management in Libya and more widely.

6.9 The overall conclusions

The overall conclusions of the current research are that:

1. By analysis of the time management operations that are practised by Libyan heads of academic departments, it is clear that control over time is the most practised feature of the work of heads of academic departments in this area. The researcher concluded that the high level of confidence gained by Libyan heads of academic departments in the practice of control over time is to ensuring more time to work on teaching in other universities. The interpretation of this finding is confirmed by the work of Momani (2010) and Hamad (1998).
2- Overall time management operations are not practised well by heads of academic departments in Libyan universities due to external factors such as social factors, lack of awareness of the value of time, and the absence of relevant legislation as well as a lack of training programmes. This finding has been affirmed by Hamami and Abd Alhalim (1996) and Taha (1996) who interpreted this by saying that weakness in time management is related to overlapping functions and responsibilities, lack of clarity of goals, and the lack of training courses to raise administrative efficacy.

3- The findings confirmed that control over interruptions of time is commonly used by heads of academic departments in Libyan universities. Al-Mulla (1991) and Albadri (2001) affirmed that Arab managers usually avoid the problems hindering their work for fear of punishment, not for commitment of their work. Al-Zwai (2004) added that control over interruptions of time is a major method that has been used to avoid any obstacles and could hinder the implementation of future plans. Kassab (2010) affirmed that the heads of academic departments are managing their time wasters well, and they are able to reduce them in order to provide more time for other activities.

4- The researcher concluded that instability in university management structures in Libya, and the implementation of traditional philosophies rather than innovative philosophies in university management systems, in addition to lack of modern management methods which can improve skills in planning and organization, have led to weaknesses of time management operations as discussed by Bashir and Ali (2002) and Baira and Durra (1998).

5- Most Libyan heads of academic departments involved in the current research agreed that the time planning process is not practised well due to a lack of a database and clear information such as a basic outline of the decision-making process, to define their goals and determine priorities. This finding is discussed by Jaber (2001) and Abu Kahf (1987).

6- Heads of departments are unable to create a balance between their research, teaching and administrative duties, which leads to a focusing on teaching work since this achieves the highest rate of revenue, as a result to heavy workload Baira and Baira (2010), Muhmmmod (2008), and Ramadn (2005) discussed this issue, and consequently the researcher recommended those responsible in the higher education ministry with reconsideration of certain provisions of current articles.
relating to the duties of heads of the academic departments at the university and issue its own interpretative regulations, in the light of global experience and contemporary trends, as well as define the powers and duties of the head of department accurately.

7- The researcher realized - as heads of academic departments affirmed - that a disorganised work place is a natural result of the cluttering of papers and a lack of modern techniques as a helpful means to save time. This shortcoming, and the paucity of spending on higher education leads to creation an inappropriate work environment and thus negatively affects the work of academic leaders. Academic leaders such as heads of academic departments in the Libyan universities complain as (Muftah, 1996) - affirmed in his study - from lack of modern communications equipment such as fax machines that help speed communications, as well as computers and Internet services.

8- External factors are more time consuming according to the viewpoint of Libyan heads of academic departments; this is related to social and managerial reasons such as unexpected visitors, instability of university, poor communication channels. Al-zwai (2004) Al-Mulla (1991) and Baira and Durra (1989) Al-Jeraisy (2004) discussed and affirmed this issue.

9- Unexpected findings have been obtained in the current research, which affirmed that there were not any significant differences among heads of academic departments in Libyan universities in the practice of time management operations according to the years of their experience. In addition the researcher found that there were no significant differences among heads of academic departments in Libyan universities in practice of time management operations according to specialization, qualifications, gender since they are subject to the same management styles and strategies in their work. The work of Al-Ghamdi (2008), Ramadn (2005), Al-Zwai (2004), Dhaoy and Qatami (1997) affirmed this point. The number of universities where heads of department are working with also has no impact in the practice of time management due to facing similar problems such as teaching load, number of students, central university management systems, the instability of organizational structure as a result of the constant change of the academic leadership. This final fact related to the variable of the number of universities has never discussed, because it had never been researched due to its
relation with laws and decisions that have been issued by the Libyan higher education ministry.

In conclusion, the research investigated time management operations that are practised by Libyan heads of academic department. The major findings have been presented, discussed and summarized in the concluding, chapter. The findings affirmed clearly that heads of academic department face many challenges to invest their work time effectively, and that they need to be supported by university leadership and higher education authorities. Reconsideration of certain provisions of current articles relating to the duties of heads of the academic departments at the university is required, as is clearer definition of the powers and duties of the head of departments. Finally, and perhaps most importantly, training and development courses for professional and managerial growth of department heads are needed in order to provide all the necessary skills to improve university administration in order to meet the needs of students and the wider society.
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Dear head of academic department:

Your name was selected in a random sample and I would like to request your assistance in completing the enclosed questionnaire on time management by heads of department in Libyan Universities. The researcher's work relates to a thesis for the degree of PhD at John Moores University entitled 'An examination of time management operations of academic department heads at Libyan universities', and completing the survey will take approximately 15 minutes.

This questionnaire involves a number of aspects related to your ability to manage your work time effectively. The researcher asks if you would kindly choose the option you think appropriate and relevant to the way that you manage available time through your work day as an academic department administrator. I would like to assure you that the information, results, and personal details will be kept totally confidential and will be used only for the purposes of scientific research.

This questionnaire includes four sections, each section is composed of 12 items and each of these is composed of five options. The four sections are:

**Time planning**: this section relates to the ability to set goals which may be divided into a project, an action plan, or a simple task list. Based on priorities.

**Time organising**: this section relates to how leaders organising the tasks or events by first estimating how much time a task will take to be completed.

**Time controlling**: this section relates to how do academic departments heads dominance over obstacles of time.

**Time wasters**: this section relates to the main factors that may impede the practice of time management according to viewpoints of academic department heads.

If you are prepared to complete the questionnaire please return to the following address in the envelope provided:
Abtesam Elabbar, Benghazi, University of Garyounis, Faculty of Arts, Department of Educational Planning & Administration.

Yours faithfully,
Questionnaire

Time Management Operations of Heads of Academic Departments in Libyan Universities

Institution:

Preliminary data:

- Number of years of your Experience. (  )
- Type of your specialization: Humanities (  )
  Science (  )
- Qualifications: Doctorate's degree (  )
  Master's degree (  )

Gender: Male (  )
Female (  )

Number of universities where the head of academic department working at:

Work at one university (  )
Work at more one university(  )

Time planning:

<table>
<thead>
<tr>
<th>Items</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>I do not know</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- I have a clearly defined set of written objectives for work.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2- plan and schedule my time on a weekly and daily basis.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

261
3- I spend time each day to think about what I should do to accomplish the department goals.

4- I carry out work on the basis of my priorities.

5- I can control over my schedule so that I achieve the department plans within the allocated time.

6- I have a clear idea of what you want to accomplish during the coming week.

7- I use an effective "list" system.

8- I attempt to take time to short term planning (daily planning) in order to achieve the long term plans in my work schedule.

9- My daily activities are linked to faculty priorities.

10- I usually work according to priorities were defined in earlier.

11- I periodically re-assess my personal activities in relation to my work goals.

12- I keep my important dates on a single calendar.

### Time organizing:

<table>
<thead>
<tr>
<th>Items</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>I do not know</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- I usually delegate as much as possible.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2- My desk and office well organized and free of clutter.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

262
3- I identify the critical tasks that lead to the majority of my results.

4- I become a good organised and accomplishing more then i were in the last weeks.

5- I am able to reduce the amount of time i spend on routine paperwork.

6- The secretary answers the telephone calls and knows when to make an exception.

7- The secretary makes my appointments.

8- The secretary opens, reads, and puts important mail on top of my correspondence.

10- I have created “form letters” to assist me with routine correspondence.

11- I allow my assistants to make decisions related to their area(s) of responsibility.

12- I attempt to keep my desk clear of materials except those necessary for completing my top priorities.

### Time controlling:

<table>
<thead>
<tr>
<th>Items</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>I do not know</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

263
1- I attempt to reduce or eliminate recurring crises from my work stress.

2- I can face any time wasters were happened during the past week.

3- I develop a specific performance standards to the level of planned performance at the beginning of each term.

4- I can avoid any non-productive activities.

5- I can meet the deadlines of department plans.

6- I am able to say “NO” whenever i must to say.

7- The secretary divides my correspondence into groups before bringing it to me.

8- I keep a time log to monitor all time wasters every day.

9- I can deal with an unannounced visitors through ending the unarranged meeting quickly.

10- I often utilization the closed-door policy with others.

11- I spend a lot of time to do my personal enjoyments.

12- I have time to renew and improve yourself.

**Time waster:**

<table>
<thead>
<tr>
<th>Items</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>I do not know</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

264
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1-</td>
<td>I usually delay in making a decision for fear that you might make a mistake.</td>
</tr>
<tr>
<td>2-</td>
<td>I can not reduce any wasteful or unprofitable activities or routines.</td>
</tr>
<tr>
<td>3-</td>
<td>I face a problem of poor channels of communication between department chair, faculty and me.</td>
</tr>
<tr>
<td>4-</td>
<td>I start and end meetings on time.</td>
</tr>
<tr>
<td>5-</td>
<td>I define the purpose of meetings prior to starting.</td>
</tr>
<tr>
<td>6-</td>
<td>I usually achieve all the department business without advanced planning</td>
</tr>
<tr>
<td>7-</td>
<td>I am interested in implementation of all department business including the routine business in order to ensure the accuracy of the achieving.</td>
</tr>
<tr>
<td>8-</td>
<td>I am unable to control over interruptions and unexpected visitors more time.</td>
</tr>
<tr>
<td>9-</td>
<td>On an average work day i spend more time with personal enjoyments activities than doing managerial duties.</td>
</tr>
<tr>
<td>10</td>
<td>I am unable to manage the meetings well which lead to waste.</td>
</tr>
<tr>
<td>11</td>
<td>I refuse to answer the phone when engaged in important</td>
</tr>
<tr>
<td>12-</td>
<td>Lack of modern technologies that help us to save time such as the Internet and modern fax machines.</td>
</tr>
</tbody>
</table>

Thank you for completing this questionnaire.

For any information please contact me (Abtesam Elabbar) by:

Email: ibtesam_e@yahoo.com
Appendix B: Interview schedule

An interview about time management operations of academic leaders in Libyan universities

Name of interviewee:
Location of interview:
Date:
Time:

Thank you for consenting to be interviewed. The researcher is undertaking a PhD thesis examining the time management operations of academic leaders in Libyan universities. Therefore, she requires your assistance in order to accomplish her goals. The researcher is grateful for your cooperation. It is expected that the interview will take about 45 minutes to one hour. All the information provided will be entirely confidential. Should you wish to remain anonymous this will be guaranteed by the researcher.

1- Time management refers to a range of skills, tools, and techniques used to manage time when accomplishing specific tasks, projects and goals. This set encompasses a wide scope of activities, and these include planning, allocating, setting goals, delegation, analysis of time spent, monitoring, organizing, scheduling, according to this outline:

1.1- What does mean the term of ‘time management’ to you?
1.2- Is time management important? Why?
1.3- do you manage your work time? Which strategies do you adopt to spend your time effectively?

As any managerial process there are methods or strategies practiced by academic leaders to managing time effectively as:

2- Planning, is scheduling of time via priorities arranging.
2.1- How do heads of academic department planning their work time? In the other words which principle of time planning is commonly used and why?

2.2 -Is time planning important? Why?

3- As you may know organizing of time is the arrangement of all elements of administration, defining and delegating tasks to the suitable staff.

3.1- How do you organize your work time? In other words, which principles do you and other heads of department always use to organize your time?

3.2- Is time organising important? And why?

4- The controlling of the time is a major managerial process, so that some of researchers said, the best starting place to improve use of time is to determine the extent to which you control the time available, according to above outlined:

4.1- How do you control over your work time? Which principles do you use to control over time? And why?

4.2- Do you think that the controlling over time is necessary for academic leaders?

5- Time waster are things that prevent use time effectively, such as unclear objectives, unexpected visitors, and unnecessary meeting,

5.1- Do you analyze the ways of spending your time? If so, which the main problems do you impede use your time every work day?

5.2- How do you deal with difficulties of managing your work time?

6- The managerial experience plays an important role in the effectiveness of management, as well as achieving the objectives of the department. So,
6.1- Do you think the heads of department who have a long experience manage their time better than others of short period experience? And why?

7- According to the initial results which obtained from the quantitative data at an earlier stage of the current research (MPhil stage), there is no difference between heads of department based on specialization. While other researchers indicated that the heads of humanities department more able to manage their departments and invest the management resources (included resource of time) in more effective way.

7.1- Accordingly, do you agree with this result? If so why?

8- Since heads of academic departments in Libyan universities are usually chosen via election, regardless of their qualification whether Master or Doctorate, therefore researcher addressed the question below to determine whether the qualification has no any impact in time management operations.

8.1- Do you think that the qualification has no effect in the management of department's resource (as time resource) effectively, in other words, the heads of scientific departments who hold Masters degree does not differ from the heads of departments who hold Doctorate degree in the management of their time? Why, please justify your answer?

9- In Libyan society and within Libyan culture, female plays many roles at the same time she is a wife, a mother, she plays a social role inside home "doing many things as visiting friends neighbours and family and their reception" in general, she looks after her family as a housewife. However, she plays a functional role outside home as a worker woman. Meanwhile, males working in more one university this leads to increase their complaint about lack of time, therefore, and in order to remove the doubts about who is more capable to manage time (males or females), the researcher addressed the following question.

9-1 Within Libyan managerial culture, do you think that no difference between males females in managing their work time? And why? Please justify your answer.
10- The researcher mentioned previously that some aspects of legislation and resolutions in Libyan universities have encouraged faculty members to cooperate in teaching some courses as a full time at other universities and institutes of Higher Education departments in order to improve their living standards. This situation leads to a lack of time because of the variety of duties including teaching, academic research and academic administrative duties. Therefore, researcher created this variable which has not be investigated by other researchers to determine whether there any significant differences between the heads of academic departments in the practice of time management according to this variable by addressing the following question:

10.1- Since the legislation and laws of higher education have allowed you to work in more than one university in addition to your main university where you work as head of academic department. Do you think that the work with more one University as an academic staff member or as a head of another academic department as well as your duties in your main university as teaching, research and run your department negatively affect in your practice of time management. In other words, heads of academic departments who are working more with university are less ability to manage and invest the time?

Thank you for your time and co-operation.