

CHAPTER 5

RESEARCH DESIGN AND METHODOLOGY

5.1 INTRODUCTION

The main purpose of this chapter is to present and justify the different approaches and methods that have been adopted in this study. The chapter begins with discussing the meaning and the purpose of research in the social sciences, then move to different research strategies and methods. The main aim of this discussion is to justify the chosen research approach and its appropriateness to the current study. The second section will present the research design, which represents the framework that reflects the succession of the research process. This is followed by a detailed discussion of the main components of the chosen design, including both quantitative and qualitative methods. An explanation of the sampling process, including the target population, survey population, and research sample will be discussed. The researcher will also discuss the questionnaire as the main method of collecting the quantitative data, including the questionnaire type, design, construction, translation, piloting, distribution, and collection. The interview is the second source of data in this study; accordingly, the researcher will present a detailed discussion of the interviewing process, which includes the interview structure, procedures, difficulties, and some reflections from the fieldwork. Moreover, a brief discussion of the data analysis methods will be presented, which will focus on the main analysis techniques that have been used to obtain the results. In the final section, the researcher will discuss the ethical issues that have been raised through different phases of the research process.

5.2 RESEARCH DEFINITION AND PURPOSES

Despite the importance of research activity, Hussey and Hussey (2003) argued that it is difficult to describe one definition of what research is. Researchers look to the concept of research in different ways. Some researchers concentrate on the role of research in finding answers; a clear example of this point of view can be seen in Neuman's definition when he illustrated that "*research is the way of going about finding answers to questions.*" (2004: 2). In the same context, Sekaran (2002) defined research as the process which includes an investigation of a specific problem, with the aim to discover answers or a proper solution to it. From another point of view, Mason (1984) described research as the process of linking between the research questions and the philosophical position on the one hand, and the proper data collection methods on the other. Another definition was introduced by Saunders *et al.* who viewed research as "*something that people undertake in order to find out things in a systematic way, thereby increasing their knowledge*" (2007: 5).

Notwithstanding the diversity of the research definitions, the purposes of any research can be one or more of the following: discovering things, solving problems, predicting or expecting things, understanding social problems, changing how people think by offering different solution to a given phenomena, and increasing knowledge of a specific subject (Aaker *et al.*, 1995). As Nachmias and Nachmias (1996) argued, the role of research is to add to the body of existing knowledge, which can be done by discovering new facts or relationships between variables through a scientific systemic process.

Consistent with the previous opinions, the main aims of this study are to find some answers about what motivates Egyptian senior and middle managers in the textile

industry. It aims to measure their satisfaction level and the effect of their personal characteristics on their motivation and job satisfaction, and to identify the effect of Egyptian culture on their perceptions, which added to the body of knowledge in the management field.

5.3 RESEARCH STRATEGIES

There are many classifications of research strategies. However, according to Nachmias and Nachmias (1996), scientific research in the social sciences depends on two major components. The first component is the theory and the other is the empirical research. Therefore, researchers can work in two different worlds; the first is the world of experience and observation, while the other is the world of thoughts, theories, and models. Connecting these two worlds can improve the role of social sciences (Nachmias and Nachmias, 1996; Remenyi *et al.*, 1998).

The connection between the theory and empirical research leads to two different research strategies, namely the ‘theory before research’ and ‘research before theory’. However, these two strategies go by other titles like ‘deduction approach’ and ‘induction approach’ (Nachmias and Nachmias, 1996; May, 1996). The theory before research represents the most common research strategy used in exploring the relationship between theory and social research (Bryman, 2004). In this approach, the researcher begins with an abstract and rational relationship among variables and concepts; then moves towards material empirical evidence (Neuman, 2004). Accordingly, this strategy begins with the theory, then formulating the research hypotheses, collecting the necessary data, testing the hypotheses, confirming or rejecting it, and finally a revision of the theory (Reynolds, 1971; May, 1996). Nachmias

and Nachmias (1996: 47) clarified how the researcher can revise the theory by illustrating that *“if the hypotheses derived from the theory is rejected by the empirical data, make changes in the theory or the research project and if the hypothesis is not rejected, select other propositions for testing or attempt to improve the theory.”*

The research before theory, on the other hand, has a long history in the philosophy of science. It is based on the idea that theories can proceed from a collection of facts, thus making a connection between these facts to generate theories (May, 1996). Neuman (2004) argued that, as opposed to the previous approach, this approach begins with a detailed observation and moves toward more abstract ideas. Nachmias and Nachmias summarized the procedures of this strategy by illustrating the following procedures: *“investigate a phenomenon and delineate its attributes, measure the attributes in a variety of situations, analyze the resulting data to determine if there are systematic patterns of variation, and finally once systematic patterns are discovered, construct a theory.”* (1996: 48).

Despite the difference between the two strategies, researchers must not have a rigid commitment toward either of them when conducting their research (Nachmias and Nachmias, 1996). In this regard, Remenyi *et al.* argued that *“In practice there is a dialectical relationship between these two aspects of research that reinforce each other. There are always theoretical assumptions associated with the collection of evidence and there is always evidence that underpins theory. Far too much is made of the distinction between empirical and theoretical research as both are central to any significant research activity and both are required to make any real scientific progress.”* (1998: 32).

5.4 RESEARCH METHODOLOGY APPROACH

According to Creswell (1994) and Mangan (2004), theory before research (deductive approach) is generally linked with the quantitative approach, while research before theory (inductive approach) is generally based on the qualitative approach. The following section provides an overview of the nature of these two approaches and how both approaches will be used in the context of this study.

5.4.1 Quantitative Research Approach

Quantitative research is the fruit of the natural sciences. It is termed the traditional, the positivist, the experimental, or the empiricist paradigm (Creswell, 1994). It can be described as *“the kind of methods that use standardized measures in order that the varying perspectives and experiences of people can fit into a limited number of predetermined response categories to which numbers are assigned.”* (Patton, 1990: 14). The main assumption of the quantitative research approach is that the design of the research should follow the positivist model, whereas the researcher must control his variables and testing pre-specified hypotheses (Falconer and Mackay, 1999). Although the quantitative approach provides researchers with narrow and thin results, it can also provide the researcher with generalizable results (McClintock *et al.*, 1979). Creswell (1994: 5-7) summarized the main assumptions of the quantitative paradigm in the following points:

- *In quantitative research, reality is objective and singular, independent of the researcher;*
- *There is an independent relationship between the researcher and that being researched;*
- *The researcher’s values must be kept out of the study to ensure it is value-free and unbiased;*
- *Formal language must be used in conducting the research;*
- *Data must be in the form of numbers from precise measurements;*

- *It is deductive in nature, wherein theories and hypotheses are tested in a cause-and-effect order;*
- *The main intent is to develop generalization that can better predict, explain, and therefore understand better the studied phenomenon;*
- *Be context-free;*
- *The study's accurate and reliable conditions can be achieved through validity and reliability tests;*
- *Analysis of data is usually done using statistics, tables, or charts.*

5.4.2 Qualitative Research Approach

On the other hand, a qualitative approach is termed the phenomenology, constructivist, naturalistic, interpretative, postpositivist, or postmodern paradigm (Creswell, 1994). According to Gerson and Horowitz (2002), it involves some sort of direct interaction between the researcher and the real world. Generally, *“qualitative methods permit the evaluator to study selected issues in depth and detail. Approaching fieldwork without being constrained by predetermined categories of analysis contributes to the depth, openness, and detail of qualitative inquiry.”* (Patton, 1990: 13). With the same point of view, Van Maanen (1979: 520) argued that, *“qualitative method is a group of techniques which seek to describe, decode, translate and otherwise come to terms with the meaning, not the frequency, of certain more or less naturally occurring phenomena in the social world.”* The main interest of the qualitative method is to understand the studied phenomenon rather than to measure them (Gordon and Longmaid, 1988). Accordingly, it tends to be an approach rather than being a set of techniques (Morgan and Smircich, 1980); moreover, it can provide the research with substantial and holistic results (McClintock *et al*, 1979).

Creswell (1994: 5-7) and Neuman (2004: 86) summarized the main assumptions of the quantitative paradigm in the following points:

- *In qualitative research, reality is subjective and multiple as seen by the different parts of the study;*
- *There is a direct interaction between the researcher and that being researched;*
- *Researcher's values may affect the study;*
- *Informal language used in conducting the research;*
- *Data in the form of words and images from documents, observations, and transcripts;*
- *It is inductive in nature wherein the main focus is on generation of theory;*
- *Lack of generalisation;*
- *It provides rich context-bound;*
- *The study's accurate and reliable conditions can be achieved through verifications;*
- *Analysis usually done by extracting themes.*

However, no one can claim that there is an ideal approach which must be followed. Both quantitative and qualitative researches have their own strengths and weaknesses that must be considered when choosing the proper research method which can be adopted. The following are the strengths and weaknesses of each approach (see Table 5.1):

Table 5.1: The strength and weakness of quantitative and qualitative approaches

Research Methodology	Strength	Weakness
Quantitative Approach	<ul style="list-style-type: none"> - It can provide wide cover of the range of situation - It can be fast and economical -Where statistics are aggregated from large sample, they may be of considerable relevance to policy decision 	<ul style="list-style-type: none"> - The methods used tend to be rather inflexible and artificial - They are not very effective in understanding processes or the significance that people attach to action - It is not very helpful in generating theories - Because it focus on what is, it make it hard for policy makers to infer what changes and actions should take place in the future
Qualitative Approach	<ul style="list-style-type: none"> - Data-gathering methods seen more as nature than artificial - Ability to look at change process over time -Ability to understand people's meaning - Ability to adjust to new issues and ideas as they emerge - Contribute to theory generation 	<ul style="list-style-type: none"> - Data collection can be tedious and require more resources - Analysis and interpretation of data may be more difficult - Policy makers may give low credibility to results from qualitative approach

Source: Amaratunga *et al.* (2002: 20)

5.4.3 Triangulation

Both quantitative and qualitative approaches can provide a precious contribution to the world of research. There is no restriction on using just one approach at a time, as the use of any of them is mainly dependent on the nature of the research. According to Das (1983) cited in Amaratunga *et al.* (2002: 23):

“Qualitative and quantitative methodologies are not antithetic or divergent, rather they focus on the different dimensions of the same phenomenon. Sometimes, these dimensions may appear to be confluent: but even in these instances, where they apparently diverge, the underlying unity may become visible on deeper penetration... The situational contingencies and objectives of the researcher would seem to play a decisive role in the design and execution of the study.”

In this way, the researcher can obtain benefits of the advantages of each methodology and strengthen the research design, which may help in gaining more accurate information and thus more understanding of the research topic. Moreover, by using mixed methods, the researcher will be sure that the bias that may accrue when using particular data sources, investigations or methods would be eliminated when used in combination with other data sources, investigations, or methods (Creswell, 1994).

The concept of using mixed methods is called ‘triangulation’. According to Mangan *et al.* (2004), there are four types of triangulation, namely (i) data triangulation, where data are collected from different sources or in different times, (ii) investigator triangulation, where data are collected by independent investigators, (iii) methodological triangulation, where both qualitative and quantitative techniques are used, and finally (iv) triangulation of theories, where one theory forms a specific discipline which is used to explain a phenomenon that belongs to another discipline. The logic of using triangulation in social research has been illustrated by Denzin (1978), Van Maanen (1979), and Burgess (1984) when they argued that no single method is adequate for solving the research problem, because each method reveals different aspects of empirical reality. Therefore, multiple methods should be used to fully understand the phenomena under investigation and to enhance the validity and reliability of the research.

Moreover, Greene *et al* (1989) cited in (Creswell, 1994: 175) gave five reasons for combining different methods in one single study. These are:

1. *When convergence of results is needed.*
2. *Complementary, in that overlapping and different facets of a phenomenon may emerge.*
3. *For developmental purposes, when the first method is used sequentially to help inform the second method.*
4. *Initiation, wherein contradictions and fresh perspectives emerge.*
5. *Expansion, wherein the mixed methods add scope and breadth to a study.*

However, triangulation can be expensive and it is limited to the researcher's time frame, budget and political constraints which may affect the amount of triangulation that is practical (Patton, 1990).

5.5 THE CHOSEN RESEARCH METHODOLOGY

From the previous discussion it is hard to claim that there is an ideal methodology that can be applied for all researches, as each research methodology have its own strengths and weaknesses which have been illustrated in the previous section. Moreover, the appropriate methodology depends on the nature of the research itself, as Remenyi *et al.* (1998) draw attention to the research's topic, questions and objectives as the main drives when choosing the applied methodology. The main aim of this study is to explore factors that effectively influence motivation and job satisfaction of senior and middle managers in the textile industry. The study explores the relationship between both organizational factors, personal characteristics, culture variables, and managers' motivation and job satisfaction.

To identify the relationships between these dimensions there is a need to ask 'what' questions which aim to identify the current level of managers' satisfaction, the motivation factors that can affect their performance and the relationship between their personal characteristics and their job satisfaction and motivational needs. This calls for

the use of the quantitative methods to answer these questions and achieve these objectives. On the other hand, according to the exploratory nature of this research, as it is considered to be the first study in Egypt that investigates this subject, there is a need to ask ‘how’ and ‘why’ questions which answer and achieve the research objectives that aim to identify how different job factors can affect managers’ satisfaction and motivation, why managers feel content or discontent about the different organizational factors, and how the Egyptian culture and traditions can affect managers’ perceptions toward different organizational factors, all of which call for the use of the qualitative methods to answer these questions and achieve these objectives. In summary, according to the topic, the objectives, and the questions of this research there is a need to answer ‘what’, ‘how’, and ‘why’ questions which call for the use of a methodological triangulation. The quantitative approach is represented by using self-administrated questionnaire, while the qualitative approach is represented by using both in-depth interviews and field observations to generate the data that serve the exploratory nature of the study. Moreover, this research follows the phenomenological approach which gives the researcher the chance to understand the phenomena under investigation in greater depth and help the researcher to find answers to questions such as ‘what’, ‘why’, and ‘how’.

5.6 RESEARCH DESIGN

A simple but comprehensive definition of research design was introduced by Yin (1989:18), who defined it as *“an action plan for getting from here to there, where ‘here’ may be defined as the initial sets of questions to be answered, and ‘there’ is some set of conclusions (answers) about these questions. Between ‘here’ and ‘there’ may be found a number of major steps, including the collection and analysis of relevant data.”*

Accordingly, any research required two basic stages; the first is the planning stage, in which the researcher constructs the design and the plan of his research, and the second is the execution stage, in which the researcher collects and analyses his data (Sarantakos, 2005). Bryman (2004: 97) and Sarantakos (2005:106) summarized the main purpose of the research design in the following:

- *Provide the researcher with the essential framework for collecting and analysing his data and reflect the succession of the research process.*
- *Offers a systematic approach to the research operation, thus guaranteeing that all aspects of the study will be addressed and that they will be executed in the right sequence.*
- *Makes the steps of the research design clear, enabling the researchers to foresee and prevent eventual errors, bias and distortions.*

Additionally, Babbie (2004) argued that if the researchers clearly specified what they want to find out and specify the right research design, they will be able to reach their objectives.

To reach this end, the researcher set down the following research design that summarizes the action plan of this research, and contains the major steps from the beginning until the research objectives are realized.

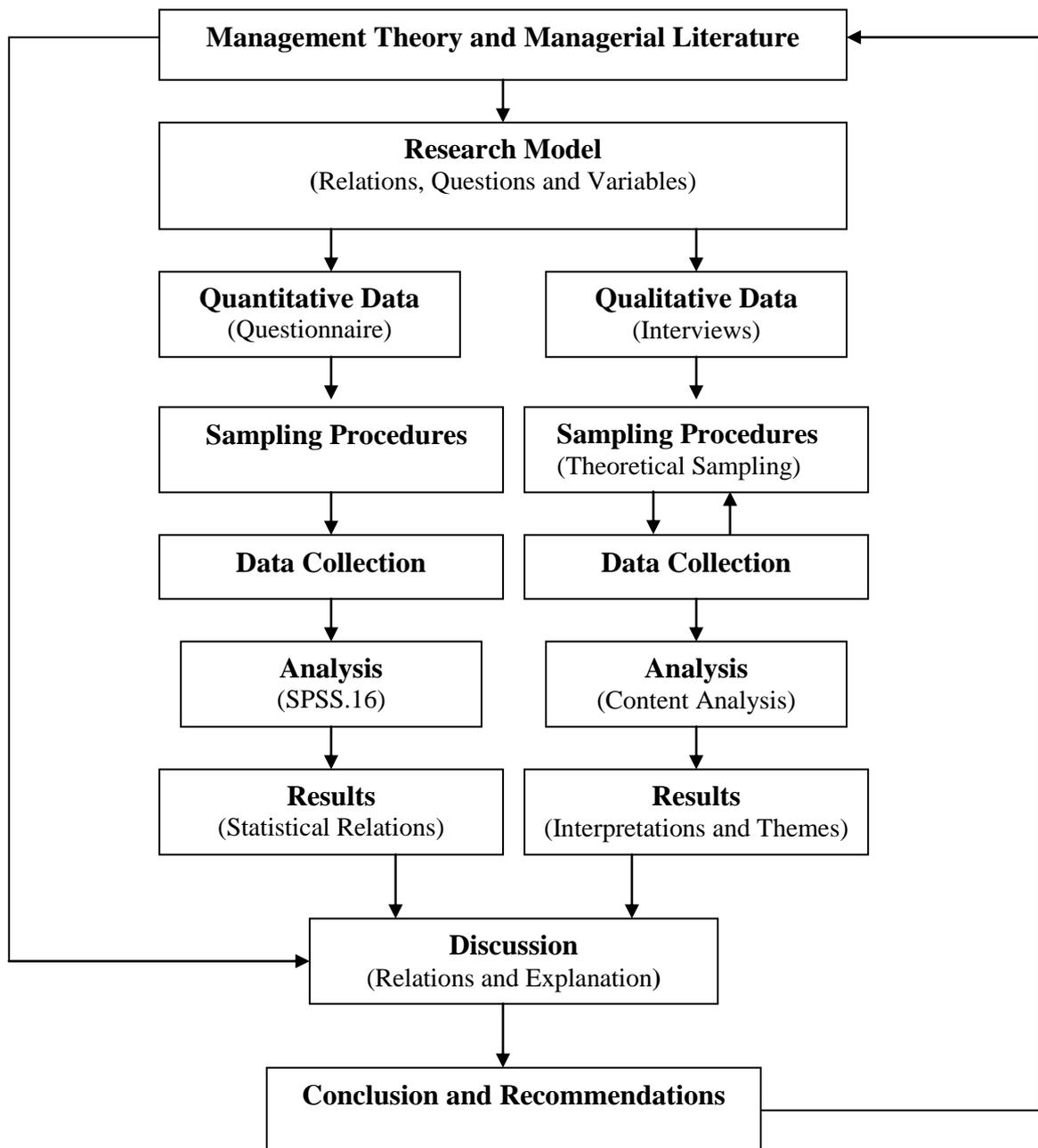


Figure 5.1: Research design overview

Source: Self

The next part provides comprehensive discussions of the different steps of the research design outlined in Figure 5.1.

5.6.1 THE QUANTITATIVE DATA

In the following section, the researcher will present the procedures that have been followed in gathering the quantitative data. An explanation of the sampling process including the target population, survey population, and research sample will be presented. The researcher will also discuss the questionnaire as the main method of collecting the quantitative data. That will include the questionnaire type, design, construction, translation, piloting, distribution, and collection. Finally, a summary of the quantitative data analysis procedures will be presented.

5.6.1.1 The Target Population

Target population is a concept that means the “*population for which information is required.*” (Sarantakos, 2005: 152). The researcher wanted to apply a comparative study between senior and middle managers in private and public textile sector in Egypt. However, by looking at the textile industry in Egypt and its general structure, it appeared that it would prove fruitless to perform such a comparative study because of the following reasons:

1. The public sector represents 91% of the total textile industry in Egypt, with only a share of 9% of the private sector. Such size imbalance makes it difficult to conduct a significant comparative study between them.
2. Most, if not all, private companies in this industry are small companies. A total of 84% of these companies have less than 50 workers while the remaining companies employ about 100 workers, and only two large companies have more than 1000 workers. However, they are not a real representative of the private sector.

3. No official governmental organizations have sufficient records or survey data of these companies to back up the researcher and enable the selection of the research sample.

4. A number of visits to some Egyptian textile private companies revealed that most private companies don't have what could be classified as 'senior' or 'middle' managers, as such positions are held by the owners' family members. Actually, it is managed on a family basis, as the chairman of the board is always the owner and managers are often family members (his sons and/or siblings). Accordingly, the organizational structure of the private sector companies (if they have one) consists of the company owner (chairman of the board) followed by the general manager and a line production manager, thus the total number of managers hardly ever exceeds four managers in most companies. Therefore, comparing managers in private companies with managers in the public sector is impossible and insignificant.

5. The geographical dispersal and spread of the private companies in Egypt will complicate the researcher's task to make a reliable survey of them.

6. The private textile companies are not under the supervision of the Central Authority for Public Mobilization and Statistics (CAMPAS). Therefore, having the (CAMPAS) permission to carry out the study does not obligate these companies to accept participation on this research. Thus, accomplishing such a study depends on personal relations and communications which require time, that the researcher did not actually have.

For the above mentioned reasons, the researcher had chosen the public sector companies which represent 91% of the total textile sector in Egypt as his target population. Private companies were excluded from the study because of the lack of required time, the lack of data, and the lack of the required managerial positions on these companies.

As been mentioned in Chapter 4, the Egyptian textile public sector, consists of 24 large companies owned by the government and work under the management of the ‘Egyptian Holding Company for Textiles and Trade’ and are subjected to its control. The organization of these companies is directed by the Business Sector Law No. 203 -1991. Accordingly, all public companies are managed according to the same roles and regulations, though each company has the right to pass its own bylaws. Moreover, the financial resources of these companies are managed by the Egyptian Holding Company for Textiles and Trade. The following table illustrates the public textile companies in Egypt which represent the target population for this study (see Table 5.2).

Table 5.2: The public textile companies in Egypt and its number of employees

No.	Company	Employees	No.	Company	Employees
1	Misr Spinning and Weaving Co.	34000	13	Upper Egypt Spinning and Weaving Co.	9273
2	Misr-Fine Spinning and Weaving Co.	30109	14	The Middle Egypt Spinning and Weaving Co.	13000
3	Misr-Helwan Spinning and Weaving Co.	18500	15	Orient Linen and Cotton Co.	7000
4	(ESCO) Spinning and Weaving Co.	22002	16	Damietta Spinning and Weaving Co.	6785
5	El Nasr Spinning and Weaving and dyeing Co.	13000	17	El- Motaheda Spinning and Weaving Co.	-
6	The Arab and United Spinning and Weaving Co.	8000	18	Arab Carpet Upholstery	2958
7	Misr-Shebin El Kome SPG and Weaving Co.	10000	19	El Siouf Spinning and Weaving Co.	10973
8	El Nasr Wool and Selected Textile Co. (SUA)	-	20	The Alexandria Spinning and Weaving Co.	6000
9	National Spinning and Weaving Co.	-	21	Dakahleya Spinning and Weaving Co.	8200
10	Misr Beida Dyers S.A.E	7273	22	Delta Spinning and Weaving Co.	7967
11	El Nasr for Spinning, Weaving and Tricot	5818	23	Cairo Dyeing and Finishing Co. S.A.A.	3086
12	Societe Misr Pour la Rayonne	-	24	Modern Textile Co.	-

Source: SEAM¹ (2008)

5.6.1.2 Survey Population

Survey population is the “*part of the target population that is studied.*” (Sarantakos, 2005: 152). As a matter of fact, not all the public companies are actually in production, as three companies have stopped production because of their need for development. Four other companies (relatively medium ones) are being prepared to be sold to the private sector. However, the government has given its assurance that it will keep the other seventeen companies for their positive contribution in building the Egyptian economy.² For this study, the researcher has chosen a non-random sample of three

¹Support for Environmental Assessment and Management
<http://www.eaaa.gov.eg/seam/Manuals/TextileSectorReport/Appendices.PDF>, access date (12/1/2008).

² An interview with the planning managers of the Egyptian Holding Company (15/05/2008).

companies, which are ‘Misr Spinning and Weaving Company’, ‘El Nasr Spinning and Weaving and Dyeing company’, and ‘Delta Spinning and Weaving Company’.

Although the non-random samples have the possibility of bias as the selection process may be affected by human judgment (Bryman, 2004), the researcher believes the selected companies are true representatives of the target population, because of the following reasons:

1. The three selected companies are large and employ a total of 54,967 workers including 386 middle and senior managers.
2. One of these companies (Misr Spinning and Weaving) is considered the biggest textile company in the world.
3. The three chosen companies work in the field of spinning, weaving, dying and clothes-production, hence they cover all textile activities.
4. The public textile companies in Egypt work under the management of one central administration which is the ‘Egyptian Holding Company for Textiles and Trade’. Consequently, the same management rules are applied to all public textile companies. Additionally, during the field work the researcher noticed that the work system in the three companies was almost the same (i.e. the working hours, the salary system, the promotion system, the appraisal system, and managerial problems), which may be due to the fact that all of them are working under the same management. Therefore, the

researcher believes that the Egyptian public textile industry is well represented by these three companies.

5. The three chosen companies are located within an area of 40 Sq. Km. This geographical proximity facilitated the data collection mission, as it enabled the researcher to move easily from one company to another to collect his data.

The following is the background information for the three studied companies which represent the survey population of this research.¹

5.6.1.2.1 Misr Spinning and Weaving Company

The Misr Spinning and Weaving Company is the biggest textile company in the world. It was established in August 1927 and went into production in 1930. Its original name was ‘Misr for Cotton Spinning and Weaving Company’ but was later changed to ‘Misr Spinning and Weaving Company’. The company specialises in spinning, weaving, ready-made garments, dyeing, and the trading of different kinds of textiles. The company supported the Egyptian economy and became the best place from which the highly trained craftsmen graduated. In the beginning of its establishment, the company occupied an area of 32 acres, which increased gradually until it reached 600 acres. The 24 factories that make up the company occupy 340 acres, while the remaining area comprises social centres, playgrounds and housing blocks. It started with a capital of 300,000 Egyptian pounds and was recently valued at 5 billion pounds. The total workforce in this company comprises 34,000 employees with total annual salaries of LE

¹ All the information about these companies were derived from the companies’ pamphlets and from the interviews with the public relation managers in these companies.

240 million pounds (for more information about the structure of this company, see Appendix B).

It is worth mentioning that one sixth of the workforce comprises female employees who work during day shifts in suitable production lines, like ready-made garments, woollen garments, the company hospital, and medical cotton mill. Table 5.3 below summarises the company's product volume during 2007.

Table 5.3: Misr Spinning and Weaving Company's production in 2007

Products	Quantity
Cotton spinning	42.150.000 Tons
Cotton weavings	125 Millions meters
Medical absorbent cotton	2010 Tons
Medical bandages	12.635.000 Meters
Wool spinning	3084 Tons
Wool weavings	3.840.000 Meters
Woollen blankets	700.000 Blankets
Silky textiles	2 Million meters
Ready-made garments	5.479.000 Pieces
Covering cloths (bedclothes, tablecloths)	2.297.000 Pieces
Yarns (small and large towels)	960 Tons

Source: Data analysis

5.6.1.2.2 El- Nasr Spinning and Weaving and Dyeing Company

The El-Nasr Company was one of the achievements of the Egyptian revolution in 1952 which aimed at promoting the industry activities. The company was set up on 23 May 1960 with an initial capital of 2 million Egyptian pounds. The increasing demand for the company's products led to unremitting expansions of its activities, until its capital reached 220 million pounds in 2006. The company has assets estimated at about 800 million Egyptian pounds with a total workforce of 13,000 employees and workers. It contains four yarn factories, two textile factories, and one wool factory and occupies an

area of 150 acres. The factories take up about 100 acres and the remaining space serves the other company's social activities. It is considered one of the pioneers in the field of textile exports, as its total exports have reached 380 million Egyptian pounds from more than 24 countries all over the world. Italy, Greece, East African countries, and the Arab countries are among the company's most important customers.

5.6.1.2.3 Delta Spinning and Weaving Company

After the Egyptian revolution in 1952, the idea of establishing this company came with the intention to have a national project that served the Egyptian economy. It was established to create work opportunities and to reduce the dependency on imported garments. The Delta Spinning and Weaving Company is located in El-Gharbia governorate, an area where agriculture is the dominant activity. The location of the company was selected in this governorate to enable it to be near to the places of cotton plantings as well as a low-cost labor force. It began its production in 1961 with one factory; another factory was added at the end of the seventies. Moreover, in 1983, two other factories were established in Tanta town. The company started in 1961 with a number of 1000 workers; however, with the expansions and developments of the company, this number amplified continuously to 7,967 workers distributed in the four factories. A total of 86% of the workforce are male and the remaining 14% are female with total annual salaries of 48 million pounds. The productivity of the company is around 10,000 tonnes of yarn per year with annual sales of about 150 million pounds, 30 million of which comes from the local market and the other 120 million from exports.

5.6.1.3 Gaining Access

Attaining the required permissions to carry out the study on the textile companies was both complicated and difficult. The following steps were necessary to get such permission. First, it was necessary to ask the permission of the Egyptian embassy in UK to conduct the research in Egypt. Another similar request was also presented to the Central Authority for Public Mobilization and Statistics in Egypt through the Egyptian Cultural Bureau in London. Moreover, the permission of the Egyptian Ministry for Higher Education was also obtained. As a result, it took four months to obtain the approval for conducting the study. However, when this permission was presented to the managers in the studied companies, they asked for the approval of the chairmen of their companies and the permission of the general representative of the 'Egyptian Holding Company for Textiles and Trade'. It transpired that this was not enough as, besides these approvals, it was necessary to have the approval of each sector head to perform the study in his sector. Moreover, one of the companies asked for the approval of the dean of 'Faculty of Commerce at Tanta University' where the researcher worked as a member of its academic staff. All these required permissions (see Appendix A) had put the researcher under much stress, because of the limited time to perform and finish the field work.

5.6.1.4 Sample Size

The researcher visited the human resources department in each of the three selected companies to identify the actual number of middle and senior managers in each company, who represented the sample units of the research. From their employees' database, they provided the researcher with a directory of the managers and their distribution. They pointed out that, according to the company system, the department

manager and general manager positions were both classified as middle managers and only the sector head position was classified as senior manager. Accordingly, the researcher calculated the number of middle and senior managers in each of the three companies as follows (see Table 5.4):

Table 5.4: The distribution of managers in the three studied companies

company	Middle managers	Senior managers	Total
Misr Company	198	25	223
El-Nasr Company	80	6	86
Delta Company	67	10	77
Total	345	41	386

Source: Data analysis

Data were collected from the entire survey population, after excluding the 20 pilot questionnaires (since they were only used to put up the final form of the questionnaire). A total of 345 questionnaires were distributed, this covered 89.3% of the total managers in the three companies, since the researcher couldn't reach 21 of the managers in the three companies (they were absent or on work missions away from the company locations).

5.6.1.5 SURVEY QUESTIONNAIRE

Generally, the purpose of using the questionnaire was to enable the researcher to measure the characteristics and the opinions of those respondents that can not be simply observed (May, 1996). It helped data to be collected about aspects such as 'what', 'when', 'where' (Remenyi *et al.*, 1998; Bryman, 2004). The following is a description of the different stages of developing, implementing, and collecting the research questionnaire.

5.6.1.5.1 The Questionnaire Type

The self-administered questionnaire was used to collect the quantitative data. According to May (1996) and Bryman (2004), there are some advantages of using this type of questionnaire. One of these advantages is the low cost involved when compared with administering interviews, as it can save the researcher's time by covering a wider area and a large quantities at the same time. Another advantage is that it is more convenient for respondents as it gives them the freedom to answer in their own time and at their own pace. Moreover, it eliminates the interviewer effect. However, it can not be claimed that the questionnaire is perfect, as there are some disadvantages attached to this kind of data collection. For example, there is no one who can help the respondents when they need some clarifications about answering some questions. Another disadvantage is that, if the respondent begins by reading the whole questionnaire before answering the first question, this may lead to the loss of the question's independency; there is also the probability of losing data when the respondent does not answer certain questions. Additionally, it is not possible to know who actually filled in the questionnaire. Finally, there is the probability of getting a lower rate of respondents (Bryman, 2004).

5.6.1.5.2 Question Design

The starting point for designing the questionnaire is to have a clearly defined problem with specific objectives to be measured (Remenyi *et al.*, 2003), and one of the main requirements when designing the questionnaire is to have a simple and a clear design without any complications. When developing the questionnaire and designing the different questions, the style of the questions was one of the researcher's main concerns as, according to Bryman (2004), one of the most important considerations when

designing the questions is whether to employ open or closed questions. The researcher used both closed and opened questions in the questionnaire. Whereas closed questions forced the respondent to choose from pre-set answers, open questions gave the respondent the freedom to express himself by using his own words. Closed questions were used because of its advantages, namely they are easy to answer, help to save the respondents time, enable the researcher to compare different responses, are easier to code and analyze, useful when asking about sensitive topics, and fewer irrelevant answers can be obtained. However, it have some disadvantages as it may suggest ideas that may affect the respondents; additionally, the respondents may answer it even if they don't have the required knowledge or experience, moreover it forces the respondents to gave simplistic answers to complex subjects (Neuman, 2004). On the other hand, the open questions have the advantage of collecting a wider range of answers, as it gives the respondents the chance to express their own opinions and thoughts. Yet, there is a possibility of getting irrelevant answers, moreover they are difficult to code and analyse and can take longer for the respondents to answer it.

The decision to use both kinds of questions was influenced by the desire of the researcher to gain the benefits of both type of questions and to enrich his data. Moreover, when designing the question format, the researcher did his best to avoid ambiguity, confusion, jargon, emotional language, double-barrelled questions, and leading questions, as these problems may affect the accuracy of the questionnaire (Nachmias and Nachmias, 1996; Neuman, 2004).

Moreover, a five point Likert scale was used to study the respondents' attitudes for each job factor and to measure the study's variables. Each respondent was asked to choose

one of the following: '1' represents 'Very low', '2' represents 'Low', '3' represents 'Neutral', '4' represents 'High', and '5' represents 'Very high'. Using the Likert scale, which is pre-coded, facilitated data processing for SPSS analysis.

5.6.1.5.3 The Construction of the Questionnaire

The questionnaire was developed after a careful review of the literature, and according to the researcher's frequent discussions with his supervisor (see Appendix C). It contains two major parts, these are, the cover letter and the main body of the questionnaire. A covering letter was attached to the questionnaire to explain the research objectives and significance and to ensure the respondents that their participation in the study was totally voluntary. Respondents were also promised anonymity as they did not need to print their names on the questionnaire. It also confirmed the privacy and confidentiality of the data and that it would only be used for research purposes and would not be passed to other external or internal parties without the participant's permission. Moreover, to enhance trust between the researcher and the participants, the researcher provided his telephone number and e-mail address to the respondents and welcomed any enquiry about any issue in the questionnaire.

On the other hand, the second part consists of four main sections. The first section is designed to collect the personal data of the managers; it includes seven questions about their gender, age, education, training, managerial rank, total years of experience, and tenure in current position. These seven personal characteristics were selected according to the previous job satisfaction studies. The second section contains 38 questions about the need satisfaction and the importance of 14 job factors that were chosen based on the study's framework and were adapted from Herzberg's theory (1964). Two ratings were

asked for each factor, the first to measure the satisfaction with the factor, and the second to measure the importance of the evaluated factor. This technique was adopted with some modification from Porter (1961), as he used this technique to measure managers' satisfaction, and it is widely accepted between researchers (Paine *et al.*, 1966; Ivancevich, 1969; Rhinehart *et al.*, 1969; Stephens *et al.*, 1980). The third section contains a performance self-rating scale and consists of 11 self-rating statements adopted with some modifications from the appraisal form of the three studied companies and the researcher's frequent discussions with his supervisor. The final section contains some open questions that give the respondents the freedom to add or to make any comment on any aspect of the questions.

5.6.1.5.4 Translation of the Questionnaire

As the fieldwork had taken place in Egypt, where Arabic is the native language, it was very important to make sure that the words used in the English version of the questionnaire were similar to the Arabic words and reflected the same meaning. Therefore, in March 2008, the original questionnaire was translated from English to Arabic by the researcher, in consultation with two academic members of the management department in Tanta University in Egypt, who both independently repeated the translation from Arabic to English. Then, differences were discussed to ensure the identification of the meaning in both versions, and a final agreement about the Arabic edition of the questionnaire was reached in order to be implemented in the pilot study (see Appendix D).

5.6.1.5.5 Piloting the Questionnaire

Piloting the self-administered questionnaire was a very important step to ensure that the questionnaire is functioning well. This was important because it will be hard for the researcher to clear up any misunderstanding or confusion after distributing the questionnaire (Bryman, 2004). Therefore, a pilot study was conducted to make sure that the questionnaire was clear for the respondents. The researcher distributed the questionnaire to a group of 20 respondents with a proper covering letter introducing the objectives of the study. The questionnaires were handed to five senior and 15 middle managers in the three studied companies; each respondent was contacted personally by the researcher. The respondents were asked to fill in the questionnaires within three days and to provide the researcher with any notes or suggestions about its contents, or its vocabulary. Moreover, during the collecting process, the researcher sat with the respondents to get their comments, suggestions, and to answer their queries. Many of the respondents focused on the importance of illustrating the goal of the study in a clearer and more detailed way. Others had some comments regarding the structure of some questions. Additionally, the substantial majority asked the researcher to attach the permission of the general representative of the Egyptian Holding Company for Textiles and Trade with the questionnaire to ensure the respondents' cooperation.

The researcher collected these suggestions and a modified version of the Arabic version of the questionnaire was then distributed on a wider scale to cover the three studied companies. Because of the researcher's time constraints, the pilot group was also asked for their willingness to participate in the in-depth interviews, to which seven of them agreed.

5.6.1.5.6 Distribution and Collection of the Questionnaire

After piloting the questionnaire and ensuring the cooperation of the respondents, to make sure the questionnaire reached the correct person and to get the highest response rate, the researcher took the following steps:

1. The permissions of both the Central Authority for Public Mobilization and Statistics (CAMPAS) and Egyptian Public Security to perform the research and distribute questionnaires in the three studied companies were obtained. The permission of the general representative of the Egyptian Holding Company for Textiles and Trade to perform the study was also obtained. Moreover, the researcher had received a letter from the dean of the Faculty of commerce, Tanta University, asking the companies to participate in the study and to facilitate the researcher's mission. The three previous permissions were attached with each questionnaire to ensure the participants that they will not face any problem when participating in the research.

2. In Egypt, personal relations make things easier. Therefore, the researcher contacted his former colleagues in the textile sector, as many of whom were in good positions in the three companies. They introduced him to the senior managers in the three companies and offered the researcher their help, especially in coordinating the distribution process and in organizing the collection of the questionnaires.

3. The researcher self-administrated the questionnaires, beginning with the sector heads, then to the managers. The researcher had used the hand delivery technique in distributing the questionnaires, although this technique took effort and time, but there was a pressing need to use it to raise the response rate. As according to the researcher's

experience when conducting a Master Degree in Egypt (the researcher distributed his questionnaire by mail), the response rate was very low (about 5%). This is because of missing concept of scientific research in Egypt and the weakness of the Egyptian mail services; however, when the questionnaires were again distributed in person (hand delivered), the percentage of respondents increased to 78%. Therefore, the reason why the researcher preferred to self-administer the questionnaires was to raise the respondent rate. Nonetheless, this method took a long time and required a great deal of effort, as the distribution process took three weeks, five hours daily; however, the geographical proximity of the three companies had facilitated the researcher mission, as two of the studied companies were in the same city and the third one was only 22 km away.

4. A total of 345 questionnaires were distributed in April and the beginning of May 2008 and the participants were asked to complete and deliver them a week after the distribution process. The researcher used a copy of the telephone directory, which contains the personal numbers of each manager, in order to follow up the questionnaire after distribution and to make sure that the respondents completed the questionnaires before the collection process, and the next process was to collect the questionnaires from the different sectors of these companies, which took about one week. A few sector heads supported the researcher by making subordinates collect them from the different middle managers (in the presence of the researcher) and bring them to the sector head's office where the researcher picked them up. Moreover, there were some managers who collected questionnaires from their colleagues (in the presence of the researcher) and handed them over to the researcher. Table 5.5 shows that 281 questionnaires were collected, which represented 81.4% of the total distributed questionnaires; of these, 34 were incomplete and were removed. Accordingly, 247 complete questionnaires

representing 71.6% of the total sample were processed and coded for the purpose of data analysis. According to Bryman (2004) and Babbie (2004), this rate is considered a very good response rate (see Table 5.5) below.

Table 5.5: The distributed, received, and used questionnaire

Description	Companies	Number	%
Distributed questionnaires	Misr Company	205	100
	El-Nasr Company	73	
	Delta Company	67	
	Total	345	
Received questionnaires	Misr Company	183	81.4
	El-Nasr Company	56	
	Delta Company	42	
	Total	281	
Usable questionnaires	Misr Company	164	71.6
	El-Nasr Company	46	
	Delta Company	37	
	Total	247	

Source: Data analysis

5.6.1.6 Quantitative Data Input and Analysis

The main advantage of using closed questions is that the data gathered is per-coded, and this facilitates the data entry process. Two kinds of data were transformed from the questionnaire to the SPSS programme, namely the 'nominal data' which related to the respondents' characteristics, and the 'ordinal data' which was concerned with measuring managers' satisfaction, motivation and performance. After completing the data input process, the SPSS.16 program was used to analyze the data. The outputs were organized into a format that makes the data easy to understand and be meaningfully reported; one of the ways of achieving that was by using some techniques of the descriptive data analysis. Descriptive data analysis refers to the organizing and presenting of data in an easy, understandable form (Karami *et al.*, 2006). The researcher used the percentage and ratio tables to summarize his row data. The 'mean' was another

statistical tool that has been used to measure the central tendency, as it is believed to be one of the most usable methods in social research. It helped the researcher to measure the centrality of his data, and the measure of dispersion indicated the spread of the data away from the centre (Walsh, 1990). Additionally, 'one-sample t-test' was conducted to determine whether the observed means of the satisfaction factors were significantly different from the midpoint.

'ANOVA' and/or 'Independent t-tests' were applied techniques of significance testing and were employed to assess the impact of the related job factors on textile managers' motivation and job satisfaction, and to determine whether there is a difference in the job satisfaction with work dimensions based on demographic factors or not. The 'Independent t-test' was used to identify the "*outcomes that are significantly greater or less than the population value or in which one population value is significantly greater or less than the value of the other.*" (Walsh, 1990: 112). On the other hand, 'ANOVA' was used to test the relationships between demographic variables and the different facets of job satisfaction. The ANOVA technique is similar in concept to regression techniques, as the statistical program calculates the mean value for each category and performs different tests to see which of the factors significantly affects the outcome (Remenyi *et al.*, 2003). 'ANOVA' test can be considered as "*an extension of the t-test and allows us to compare more than two means simultaneously to determine whether any differences among two or more of them are greater than would be expected by chance.*" (Walsh, 1990: 125).

To test the relationship between job satisfaction and job performance, a ‘Pearson Correlation Coefficient Test’ was applied. The Pearson correlation coefficient measures the degree of linear association between two variables, as the positive correlation reflects a positive relationship between the two variables, and that a tendency for a high value in one variable is to be associated with a high value in the second variable; on the other hand, a negative correlation reflects a negative relationship between the two variables and that a tendency for a high value in one variable is to be associated with a low value in the second one (Aaker *et al.*, 2004). Finally, the content analysis was used for analyzing the data obtained from the open questions to reach the main themes of each answer.

5.6.2 THE QUALITATIVE DATA

To enrich the study data and guarantee the credibility and validity of the data, the researcher used interviews as another means of collecting data. In this section, the researcher will present the procedures that had been followed in gathering the qualitative data. An explanation of the sampling process, the interview procedures, the qualitative data analysis, and finally some reflections from the interviews will be presented.

5.6.2.1 Sampling of the Qualitative Study

There is a unanimous agreement that the sampling procedures in qualitative research are less structured than that of quantitative research (Silvermana, 1997; Mason, 2002). However, there were some issues that had to be taken into consideration when selecting the qualitative study sample; for example, the people who represented the respondents of the study (senior and middle managers), the time of the interview (during the official

hours or after work time), and the place of conducting the interviews (inside or outside the managers' offices). The main intent of the researcher was to cover 20 interviews. However, while the study was in progress, the researcher increased the number of the interviews to 33; this was due to the researcher's concern of enriching the research data and to gain a deeper understanding of the phenomena under investigation. However, taking the decision to increase the qualitative sample was very expensive and time-consuming, but it was worth the effort and the time that been consumed. Table 5.6 below shows the numbers and the distribution of the qualitative sample.

Table 5.6: The number and distribution of the qualitative sample

Company	Middle managers	Senior managers	Total
Misr Company	14	7	21
El-Nasr Company	4	3	7
Delta Company	3	2	5
Total	21	12	33

Source: Data analysis

5.6.2.2 Interviews

Applying quantitative research using mainly close-ended questions to some extent cannot reflect the complex nature of the studied phenomena, since it is only considered as a bird's eye view of textile managers' job satisfaction. Therefore, using the interview as the second method in gathering data provided the opportunity for a deeper understanding and provided another dimension of the phenomena under investigation. The interview was seen to be an important approach, mainly due to the 'exploratory' nature of the study which calls for a comprehensive discussion and understanding, as it helped in answering the 'who', 'how', and 'why' questions and produced rich data about the respondents' feelings and experiences.

Ackroyd and Hughes (1981) defined the interview as a conversation between the interviewer and respondent, in which the interviewer tries to gather the raw data related to the subject of the research which will be used later in answering the research questions. Miller and Rrewer (2003) illustrated that one major advantage of the interview is its flexibility, as the interviewer can ask questions on the spot or change the order of questions. It also ensures a high response rate and gives the interviewer the chance to explain any ambiguities and correct any misunderstandings in the questions. Additionally, the interviewer may obtain clarification from the interviewee concerning what is said and how it is being interpreted. It also can give the interviewer the chance of making a connection between different parts of the conversation. Finally, the interview offers the interviewer the chance not only to hear what the respondents say, but also see how they say it, which can provide a rich source of data. On the other hand, it has some disadvantages as it is expensive and there is a possibility of interruptions as the interviewee may be called away to the telephone or have to deal with other demands, which may disrupt the interaction and affect the quality of the respondents' answers.

5.6.2.2.1 Interview Structure, Construction, and Technique

There are three main types of interview, namely structured, semi-structured, and unstructured interviews. In the structured interviews, the researcher uses pre-set questions and asks all the respondents the questions in the same order and uses the same wording (Maccoby and Maccoby, 1968). In semi-structured interviews, *“the questions are normally specified, but the interviewer is more free to probe beyond the answers and it allows respondents to answer more on their own terms than the standardized interviews permits.”* (May, 1996: 93). On the other hand, the unstructured interviews

begin with the assumption that the researcher does not know in advance the whole question that he is going to use (Miller and Brewer, 2003).

Due to the exploratory nature of this research and the need to have in-depth understanding of managers' attitude, the researcher used the semi-structured interview as it seemed to be the most suitable method of generating the qualitative data. The primary structure of the in-depth interview was set up through reviewing the managerial literature and the researcher's frequent discussions with his supervisor. The primary interview structure included two main sections. The first section related to the interviewee's background, such as his gender, age, position, qualifications, training, and experience. The second section contained the interview questions that related to different research variables (see Appendix E).

The interview's technique chosen for conducting the interviews was face-to-face interviews, as this technique is believed to be an excellent way of achieving a greater understanding of the research problem. Using the face-to-face interviews gave the researcher the opportunity for more interaction with respondents, and thus obtains valuable information, suggestions, and opinions that were not gained through the questionnaire. During the interviews, managers discussed different issues freely and without restriction. Also, the researcher had the chance to ask unplanned questions which arose during the discussions that enriched the researcher's information and helped in achieving the research objectives.

5.6.2.2.2 Piloting the Interview

To ensure that the interviewer's questions and procedures function well, some pilot interviews were conducted. The pilot interviewing covered five managers (two senior and three middle managers) from different companies. The main aims of these pilot interviews were to become familiar with the way of dealing with interviewees, to practise explaining the common questions raised by managers during the interviews, to identify critical points that managers might avoid speaking about or the questions that may make them uncomfortable and how to deal with that, and to identify the best flow and order of the questions. According to the pilot interviews, the researcher was able to set up the final form of the interview questions and structure, also to decide on the best way of managing the interview in order to assure respondents' cooperation. The adjusted form of the interview questions was then implemented to interview 33 managers (the five pilot interviews were excluded, since they were only used to put up the interview strategy and questions). The sample included 12 male senior managers, 15 male middle managers, and 6 female middle managers from the three companies, and from different sectors. Some of those managers were asked to participate in the in-depth interviews during the questionnaire distribution stage.

5.6.2.2.3 Interviews Procedures

The following procedures were used when conducting the interviews:

1. Because of the sensitivity of the respondents' positions and the lack of their available time, respondents were free to choose the appropriate time and place of conducting the interview. Some of them chose the interview to be held in their offices, others chose the company's social club after the official hours. Moreover, according to the respondents'

requests, the researcher defined the expected interview time between two and three hours and also agreed with some of them to divide the interview into two sessions. Then, the researcher put a time schedule for the interviews.

2. Interviews were conducted on an individual basis, and not in groups, to give the participants the chance to express their opinions freely with no fear or hesitation. Another reason for that was to avoid participants influencing each other, especially on opinions that included some criticism of the company's policies which can not be declared in public, especially in the Egyptian governmental work context.

3. Egyptian employees do not like to speak about their work with anyone but their colleagues. Consequently, because the researcher was the first to conduct in-depth interviews with the managers in these companies, it required much effort to guarantee the cooperation of each respondent. Therefore, to achieve rapport with the respondents, the researcher began the interview by introducing himself and with thanking the respondent for providing his valuable time, and assuring the participant that his opinion was very important for completing the research. The researcher also reassured the interviewee that he had the required permissions for conducting the interviews and the data would under no circumstances be used for any other purpose but the study, and that no one inside or outside the organization would ever get access to it. This introduction was very important to achieve rapport and to assure the respondent that his participation was not going to cause him any kind of problems or any blames, and to guarantee the participants' full cooperation.

4. Before asking the questions, an explanation of the study's purpose, objectives, the main parts to be covered, the expected time needed, and the role of this study on improving managers' job satisfaction and motivation were clearly defined.

5. The respondent was free to choose whether the interview was to be tape-recorded or manually written. Most managers preferred that their responses to be written. However, some of those who had chosen to tape-record their interview asked the researcher to stop the recording when they talked about organization policies or their relations with their superiors.

6. The researcher began by asking the demographic questions that identify the characteristics of the respondents, and then moved to the questions concerning managers' expectations and feelings about different job factors. During the interviews, the respondent answered the raised questions and also asked the researcher about some of the interview's questions. Moreover, many of them expressed their personal experience regarding the different organizational factors, as it was the researcher's intention to give them complete freedom and as much time as they needed to explain their opinions honestly. Additionally, the researcher kept handwritten observation notes of all attended interviews, especially for the tape-recorded ones.

7. At the end of the interviews, the researcher thanked the respondents for giving up their time, for their cooperation, and for their participation on the research. He also promised them with a summary of the research results after it was completed.

8. The researcher began the interview process in the middle of April 2008 and completed the interview process at the end of June 2008.

5.6.2.2.4 Reflections from the Interviews

Any researcher must be able to fit with the particular studied situation because the techniques and instruments that can be used in interviewing people in one place may not be suitable in another place. During the in-depth interviews, some important points need to be highlighted and which the researcher would like to mention in order to benefit other researchers who would like to perform similar studies in Egypt, and which the reader coming from outside the Egyptian cultural might find considerably strange. These points can be summarized as follows:

Firstly, taking the decision of participation in this study was not an easy task for Egyptian managers, or at least for some of them, as many of them were worried, if not scared, about voicing their opinions. This is because the topic of job satisfaction is a very sensitive issue in the public sector, as an employee can cause himself a lot of trouble if he criticize the system, the organization, or even his boss. Therefore, it was very important when conducting the interviews to establish a good relationship and a mutual trust between researcher and the interviewee by providing him with all permissions he asked for and by promising him anonymity and confidentiality.

The second point is the noticeable objection of the interviewees to record their answers. Although the researcher asked the participants' permission to tape the interview, most managers replied negatively and preferred that their responses be written. Moreover, some of those who had chosen to tape-record their interview stopped the recording

when they talked about organization policies or their relations with their superiors. Therefore, it seemed wise to agree and not persuade them, otherwise the interview would probably have been abandoned.

Thirdly, the fact that the researcher had the same nationality as the interviewees but belonged to a foreign university made the interviewees feel uncomfortable and considered the researcher to be a foreigner. Therefore, some managers asked for a letter from the dean of the 'Tanta Faculty of Commerce' in Egypt, which asked them for their participation on the research. The researcher actually provided them with such letter to assure their participation, to make them feel comfortable, and to guarantee that they can express their opinions legally without any kind of suspicions.

Fourthly, at the beginning of the first and the second pilot interviews, the researcher noticed some kind of anxiety, fear, and embarrassment on the interviewees' faces whenever a subordinate or a colleague entered their office during the interview. When asked about the reason for that, the first interviewee did not tell, but the second one explained honestly that the person who had entered the office probably thought that the manager was being investigated by a governmental body. This idea was strengthened by the formal outfit of the researcher, since governmental inspectors always dressed formally and used papers or recorders to record the manager's answers. Therefore, the interviewee was embarrassed and rumors spread about the reason for the interview. So, to prevent and stop future embarrassment, the researcher had to change his outfit and wore casual instead of formal clothes when holding the interviews.

Fifthly, the main reason the interviews took so long was that each interview was interrupted many times due to the high importance and the sensitivity of the respondents' positions. Sometimes they were asked to sign or approve some papers or were consulted about solutions for a certain problem. Moreover, many interviewees deviated from the interview questions and talked about their personal life and it was impolite to stop them because, in the Egyptian culture, it is impolite to interrupt older people. Moreover, any sudden interruption may influence the harmonious atmosphere of the interviews. In such cases, the researcher usually let them talk for a while and tried to move to another point. Therefore, the interview took about three hours in average, but this part was out of the hands of the researcher.

Sixthly, a point which the researcher should also highlight here is the language used in conducting the interviews. To create some sort of communication between the researcher and the interviewees, the researcher was careful not to use any English expressions, since Egyptians perceived this attitude as a kind of showing off; accordingly, it can create some sort of psychological barrier between them and the researcher, as using English is not common in the Egyptian working context.

Finally, in order to conduct any research in Egypt one has to start with the 'big boss'. During the pilot interviews, the researcher faced an embarrassing situation when the sector head of the interviewee was passing by the offices and found the manager talking to the researcher; he then ordered the middle manager to come to his office and scolded him for not asking his permission before participating in the interview. Therefore, the researcher changed his strategy and went first to the head of each sector and asked his

permission to carry out the interviews, and began with interviewing him. This approach prevented any future embarrassing situation for both the researcher and the interviewees.

5.6.2.3 Qualitative Data Analysis

After gathering the quantitative data via the interviews, the content analysis was used to reach the main themes (concepts, beliefs, and behavior) of each interview. According to Holsti (1968: 601), the content analysis can be defined as “*any technique for making inferences by systematically and objectively identifying specified characteristics of messages.*”. Both the data that been collected thorough the interviews, the researcher’s notes during the interviews, and the researcher’s observations regarding work settings in textile companies were transcribed. The transcriptions were the main source and the raw data for qualitative analysis. These transcriptions contain managers’ expectations, experience, feelings, and opinions. Two steps were taken to organize the data, the first was a case analysis for each interview to help in organizing the data for each participant around the different interview’s questions, and the second was a cross-case analysis for all interviews to compare managers’ opinions and expectations regarding different interview’s questions. Then data were organized in categories and sub-categories to facilitate the generating of themes which were organized around different interview’s questions. The analysis of the text began by looking for the main themes through conducting a proofreading examination for the text and highlighting the key phrases. Ryan and Bernard (2003:87) argued that “*you know you have found a theme when you can answer the question, what is this expression an example of?*”. In this regard, Denzin and Lincoln (2000) illustrated that, when looking for actions, assumptions, consequences and processes, the researcher had to make a careful line-by-line reading of the text.

Identifying the main themes of the interviews served as a basis for the analysis process as it aimed to reflect the respondents' perceptions toward the different work factors, and measured their satisfaction or dissatisfaction towards these factors. The researcher had used the most common method for describing themes, which is the presentation of direct quotes from research participants, as Denzin and Lincoln (2000: 784) argued that *“direct quotes from respondents lead the reader to understand quickly what it may have taken the researcher months or years to figure out.”* The researcher used segments of text (verbatim quoted words and phrases from different respondents) which represented the main themes and were exemplars of the respondents' satisfaction/dissatisfaction with different work factors to examine the research model and test the research claims and arguments. Moreover, tables were used display and summarize the results of the qualitative data and the following coding system presented in Table 5.7 is used to identify managers' personal characteristics that been attached to each quotation to help the reader to understand the related quotations.

Table 5.7: Coding system of managers' personal characteristics

Characteristic	Code	Explanation of the code
Gender	M, F	M= Male F= Female
Level	Mi, Se	Mi=Middle Manager Se= Senior Manager
Age	1 to 4	1= 40-45 2= 46-50 3= 51-55 4= 56 and more
Interview Order	I ₁ to I ₃₃	I ₁ = Interview No.1 . . I ₃₃ =Interview No.33

Source: Self

For example (M.Mi.4.I₉) means male middle manager in his late 50's and his interview order was 9. Chapter 6 presents the qualitative data related to different work factors which helped to gain a deeper understanding of the phenomena under investigation.

5.6.3 OTHER DATA COLLECTION INSTRUMENTS USED IN THE STUDY

Besides implementing the questionnaire and the in-depth interviews described above, other data collection instruments have also been used, as follows:

5.6.3.1 Direct Observation

Observational evidence is a method by which to generate additional data about the research topic and help the researcher to gain a better understanding of the research topic (Yin, 1994). The researcher spent three months in conducting his fieldwork in the three companies, this long period of time gave the researcher the chance to take field-notes about the work environment (work spaces, lightning, airing, furnishings, and work facilities), managerial practices, managers' behavior, and the personal relationships between managers in the actual work settings. These observations were easy for the researcher since he shares the respondents their language and social background. The researcher wrote down these observations directly after leaving the company. These observations helped to form a general understanding of the work environment, work system, and work problems in these companies and provided another valuable resource of data. It also gave the researcher a deeper and more comprehensive understanding of managers' perceptions toward the different studied factors.

5.6.3.2 Publications and Official Documents

Because of their values, documents play an important role in the data collection process (Yin, 1994). In this study, publications and official documents were another source of generating data as they helped in building the grounds of this study. For example, there was a pressing need to find out the size of the textile workforce in Egypt, the Egyptian textile exports, the contribution of the textile industry to the Egyptian economy, the organizational structure of the studied companies, the applied appraisal system, the number of managerial staff in each company, and the geographical distribution of textile companies in Egypt. Therefore, during the field study, the researcher managed to collect the required documents from the following sources:

- 1- The Central Authority for Public Mobilization and Statistics (CAMPAS).
- 2- Ministry of Industry.
- 3- Ministry of Trade.
- 4- Libraries of the studied companies.
- 5- Various management libraries in Egypt.
- 6- The Egyptian central library of research.

5.7 ETHICAL CONSIDERATIONS

According to Saunders *et al.* (2000), research ethics is the appropriate academic behavior in conducting a research. From another point of view, Homan (1991) defined ethics as the philosophical discipline that is interested in the evaluation of the standards of personal and interpersonal behavior. In spite of a diversity of definitions of what ethics actually is, they all reach the same conclusion in that ethics is doing what is morally acceptable and avoiding what is morally unacceptable for all research parties.

In all cases, meeting research ethics can lead to a clear and better research; moreover, it builds a mutually respectful relationship between the researcher and the respondents and guarantees a win-win relationship in which respondents are happy to respond candidly (Miller and Brewen, 2003). Denscombe and Oliver argued that, by meeting the ethical issues, the researcher can feel more confident that he is not oppressing the people involved (Denscombe, 2002; Oliver, 2003). Moreover, by following research ethics, the researcher opens the research door for other researchers and facilitates their research mission. Therefore, the researcher had taken into consideration the ethical issues from the early stages of his research project; the researcher had put himself in the participants' situation whenever possible and did not consider them as subjects. Thus, the researcher did his best to meet the ethical issues in different research stages as discussed below:

5.7.1 Questionnaire's Ethics

As has been mentioned, a self-administered questionnaire was adopted to collect the quantitative data. Accordingly, some ethical issues were raised. The first ethical issue was informed consent, as participants should be informed about the nature of the research project (Denscombe, 2002; Oliver, 2003; Sarantakos, 2005). To handle this issue, a covering letter was attached to the questionnaire to identify the researcher, explaining the research nature and purpose, ensuring the respondents that their participation in the study was totally voluntary, clarifying the benefits behind conducting this research, guarantee the participants' anonymity, and guarantee the confidentiality of the data.

The other ethical issue that was raised when using the questionnaire was the participants' anonymity as, according to Miller and Brewen (2003), the respondents must remain anonymous. However, when distributing the questionnaire, the researcher obtained a copy of the telephone directory of each organization with the name and the telephone number of each participant and a code was attached to each questionnaire to help the researcher to identify the uncollected ones, and then he called the respondents asking them to complete it. This procedure can infringe upon the participants' anonymity. Therefore, and to ensure the participants' anonymity, the researcher deleted all the names and codes attached to the questionnaires after analysing the data, thus the questionnaire could no longer be associated with specific respondent.

Regarding the participants' confidentiality, all the information that had been gathered was kept confidential, as the information was used for the purposes of the research only and no other parties had the right to see it without the participants' consent. Moreover, to handle the participants' privacy, the questionnaire did not include any personal questions, as this helped to protect the participants' privacy. Moreover, to show respect and to build trust between the researcher and the respondents, the researcher provided his telephone number and e-mail address to the respondents and assured them that he would welcome any enquiry about any issue in the questionnaire.

5.7.2 Interview's Ethics

When conducting the interviews, some ethical issues were raised. First, there was a need to inform the participants about the purpose and the aims of the research, how the researcher is going to use their opinions and discussions, and gave them the freedom to accept or refuse the participation in the research. Additionally, the researcher informed

the participants of their right of withdrawal from the interview, and their right to refuse to answer any specific question or to discuss any topic that they may not want to discuss. Another ethical issue was the participants' anonymity; this ethical issue was raised because the researcher asked the respondents some sensitive questions about their companies' policies and their relationship with their superiors. Thus, the researcher had the responsibility for erasing personal information such as names and had used numbers and letters to refer to respondents.

Furthermore, regarding the privacy issue, some participants felt uncomfortable about using the audio-tape recorder in taping their opinions as they felt that this may threaten their privacy. Thus, to protect the participants' privacy, the researcher asked their permission to record the interview and offered them to stop recording when they ask for that. Moreover, the researcher offered them a copy of what had been recorded. Another important ethical issue in the interview was to give the respondents the respect that they deserved and be grateful to them for giving their time, opinions, and help. Therefore, the researcher began and ended the interview by thanking the respondents for giving up their valuable time and assuring the participants that their opinions are very important for completing the research.

Finally, a printed card with the name of the researcher and his personal contact numbers was offered to each respondent, so that they can contact the researcher if they have any further queries.

5.7.3 Ethics of Gathering Secondary Data

When conducting the fieldwork, the researcher gathered some sensitive information related to the studied companies (e.g. productivity, appraisal form, profits, organizational structure, phone directory, future plans, and organizational problems). Therefore, the researcher had both a moral and legal responsibility to ensure the confidentiality of these data, especially the data which may have commercial sensitivity. Moreover, to ensure no harm would come to these companies, the data were only used for the purposes of the study and no other parties had the right to see or to use it.

5.8 THE OBSTACLES OF CONDUCTING THE FIELDWORK STUDY

Conducting a behaviour survey in Egypt is not an easy task, especially in the public sector. The researcher faced many difficulties when performing the empirical research, which can be summarized as follows:

1- The fieldwork coincided with some demonstrations in Egypt as a result of the increase in worldwide prices. The biggest demonstrations were in Al-Mahalla Al-Kobra, where two of the studied companies are located (Misr Company and El-Nasr Company). As a result, the entry to Al-Mahalla Al-Kobra was closed for two weeks and the company visitors were carefully checked to ensure everyone's safety. Therefore, the researcher had to begin with the other company located in Tanta 'The Delta Company' while making some careful visits to Al-Mahalla Al-Kobra. However, because of researcher's good relations with the officials in the three companies, he managed to bypass the security problems.

2- Because of the lack of scientific culture in the Egyptian work context, some managers were suspicious about the purpose of the study, as it was the first time they had ever participated in a job satisfaction survey. Many managers thought that it may be an attempt on the part of their companies' management to identify those who were either with and or against the company's management and policies. However, their attitude was understandable because they were asked questions about their salary, appraisal system, promotion system, and other sensitive issues. Therefore, the researcher had to put a great deal of effort in explaining the nature and the significance of the research, and attempted to gain the participants' trust by offering them all the documents and official permissions they asked for. However, during the interviews some managers refused to answer some questions, especially those related to their relationship with their superiors or the company policies.

3- There is a great shortage of studies related to job satisfaction and motivation in the industrial sector in Egypt in general and in the textile industry in particular. This shortage led to extra efforts by the researcher in finding similar researches in various Egyptian universities. However, since there is no database connecting these universities, the researcher had to visit each library separately which took a great deal of effort and time. However, after an exhausting search in the Egyptian universities, the researcher found a small number of quantitative studies but did not find any qualitative studies about job satisfaction and motivation in Egypt. Hence, it was difficult to find the data needed to establish the grounds for the research and to enhance discussion, comparison, and the arguments of the study findings.

4- All the interviews were carried out in Arabic. Therefore, the researcher had to translate all the participants' answers from Arabic into the English language which took a lot of time and, hence, slowed down the research progress.

5- Most managers avoided answering the questionnaire's open questions which asked them about their personal opinion and their comments on other questionnaire's aspects. They believed that their handwriting could be identified, which would cause them problems and thus they preferred to avoid answering it.

5.9 CHAPTER SUMMARY

In conclusion, this chapter provided a detailed discussion of the applied methodology in this research. The chapter began with a review of the main research approaches in order to reach the appropriate methodology that can be adopted to achieve the objectives of this research. The nature of this research required an in-depth understanding of the phenomena under investigation. Therefore, triangulation was the chosen approach for collecting the research data, as using triangulation helped the researcher to gain advantages of each of the data collection methods and strengthen the research design. The quantitative approach was represented by using a self-administrated questionnaire, and the qualitative approach was represented by using in-depth interviews which enriched the data that served the exploratory nature of the study.

As has been mentioned, the textile public sector was the target population of the current study, as it represents 91% of the total textile industry in Egypt. The researcher discussed the necessary steps for determining his research sample, and the different reasons behind choosing the three studied companies. The self-administrated questionnaire was the main technique used to gather the quantitative data as it helped the researcher to cover a wider area at a low cost. A covering letter was attached to the questionnaire to introduce the researcher and to explain the research objectives. The questionnaire consisted of four main sections. The first included seven questions aimed to explore managers' personal characteristics. The second section contained 38 questions that aimed to explore the managers' satisfaction and the importance of 14 different job factors. The third section contained a performance self-rating scale, and the final section contained some open questions designed to give the respondents the freedom to add or to comment on any aspect of the questions. The questionnaire was

then translated to the Arabic language and then translated back to the English language to ensure identification. A number of 247 complete questionnaires, representing 71.5% of the total sample, were collected and then coded for the purpose of data analysis. On the other hand, 33 semi-structured interviews (12 male senior managers, 15 male middle managers, and 6 female middle managers) were conducted and the different procedures of conducting the interview were discussed in details.

Regarding the analysis of the collected data, the researcher discussed the main techniques that been adopted to analyze both quantitative and qualitative data. The quantitative data were analyzed by using the SPSS.16, while the content analysis was used to analyze the qualitative data. Moreover, observations, publications and official documents were used to gain a better understanding of the topic under investigation. The researcher had taken into consideration the ethical issues from the early stages of his research project. As been discussed in this chapter, participants' anonymity, confidentiality, and privacy were protected at all research stages and the ethical standards were met in all data collection procedures. Finally, the obstacles that faced the researcher when conducting his fieldwork study were presented.