THE UNIVERSITY OF HULL

UNDERSTANDING STRESS:
A FOCUS ON EXECUTIVE FUNCTIONS
IN SAUDI ARABIA

AN EXPLORATORY STUDY

A dissertation submitted in partial fulfilment of
the requirements for the Degree of Doctor of Business Administration
in the University of Hull

BY

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DEDICATION

This dissertation is dedicated to my family: father, mother, brothers, sister, wife and sons. I ask Allah (God) to continue living in a good status, health and cooperation as well as in a peaceful life.
ACKNOWLEDGMENTS

In the Name of Allah, the Most Beneficent, the Most Merciful

Thanks primarily to Allah, and I will continue to ask for his guide, help, support and forgiveness in all matters of life. The completion of this study was accomplished with the help and support of various cooperative people.

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ABSTRACT
UNDERSTANDING STRESS:
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BY
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THE UNIVERSITY OF HULL
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The dissertation brings together and reports the entire work presented and discussed throughout this pioneering and original research project. This exploratory study utilising primarily semi-structured, qualitative research methodology aimed to develop a model of executive stress by discovering, understanding, describing and sharing knowledge and experience of occupational stress caused by the basic executive functions, among the oil and gas executives in Saudi Arabia. These functions included planning, organising, leading and controlling. This interpretive investigation involved forty-three executives of five major oil and gas firms in Saudi Arabia purposively selected for participation in this exploratory study through audiotape-recorded interviews gathered over a period of eight months from June 2002 to January 2003. In addition, this primary data collection method was triangulated with other secondary methods of observations, focus groups and documentary analysis involving additional twenty executives from other neighbourd Arabian Gulf countries. These considerable qualitative data were systematically managed through primarily manual analysis along with the aid of NUD*IST qualitative analysis computer program.

Common recurring categories, themes and patterns were identified in relation to sources of stress, manifestations and coping strategies along with stressful factors related to internal and external environments. The study findings revealed four significant interrelated eustressful and distressful themes underpinning the basic executive functions of planning, organising, leading and controlling. These were related to information management, performance management, human resource
management and strategic management. The findings revealed that the participants perceived these focused executive functions as a direct source of occupational stress instead of the basic executive functions that were thought of at the beginning of the research. The emerged key patterns related to these focused activities included difficulty of people management, micromanagement behaviour and engineering attitude. Moreover, the study resulted into additional stress factors related to the organisational structure and work style of the internal environment of the organisation. There were also other stressful contributing factors associated with Government interventions, market influences, media focus and social conflict of the external environment of the organisation. Furthermore, the study revealed important personal related factors that could shape and regulate the manifestations of executive eustress or distress. These included experience, personality type, cognitive appraisal and self-esteem factors.

Accordingly, a comprehensive framework of executive stress process based on a dynamic system approach was developed summarising the explored executive stress process and its underlying attributes. This present qualitative study was designed interpretively and qualitatively for exploration or discovery of the topic under investigation. Further, the limitations of this approach were acknowledged, as being subjective perceptions, understandings and descriptions of the oil and gas executives under investigation.

In view of that, this new and original study was hoped to add to the existing knowledge in various related areas such as occupational health and safety, industrial/organisational psychology, human resource management, strategic management and organisational culture. This research could add value to the field of occupational stress in Arabic context in particular and the world in general since there was little research about the types and effects of job-related stress at the time of the study.
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CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

This present study aimed to understand and develop a model of executive stress by identifying, describing, exploring and sharing knowledge and understanding of occupational stress caused by the basic executive functions, among the oil and gas executives in Saudi Arabia. These functions included planning, organising, leading and controlling.

Saudi Arabia, as an oil and gas based country, has not been immune from domestic and international rapid developments and changes influencing upon the entire oil and gas industry. For instance, globalization, economies of scale, cost reduction, uncertainty, speed, efficiency, technology, competition and the need to access new markets, especially World Trade Organization (WTO), are driving rapidly in the Saudi environment. The consequences of such serious challenges compel the oil and gas countries to respond correspondingly by implementing various and appropriate management strategies such as restructuring, re-engineering, total quality management, merging, integration, acquisition, outsourcing and privatisation to maintain profitability, power, stability and position. Subsequently, these changes and consequences have a direct impact on the local and international businesses that have significantly lined the way for an alarming stress rise at the workplace.

Accordingly, this research project attempted to enhance understanding of occupational stress caused by the executive functions, portray executive practices and styles, expand the effectiveness extent of the executive functions, and empower executives to understand and manage the associated occupational stress effectively. A general description of the research project is provided in the following sections of this introductory chapter. These include research background, purpose, justification,
context, aim and contribution, definitions of terms, summary of the chapters and limitations of the study. Some concluding remarks at the end of this chapter are also provided.

1.2 BACKGROUND TO THE RESEARCH

The construct of stress has been considered quite complex to explain, and researchers keenly have attempted to understand and learn more about it and its related aspects, starting with the physiological stress theories by Walter Cannon in 1930’s and Hans Selye in 1950’s and passing through the contemporary psychological theories by Richard Lazarus in 1970’s (Greenberg, 1990). Research thus has continued and revealed that stress directly triggers physiological complaints such as headaches, excessive heart rate and blood pressure, and psychological concerns such as anxiety, frustration, absenteeism and dissatisfaction (Hellriegel and Slocum, 1989; Greenberg, 1990; Sutherland and Cooper, 2000). These consequences have emerged from various facets of life including home, school, environment, society and interpersonal interactions (Riggio, 2000).

Moreover, the earlier researchers facilitated the general understanding of the relationship between stress and body’s reaction, which provided an insight to the related concepts of stress (Cooper and Marshall, 1977). However, researchers lately have strived to understand and explain a different type of stress related to workplace because of the concerns raised up by a range of affected employees, organisations and governments (Weihrich and Koontz, 1993; Riggio, 2000). In particular, Rahim (1996) indicated that the various job-related stress studies have focused mostly on role ambiguities and role conflicts stress variables to describe and measure job stress. In addition, Menon and Akhilesh described the general areas where stress was studied by stating: "Stressors have been studied from different perspectives. Some have focused on organizational characteristics, some on task characteristics and still others on the
personality characteristics of the managers" (Menon and Akhilesh, 1994, p. 13). Therefore, the research on work-related or occupational stress has been a major concern to both academic and industrial communities for the last two decades since the effects of stress not only impact upon employees, but also the health, safety, security and performance of organizations (Schermerhorn, Hunt and Osborn, 1994).

According to Greenberg (1990) and Sherman, Bohlander and Snell (1998), occupational stress annually costs US companies about 150 billion dollars, part of which 10 to 19 billion dollars were annually spent on business executives, which eventually can extend not only to human suffering but also to national economy. Sherman, Bohlander and Snell indicated that these costs were mainly associated with payments of medical treatment, off-duty salaries, health insurance claims, disability claims and death expenditures. In more details, Executive Health Examiners (1983) provided, as indicated below, an explanation about the cost associated with executive stress and its consequences. In the American industry for executives only, about $20 billions per year were lost in hospitalisation costs, early deaths costs and lost man-hours because of stress-related problems. Specifically, about 20-25% of the thousands of businessmen and women every year seen in the Executive Health Examiners suffered from stress related problems and effects, and 5% were severely affected and require specialist support. Moreover, the United States Clearing House for Mental Health Information, as revealed by the Executive Health Examiners, reported that there was a negative impact and loss in their industry by $17 billion annually due to the experienced stress in the past years.

In view of that several consultants regarded stress as the hidden, silent and future malady (Albrecht, 1979; Cox, Griffiths and Rial-González, 2000).
1.3 PURPOSE OF THE RESEARCH

The primary purpose of this research was to explore and understand theoretically and empirically the occupational stress caused by the basic executive or managerial functions (used interchangeably). Henri Fayol, a French pioneer in modern management theory, developed initially the five basic functions including planning, organising, commanding, coordinating and controlling in 1916 in a French language, and was first published early 1950’s in English within the US institutions (Weihrich and Koontz, 1993). Weihrich and Koontz further indicated that management was defined through these basic functions and they are still widely accepted and used to establish organizations, accomplish objectives and manage resources. In fact, the concepts, principles, theories and techniques of management are mostly organised into these basic functions as found in most of the management related books.

Moreover, one widely used definition of the term management to assist in facilitating the discussion and understanding of the topic under study is "the art of getting things done through other people" (Hellriegel and Slocum, 1989, p. 6). Another important definition described management as "the accomplishment of desired objectives by establishing an environment favorable to performance by people operating in organized groups" (Farmer and Richman, 1964, p. 55). Accordingly, these broad meanings of management indicate that it is a dynamic process and ongoing interaction between managers, employees and environment to ensure that the resources and activities of the organisation are handled efficiently toward the set objectives.

In relation to the above mentioned five Fayolian functions of management, various classifications of the basic functions of management were reviewed (e.g., Aldag and Stearns, 1991; Bartol and Martin, 1991; Beamish, Morrison and Rosenzweig, 1997; Farmer and Richman, 1964; Hellriegel and Slocum, 1989; Kras, 1995; Kreitner, 1983; Weihrich and Koontz, 1993). These different classifications were generally found to
fall under four main categories: planning, organising, leading and controlling. For instance, the extended functions of staffing, coordinating, motivating, directing or commanding all could be grouped under one category that is leading function. Therefore, the new perspective examined under this study to explore and understand executive stress concerns primarily the following four basic functions: planning, organising, leading and controlling. In fact, Hellriegel and Slocum (1989) and others considered this specific classification of the basic functions, and thus it was utilized for the purpose of this study. These basic functions are characterised by being interrelated, integrated, and performed in parallel as shown below in figure 1.1.

![Diagram of basic managerial functions](image-url)

**Figure 1.1:** Basic Managerial Functions (Figure 1.2, p. 12)


Furthermore, all levels of managers whether on the top or bottom of the organisation’s hierarchy are required typically to perform dynamically these functions for the success of themselves and their organisations. According to Hellriegel and Slocum, the distinguished differences between the executives as top managers and the lower-level managers in effecting the managerial or executive functions is by being accountable for the overall decisions, directions and representation of the whole organisation, and by the complex nature of job’s exposure to the internal and external
environments. They also indicated that executives, in terms of average daily working hours, spend about 1.5 hours on planning activities, 2.5 hours on organising activities, 3 hours on leading activities, and 1 hour on controlling activities. Weihrich and Koontz (1993) added that executives typically devote 90% of their time on the basic executive functions as the primary tasks of their positions while only 10% of their time is devoted to technical matters. Weihrich and Koontz also indicated that the nature of managerial work is very concise, disintegrated and diverse. In particular, executives seek for shortcuts in decisions, and their personal relationships tend to be normally very dense. The definitions of these basic functions, as explained thoroughly by Weihrich and Koontz, are presented next.

1.3.1 Planning Function

First, planning is defined as, "the dynamic process of making decisions today about future actions" (Hellriegel and Slocum, 1989, p. 12). It is a formal process whereby the organisational visions, missions, objectives and strategies are established. It is required in order to ensure that the overall objectives of the organisation are achieved, and the resources are managed and utilised efficiently and effectively through successful employment of the other executive functions.

1.3.2 Organising Function

Second, organising is another function of the manager or executive in his/her work career. Organising is defined as, "the process of creating a structure of relationships among people that will enable those people to carry out management’s plans and meet their objectives" (Hellriegel and Slocum, 1989, p. 13). The manager needs organising activities to manage the organisation, employees and other resources with set-up plans so that they can be achieved with minimum losses. Organising activities require time and resource management, and a high quality structure from work and employees relations to the activities of the organisation.
1.3.3 Leading Function

Third, leading function is highly involved with all executive functions since the established plans, organisational structure, employees and other resources require a leader who is able to carry them efficiently and effectively. Leading "involves motivating others to perform the tasks necessary to achieve the organisation’s objectives" (Hellriegel and Slocum, 1989, p. 13). In addition, the ability of the executive to influence people and work together freely and actively in order to achieve the organisation’s objectives is a very hard job to do due to the required strong relationship between the manager and the group with different types of personality. Leading includes all kind of communication, directing, promoting, appraising, training and recruiting. In fact, leading function is considered as an essential and critical factor to achieve success of an organisation (Smith and Cooper, 1994).

1.3.4 Controlling Function

Last, controlling is defined as, "the process by which a person, group, or organisation consciously monitors performance and takes corrective action" (Hellriegel and Slocum, 1989, p. 13). Weihrich and Koontz added that controlling function assesses and corrects the performance of the individual, group and organisation to ensure that the current practice is consistent with the established plans. As part of the controlling function, executives set up their expected performance or standards, compare the current performance with those expected performance and then take the necessary action to ensure that the current performance is aligned with the expected performance. Therefore, planning and controlling functions are dynamic activities that work in parallel. Plans actually require always a sort of control measures to ensure that they are implemented as expected.

Accordingly, the aim of the study was not to assess the organizations, but it attempted to understand the topic under study from the eyes of the participants or
executives by developing a model of stress that is applicable to the culture of Saudi Arabia with respect to the functions of an executive in a major oil and gas organisation. This research project essentially strived to achieve the following objectives:

- Clarity in understanding the nature of occupational stress and its various sources and effects by reviewing the related theoretical and empirical literatures in this field.
- Exploration of occupational stress caused by the activities underpinning the basic executive functions as experienced by executives of the oil and gas firms in Saudi Arabia. This exploration served in achieving clarity and understanding of the nature of this type of occupational stress.
- Exploration of other associated factors contributing to occupational stress and its management with respect to the basic executive functions. This included, for instance, cultural aspects, individual differences, organisation, social support, and economical matters, etc.
- Exploration of existing and proposed stress coping strategies from the perspective of the executives and the organisation.
- Conceptualisation, discussion and presentation of the study findings. This conceptualisation served in developing an appropriate and useful framework of executive stress related to the basic executive functions.

In view of the above mentioned objectives, this research project examined occupational stress from a new and specific perspective that has not been yet researched. Accordingly, the following were the associated and underlying developed questions, based on the purpose of this study, that were explored from the perspective of the Saudi executives:

1) What executive function related activities (planning, organizing, leading and controlling) do executives perceive to be stressors?
2) In what ways do executives perceive these stress effects to manifest themselves?

3) What are the stress factors related to the particular work environment (organizational or context of Saudi Arabia) make the executive functions stressful?

4) What individual and organizational strategies are available to executives in order to help them deal with the effects of stress?

5) How do executives think that the effects of stress might best be dealt with?

1.4 RESEARCH JUSTIFICATION

Although occupational stress is applicable to everyone, executives may carry more because of the nature of their work and conditions including their decision-making processes and responsibilities (Pool, 2000). Greenwood and Greenwood (1979) described various reasons that explain why executives are susceptible to stress. For instance, the roles of executives as policy-makers, leaders, mentors, moderators, mediators, change managers, stability handlers and problem-solvers with different work setting, functions and authorities including class, power, risk-taking, uncertainty, external response, and the high responsibility, commitment to work and interpersonal relations constitute conflicting demands and potential stressors. In addition, executives strive to keep their work coherent and congruent to accomplish the mission and objectives of their businesses. In fact, executives are responsible for the decision-making process. Accordingly, it seems reasonable to expect executives to suffer from significant occupational stress as they carry heavy responsibilities taking into consideration the significant influence of the complexities and uncertainties of work conditions and environment, and time and work pressures in addition to the family, economic, social and political factors.

Furthermore, the earlier mentioned significant costs associated with only executive stress is by itself an important factor that justifies and attracts the research on
executive related stress aspects. In general, the survey of the literature showed that the significant efforts exerted on stress related studies focused on finding the physical and/or psychological effects of stress from the individual or employee perspective, given that stress was regarded as either a cause or an effect. Moreover, the majority of these studies were carried out by employing survey questionnaires, which generally did not consider the participants’ feelings, perceptions, attitudes, understanding and experiences.

Therefore, little research unfortunately has been considered on studying stress from the organizational perspective that involves the top leaders or executives. In particular, inadequate research existed, at the time of this present study, on the relationship between occupational stress and the basic executive functions. It actually revealed that the topic under study has not been addressed yet so far. This conclusion was verified by the thorough search in dissertation abstracts, articles and studies from the internet and CD’s, and consultations with pioneered professors in stress related studies. Professor Cary Cooper, a leader in stress related thoughts and studies, was further contacted through personal communication to comment on the topic under study and confirm if it was ever researched before. He responded via an email message included in Appendix E: "This sounds like an interesting piece of research, which to my knowledge has not been done".

In consideration of the above, there is a need to study the related stress and effects caused by the duties and activities of the executives from their perspectives, as they are their day-to-day business. These executives need to feel and understand stress from their own perspective in order to assist in creating the required atmosphere for change in the organization that can assist in managing occupational stress within the entire organization. This type of research can assist in managing stress from its roots rather
than concentrating on finding the surrounded and external factors that contribute to executive stress.

Hence, the basic executive functions of planning, organising, leading and controlling have not received the necessary attention from researchers to reflect their contribution to executive stress. In fact, several executives during the initial development and survey of the topic under study showed their concerns with the practice and processes of these basic functions.

In view of that, the present study attempted to fill this gap by developing a model of executive stress by exploring occupational stress caused by the basic executive functions from the perspectives of oil and gas executives in Saudi Arabia.

1.5 RESEARCH CONTEXT

As indicated earlier, the research context is the Kingdom of Saudi Arabia (KSA), a less developed nation in the Middle East and a significant economic and political key player in the world (Al-Zahrani and Kaplowitz, 1993). Saudi Arabia essentially was selected because of its significant oil and gas based economic and political influence in the Middle East and worldwide. The oil and gas industry was the focus of this study since it is a vital industry in the world economy in general and in Saudi Arabia in particular. In fact, Al-Zahrani and Kaplowitz indicated that the oil and gas industry is fluctuating, and the world economy frequently disturbed by the problems of recession. In addition, they reported that this industry is an active, dynamic, uncertain, changing and high technology working environment that could cause stress to employees. This industry was also selected because it is accessible to the researcher since he works in one of the major oil and gas firms.

Furthermore, KSA is one of the Arab largest countries located in South-Western Asia that is occupying four-fifths of the Arabian Peninsula, and was unified by King Abdulaziz Al-Saud on September 23 1932 (Metz, 1992). The information and figures
about the country's profile, background and geographic map referenced in this entire section are included in Appendix F, as reported by CIA in "The World Factbook", published in 2003. This appendix presented an overview of the country’s geography, people, government and economy. For instance, the recorded area of Saudi Arabia is 1,960,582 square kilometres (756,981 square miles), and population is about 24.3 million. This entire country is also reported to be ruled by a highly centralized political and monarchy system. Al-Zahrani and Kaplowitz (1993) further indicated that Saudi society has a highly homogeneous and collective type culture that is well vigilant to Islamic teachings, principles and values.

1.5.1 Saudi Society and Culture

As indicated earlier, the aspects of Saudi Arabian society and culture is characterised by being guided by Islamic teachings in all life matters (Sebhatu, 1994). Sebhatu emphasised that Islam is the official religion of KSA and has been the most significant contributor in bringing justice to the society and economy, and shaping significantly the culture and law. Islam is not just a religion, but also a way of life that organises the relationships among self, people, society and God, in every aspect of life pertinent to religion, society, business, economy, politics and others (Muna, 1980). Moreover, the values and attitudes commonly observed in the Arabian tribal society in general and the family in particular play a significant role in the high cultural homogeneity of Saudi Arabia (Czinkota, Rivoli, and Ronkainen, 1992; Sebhatu, 1994). These generally include the belief in one God, common Arabic language, adherence to Islam teachings, strong and extended family relationship, religious, conservative, moral and collectivist society, respect for old, protection of the weak, forgiveness, kindness, modesty, obedience, courage and unlimited hospitality and sincerity (Al-Sweel, 1993). Metz (1992) further indicated that the family is considered as the primary social entity, identity and status for people in Saudi Arabia. Al-Sweel (1993) indicated that the roles
of the father and mother in the Saudi society as the first start of the family are integrated and complementary to help each other to satisfy and balance the life's needs. He further indicated that the father or husband religiously is primarily responsible for the family and ensures that the basic social and financial needs are satisfied whereas the mother or wife is responsible for the house's administration and children.

In conjunction with the above, Bjerke and Al-Meer (1993) analysed the culture of Saudi Arabia in connection with Hofstede’s four famous cultural indices that are further explained in chapter 2: Power Distance Index (PDI), Uncertainty Avoidance Index (UAI), Individualism/Collectivism Index (IDV) and Masculinity/Femininity Index (MAS). The results indicated that Saudi managers recorded high scores in PDI or unequal power distribution (score: 73) and UAI (score: 74) dimensions. These results are consistent with the findings of Hofstede (1991) for the Arab countries, and KSA is one of them. Redding (1993) also indicated that Saudi Arabia that is one of the Arab countries is characterized based on Hofstede’s (1984) findings by high PDI. With respect to the high UAI score, this could be explained by knowing that Saudi people generally prefer to stay with the same employer, tend to be less risk-takers, show more emotions, prefer consensus, are conservative and obedient to law and order (Sebhatue, 1994). In addition, the Saudi managers were found in the side of collectivism (score: 41) that is opposite to individualism. This result of Saudi collectivist culture is also consistent with Hofstede’s finding for Arab countries. In collectivist society, the mode of living among in-groups of people is very tight and cohesive. From this perspective, Czinkota et al. (1992) described Saudi Arabia as one of the few countries characterized by homogeneous and high context culture with people tend to be together and care of their families and society.

On the other hand, the Saudi managers scored low on MAS index (score: 43), which indicated the tendency toward the feminine side. Hofstede’s MAS score for
Arab countries was 53, which is within the low range of masculine scale. In addition, this finding by Bjerke and Al-Meer is consistent with the conclusion of Muna (1980) about the Arab executives being emotional and people oriented. Bjerke and Al-Meer here actually provided their interpretation for the low score in MAS index or high score in feminine side by indicating that Saudi managers tend to exhibit high concern for others and for friendly relationships. In this regard, some researchers do misinterpret MAS index as intended by Hofstede. For instance, some consider primarily a low masculinity ranking as an indication for having a low level of differentiation and discrimination between genders, and females are treated equally to males in all aspects of the society. This is not the precise interpretation of the dimension itself. Hofstede (1994) actually indicated that the masculinity dimension represents the typical nature, pattern, role and behaviour of the men and women, and not mainly the gender majority or domination in the society. For instance, the behaviour of men dominated societies tends to be assertive, tough, ambitious and competitive whereas the behaviour of women dominated societies is on the side of modesty, cooperation, compassion, affection, understanding and nurturance.

1.5.2 Nature of Saudi Business System

Metz (1992) described the nature of Saudi business system as detailed below. For instance, commercial and business deals comply with the regulations set by Islamic law (or Sharia’ in Arabic). Sharia' treats people the same with no difference whatsoever. It highly calls for a clean, ethical, respectful, transparent and honest act in all matters. Moreover, it permits sale and forbids interest or additional payments on moneys. However, Sharia' demands from all citizens and companies to pay 2.5% of their income or goods annually to be paid back to the poor people in charity as a means of a valuable source of justices and social order to balance the living standards and
income among people. This religious payments or alms are called Zakat, which is one of the important pillars of Islam.

Furthermore, Mellahi highlighted the influence of Islamic values on Arabic leaders: "Management values in Arab countries are shaped by the Islamic religion’s philosophical and spiritual beliefs and by the cumulative Arab traditions" (Mellahi, 2001, p. 47). In particular, Sebhatu (1994) indicated that the leadership style of Saudi business and family managers is fashioned by the instructions of Islam. For instance, the common practiced leadership style of management in the decision making process is the participative, supportive and delegating authority style. However, most of Saudi companies are still organised and managed in a centralized, bureaucratic and hierarchical system due to the influence and participation of western leaders since early 1970's (Metz, 1992). The large scale of foreigners in Saudi Arabian labour force was "a consequence of its rapid economic development following the oil boom revenues of the 1970's" (Madhi and Barrientos, 2003, p. 70). Madhi and Barrientos indicated that the Saudi Government subsequently exerted significant efforts in developing and qualifying Saudi individuals to perform certain occupational tasks that were performed by qualified non-Saudis, which is called Saudisation or localization program. According to Farahat (1993), this high priority Saudisation program, motivated by the decline in oil revenues in 1990’s, aims to achieve the following main objectives: 1) rely heavily on national workforce; 2) open the opportunities for Saudis; 3) balance the supply and demand of the Saudi labour market; 4) pump-in money inside the country; 5) raise the level of standards living of Saudis and society; 6) transfer-in new international technologies; 7) protect country’s cultures and values. In addition, the Saudi Government under its strict policy of Saudisation in the development plans strongly promotes for effective Saudi participation and investment in all public and private sectors (Madhi and Barrientos, 2003). For example, the Saudi Government dictates on
all private companies to replace 5% annually of foreign labour force by Saudis. However, there are still obstacles in implementing the Saudisation program that include misfit of jobs, low wages and reluctance of private firms to recruit unqualified Saudis and develop them (Farahat, 1993).

1.5.3 Saudi Economy and Challenges

In connection with the economic aspects of the country, Saudi Arabia is still one of the world’s leading producers of dates, but the economy today is well dominated primarily by oil or the black gold (Metz, 1992). Metz also added that Saudi Government benefited from the petroleum revenues significantly since the early days by building a strong infrastructure, transforming the country into the world of well-developed industrial nations and diversifying its products and economy. According to the figures provided by CIA in "The World Factbook", the oil and petroleum products account for more than ninety percent (90%) of the exports, forty-five percent (45%) of Gross Domestic Product (GDP) and about seventy-five percent (75%) of the Government revenues. Metz further highlighted that Saudi Arabia has been recognized worldwide as the largest petroleum possessor and exporter that plays a significant leading role in regulating the market through the Organization of Petroleum Exporting Countries (OPEC). In addition to the oil and gas products revenues, Cordesman (2001) reported that Saudi Arabia produces iron and steel, processed foodstuffs, plastics, polymers, cement and electrical equipment, and it has strategic plans to privatize some of their owned businesses in order to lessen the kingdom’s dependence on oil and increase employment opportunities. These include the sectors of electricity, water, airlines and telecommunications.

Concerning the climate and development of Saudi business and economy, they can be best described by the following statement from the speeches of Prince
Bandar bin Sultan, Saudi Arabian ambassador to the United States, highlighting the Kingdom’s encouragement for foreign investments inside Saudi Arabia:

The Kingdom of Saudi Arabia is dedicated to the concept of free trade based on competition. There are no foreign exchange controls, quantitative restrictions or tariff barriers. The long-term objective of the Saudi government’s industrial policy is to diversify the Kingdom’s economic base and to reduce its dependence on the export of crude oil. Since the early 1980s, the Saudi economy has been moving from the stage of building the basic infrastructure to the stage of production of goods and services. The Kingdom encourages companies to join with Saudi partners and provides the best climate for joint venture operations in the Middle East. (Metz, 1992, p. 9)

Although the Saudi economy, as described above, is strong and stable with an estimated GDP of $242 billion in year 2002, the country is encountering some serious economic challenges before being admitted to the World Trade Organization (WTO) (Bourland, 2002; CIA, 2003). These challenges include moving toward rapid economic reforms to foster a more attractive investment and economic climate with greater aspects of liberalization, transparency, stability, predictability, opportunities and diversification. Dr. Hashim Yamani, Saudi Minister of Industry, offered the following comments on the WTO’s accession during Saudi bilateral agreement with the European Union (EU):

If Saudi Arabia remains outside WTO, it would lead to isolation and a definite weakening of the Kingdom’s ability to contribute to international decisions, participate in comprehensive trade negotiations, or draft new agreements. (Saudi Embassy, 2003, spa/09-01-WTO)

Presently, Saudi Arabia is experiencing a challenging high unemployment rate that has been steadily increasing, and it is now expected to reach twenty-five percent (25%), as reported by CIA (2003). In response to these vital challenges, Osama Faqih, Saudi Minister of Commerce, highlighted also the Government efforts and programs being exerted to effectively cope with the global economic challenges during the 13th Cran Montana Forum held on June 28, 2002 in Switzerland by stating:
In the last decade, the Kingdom has pursued an economic reform program to extend the role of the private sector by privatising public services, encouraging foreign investment, developing the tourism sector and enhancing free trade in goods and services. (SPA, 2002, http://www.saudinf.com/main/y4254.htm)

Furthermore and as part of the country’s efforts in tackling the pressing economic challenges, Saudi Government recently has established the Saudi Arabian General Investment Authority (SAGIA) that will act as a one-stop shop for foreign investment projects to facilitate the information and regulation on investment opportunities and to boost capital investment and real GDP growth rate (SAGIA, 2003). SAGIA has also reported lately that Saudi Arabia has launched the National Gas Initiative (NGI) for foreign investment in the gas exploration and production fields.

1.6 RESEARCH AIM AND CONTRIBUTION

The aim of the research was to develop an understanding and model of executive stress that may be used to enable companies to improve the health of employees and minimise the associated costs of stress. The importance of this study rested on the examination of occupational stress caused by executive functions. As the topic of occupational stress is relatively less studied in the Arab world and specifically in Saudi Arabia, this study can add a value to the library of the world in general and Saudi Arabia in particular. The information and insights presented in this study can be useful for academic institutions and multinational firms, particularly those that operate in Saudi Arabia, in training programs for top managers. There is also a need for multinational organizations to improve cross-cultural management and human resource management skills, and this study can be valuable to them, especially nowadays with the efforts exerted by Saudi Government on the new foreign investments. These new coming firms are definitely in need for such information offered in this study. Even as these basic executive functions and management knowledge are generally universal in theory as known by many scholars, expected findings may be different when applied in another country and/or culture. Managing a business in Saudi Arabia is not an
exception, and foreign investors should be aware of any differences in the basic executive functions in this country for their business success.

Furthermore, this present study is useful and significant for the executives since it provides an overall understanding and insights on their activities, enhances their knowledge on stress process and subsequently minimises their existing worries. Sutherland and Cooper (1990) actually indicated that executives were worried about occupational stress since its consequences were rapidly apparent such as the decrease in productivity, increase in absenteeism, high turnover, irresponsible and unethical work behaviour, dissatisfaction and low commitment to the organisation that can even lead to illness and work’s accidents. According to Schermerhorn et al. (1994, p. 649), research has indicated that executives "in mature industrialized countries worry about losing their jobs, family and social pressures, lack of autonomy, and poorly trained subordinates" whereas executives "in developing and recently industrialized countries worry about overloads, interpersonal relations, competition for promotion, and lack of autonomy”.

Accordingly, the present pioneering study sought to rectify the lack for knowledge regarding the topic under study and contribute to a better understanding of occupational stress caused by the related activities of the executive functions from the perspectives of oil and gas executives in Saudi Arabia. A distinct contribution to the body of knowledge was achieved by being an original exploration of the topic under study. The researcher based on the research findings and the intensive and critical review of literature developed an understanding of the nature of stress, a precise analogy to physical stress and corrected its misconception in stress related literatures, and came up with a comprehensive stress process, approach and framework based on a dynamic system model as depicted in figure 5.2 as part of chapter 5, taking into consideration the individual as whole. In addition, the contribution of this study lied on the employed qualitative methodology of interpretive paradigm to explore the topic under
examination, which differs from the predominant quantitative methodology used by most stress researchers.

Moreover, the findings presented in chapter 5 provided significant contributions to the existing knowledge. This study actually can facilitate the understanding and incorporation of stress management tools related to executive functions into the current business practices for effective performance of businesses in Saudi Arabia. This understanding can contribute to more insight and knowledge of the relationship between stress and the basic executive functions, and how they can affect the behaviours, performance and practices of executives within the context of Saudi Arabia in general and in oil and gas industry in particular. This study also revealed four significant themes underpinning the basic executive functions of planning, organising, leading and controlling. These included information management, performance management, human resource management and strategic management. In addition, it identified existing leadership behaviours, styles and practices, and explored new approaches that may be less stressful and more appropriate to the modern leadership requirements in Saudi Arabia. More importantly, the study contributed to identify what really executives do and worry about at workplace.

This new and original study was hoped to add to the existing knowledge in various related areas such as occupational health and safety, industrial/organisational psychology, organisational behaviours, the human resource management, strategic management and organisational cultures. This research could add value to the field of occupational stress in Arabic context in particular and the world in general since there was little research about the types and effects of job-related stress at the time of the study. These research contributions were addressed in detail at section 6.3 of the chapter of conclusions.
1.7 SUMMARY OF THE CHAPTERS

The logical development of the research that incorporates seven chapters is illustrated in figure 1.2 and summarised below:

1). **Chapter 1 – Introduction:** This is an introductory chapter that provides an overall description about the research project by addressing the research background, purpose, justification, context, aim and contribution, limitations and definitions of terms.

2). **Chapter 2 – Review of Literature:** This chapter reviews and discusses the definitions, concepts and approaches of stress to improve understanding and
successfully address the topic under study. It presented a proposed integrative model to the study and definition of stress that was used to explore the topic under investigation. The review also includes discussion supported by empirical studies on sources, consequences and coping strategies of stress. It also includes the influence of environment or culture on executive stress. The outcome of this review was a development of an integrative model of stress.

3). **Chapter 3 – Research Methodology and Design:** This chapter details the philosophical assumptions underpinning this research, choice of research methodology, justifications and the empirical techniques adopted to explore the topic under study, and subsequently answer the research questions. Interpretive or phenomenological approach, qualitative or in-depth interviews of qualitative methodology was used primarily through purposive sampling technique to explore and understand occupational stress caused by executive functions. This qualitative methodology was seen most appropriate to investigate the perceptions of the executives. In addition, qualitative interviews were supported by other qualitative data gathering methods such as observations, focus groups and document reviews in order to examine and understand further the topic under study and answer the research questions. A detailed description of the research methodology and design is covered in Chapter 3. Moreover, the procedures of data collections and analysis are provided in chapter 4, and the research findings are presented and discussed in chapter 5.

4). **Chapter 4 – Data Collection and Analysis:** This chapter presents the data collection and analysis processes and procedures. In addition, it includes the descriptions of the research ethical considerations, criteria of evaluation and making sense of this exploratory data.
5). **Chapter 5 – Research Findings and Discussions:** This chapter reports the study findings and discusses them theoretically, empirically and within the context of Saudi Arabia.

6). **Chapter 6 – Conceptual and Empirical Frameworks of Executive Stress Process:** This chapter reports the distinct study contribution of the development of a comprehensive empirical framework of executive stress as depicted in figure 6.2. It also discusses the comparison between the established conceptual model of executive stress identified in chapter 2 and the resulted practical framework of executive stress process.

7). **Chapter 7 – Conclusions:** This is the concluding chapter, which summarises the overall research process and findings along with some concluding remarks. This chapter also presents critiques of the research or reflections on the study. It assesses critically the research methodology, design approaches, data collection and analysis procedures, and findings. In addition, the research implications and suggestions for further research are provided.

Furthermore, the references of this research and the corresponding appendices are included at the end of the dissertation report.

**1.8 LIMITATIONS OF THE STUDY**

This present study was designed interpretively and qualitatively for exploration or discovery of the topic under investigation. Exploration was required for this type of new research in order to achieve clarity, understanding, and discovery of the topic under study and its associated concepts. Accordingly, the findings presented in this study should be generalised with respect to the limited Saudi context and the executives of oil and gas firms in Saudi Arabia, and may not reflect collective conditions throughout the world of other public or private sectors. The findings could also be extended to the context of the other similar Arabian Gulf countries and the oil and gas executives in
these countries. These include Bahrain, Kuwait, Oman, Qatar and UAE. Further, the limitations of this approach were acknowledged, as being subjective perceptions, understandings and descriptions of the oil and gas executives under investigation. However, it was seen appropriate for this type of study since it permitted to understand, from the participants’ points of views, factors related to occupational stress and coping strategies as they experienced in their day-to-day business. These minor limitations are spelled out in more detail at section 6.4 of the chapter of conclusions.

1.9 DEFINITIONS OF KEY TERMS

**Burnout:** "An adverse stress reaction to work with psychological, psychophysiological, and behavioral components". (Greenberg, 2002, p. 273)

**Cognitive Appraisal:** "Interpretation of a stressor". (Greenberg, 2002, p. 61)

**Controlling:** "The managerial function of measuring and correcting individual and organizational performance to ensure that events conform to plans". (Weihrich and Koontz, 1993, p. 713)

**External Environment:** "all elements that exist outside the boundary of the organization and have the potential to affect all or part of the organization". (Daft, 1995, p. 71)

**Leading:** "The function of managers involving influencing people so that they will contribute to organization and group goals". (Weihrich and Koontz, 1993, p. 715)

**Organisation:** "a structured group of people brought together for a specific purpose to achieve certain objectives". (Hellriegel and Slocum, 1989, p. 5)

**Organisational Culture:** "the organization-wide pattern of shared (1) values, norms, and ways of managing; (2) assumptions about the organization’s mission; and (3) perceptions of how best to adapt to the external environment". (Hellriegel and Slocum, 1989, p. 560)
Organising: "the process of creating a structure of relationships among people that will enable those people to carry out management’s plans and meet their objectives". (Hellriegel and Slocum, 1989, p. 13)

Planning: "the dynamic process of making decisions today about future actions". (Hellriegel and Slocum, 1989, p. 12)

Strategic Management: "includes strategic analysis, in which the strategist seeks to understand the strategic position of the organisation, strategic choice, which is to do with formulation of possible courses of action, their evaluation and choice between them, and strategy implementation, which is concerned with both planning how the choice of strategy can be put into effect, and managing the changes required". (Johnson and Scholes, 1999, p. 17)

Top Managers/ Executives: "are responsible for the overall direction and operation of an organization. Typical titles of top managers are chief executive officer (CEO), president, chairman, division president, and executive vice president". (Hellriegel and Slocum, 1989, p. 10)

Uncertainty: "the decision makers do not have sufficient information about environmental factors, they have a difficult time predicting external changes". (Daft, 1995, p. 76)

1.10 CONCLUSION

This chapter laid the foundations for the dissertation. It introduced the research problem and purpose. Then, the research was justified, methodology was briefly described and justified, contributions were presented, limitations were provided, the definitions of the key terms were offered, and the dissertation was outlined. In this chapter, the research context of Saudi Arabia, in which oil and gas executives operate, was also introduced in details. This included a description of Saudi general profile, background, strategic geographic location, homogenous collective society and Islamic
based culture, absolute monarchy government, oil based economy and reforms challenges to foster a more attractive investment and economic climate with greater aspects of liberalization, transparency, stability, predictability, opportunities and diversification. On these foundations, the dissertation can proceed with a detailed description of the research.
CHAPTER 2
REVIEW OF LITERATURE

2.1 INTRODUCTION

This chapter reviews and discusses the definitions, and models underlying the concept of stress, and the approaches to stress to develop the foundation of understanding necessary to address the topic under study. Further, it is important first to define associated terms, address the issues of causes and perceptions of occupational stress and the way in which they may be associated with the activities underpinning executive functions in an organisation.

To achieve the above mentioned objectives, the theoretical frameworks and models of stress are described and discussed to improve understanding of the term occupational or job stress. Thereby, an explanation could be achieved of how and why exposure to certain conditions and situations could have an adverse impact on performance, health, well-being, and quality of life. Accordingly, it was useful to review the various approaches of stress to explain the ways in which stress was perceived and operationalised. It was also important to understand the origin and evolution of these various approaches and their influence on the attempts to manage stress at the workplace. Accordingly, this intensive and critical review facilitated the development of an appropriate definition and model of stress to investigate the topic under study.

2.2 THE CONCEPT OF STRESS

Stress is a Latin word used in the 17th century to mean "hardship, straits, adversity or affliction", and this word was used during the 18th and 19th centuries to mean "force, pressure, strain or strong effort" (Cooper and Marshall, 1977, p. 2). Fraser (1983) and Matteson and Ivancevich (1982) highlighted that the definitions of stress vary extensively due to the complexity of this concept and its wide applications. Fraser, as
described below, presented different views used by researchers and authors to describe stress. Some referred to stress as the causative state, and others referred to it as a resulting state. Some used the terms of stress and strain interchangeably to describe specific human state, and others bounded them in terms of cause and effect relationships, respectively. Some believe that stress is linked to a physical change and others believe that it is subjective and coupled with psychological and emotional status. For instance, stress was defined by Matteson and Ivancevich (1982, p. 8) as, "…the physiological or psychological response you make to an external event or condition called a stressor". Similarly, Sauter, Murphy, Colligan et al. (1998, p. 6) defined stress as, "the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the worker. Job stress can lead to poor health and even injury". In line with the above, Schermerhorn et al. (1994, p. 647) defined stress as, "a state of tension experienced by individuals facing extraordinary demands, constraints, or opportunities".

Likewise, Executive Health Examiners (1983) explained that some authors considered stress as an external event like a loss of an occupation, and some treated it as an internal reaction of the body to that external event. In addition, Sutherland and Cooper (2000) argued that stress is routinely expressed or described by people in different ways. Some look at stress as something that is negative and undesirable. Others find it as a positive motivating force. For instance, people express stress as a depression, feeling out of control, overworked, headaches, time pressures, panic attacks, anxiety and lack of sleep. Others connect stress to happiness, challenge, hard work, motivation and enthusiasm.

Hence, these various descriptions of stress considered by different authors indicate that no specific and common definition of stress has yet been established. However, a widely used definition of stress stated the following:
...an adaptive response, mediated by individual differences and/or psychological processes, that is a consequence of any external (environment) action, situation, or any event that places excessive psychological and/or physical demands on person. (Gibson, Ivancevich and Donnelly, 1994, p.263)

Another general definition of stress was provided by some health organisations as, "the non-specific response of organism to any demand made of it" (Fraser, 1983, p.13). Therefore, there is no basic agreed definition of stress.

2.3 THE APPROACHES TO THE STUDY OF STRESS

In view of these different definitions of stress, there have been attempts to theorise, and represent these definitions of stress systematically for attaining better understanding and description. These have been grouped into three key acknowledged approaches in literature as presented by Cox et al. (2000) and Cooper, Dewe, and O'Driscoll (2001): 1) an engineering approach; 2) a physiological approach; 3) a psychological approach.

2.3.1 The Engineering Approach

The engineering approach or stimulus-based model generally refers to stress from the perspective of its causes or sources as forces or loads exerted on the body (Cox et al., 2000; Fraser, 1983; Smith and Cooper, 1994). Smith and Cooper also indicated that this approach was originated from the fields of physics and engineering where stress, as an independent variable, was defined as a force applied on an object or metal that eventually would cause a deformation during the resistance of the object to that force. The forces here from the human perspective are analogous to the stimulus, and the object is analogous to the body. From this perspective, stress was defined as, "a set of forces acting on a person, the existence of which is identified by its effects" (Lupton, 1975, p. 154). This engineering approach to define stress in social sciences or management was apparently dependent on the engineering/physics concept of stress. This relationship between the two concepts necessitated a further investigation and
elaboration to verify this relationship, make the appropriate analogy and understand the nature of occupational stress.

In the science of physics, stress is specifically illustrated through stress, strain and load relationship, as shown in figure 2.1. Smith (1990) provided the definitions for the terms associated with this relationship. The term stress refers to the internal force generated within a solid body by the action of any external force, which tends to distort and deform the body. Strain here is the resulting distortion, and the external force causing the distortion is called load. This load, stress and strain phenomenon is well described by Newton’s third law that states "to every action, there is an equal and opposite reaction" (Giancoli, 1980; p. 41).

Moreover, Smith, as discussed below, defined in details the associated plastic deformation and elastic deformation as part of the engineering applications. The metal or object will be plastically deformed when it is subjected to a force and could not fully return to its original shape. Otherwise, it will recover to its original shape after removal of the force, which is known as elastic deformation. Engineering stress on the object is measured as a force per its original cross-sectional area, and this relative force or internal resisting pressure causes the elastic or plastic deformations (Serway, 1986).
Serway further explained the terms of stress and strain to illustrate the concepts of elastic and plastic deformations. Strain is the difference between the new deformed dimension and the original dimension of the object, caused by the applied load that distorted the object. It is the calculated amount of deformation. Accordingly, stress here is a depiction of the force on the object. If the object withstands this applied force or load, there is no strain, and it is referred to as elastic deformation. However, if the object could not withstand this force or load, then it will create intolerable stress that will lead to deformation. This is referred to as plastic deformation. Therefore, stress or the resistance of the object causes strain from the engineering point of view if the object cannot not withstand the applied external force or load. Once the resistance of the object or stress diminishes, the object will not be able to resist anymore. This may lead to a permanent change in the properties of the object. These effects or changes are called strain.

In addition, Smith (1990) indicated that metals could fail faster when subjected to cyclic loads, which are known as fatigue failures, and when metals are subjected to constant loads over time, this type of plastic deformation is referred to as creep of metals. The object or metal actually passes through certain phases when subjected to a load. Figure 2.2 explains the three phases of the behaviour of the object or metal. Serway (1986) actually described the elastic, plastic and necking phases as explained below.

First, the object at the elastic zone or linear behaviour would tolerate the load being exerted on it and the object is able react to it by its internal force (stress) to maintain its dimensions. The process will continue until it reaches to a point (yield) of changing behaviour from linearity to a curve known as the plastic behaviour during which the dimensions of the object change. If the load continues and the metal cannot
withstand by its internal and opposite relative force or stress, the object will break and fractured during known necking behaviour.

The analogy here is that the human physical body was assumed to be similar to the metal in terms only of behavioural responses when subjected to certain loads. The model has limited use since the human body differs in terms of the other factors, and characteristics, i.e. physiological, psychological, social, etc., which play significant roles in responding to stressful events. However, the model has some use in indicating that stress can be either within the tolerance of the individual (like the metal during the elastic zone) or is intolerable and so leads to burnout (like the metal in plastic zone). It is also useful in indicating that stress and strain can be distinguished by considering stress as the reaction/ response of the body or the feeling toward the exerted forces or load whereas strain is the resultant effects. Accordingly, stress is not the cause of the response. The cause is actually the external load, pressure or what is referred as stressor. However, the reaction to that load is the stress. The positive or negative effect

Figure 2.2: Stress/Strain curve (Figure 15.2, p. 311)

is the strain. For example, if the person responds to good news of promotion, then it can be said that the promotion is the source of stress (the stressor). The reaction of the body to this promotion is the stress since the body would attempt to translate the reaction into an action, which is the happiness or strain. Therefore, the load is the action performed and it is analogous to the force from the engineering and physical stress perspective. Stress is the internal reaction or the response to that exerted force, which is hidden but can be felt from the resultant effects. Strain is the positive or negative effect (damage) occurred because of this phenomenon.

This analogy and relationship indicated that the understanding and description of stress from a social perspective was drawn and originated from the already understood application of physical or engineering stress. Along these lines, this application of the physical stress model, which is a more concrete and accessible phenomena, constitutes a metaphor within a social setting that permitted researchers to comprehend, reason, describe and communicate the complex stress phenomenon related to human beings. People develop these metaphors, as a perceptual process of analogy making, to facilitate the understanding of abstract or ambiguous matters based on their own dynamic interactions and embodied experiences (Brown, 2003). Theodore Brown advocates that metaphorical reasoning is the basis for most of scientific knowledge where abstract concepts are explained and communicated based on surrounding physical experiences. So, complex systems in nature are understood through cognitive and metaphorical concepts as derived from close observation and association with the surrounding direct physical world.

In the literature of human stress within the social sciences, the forces acting on the individual as mentioned earlier by Lupton (1975) and others are referred to as the stress. This conception, as illustrated above, is not precise. Instead, these acting forces should be corrected and referred to as stressors. Stress actually is the reaction and
response to these forces acting on the person. In engineering literature, stress is not defined as a cause or source, as described in stress literature. The term cause in engineering or physics is referred to as the external load or force. Hence, it is suggested that researchers and others refer to the engineering approach to stress as a stimulus-based, source-based, or action-based approach rather than the engineering approach.

2.3.2 The Physiological Approach

Sutherland and Cooper (2000) described the second approach to stress from the perspective of its symptoms, i.e. having headaches, feeling anxious or depressed. Arroba and James (1992, p. 9) referred to stress from this stance as, "...your response to an inappropriate level of pressure. It is a response to pressure, not the pressure itself". According to Sutherland and Cooper, this view was originated in medicine and called the physiological approach to stress or the response-based model that dealt with stress as a dependent variable. It accounts only for the physiological part, i.e. stress symptoms. This model evolved from the General Adaptation Syndrome (GAS) developed by Hans Selye who expressed stress as, "the rate of all wear and tear caused by life" (Weihrich and Koontz, 1993, p. 408). The GAS model is illustrated below:

![Figure 2.3: Three Stages of Stress Response (Figure 2.5, p. 19)](source: Arroba, T. and James, K. (1992). *Pressure at work: A survival guide for managers, 2nd edition.* London: McGraw-Hill Book Company.)
Greenwood and Greenwood (1979) pointed out that the GAS model essentially explains the normal behaviour of the human reaction to high demands, which produce pains and illness. This initial reaction of the body to sources of stress is referred to by many authors as the, "fight or flight response", "alarm reaction" or "emergency response" (Greenberg, 1990). Greenberg highlighted that Walter Cannon was actually the originator of the "fight or flight response" stress concept, which means that the body of the human being attempts immediately to react to threats by either facing them or escaping from them. However, the reactions of the body to any sources of stress are not necessarily limited by these two basic categorisations of fight or flight responses. Specifically, there are some situations where the individual may respond to threats by neither fight nor flight reactions, but through "freeze" reaction as the case of fear of embarrassment during public speaking (Greenberg, 2002). Accordingly, Hans Selye built on this idea with the GAS model, which assumes that the human body would undergo three main phases or sequence of events under stress (Greenwood and Greenwood, 1979). Arroba and James (1992) and Charlesworth and Nathan (1985) described these three phases as: alarm reaction, adaptation or resistance, and exhaustion.

During the first phase, the human body would start getting some warning signs of a specific stressor that he/she needs to respond to and would attempt to act in response to it. During this phase, the body would face the high load (fight) or escape from it (flight), the body would first receive the shock and then second it would attempt to either challenge and resist this shock or escape from it. If meeting the challenge then, this would be followed by the adaptation phase, where the body would attempt to continue to overcome the received stressor, and attempt to maintain a good level of acquaintance and adjustment to it. However, if the stressor was sufficiently large, there would be a stage where the body could not continue to resist and adjust itself to this stressor and the demands made by it. Thus, it would lose its reserves of adaptation
energy, and reach a level where the body would be exhausted and this might lead to death (Charlesworth and Nathan, 1985). However, Cooper and Marshall (1977) pointed out that the stress level could return to normal if the situation is well controlled and coped with.

Beehr and Newman (1978) indicated that stress could be beneficial to an individual to a certain extent, which is not explained by the GAS model. However, in a situation of continuous rising stress they indicated it would lead to negative consequences, which is consistent with the GAS model. The following key description of stress implies the acknowledgement of the both positive and negative aspects of stress: "...a condition wherein job related factors interact with a worker to change (modify) his/her psychological or physiological condition such that the person is forced to deviate from normal functioning" (Beehr and Newman, 1978, pp. 699-670). Accordingly, stress is identified under the physiological approach as the physiological consequences resulted from variety of unpleasant work environments (Cox et al., 2000). The following inverted "U" shape further illustrates the relationship between stress and performance as shown in figure 2.4, and models this concept of positive or constructive, and negative or destructive stress.

![Diagram of stress intensity affecting individual performance](image-url)

**Figure 2.4**: How stress intensity affects individual performance (figure 20.5, p. 648)

Schermerhorn et al. (1994) described, as given below, the nature of constructive stress, which is known as eustress. Eustress has a positive effect on the behaviour of the individual and/or the organisation. Moderate stress would lead to challenge and innovation. Executives may react to such tension or external pressure by perceiving it as a challenge to them that they must overcome. Thus, they would be more energetic and useful in their workplace. Executives should hunt for the positive performance boundary presented by eustress while considering very carefully its potential negative effects on subordinates. It is not an easy task for executives to determine the optimum boundary for both themselves and their subordinates.

On the other hand, destructive stress or distress has a negative effect on the behaviour of the individual and/or the organisation. Whilst low to moderate levels of stress can boost performance, excessively high levels of stress can overwork and cause collapse of an individual’s physical and psychological structures. This critical stage of stress or burnout is defined as, "a psychological process, brought about by unrelieved work stress, which results in emotional exhaustion, depersonalisation (such as feelings of being and acting alone in the world) and decreased accomplishment" (Hellriegel and Slocum, 1989, p. 600). Therefore, some executives undergo burnout in reaction to severe work-related stress factors or stressors. Specifically, burnout occurs because they have encountered and undergone a very tough combination of stressors related to their person, family, job, organisation and culture (McNally, 2000; Robbins, Millett, Cacioppe and Waters-Marsh, 1998).

2.3.3 The Psychological Approach

The main limitations of the engineering and physiological models, as critiqued by Cox et al. (2000) and Cooper et al. (2001), were that neither considered the influence of the environment or context, nor the individual’s characteristics, i.e. personality, styles, coping levels and methods, knowledge, skills, wishes and
perceptions, that would affect how the person would react or respond to stress. Neither the engineering nor the physiological models explain adequately stress in relation to either the work environment or employee, respectively. Both lacked consideration of the cognitive, emotional, context and social factors, and assume a simplified occupational stress process that ignores the dynamic interaction in the employee/work environment processes. The role and status of the person, whether active or passive in reacting and coping with stress, were also overlooked by both approaches. Moreover, the search in literature indicated that stress related researchers and authors focused mainly on the methodology part to develop the associated models and theories of stress, and did not reflect the philosophical foundations underpinning the models of stress (e.g., Cooper et al., 2001; Cox et al., 2000; Fraser, 1983; Smith and Cooper, 1994). In particular, quantitative methodology through survey questionnaires was used predominantly in occupational stress related studies. Nevertheless, the philosophical foundation underpinning the models of the engineering and physiological approaches could be linked to positivism with respect to the consideration of external sources of stress and objectivity in examining occupational stress.

Subsequently, the psychological approach was developed to account for the interaction process between the employee and the work environment. As indicated by Cooper et al. (2001) and Cox et al. (2000), this psychological approach, which governs the contemporary literatures and theories of stress builds on both the engineering and physiological models, and defines occupational stress as a vigorous interface between the employee and the work environment. Therefore, this psychological approach attempted to overcome the criticisms raised on both the engineering and physiological approaches. More closely, it attempts to model human behaviours in which personal and behavioural, organisational and environmental factors are considered in defining the occupational stress. Cooper et al. and Cox et al. referred to this approach as modelling
the psychological consequences of an unfavourable work environment that incorporates two main theories: interactional and transactional. Cooper et al. and Cox et al. further explained that the interface between the employee and work environment can be described either by its structural characteristics, which is the interactional concept, or by its ongoing psychological activities, which is the transactional concept.

2.3.3a Interactional Theories

First, the interactional model focuses only on "the statistical interaction between the stimulus and the response" (Cooper et al., 2001, p. 11). Cooper et al. further explained the interactional model as a structural, quantitative, and static or cause and effect relationship between only the two variables: stimulus and response. Thus, it is concerned primarily about the statistical interaction or correlational relationship itself between the stimulus and response, and overlooked the stressors and responses embedded in the interaction. Along these lines, the interactional model was used mostly in studies associated with occupational stress: "Much of the research on work stress has been carried out using an interactional framework" (Cooper, 2001, p. 14). Again, the philosophical foundation of the interactional theories as described above could be associated with positivism despite the fact that researchers overlooked to address the philosophical justification underpinning the corresponding models, which mostly relied on quantitative research and hypothetico-deductive methodology to carry out the related studies (e.g., French, Caplan and van Harrison, 1982; Karasek, 1979). Accordingly, there are two main theories of the interactional type of the psychological model: the Person-Environment (P-E) Fit theory developed by French et al. and the Demand-Control (D-C) theory developed by Karasek.

2.3.3a-1 Person-Environment Fit Theory

French et al. (1982) developed the P-E Fit theory that explains occupational stress in terms of the match or compatibility between the employee and the work
environment. In other words, positive results can be attained if there is an alignment, fit or congruency between the characteristics of people and their environments as explained below by Kahn:

The basic idea of the P-E fit model is that individual adjustment consists of goodness of fit between the characteristics of a person and the properties of that person’s environment. A person’s environment might include, for example, the work situation, the family arrangement, and the neighbourhood. (Kahn, 1981, p. 105)

Accordingly, three essential factors can be recognised and understood from the P-E fit theory. These include the characteristics of the person, the characteristics of the environment, and the resulting consequences or outcome of the interaction between the person and the environment. The characteristics of the employee incorporate own abilities, skills, qualities, values, goals, needs, desires, expectations, utilisation and personality type and the characteristics of the work environment involve resources, supplies, demands, workload, work schedule, work conditions, job complexity, policies, autonomy, freedom, structure, organisational culture and family arrangement (Hofstee, 1994). Furthermore, Meglino and Ravlin (1998) indicated that the degree of resulting positive or negative outcomes (employee’s occupational stress, satisfaction, motivation, growth, achievement and persistence in the organisation) predicated by the P-E cause and effect relationship differs depending on the level of fit between the characteristics of the person and the environment. For instance, Holland (1985) indicated that if the employee’s characteristics of attitudes, behaviours, abilities, skills, goals, needs, interests, values and expectations are matching the requirements of the job, then it is said that the employee fits with the work, and negative outcomes or distresses are unlikely to happen. Moreover, Levi below, as cited by Sutherland and Cooper, described the misfit between the personal characteristics and the environment:

…the interaction between, or misfit of, environmental opportunities and demands, and individual needs and abilities, and expectations, elicit reactions. When the fit is bad, when needs are not being met, or when abilities are over-or under-taxed, the
organism reacts with various pathogenic mechanisms. (Sutherland and Cooper, 2000, p. 61).

Therefore, the P-E Fit theory suggests that the employee and the work environment could significantly influence each other, specifically if there is a gap between motives or abilities of the person and the job requirement or task demands. In fact, Edwards and Harrison (1993) indicated that the level of experienced stress is proportionally related to the degree of misfit or imbalance between the person and the environment. In this regard, most occupational stress related studies were centred on the P-E fit theory that attempted to measure the dimensions of congruency-incongruency, balance-imbalance or certainty-uncertainty in correspondence with the expectations of employees (Cooper et al., 2001). In particular, the known two role stressors that impact the performance and commitment of employees, role conflict and role ambiguity, were used considerably as a research instrument to measure occupational stress associated with the P-E fit theory (Fogarty, 1996; Rizzo, House and Lirtzman, 1970). Role conflict stress might take place if "messages and cues from a superior about the role is clear, but may be contradictory or mutually exclusive" whereas role ambiguity stress occurs if "a role is unclear" (Pool, 2000, p. 32).

2.3.3a-2  Demand-Control Theory

On the other hand, Karasek (1979) pointed out in his D-C theory that the health of the employee and aspects of the work together might be interrelated to the wellbeing of the employee. Karasek’s D-C model is depicted below in figure 2.5.

Karasek supported this view by his findings through the secondary data analysis from studies conducted in US and Sweden. These revealed that employees characterised by a heavy workload and low decision latitude (control), as job stressors, did suffer from illness, job strain and dissatisfaction. The decision latitude was defined as, "the working individual’s potential control over his tasks and his conduct during the
working day", and the job demands as, "the psychological stressors involved in accomplishing the workload, stressors related to unexpected tasks, and stressors of job-related personal conflict" (Karasek, 1979, pp. 289-291). This model illustrates high distress level is expected when there is a low decision latitude or freedom over the high job demands. On the other hand, the favourable level of stress or active job is expected when there is high decision latitude over the high job demands. However, this theory did not consider the social support factor that has a significant impact on stress management (Cox et al., 2000).

![Figure 2.5: Job Strain Model (Figure 1, p. 288)](image)


Johnson and Hall (1988) thus modified Karasek’s theory and added a third dimension, which is the social support factor. Johnson and Hall defined this social support factor as the overall levels of helpful social interaction available on the job from
both colleagues and supervisors. Again, this modified theory was criticised for not considering the personal characteristics and differences (Cox et al., 2000).

In general, the main disadvantage of both theories of the interactional model is that they deal with the response to stress as a static reaction whereas in reality it is a dynamic reaction (Cooper et al., 2001; Cox et al., 2000; Sutherland and Cooper, 2000). Accordingly, this suggests that the response to any stressful situation today might not be the same tomorrow for the same stressor since the individual’s desires, attitudes and perceptions often vary with time.

2.3.3b Transactional Theories

Last, the transactional type of the psychological model of occupational stress represents the contemporary theories in this field that regards stress as, "a negative psychological state involving aspects of both cognition and emotion" (Cox et al., 2000, p. 41). In other words, the source of stress is based on how the person perceives the demands and constraints from the environment. Thus, these transactional theories emphasise the subjective nature and experience of stress, which could be more related to a phenomenological research paradigm even though the reviewed literature on the transactional theories did not address this philosophical foundation underpinning these theories (e.g., Lazarus and Folkman, 1984; Siegrist, Peter, Junge, Cremer and Seidel, 1990). Besides, these transactional theories were developed to overcome the criticism of the static nature of interaction between the person and the environment conceptualised by the interactional theories, as highlighted below by Cooper et al.:

Whereas the interactional definition of stress focuses on the structural features of the person's interaction with his or her environment, transactional definitions are more concerned with the dynamics of the psychological mechanisms of cognitive appraisal. (Cooper et al., 2001, p. 12)

Leyden-Rubenstein (1998) further indicated that the transactional theory of the psychological approach is the best to describe the psychological state resulted from the dynamic interaction between the employee and his/her work environment.
Subsequently, there are two main theories of the transactional type of the psychological approach to the study of stress discussed in the next subsections: the Effort-Reward Imbalance (ERI) theory, and the Appraisal and Coping (AC) theory. Although these most recent theories are acknowledged at the theoretical level, they still require more treatment at the empirical level to be measured adequately through the consideration of the worker's perceptions of the imbalance process between the person and the environment by adopting appropriate qualitative methodology rather than relying on the existing traditional survey instrument of quantitative methodology (Brief and George, 1991; Cooper et al., 2001; Harris, 1991; Lazarus, 1990).

2.3.3b-1 Effort-Reward Imbalance Theory

The first transactional model of occupational stress concerns the effort-reward imbalance or ERI theory developed by Siegrist et al. (1990), attributes, as the name implies, the cause of occupational distress to the mismatch between the efforts (job demands, obligations, mental and physical energy) exerted in the job and the subsequent rewards gained (money, esteem and career opportunities), as illustrated below in figure 2.6.

Therefore, distress may result from high work performance with little or no credit (Cox et al., 2000). Cox et al. further indicated that the imbalance interactive states of any employee and his or her job with regard to high job performance and low return or recognition might result in health problems such as cardiovascular diseases. The ERI theory explains distress in terms of incongruent legitimate rewards rather than ineffective control of the work environment or demands as conceptualised by the above discussed Karasek’s D-C model (Bosma, Peter, Siegrist and Marmot, 1998; Siegrist, 1996). Siegrist (2002) further highlighted the importance of ensuring appropriate rewards and incentives are comparable with the exerted efforts, hard work and
commitment at workplace in order to encourage employees, and prevent distress and negative health outcomes. An example of high cost-low gain or high effort-low reward conditions at workplace that may cause distress includes handling high challenging and unstable job without any recognition in return for the employee (Siegrist and Klein, 1990). These conditions may jeopardize the individual's "sense of mastery, efficacy and esteem by evoking strong recurrent negative emotions of fear, anger or irritation" (Siegrist, 1996, p. 30).

![Effort-Reward Imbalance Model](image)

**Figure 2.6:** Effort-Reward Imbalance Model (developed by the researcher)

In spite of the advantages of the ERI theory in attempting to explain the psychological distress as a dynamic interaction between the person's exerted efforts and the environment's returned rewords, it focused on the interaction process itself and did not provide a comprehensive theory of stress by not considering the nature of stress experience, appraisal and coping processes, social support, and stimulus and response of stress (e.g., Bosma et al., 1998; Leyden-Rubenstein, 1998; Siegrist, 2002).
2.3.3b-2 Appraisal and Coping Theory

The other transactional model of stress, as pointed out by Cox et al. (2000) and examined below, is the appraisal and coping processes or AC theory developed by Lazarus and Folkman (1984, p. 19) in which stress was defined as, "a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being". Lazarus (1991, p. 113) distinguish between the concepts of appraisal and coping by stating: "coping refers to what a person thinks or does to try to manage an emotional encounter; and appraisal is an evaluation of what might be thought or done in that encounter". The advantage of this AC theory over the ERI theory was the incorporation of the appraisal and coping processes as part of the dynamic interaction between the person and the environment.

Accordingly, the first part of the AC theory is the appraisal process, which is an evaluative process of the dynamic interaction between the employee and his/her work environment, consisting of two main parts: primary and secondary. The primary appraisal, which questions the problem that concerns the individual, is a continuous process to monitor the transactions of the individual with his/her environment or context. These include loads, skills, capability, constraints, care, encouragement and assistance. For instance, the primary appraisal may be expressed by asking the following question: "Am I in trouble or being benefited, now or in the future, and in what way?" (Lazarus and Folkman, 1984, p. 31). Lazarus and Folkman further added that the process of the primary appraisal attempts to evaluate if the perceived situation or event constitutes a harm/loss (some damage has already taken place), threat (damage or loss is expected to occur) or challenge (positive outcomes for growth are expected). These are referred to as the three stress appraisals. On the other hand, the secondary appraisal, which questions the subsequent actions of the individual, is a follow up action...
on the primary appraisal where the problem has already been acknowledged. Then, this
is followed by analysing the present state to facilitate the initiation of the appropriate
measures to cope with stress. In other words, the process of the secondary appraisal
attempts to assess "which coping options are available, the likelihood that a given
coping option will accomplish what it is supposed to, and the likelihood that one can
apply a particular strategy or set of strategies effectively" (Lazarus and Folkman, 1984,
p. 35).

The other part of the AC theory is coping process, which follows the
appraisal process of evaluating coping resources and options discussed above. Coping
is defined as "constantly changing cognitive and behavioral efforts to manage specific
external and/or internal demands that are appraised as taxing or exceeding the resources
of a person" (Lazarus and Folkman, 1984, p.141). Lazarus and Folkman alerted that
coping includes any efforts made or thought of to handle the encountered situation or
event, and it should be distinguished from the outcome of the situation. In fact,
Folkman (1984) distinguished between two key categories of coping to manage stress:
problem-focused coping and emotion-focused coping. According to Greenberg (2002,
p. 293), problem-focused coping is "the use of activities specific to getting the task
accomplished, whereas emotion-focused coping is the use of activities to feel better
about the task". Lazarus and Folkman1 (1984) further indicated that problem-focused
coping is the implementation of problem-solving skills and techniques by considering
various alternatives in order to be able to get around the distressful task whereas
emotion-focused coping involves various cognitive and behavioural techniques such as
avoidance, denial, drinking and seeking emotional support. Thus, distress may exist
when the individual perceives and recognises difficulty in coping with the encountered
demands or pressures, and subsequently feels anxious about the incapacity of utilising
appropriate coping strategies (Bird and Melville, 1993; Lazarus, 1991).
Despite the improvements of the above mentioned contemporary AC theory of the transactional model by incorporating specifically the coping process, some shortcomings could be pointed out here regarding the nature of occupational stress experience. The AC theory focused on the process itself, and did not reflect the comprehensive theory of stress and its related factors such as the stimulus and response factors of stress underpinning the interaction process and social support (e.g., Lazarus, 1991; Lazarus and Folkman, 1984). Thus, Lazarus and Folkman recognised the importance of the cognitive and emotions in the stress process. However, the role of physiological changes in the stress process was overlooked. Further, the reviewed studies pertinent to these latest transactional theories showed inconsistency in research findings whether using the ERI model (e.g., Aust, B., Peter, R. and Siegrist, J., 1997; Head, Stansfeld and Siegrist, 2004; Vrijkotte, van Doornen and de Geus, 1999) or the AC model (e.g., Armstrong-Stassen, 1994, 1998; Terry, Callan and Sartori, 1996). These studies through the use of the above mentioned models of stress varied in predicting and explaining adverse mental health effects and coronary heart disease due to job strain. Moreover, each of these discussed theories explains some aspects of occupational stress process with its own limitations. In particular, the transactional models focused more on cognitive and coping processes.

Therefore, a comprehensive theory of stress, as illustrated above from the limitations of the various discussed models of stress, is necessary to represent the key components of the stress process. These mainly include: 1) sources of stress; 2) perceptual, cognitive and dynamic interaction between the person and the environment; 3) response or consequences of stress; 4) appraisal and coping processes; 5) contextual, social support or culture factors; 6) personal differences. Accordingly, the next section particularly reviews the related studies to the above discussed models of stress, and expands empirically the various components related to executive stress as highlighted.
above. This review was necessary in order to further improve understanding of stress related findings, develop a model of executive stress and facilitate later the comparison of these existing arguments with the findings of this present study.

2.4 EXPLORATION OF EXECUTIVE STRESS COMPONENTS

So far, the above discussions were concentrated on reviewing existing theories and models, and highlighting their limitations to the study and definition of stress. Therefore, this section reviews the following main components that contribute to executive stress as identified above in order to facilitate the understanding and development of a model of executive stress: sources, consequences, coping strategies, and environmental stress factors.

2.4.1 Sources of Executive Stress

First, various researchers and authors have carried out or developed different studies or frameworks to determine the sources, consequences and management of occupational or job stress. For instance, Cooper and Marshall (1977) presented a framework of sources of stress related to workplace that included some aspects of the engineering and physiological stress models. It included the following categories of sources of stress: 1) intrinsic to job; 2) role in the organisation; 3) career development; 4) organizational structure and climate; 5) relationships within the organization; 6) extra organizational sources. Examples of factors intrinsic to job include work demands, working conditions, time pressures and decision making. Stressors of personal roles in the organisation include role conflict, role ambiguity, responsibility to people and participation in decision making. Stressors of career development include promotion, job security and thwarted ambition. Examples of organizational structure and climate stress factors are ineffective consultation, behavioural restrictions and office politics. Stress sources pertinent to improper relationships within the organization include those with bosses, colleagues, subordinates and difficulties delegating responsibility. Last,
the extra organizational stress factors include response to family demands and own interests. Moreover, Cooper and Marshall highlighted that stress response of the individual generally varies according to his/her personality tolerance to ambiguity, ability to cope with change, motivation and behavioural pattern.

Similarly, Matteson and Ivancevich (1982) introduced a useful framework for understanding stress, because it provided a synergistic overview, based on the physiological stress model starting with the stressors at work including physical (light, noise and temperature), job (role conflict, role ambiguity, overload, responsibility, change and time pressure), work group (norms, lack of cohesiveness and lack of group support), organisation (red tape, lack of boss support, structure and leading behaviour) and lastly career stressors (early-career, mid-career and retirement). In addition, Matteson and Ivancevich considered the non-work stressors such as family, community and financial stressors, which cannot be isolated from the individual total stressors. This framework also considered the personal characteristics, and the associated physical, psychological and organisational consequences in understanding and coping with stress. Therefore, this framework attempted to identify stressors inside and outside the work, which were interpreted, perceived and managed by the individuals differently according to their personal characteristics, genetics and desires.

Furthermore, Schermerhorn and his colleagues (1994) presented a framework that identifies three main sources of occupational stress to the individuals and organisations. These include work factors, nonwork factors and personal factors. Examples of the work factors are low or high task demands, role conflict, role ambiguity, poor interpersonal relationships and fast or slow career progress. Nonwork stressors include family-related events, economic problems and personal/spouse relationship. Personal stressors include needs, desires, capabilities, and type of personality. Schermerhorn and his colleagues also divided the potential consequences
of occupational stress into individual related and organisation related. Individual related consequences include behavioural problems, psychological problems and medical problems. Organization related consequences include decreased performance, low morale and motivation, and increased turnover and absenteeism.

On the other hand, DeFrank and Ivancevich (1998) attempted to compare between the known and familiar occupational stressors and the recent emergent ones related to the engineering model, described earlier as part of approaches of stress. These familiar stressors include work overload, role conflict, ineffective, hostile and incompetent bosses, lack of personal fit with a job, lack of recognition, lack of clear job description or chain of command, fear, uncertainty and doubt about career progress and prejudice based on age, gender, ethnicity or religion. However, the new developing stressors include competition and change, technological change, increasingly diverse workforce, downsizing, employee empowerment and teamwork, work/home conflict, elder and childcare and violence in the workplace. Schabracq and Cooper (2000) also listed these significant occupational stressors that include excessive working hours, less social activities, too much travelling, lots of role conflicts such as poor prior job planning and coordination, poor priority settings, too much job ambiguity including unclear objectives, too much variable or loose tasks and too many crucial decisions making.

Moreover, Levi (1996), in relation to the above discussed transactional theories, developed a model that illustrates the relationship between the employee and his/her work environment as a source of occupational stress. The process of occupational stress according to Levi’s model begins with a dynamic interaction between the employee’s work environment as a stressor and the appraisal system of the employee (personality characteristics, traditions, values, habits, etc.) by which these stressors would be perceived, evaluated, and handled. Consequently, there would be
negative impacts that are associated with the employee’s emotions, behaviours, and body, which eventually would lead to poor health. The degree of stress on the employee according to Levi’s model depends on other interrelating variables (coping, social support and nutrition) during the entire process of stress.

Siu, Luo and Cooper (1999) further carried out a comparative study on occupational stress involving 280 managers from Hong Kong (from March to June 1997) and 347 managers from Taiwan (from December 1996 to July 1997). The study was conducted through self-administrated questionnaires utilising the adopted British Instrument of Occupational Stress Indicator-2 (OSI-2). The framework used for this study consisted of sources of stress, i.e. workload, relationships, home/work balance, managerial role, personal responsibility, hassles, recognition and organisational climate. It also included health effects (job satisfaction, mental well-being and physical well being), strain effects (absenteeism and quitting intention), moderating variables (coping strategies, locus of control and characteristics of Type-A behaviour personality and demographical variables (age, gender, education, level, marital status, working experience, rank and company size). Individuals with Type-A’s or coronary prone behaviour are characterised by being too much aggressive, competitive, urgent, intolerant and hard workers (Frei, Racicot and Travagline, 1999).

Frei et al. also indicated that individuals with Type-B behaviour are totally opposite to type-A individuals and they are characterised by being responsive, patient, introspective, reasonable and practical. The study of Siu, Luo and Cooper (1999) also revealed that the analysis of the two samples showed similar findings of relationships among job satisfaction, mental well-being and physical well-being to studies conducted in western countries. The findings of this study with regard to the influence of the moderated variables (coping methods, locus of control and Type-A behaviour) were also consistent with the findings of the western studies. This study generally indicated
that the job stressors for both samples were negatively correlated to job satisfaction, mental and physical well-beings and locus of control, and were positively correlated to absenteeism, quitting intention, coping and type-A behaviour. Similarly, Ho (1995) conducted a survey on 143 Singaporean executives of insurance, financial and banking companies in order to determine the levels and nature of stress, and its management styles. The findings revealed that sources of stress were classified, from highest to lowest of stress levels, into work overload, role ambiguity, poor relationship with colleagues and lack of challenges. In these lines, Matteson and Ivancevich (1982) reported from previous research that executives with Type-A behaviour personality were found generally to be more stressful in terms of role ambiguity, and Type-B executives were found to be more stressful in terms of poor relationship with colleagues. Matteson and Ivancevich further indicated that Type-B’s individuals occupy more in the executive positions than type A’s.

In 1994, Worrall and Cooper (1995) further conducted a survey across 1,040 executives of West Midlands businesses to explore the nature, patterns and impacts of stress. Among the main stressors found from this survey to account for executive stress, ranked from highest to lowest, were competitive pressures, the volume of work, performance targets, relationships with colleagues and domestic issues. In addition, the survey showed that the impact of executive stress (i.e. lost days) increases proportionally to the size of the organisation except for organisations with more than 1,000 employees. According to the authors, this might be attributed to the stress management programs implemented by those large organisations as well as the use of delegation and empowerment practices. An interesting finding that stress was found higher on those executives whose headquarters were located outside UK, which might be attributed to cross-cultural differences.
Moreover, Ben-Baker, Al-Shammari and Jefri (1995) conducted a survey on 442 employees from 23 different Saudi Arabian organisations in order to evaluate the levels of stress among different nationalities including Saudis, Arabs, Asians and Westerns. The utilised stress-assessment questionnaire tested three main stress factors: physical environment, role conflict and role ambiguity. In fact, Hellriegel and Slocum (1989) developed this instrument. The results of this study revealed that the physical environment stress factor was found highest among the employees of public organisations, role conflict stress factor was found highest among the employees of private organisations, and role ambiguity stress factor was found highest among the employees of semi-private organisations. Specifically, the ambiguity on performance appraisal was found to be the highest stressor across the private and semi-private organisations. Saudi employees were found to be more stressed whereas the Westerns were found the lowest stressed employees. Other findings of this survey include the inverse relationships between stress and education and between stress and age.

Furthermore, Menon and Akhilesh (1994) examined quantitatively and comparatively occupational stress from the perspective of typical functional departments of a manufacturing organisation, i.e. production, maintenance, finance, personnel and sales. The sample of the study consisted of 128 managers from Bangalore. The nine identified functionally dependent stressors include the following: 1) role ambiguity; 2) pressure for performance; 3) responsibility for people; 4) responsibility for things; 5) travel as part of the job; 6) being on the interface; 7) status of the functional area in the organization; 8) crisis situations; 9) keeping up with change. The findings of this study revealed that the level of stress varied and were independent of age, experience and seniority among the managers working in different functional areas. For instance, personnel managers were found to have the most level of stress caused by role ambiguities, being on the interface, responsibility of people and
status factors whereas maintenance managers were found to have the most level of stress caused by pressure for performance, responsibility for things, crises and keeping with change factors. Sales managers were found to have the most level of stress caused by travel as part of the job. Keeping with change stressor was the only one found to be insignificant in terms of its dependency on the functional areas.

In conjunction with these related stress factors, Executive Health Examiners (1983) concluded that the time factor was one of the significant contributors to executive stress. This finding was also based on figures from the U.S. Department of Commerce that showed the executives worked an average of 47.5 hours per week. In fact, Sutherland and Cooper (1995) indicated that executives commonly were found to work daily an average of 10.8 working hours in addition to the frequent works during weekends. In 1990, Sutherland and Cooper also surveyed 118 European executives with their 93 associates (spouse) from different companies to examine their stress, routine activities and their standard of living. The executives in this study were recorded to have highest source of stress from time pressures and deadlines, and lowest from threat of job loss. This study also revealed that 89% of executives were generally satisfied with their current jobs. About 23% of the respondents (mostly the younger executives with age of less than 50 years old) considered leaving the chairs of top management, and finding another one mainly due to the thought of starting their own ventures.

In addition, the health issue of those executives of the sample of the study (specifically the younger ones) was a concern, which was pointed out by 27% of the respondents. The sample of this study generally reported good health, and 25% of the respondents indicated that they were at above average risk of heart disease. The percentage of respondents suffering from job burnout was 23% above average risk. The executives in this the study were found also to suffer from gastric problems (10%),
chest pains (3%), hypertension (15%), insomnia (10%) and migraine (6%). Executives with age of 50 years old and less were found more anxious and depressed.

Similarly, Executive Health Examiners reported another study conducted by Ari Kiev and Vera Kohn in 1979 for the American Management Association to identify possible sources of occupational stress. The sample of this study consisted of 2659 executives in the top and middle management. The findings of the study identified four main sources of stress to the executives. These are: 1) excessive workload and unrealistic deadlines; 2) disparity between what executive accomplishes and what he or she would like to achieve; 3) the company general political climate and lack of feedback on job performance. It was found also that the most significant stress factor among them was the work demand and time pressures. The same study found other factors contributing to executives stress including lack of authority and its unbalance with responsibilities for making decisions, the uncertainty of the company’s future, relationship with superiors and colleagues and lack of job advancement or opportunities.

Donaldson and Gowler (1975) also considered the conflict between the official powers and privileges the executive has, and how he exercises them in reality is a common source of executive stress. This indicates that executives would be stressed if they feel that they cannot utilise the formal powers and authorities they possess. In March and April of 1997 and 1998, Worrall and Cooper (1999) also carried out a survey study across 1350 UK managers, i.e. chairmen, CEO’s, Directors, Senior managers, middle managers and junior managers. The survey revealed that the long working hours including the weekends were associated with management seniority, i.e. senior managers worked more hours than lower levels, which mostly attributed to meeting deadlines. This type of pressure or workload negatively affected the managers’ health, morale, productivity, relationship with partners, and relationship with children and
social life. According to this study, home and social relationships were mostly affected by the long working hours.

In addition, Oshagbemi (1995) reviewed various studies related to the allocation of time by managers in order to explore the nature of managerial work and roles, and to address some improvements for time management. The allocations of time among those managers in the selected studies were found mostly spent in meetings as well as deskwork and phone calls. For instance, Martinko and Gardner, cited by Oshagbemi, found that 43% of the managers’ time was consumed in meetings, 21% in deskwork and 6% in phone calls. These studies also indicated that managers normally work long hours with an average of 60 to 70 hours per week. Among the major time management recommendations out of this review by Oshagbemi include appropriate control of meetings, office activities and interruptions, and proper utilisation of management and delegation skills. These mentioned studies demonstrated that the time is a significant factor in relieving or stressing the executives since they normally spend more time at work and do not pay adequate attention to other needs in their life that causes unbalance and tensions in their life. Accordingly, this is an indication for executives to realise the significance of managing and balancing the matters of home and work.

Moreover, Weinman, as cited by Fraser (1983), found that management and responsibility of people were the key and common stressor on both 276 senior and 1204 junior financial executives. This was in consistence with the findings of Cooper and Marshall (1977). They pointed out that the interpersonal problems could contribute significantly to executive stress since some executives were found to cause trouble and stress for themselves by complicating matters with their employees and make their life miserable, which ultimately affected their health. Likewise, Work-Related Stress (2001) reported among the highest executive stressors associated with FUD factor
(Fear, Uncertainty and Doubt) are: 1) work trouble with others; 2) responsibility; 3) lack of recognition; 4) feeling expression; 5) time management; 6) coping with changes.

Therefore, the above review indicated that the sources of stress vary and could not be linked to certain types of a stressor. They could be also positive or negative stressors. This empirical finding indicates that the sources of stress should be regarded as non-specific, which needs to considered in any developed model of stress. Subsequently, the abovementioned sources of stress have their consequences on the executives. These are covered next.

2.4.2 Consequences of Executive Stress

Second, Arroba and James (1992), in relation to the possible consequences of executive stress, pointed out that executives are typically exposed to various stressors from different parties: superior, subordinate, colleagues and clients. In addition, Matteson and Ivancevich (1982) reported that the general findings of various researchers on the consequences of occupational stress include the following: 1) occupational stress causes high levels of cholesterol, heart diseases, high blood pressures, and heavy smoking; 2) responsibility for employees causes more stress than responsibility for properties; 3) executives who are good in delegating tasks to subordinates are better off in terms of stress and ulcers than those who are poor delegaters.

In this regard, several cases related to executive stress problems, as reported by Executive Health Examiners (1983), demonstrated that stress has mental, physical and psychological consequences. One of the cases involved a forty-one years old division manager in a packaged goods company who, based on his behaviour and attitude, appeared to be managing his work effectively and his physical conditions appeared to be in a good shape. However, he experienced daily pains in his neck for
which he had been taking medicines. The pains were a result of uncomfortable sleeping positions due to work-related stress.

Another case related to a thirty-seven years old enthusiastic and hard-working female executive in a financial company who suffered from eczematous rashes because of work-related stress problems. A third case involved a forty-six years old vice president in a large organisation whose job required travelling and leaving his wife and three children. These business trips created tensions within his family, which made the vice president to suffer pains, heart attacks and insomnia, and to become more unstable, unreasonable, fed-up and concern that his marriage was about to break up.

Accordingly, Executives should be aware of stress and how they can control it within acceptable and reasonable limits in order to survive and manage their work properly without damaging themselves and others. These critical issues can be well represented by highlighting the significant findings of 1977’s study conducted by the National Science Foundation:

Stress is a major problem in the contemporary United States. It negatively affects the daily lives of scores of millions of Americans. It causes a bewildering array of physiological, psychological and social malfunctions. On an economic level, the effects of stress probably cost the nation over 4100 billion annually. Moreover, available evidence suggests that stress-related maladies are in the rise. (Executive Health Examiners, 1983, p. 7)

In these lines, Greenberg (1990) indicated that stress could cause illness associated with high blood pressure and increased muscular contractions, serum cholesterol, and secretions of hydrochloric acid in the stomach. Greenberg highlighted that the consequences of these stressors can be very harmful when stress is constantly exerted on the body. Breslow and Buell (1960) further studied the connection between the working hours and the death caused by Coronary Heart Disease (CHD) among a targeted population of USA workers. Their findings showed that those workers who worked more than 48 hours weekly with the age of 45 years and below experienced two times CHD’s death risks. Cooper and Sutherland (1991) found that the known problem
of "work spill-over" existed across 118 European executives which in turn affected their health, family and life even during the weekends. About 33% of them had working hours ranged between 12-16 hours per day. Some of them were suffering from heart diseases and job burnout. The stressors experienced by those executives include long working hours, work overload, time pressures, and business trips.

Moreover, Cooper and Marshall (1977) highlighted that the routine tasks and work underload were found in the literature to cause tediousness and job stress whereas handling all the jobs without proper delegations causes work overload and in turn job stress. The cross-sectional survey study by van Vegchel, de Jonge, Meijer and Hamers (2001) examined the ERI model of stress among 167 ancillary health care employees. The study indicated that both high psychological, physical and emotional efforts and low rewards resulted in higher health risks and job dissatisfaction. Similarly, de Jonge, Bosma, Peter and Siegrist (2000) investigated the effects of both D-C and the ERI models of stress on the health of 11,636 Dutch male and female workers. The findings indicated that the reported elevated risks of emotional exhaustion, mental complaints, physical health problems and job dissatisfaction were related to both high job psychological and physical demands and low job control. Further, Bakker, Killmer, Siegrist and Schaufeli (2000) examined the effects of the ERI model of stress on 204 German nurses. The findings of the study indicated that the burnout was associated with the imbalance between the efforts exhausted and low rewards gained.

Again, the above studies also indicated that the consequences of stress differ and are non-specific. These could be physiological, psychological or behavioural related. Thus, any developed model of stress needs to take account of these different manifestations and consequences of stress. Further, the lesson that should be learned from the aforementioned studies is that the executives or employees in general need to have a balance between work underload and work overload in order to enjoy their work
and maintain good level of job stress. In addition, the executives need to be aware of the different coping strategies that can assist them in handling various types of stressors. Some of these reported measures of stress management are reviewed in the following subsection.

2.4.3 Coping Strategies of Executive Stress

The third component related to stress process is coping strategies. Various researchers and authors thus have attempted to determine different types of measures to cope with stress and minimize its consequences, as discussed earlier in section 2.3.3b-2, the appraisal and coping theory. In addition to the above mentioned primary and secondary appraisal factors, one significant factor associated with the stress coping techniques is personal traits such as attitudes, perception/cognition, judgment, beliefs, type of personality, experience, tolerance, abilities, neuroticism, self-esteem and locus of control (Hewitt and Flett, 1996). For instance, Hewitt and Flett indicated that neuroticism can be coupled with emotion-focused coping techniques whereas optimism, self-esteem, and locus of control to problem-focused coping techniques. However, Hewitt and Flett drew attention to other important personal factors such as cognitive styles that have been commonly overlooked in stress coping models.

Moreover, Kirkcaldy and Furnham (1999) utilised the OSI (Occupational Stress Indicator) instrument to test mainly the coping strategies exercised by 160 German executives. The survey revealed that the most coping strategy implemented by German executives emphasised on setting priorities and dealing with problems accordingly. Kirkcaldy and Furnham also found that delegation and stable relationships stress coping strategies were mostly practiced by the higher levels of management whereas the junior and middle managers mostly coped with stress by seeking social support and the advice of superiors.
Furthermore, Ho (1995) reported from the abovementioned survey study on 143 Singaporean executives that the most stress coping strategy employed by Singaporean executives was the "switch off" technique. This technique includes the leisure travelling, reading and listening to music. The second mostly used stress coping technique by Singaporean executives was the "exercise" technique. Other techniques include quiet control, smoking, eating, communication, patience and time management.

Accordingly, these measures of stress management bring up the role of personal characteristics and culture in influencing the process of executive stress. These two important factors should be considered comprehensively in any new model of stress. The personal role is thus significant and embedded in any reaction among stress components, i.e. stressors, strains and coping. The other environmental or cultural role is discussed empirically on the following subsection.

2.4.4 Environmental/Cultural Stress Factors

Last, this part of the chapter examines the environment related factors contributing to executive stress, and culture is one of the significant factors in that environment where executives function, interact and make decisions (Doktor, 1990). In this regard, Badaway (1980) indicated that the recognition of the nature of the environment and the cultural background within which executives perform could facilitate the understanding of the specific practices and behaviours of executives. Moreover, Gray (1988) indicated that culture has a significant influence on shaping the thoughts, feelings and behaviours of people. In particular, Muna (1980) pointed out that the influence of society and culture has a prominent reflection on the leadership styles of executives such as decision making, problem solving, conflict management and interpersonal and work relations.

Furthermore, Haire, Ghiselli and Porter (1966) emphasised that the practices and behaviours of executives and managers may differ from an organisation to another,
a society to another and from a country to another despite the fact that values, perceptions and attitudes of management generally were determined to be universal. Haire, Ghiselli and Porter further emphasised that the reason behind this variation in the practices and behaviours of executives is primarily due to the cultural differences and level of modernization, civilization and industrialisation. Similarly, Certo below pointed out that the uniqueness of the work environment causes the jobs of managers to be different irrespective of the universality of management theories:

Management principles are universal, or applicable to all types of organizations (business organizations, churches, sororities, athletic teams, hospital, etc.) and organizational levels. Naturally, a manager's job is somewhat different in each of these organizations because each organization requires the use of specialized knowledge, exists in unique working and political environments, and uses different technology. However, job similarities also exist because of the common basic management activities necessary in all organizations. (Certo, 1985, p. 19)

In light of the above, this section reviews and discusses further the concept and models of culture to facilitate the understanding and development of a model of occupational stress that reflects the above discussed significant related factors contributing to executive stress.

2.4.4a The Concept of Culture

The theoretical and empirical reviews, throughout this chapter, addressed the significance of culture on shaping feelings, thoughts and behaviours of people. Accordingly, an appropriate and comprehensive model of executive stress could be developed by considering all the ingredients of the stress process including the influence of cultural factors. It was also indicated at the beginning of this section 2.4.4 (p. 60) that culture is an important factor in stress management. In this regard, Farmer and Richman (1964) reported that culture influences the practices, styles, actions and functions of executives. In view of that it was necessary to review the concept of culture and its widely accepted models to improve understanding and subsequently develop a comprehensive model of executive stress process.
At first, various authors and researchers representing various disciplines have attempted to define the complex and important term culture. However, a common definition has not yet been acknowledged and different models of culture do exist in the literature to conceptualise and describe it. In this regard, Groeschl and Doherty said:

Many human resource management and cross-cultural researchers have identified and discussed the importance of culture and its impact on human resource practice. Yet, despite this, a common understanding and agreement on the definition of culture (including variations of culture) has not yet been reached. (Groeschl and Doherty, 2000, p. 12)

An early definition of culture by Kroeber and Kluckhohn examined culture comprehensively indicating that it manifests itself essentially through typical behaviour, traditions, values, ideas, symbols, actions and reactions:

Culture consists of patterns, explicit and implicit, of and for behavior acquired and transmitted by symbols, constituting the distinctive achievement of human groups, including their embodiment in artifacts; the essential core of culture consists of traditional (i.e. historically derived and selected) ideas and especially their attached values; culture systems may, on the one hand, be considered as products of action, on the other as conditioning elements of further action. (Kroeber and Kluckhohn, 1952, p. 357)

In relation to the above definition, Groeschl and Doherty described the basic model of culture by stating: "Culture consists of several elements of which some are implicit and others are explicit. Most often these elements are explained by terms such as behaviour, values, norms, and basic assumptions" (Groeschl and Doherty, 2000, p. 14). Various authors also illustrated this basic model by using the layers of an onion as a metaphor (Lim, 1995; Trompenaars and Hampden-Turner, 1999). First, the outer and explicit layer is behaviour such as observable language, food and art. Second, the middle layer is the values (shared ideals) and norms (laws, standards and expectations). Last, the inner or core layer is basic assumptions (established beliefs: self, environment, life, nature and others).

UNESCO provides another generic definition of culture, as things that distinguish one society or group from another:
…the whole complex of distinctive, spiritual, natural, intellectual, and emotional features that characterize a society or social group; it includes not only the art and letters but also modes of life, the fundamental rights of human beings, value system, traditions, and beliefs. (UNESCO, 1982, p. 1)

Moreover, Weihrich and Koontz defined culture generally as established common and shared things among the members of a society or a group:

…the general pattern of behavior, shared beliefs, and values that members have in common. Culture can be inferred from what people say, do, and think within an organizational setting. It involves the learning and transmitting of knowledge, beliefs, and patterns of behavior over period of time, which means that an organization culture is stable and does not change fast. (Weihrich and Koontz, 1993, p. 334)

A broader definition of culture is "shared pattern of being, thinking, and behaving: something learned from childhood through socialization: something deeply rooted in tradition that permeates all aspects of given society" (Xing, 1995, p. 14).

Keller further defined culture as "the meanings and values that people attach to certain symbols concerning behavior and that these meanings and values are transmitted across generations" (Keller, 1987, p. 307).

Therefore, the above mentioned definitions of culture share certain and common aspects underpinning the concept of culture. These include shared patterns of behaviour, values, norms and beliefs, and learning and exchanging aspects of culture. Thus, culture can be described as a unique and patterned way of life with specific shared values and living standards that distinguishes a society from another. However, these definitions only outline the concept of culture without exploring what are the driving forces behind each one that makes it unique. In this regard, the following Islamic directive summarises the process of culture building in a Muslim society, such as Saudi Arabia, reflecting that culture is largely a manifestation of Islamic values and teachings: "believe and work righteously" (Abdul Latif, 1960, p. 2). This process of culture implies that the Islamic culture consists of constructive beliefs, values, justice, ethics, norms and appropriate behaviours that instruct and guide the Muslim society. Thus, Islam looks to culture from a positive stance through which the process of culture relies
on a dynamic leadership to guide its cultivation and progress in accordance with specified Islamic teachings and directions that shape and organise the society.

Subsequently, different cross-cultural dimensions have been developed to explain and model culture as discussed below.

2.4.4b Models of Culture

In the literature, there are three prevalent and widely used models or theories to understand and conceptualise national culture. These include Hofstede's indices, Hall’s High Context-Low Context cultures, and more recently, Trompenaars’ cultural dimensions (Jackson, 1995). In addition, the distinctive cultural model of Schwartz will be also presented.

2.4.4b-1 Hofstede's Model

First, Geert Hofstede, a famous Dutch researcher, relied on the following definition of culture in his model: "the collective programming of the mind which distinguishes the members of one human group from another...Culture in this sense, includes systems of values; and values are among the building blocks of culture" (Hofstede, 1984, p. 21). The collective programming was identified by Hofstede to include shared things within a group of people or society such as common values, language, desired power distance, typical approach of perceiving things and so on. Accordingly, Hofstede developed four main dimensions that distinguish different national cultures: 1) power distance; 2) individualism/collectivism; 3) uncertainty avoidance; 4) masculinity/femininity. In addition, Hofstede later developed a fifth dimension, Short-term/Long-term orientation, to incorporate the values and attitudes of the eastern countries (Hofstede, 1997; Jackson, 1995; Samovar and Porter, 2001). A description of each dimension in Hofstede's model of national culture is provided below:
1) **Power Distance Index (PDI):** The PDI index refers to "the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally" (Hofstede, 1991, p. 28). The central part of this definition is the society's elected acceptance or endorsement of the existing unequal distribution of power. In high power distance society or organisation, the respect for obedience to power, hierarchy, central authority, position and status are considered as part of natural life or work environment (Smith and Bond, 1999). In contrast, Smith and Bond indicated that the respect for individuality, independence, autonomy and decentralised authority are emphasised by low power distance societies or organisations.

2) **Individualism/Collectivism Index (IDV):** The individualism index "pertains to societies in which the ties between individuals are loose: everyone is expected to look after himself or herself and his or her immediate family" (Hofstede, 1991, p. 51). On the contrary, the collectivism index "pertains to societies in which people from birth onwards are integrated into strong, cohesive ingroups, which throughout people's lifetime continue to protect them in exchange for unquestioning loyalty" (Hofstede, 1991, p. 51). This individualism/collectivism dimension pertains to the nature and organisation of relationship between the individual and his/her group or society (Smith and Bond, 1999). Smith and Bond further indicated that individuals in the individualist cultures are concerned about own interests and problems or immediate family. On the other hand, the members of collectivist cultures function homogenously as a cooperative and loyal group (Morden, 1999).

3) **Masculinity/Femininity Index (MAS):** Masculinity dimension in Hofstede's model of culture "pertains to societies in which social gender roles are clearly distinct (i.e., men are supposed to be assertive, tough, and focused on material success whereas women are supposed to be more modest, tender, and concerned with the quality of life)" (Hofstede, 1991, p. 82). Thus, the masculine culture promotes male's norms and values.
Similarly, femininity dimension describes societies characterised by performing common, integrative and cooperative gender functions, signifying that "both men and women are supposed to be modest, tender, and concerned with the quality of life" (Hofstede, 1991, p. 83). Moreover, one important point to address here is related to the use and interpretation of masculinity index as originally intended by Hofstede. For instance, a low masculinity ranking should not be interpreted as an indication for having a low level of differentiation and discrimination between genders where females are treated equally to males in all aspects of the society. This is not the precise interpretation of the dimension itself. As mentioned earlier, Hofstede (1994) indicated that the masculinity dimension represents the typical nature, pattern, role and behaviour of the men and women, and not mainly the gender majority or domination in the society. For instance, the behaviour of masculine dominated societies tends to be assertive, tough, ambitious and competitive whereas the behaviour of feminine dominated societies is on the side of modesty, cooperation, compassion, affection, understanding, caring and nurturance. In particular, this dimension reflects the general attitudinal and behavioural patterns in a society whether they are toward manly or womanly culture, but it does not measure the majority of men and women with respect to population. Thus, there could be a feminine culture where men dominate the society. Likewise, the opposite is also true.

4) **Uncertainty Avoidance Index (UAI):** The UAI index in Hofstede's model of culture refers to "the extent to which the members of a culture feel threatened by uncertain or unknown situations" (Hofstede, 1991, p. 113). High UAI culture attempts to focus on formality, rules, procedure, detail plans and consensus to feel more comfortable and less anxiety, and cope with the encountered uncertainties and threats (Smith and Bond, 1999). Smith and Bond further indicated that high UAI cultures normally resist change.
On the other hand, Low UAI cultures promote and accept competition, conflicts and risk taking.

5) Short-Term/Long-Term Orientation: A Short-term dimension is characterised by "personal steadiness and stability, protecting face, respect for tradition, reciprocation of greetings, favors, and gifts" (Hofstede, 1991, 164). Hofstede (1997) indicated that the short-term society is static and past-present oriented with the emphasis on quick results, traditions and acquirement of insignificant economic returns. On the contrary, long-term dimension is characterised by "persistence, ordering relationships by status and observing this order, thrift, having a sense of shame (Hofstede, 1991, 164). A Long-Term, dynamic or future society is characterized by the adaptation to modern context, slow results and the attainment of significant economic returns (Hofstede, 1997).

2.4.4b-2 Hall's High-Low Context Model

The second model of culture, developed by Edward Hall, compares high context (HC) cultures to low-context (LC) cultures that focuses primarily on the spoken language or communication aspects, which are the outer layer of an onion as illustrated previously (Hall, 1981; Jackson, 1995). The HC culture is "one in which most of the information is either in the physical context or internalized in the person, while very little is in coded, explicit, transmitted part of the message" (Hall, 1981, p. 91). However, Hall indicated that the LC culture is quite the opposite where the information is made explicit and stated directly. Hall and Hall (1990) further indicated that high context cultures, such as Japan, are context dependent focus more on non-verbal communication such as facial expression and appearance. On the other hand, Hall and Hall also highlighted that low context cultures, such as Europe, rely on clear and explicit communication methods such as written messages. Thus, this dimension reflects how the members of a society contextually communicate and understand the situation (Samovar and Porter, 2001).
2.4.4b-3 Trompenaars' Model

The third model of culture, developed by Fons Trompenaars, is consistent with Hofstede's cultural dimensions. The model of Trompenaars referred to culture as "the way in which a group of people solves problems and reconciles dilemmas" (Trompenaars and Hampden-Turner, 1999, p. 6). These problems or cultural differences, as described below in detail by Trompenaars and Hampden-Turner, are examined through three fundamental cross-cultural levels:

1) **Relationships with people:** Five cultural dimensions are identified under this category. First, universalism versus particularism dimension that can be represented by the following question: Which is more critical for people- rules or relationships? Second, individualism versus communitarianism dimension that can be simplified by answering the following question: Do people act as part of a group or as an individual? This dimension is similar to Hofstede's individualism-collectivism dimension discussed above. Third, neutral versus emotional dimension that can be identified simply by answering the following question: Do people interact objectively or express their emotions? Fourth, specific versus diffuse dimension that mainly asks the following question: How far do people get involved in relationship- indirect and formal contact or direct and personal contact? Last, achievement versus ascription that can be identified by answering essentially the following question: Do people have to prove themselves to receive status or is it given to them?

2) **Attitudes to time:** Sequential versus synchronic cultures dimension that attempts to explore the following question: Do people perform tasks one at a time or together at once? This dimension is also similar to Hofstede's time-orientation dimension discussed earlier.
3) **Attitudes to the environment:** Internal versus External control dimension that question the following: Do people control their environment or be controlled by their environment?

**2.4.4b–4 Schwartz's Value Model**

Finally, Shalom Schwartz (1992, 1994, 1999) developed a value-based model to describe culture by analysing various categories of values at the individual and cultural levels. Schwartz used a list of 57 values, in his SCV's (Schwartz Value Inventory), which asked participants to report the significance of these values in their life rather than specific results. From an individual perspective, Schwartz derived ten distinct types of values described below: benevolence, universalism, tradition, conformity, power, achievement, security, self-direction, stimulation and hedonism (Dahl, 2006).

1) **Benevolence** refers to the focus on understanding, improving and safeguarding particularly the welfare of relatives, close friends or within an inner group.

2) **Universalism** is a broader term than benevolence and refers to the focus on the welfare of and care for an outer group or other people and nature.

3) **Tradition** refers to the commitment and respect of customs, beliefs, rituals and practices acknowledged within a culture.

4) **Conformity** refers to self-control on actions that may violate the established social rules, practices and norms.

5) **Power** refers to prestige, command, control and influence over people and assets.

6) Achievement refers to personal accomplishments, contribution and success.

7) **Security** focuses on self and social wellbeing, safety, protection, assurance, confidence, stability, harmony and interrelationship.

8) **Self-Direction** refers to personal freedom and independency in beliefs, decisions, conduct and lifestyle.
9) **Stimulation** necessitates excitement, motivations, inspirations, incentives, challenges in one's life.

10) **Hedonism** refers to the need and seeking for satisfaction, pleasure and enjoyment.

In parallel to the value types at individual level reviewed above, Schwartz also developed various values at the cultural level. These are grouped into three main sets of distinct value dimensions: Embeddedness/Autonomy, Hierarchy/Egalitarianism and Mastery/Harmony.

1) **Embeddedness/Autonomy**: Embeddedness is related to the value type of tradition/conformity described above. However, the emphasis is from a cultural or group perspective where the individual, as embedded within the group or society, is committed to maintain the status quo and restraint of actions that are not in the favour of the entire group's established norms and practices. Autonomy is the opposite pole and expands the self-direction value type. It describes cultures in which the individual functions independently and uniquely.

2) **Hierarchy/Egalitarianism**: Hierarchy refers to how a culture emphasises the chain of command, top-bottom obeying and respect role, and unequal distribution of power, roles and resources. It is similar to the description of Hofstede's power distance dimension. Egalitarianism, on the other hand, refers to an emphasis on equality and transcendence of selfishness to enhance the welfare of others.

3) **Mastery/Harmony**: Mastery refers to a cultural emphasis on mastering, modifying and developing the surrounding environment or world through active self-assertion, participation and motivation. Harmony, however, refers to an emphasis on accepting and adapting to the existing world or environment as it is. At such passive participation, there would not be any likely attempts to change or exploit the natural world or social environment.
The above discussions presented the generic view of culture and specifically focused at the national level. However, a narrower level exists at the boundary of an organisation. This concept of culture is called organisational or corporate culture since it is applied in the context of an organization (Lim, 1995). Next, this concept of organisational culture is described.

2.4.4c Organisational Culture

Cockburn explained that organisational culture is an output of the organisation similar to other manufactured products and services: "While people are working they are not just producing goods and services, pay packets and careers, they are also producing culture" (Cockburn, 1991, p. 134). Organizational culture thus is defined as:

a pattern of basic assumptions that a group has invented, discovered or developed in learning to cope with its problems of external adaptation and internal integration, and that have worked well enough to be considered valid, and therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems. (Schein, 1990, p. 111)

Furthermore, Pool said: "The corporate culture's taproot is the organization's beliefs and philosophy in how it conducts business" (Pool, 2000, p. 32). In particular, Pool rely on the following definition of organisational culture: "a set of processes that binds together members of an organisation based on the shared pattern of basic values, beliefs, and assumptions in an organization" (Pool, 2000, p. 33). So, these shared meanings by employees in an organisation represent the concept of organisational culture (Joiner, 2001). In this regard, Line (1999) further indicated that certain cultural aspects exist within the level of the organisation that shape the styles and behaviours of management and employees. According to Johnson and Scholes (1999), these may include organisational values such as excellence, commitment, quality service, safety, citizenship, stewardship, partnership, teamwork, trust, accountability, fairness and
integrity, human resources, decision making process, power and organizational structure, fears of making mistakes, working many hours, late work quitting and so on.

Besides, the above discussed literature indicated that culture plays a significant role in the behaviours and practices of people and management. Thus, the level of stress experienced differs from one country to another due to cultural differences and different contextual environments (Chiu and Kosinski, 1999; Defrank, Matteson, Schweiger and Ivancevich, 1985; Hofstede, 1984).

2.4.4d Executive Culture Related Stress Factors

In particular, Fairhurst (1975) explained different sources of executive stress that might arise from the following factors: 1) bureaucratic promotion programs; 2) risk and uncertainty; 3) the nature of the task; 4) luck-labelling; 5) self-identity. Some of these findings were culture and environment related, specifically luck-labelling, which indicates that executives sometimes relate success or failure to luck rather than their actual capabilities. Building on this finding, executives might attempt to explain things according to their values, beliefs, thoughts, and habits. Therefore, the aspects of culture that executives live and grow in could be a source or coping strategy of stress.

Subsequently, the practices, styles and actions of the individuals and organisations could be a sort of culture related stressors. For instance, Sutherland and Davidson (1993) showed from their survey on 561 American construction managers that the stressful long working hours were perceived as part of the organisational culture, career development and recognition. Moreover, Ashkenas and Scaffer (1982) reported in a survey that consisted of more than 1300 executives and managers including more than 500 presidents and vice presidents. The results showed that the executives and managers practiced the issue of low priority setting. In addition, most of their time was spent on non-managerial or executive tasks. Consequently, executives might consider them as a routine and habit, which may be later regarded as part of the
individual organisational culture as a normal practice. Arroba and James (1992) added that executives may stress themselves by either over reacting to or inappropriately practicing the following five specific messages, which are affected by the internal culture: 1) you should do the job very well; 2) you should do the job very quickly; 3) you have to push yourself hard to accomplish this task; 4) you must depend on yourself to do this job; 5) your work has to please the others. Arroba and James further highlighted that if these themes are impractically received and exercised by executives, they might elevate the pressure or stress on them.

Furthermore, Pool (2000) found in his study on the relationship between role stressors and organisational culture involving 238 business executives from different disciplines that the level of stress was influenced positively or negatively by the organisational culture. For instance, the productive, supportive and creative cultural environment assisted reducing the role stressors associated with conflicts and ambiguities. This type of culture recognised, challenged and valued the executives, which motivated them to pursue and accomplish the corporate objectives. On the other hand, the passive culture that relies on others' actions and focuses on following unconsciously the rules and procedures was found to be positively related to role conflict and role ambiguity. Similarly, the aggressive, individualist, perfectionist and confronting culture was found to be positively related to role stressors. Accordingly, this study indicated that organisations should strive to avoid passive and aggressive organisational cultures, and promote for a constructive, supportive and innovative culture that can lead to positive outcomes. In turn, this type of constructive culture can achieve a better congruency between the employee and the work environment as part of the discussed P-E fit model. Similarly, the study findings of Silverthorne (2004) on randomly selected employees from three Taiwan companies indicated that the person-organisation (P-O) fit was influenced by organisational culture. This fit played a
significant role in shaping the level of job satisfaction and organisational commitment for the sample under study. In particular, the bureaucratic organisational culture was found to be negatively related to job satisfaction and organisational commitment. In addition, both innovative culture and supportive culture scored the highest level of employee's job satisfaction and organisational commitment. Along these lines, organisational culture "helps determine how well a person "fits" within a particular organization because the "fit" includes feeling comfortable with the culture" (Silverthorne, 2004, p. 593).

Moreover, Wood (1975) argued that redundancy and stress are interrelated since the redundant executive has been in the first place chosen to be useless and obsolete with no role in the organisation. This kind of personal failure could be eventually stressful. This also suggests that executives must constantly be up-to-date and flexible, and adapt to changes promptly in order to be able to compete in their organisation, and eliminate the notion of redundancy from their ways. Thus, the cultural differences play a significant role in influencing the behaviour of the individuals, and thus a shared dysfunctional and unhealthy culture or perceived negative view by the employees about their organisations is unlikely helpful for them to be motivated and perform well. This was referred to earlier in the discussion of models of stress as a person-environment misfit. When this condition prevails, distress is likely to be experienced. In fact, Pool (2000) indicated that the culture factor within an organisation is very crucial element in executives’ day-to-day work since changes in the organization would not be successful unless the aspects of the organisational culture are incorporated to attain successful strategic objectives. Thus, understanding and considering the organisational culture before any rapid change takes place in an organisation will facilitate the management of organisational stress.
Hence, the earlier review of literature and the analogy made on stress/strain relationships from the viewpoints of engineering and management sciences provided an insight and focus view about the nature and relationship between occupational stress and strain processes from the human perspective. The above review signifies the importance of the following interdependent components of executive stress: sources, consequences and coping strategies of executive stress, and personal characteristics and surrounding environment or culture. It further supported the understanding presented earlier that the sources and consequences of stress vary and are not static or limited to certain types or factors such as physical, psychological or organisational. Thus, stress was regarded as non-specific and dynamic process between the stimulus and response of stress. It also highlighted the significance of the personal characteristics and the influencing environmental factors in contributing and coping to executive stress. This review was necessary to appropriately develop the model of stress based on which the topic under study was explored. Thus, the following section presents this contribution by proposing a comprehensive and integrative approach or framework to the study of stress based on the understanding and discussions presented above.

2.5 A PROPOSED APPROACH TO THE STUDY OF STRESS

The above discussion of the reviewed models of occupational stress showed that these models may not provide a sufficiently comprehensive model to understand the process of stress due to various limitations related the overall process of stress, as explained above. Thus, the development of any model of a process requires the examination and consideration of all related components to that process. In this regard, de Vaus (1996) explained the methodology of building a model is through the development of indicators and concepts of the interrelating variables or factors. In these lines, the critical review explored above showed that stress has been defined in a single term and separately from other interconnected variables that could play a significant
role in its final shape. Therefore, the term stress in literature could not be defined, explained or dealt with conclusively.

In light of the above, stress needs to be regarded as a function of a series of interrelated components or ingredients that include the dynamic and non-specific contract between stress stimulus and response, individual characteristics, coping strategies and influencing environment related factors. These are viewed as interrelated components of an interdependent process. In these lines, these stress components should not be handled individually since they all operate and react to each other in a dynamic system. Otherwise, the complexity and confusion of defining stress will continue if it continues to be regarded as a single isolated term in its definition or description. Accordingly, the appropriate method of defining and understanding stress is through a system approach since stress is a complex and an interdependent process. Accordingly, stress in this present study was not treated merely as stressors, responses or an interaction process between stressor and response, but the study incorporated all above mentioned stress interrelated components together under a dynamic and non-specific process.

In this regard, the system has been defined in general as "a perceived whole whose elements "hang together" because they continually affect each other over time and operate toward a common purpose" (Senge, Kleiner, Roberts, Ross and Smith, 1994, p. 90). Moreover, the system viewpoint of management was defined as "an approach to solving problems by diagnosing a system's input, transformation process, and output inter-relationships" (Hellriegel and Slocum, 1989, p. 61). Hellriegel and Slocum further indicated that the individual, the work group and organisation could be regarded as a system that has boundaries to separate it from its environment. They also indicated that the broad elements of the environment might include acts of God, and the natural, economic, uncertainty, social, cultural, political, work, physical and
technological environments in which everybody moves and resides. Franklin, Powell and Emami-Naeini (1991) and Hellriegel and Slocum indicated that the process typically transforms inputs to outputs through a dynamic interaction and behaviour shaped by the environment, coping strategies and feedback/forward loops. Accordingly, the system viewpoint was used to explain and describe the stress process and its underlying components or subprocesses. Figure 2.7 below illustrates the basic components of block diagram of feedback control system.

![Figure 2.7: Basic Systems View of Organization (Figure 2.4, p. 61)](image_url)


In terms of the above system concept, the input here is the stressor, the transformation process is the stress and the output is the strain. Analogically, stress was defined and explained in this study as a process that starts with sources of stress or stressors transformed by the individual's dynamic interaction with environment to consequences or strains, as illustrated in the proposed conceptual model shown below in figure 2.8.
The feedback/forward loops process then regulates the system to achieve the desired outputs. Occupational stress thus was defined in the present research as a dynamic, non-specific and complex process concerning the whole individual in the workplace. It consists of active and dynamic subprocesses including stressors or sources of stress, reactions to these stressors or stress, the influence of the environment, the individual differences, consequences or strains and coping strategies. Stress process was regarded in this study as a range of non-specific subprocesses with respect to the interaction or response of the individual to various sources of stress and the surrounding...
environment. The stress process can be positive or pleasant (eustress), negative or unpleasant (distress) or a response between these that may be hidden or felt. This was illustrated earlier in figure 2.4 (p. 36) that explained pleasant stress (eustress) and unpleasant stress (distress). This was also incorporated in the above figure 2.8 that explained the process of stress consisting of stressors (stimulus), stress (reaction), coping and strain (consequences). For example, promotion is considered as a stressor or cause, and the happiness of the person is considered as strain or response. The reaction of the person to that stimulus of promotion is considered as a stress.

Furthermore, different persons even in the same work environments may perceive stress differently. In this perspective, the mental model plays a significant role in stress process where thoughts and understanding are constructed and modified according to every new human experience of that stress components. The mental model is "both the semipermanent tacit "maps" of the world which people hold in their long-term memory, and the short-term perceptions which people build up as part of their everyday reasoning processes" (Senge et al., 1994, 237). In these lines, the response and ability to cope with the stress dynamic process can vary from person to person depending on individual characteristics such as stress perception, mental model, appraisal and cognition, type of personality, type of locus of control, motivation, abilities, skills, physical health, tolerance, needs, desires, goals, self-esteem, values, faith, age, experience, and education.

Therefore, the stress process depicted above represents the active and dynamic interaction of the individual with the surrounding environment through reacting to the various sources of stress, stressors or actions including the environment factors and the personal factors. The type of reaction whether pleasant or unpleasant is dependent on the personal characteristics, differences and cognitive processes based on which the consequences of stress or strains are determined after appraising, perceiving,
recognising, identifying, evaluating and handling the stressors and then feeding forward some coping strategies and the perceived demands and abilities to cope with them. If these strategies, personal characteristics and the supportive environmental factors do not reduce the observed stress and strain, a feedback/forward process will start to regulate the reaction to the different stressors until an appropriate coping strategy is employed successfully. Otherwise, negative strains or outcomes will follow and the health of the individual will be at risk. When the stress process is within the elastic zone, explained earlier in the analogy between the physical stress and human stress, no action is required to correct the behaviour.

However, when these stressors disrupts the stress process or system beyond its range of stability or elastic zone, then there is a need for a corrective action or appropriate stress coping strategies to restore the stability of the stress system. Along these lines, distress process occurs when one of the above mentioned components of stress process is disrupted. In particular, the above basic stress process depicted in figure 2.8, was further developed to explore the stress process caused by the basic executive functions of planning, organising, leading and controlling. Therefore, the following model shown below in figure 2.9 expands further the basic stress process to incorporate the findings of the related executive stress studies as discussed above.

In fact, the above empirical review of executive stress components related studies provided a general understanding of the stress process and its components. These studies indicated that the strains of stress process include some physiological, psychological and behavioural manifestations or consequences. This conceptual model of executive stress process incorporates specifically the basic executive functions stressors associated with planning, organising, leading and controlling as well as the physiological, psychological and behavioural strains. This study considered the main stress variables, not merely the stressor and/or the response variable. Further, the study
expanded the environment variable as part of the system model to include also the culture part, which could shape the executive stress process. In this regard, Farmer and Richman (1964) concluded that the basic managerial or executive functions are culture bound. In addition, the study included the coping and feedback loops to understand comprehensively the nature of stress.

Figure 2.9: Conceptual Framework Executive Stress Process (developed by the researcher)
Therefore, the occupational stress caused by the executive functions was specifically explored in this study by utilising the above system approach or model and the developed definition and process of stress. This model attempted to overcome the above mentioned limitations associated with the existing theories and models of stress to attain better understanding and description. This conceptual model facilitated the development of the research questions and the design of the research instrument by considering together these limitations associated with the influence of the surrounding environment or context, individual characteristics or differences, types of stress (eustress and distress), dynamic and non-specific nature of response to stress and total human being interaction with the environment, and stimulus and response of stress. The study essentially opened and examined the closed boxes shown in figure 2.9 ready to examine executive stress from the perspective of the executives of the oil and gas firms in Saudi Arabia.

2.6 CONCLUSION

This chapter reviewed and discussed the definitions and approaches of stress to improve understanding and successfully address the topic under study. Specifically, the engineering, physiological and psychological approaches to the study of stress were critically discussed. The earlier discussion of stress approaches could be simplified and summarised by the following developed figure 2.10, which shows the physiological and engineering approaches as earlier theories of occupational stress, the psychological approach as a contemporary theory of occupational stress and the present research integrative model. This figure 2.10 is a model of the way in which the various approaches to modelling stress relate to each other. It illustrates how the conceptual model was developed in this study by considering the strengths and overcoming the limitations of the old contemporary stress models discussed throughout chapter 2 at the respective sections as indicated in the figure.
The psychological approach consists of the interactional and transactional theories. Two main theories developed under the interactional model: 1) Person-Environment Fit; 2) Demand-Control-Support. Similarly, two main theories developed under the transactional model: 1) Effort-Reward Imbalance; 2) Appraisal and Coping Theory. These approaches treated stress independently with certain parts of the human being, i.e. psychological or physiological related aspects. However, the present study model reviewed critically the existing approaches to the study of stress and incorporated the associated limitations to reflect the comprehensive nature of stress process.

Moreover, an analogy to the human stress was presented by elaborating on the stress identified in physics and engineering as a metaphor. It was argued that the identified engineering approach of stress is not a precise reflection of the physical or
engineering stress. The main reason was that the referred engineering stress approach treats stress as a cause whereas the accurate definition of engineering stress defined in physics or engineering treats stress as the internal reaction or response of the object to an applied force on it. Hence, the true engineering stress is not the cause or source as described in stress literature. The term cause in the real engineering or physics is referred to as the external load or force. Alternatively, it was suggested to refer to the engineering approach of stress as stimulus-based, source-based or action-based approach.

In conjunction with this intensive and critical review of literatures presented in this chapter, the appropriate research methodology and design used to answer the research questions were facilitated and fulfilled to explore the topic under investigation utilising the developed definition of stress and integrative model or approach to the study of stress as shown in figure 2.9. In this proposed model, a consideration was given to contribute to the body of knowledge by filling the gaps in the existing theories and models to the study of stress by overcoming their limitations addressed in this chapter and treating stress as a process rather than a single component exists by itself. In fact, the presented limitations of these approaches to the study of stress facilitated the design of the research instrument by considering together the influence of the surrounding environment, individual characteristics or differences, types of stress (eustress, distress and in between response), dynamic nature of response to stress and total human being interaction with stressors and strains. Further aspects of the research methodology and design are covered in the following chapter.
CHAPTER 3
RESEARCH METHODOLOGY AND DESIGN

3.1 INTRODUCTION

The purpose of this chapter is to present the philosophical assumptions underpinning this research as well as to introduce the choice of research methodology, justifications and the empirical techniques adopted, based on the intensive and critical review of literatures presented in chapter 2 and the earlier developed definition and model of executive stress shown in figure 2.9. The answers to research questions were well dependent on its underpinning philosophy and related assumptions, which facilitated the decision on the appropriate choice of research methodology and instrumentation. Therefore, this chapter presents the research design and methodology used to explore the topic under study and subsequently answer the research questions.

3.2 PHILOSOPHY OF THE RESEARCH

In order to determine the appropriate methodology to provide answers to the research questions identified, it was first necessary to discuss in general research and its philosophical choices. Having established the appropriate research philosophical approach, the associated research methodology and techniques were determined to justify and facilitate the process of data collection and analysis.

In the literature, there have been different schools of thought in social research and categorisations of research approaches. Some authors referred to the research types or traditions from an ontological perspective by considering realism or objectivism versus nominalism or subjectivism (Burrell and Morgan, 1979; May, 1997). Some classified research from an epistemological perspective by counting on positivism or scientific versus anti-positivism, phenomenology or interpretivism (Easterby-Smith, Thorpe and Lowe, 1991; Henwood and Pidgeon, 1993; McNeill, 1990; O’Brien, 1993; Wright, 1993). Some considered the critical paradigm in addition to the positivist and
interpretivist paradigms to approach the research (Guba and Lincoln, 1994; Jupp and Norris, 1993; Perry, Alizadeh and Riege, 1997). Some also classified the types of research from a methodological perspective by utilising quantitative research that is associated with positivism versus qualitative research that is associated with interpretivism (Bryman, 1988; Henwood and Pidgeon, 1993). Others provided and will continue to develop different classifications to approach research.

Furthermore, this review of different research paradigms indicated that research was generally associated mainly with either positivism or interpretivism. Among these philosophical research categorisations, the philosophical framework developed by Burrell and Morgan (1979) was used in this study to drive the appropriate philosophy, methodology and techniques. This framework was selected since it provided an overall understanding and analysis of research philosophy by examining the nature of social science and the nature of society or organization. Moreover, most of the philosophical concepts and explanations used throughout this chapter, unless otherwise indicated, were cited from Burrell and Morgan.

3.2.1 Research Approaches

Burrell and Morgan described the nature of social science from two main approaches: objectivist or positivism and subjectivist or anti-positivist. These two perspectives were analysed by focusing on four sets of assumptions related to ontology, epistemology, human nature and methodology, as illustrated below in figure 3.1. The first set of assumptions is related to ontology, which reflects the nature of the reality under study, whether it is external and objective to the individual that is called realism or internal and subjective to the individual that is called nominalism. Nominalism regards social reality as an output of the human being whereas realism considers the social reality exiting without any influence from the human being (Henwood and Pidgeon, 1993; O’Brien, 1993).
The second set of assumptions is related to epistemology, which describes the nature of knowledge and how it is gained whether by objective, real, acquirable and tangible means as the case with positivism or through subjective, nominal, experienced and intangible means as the case with anti-positivism or phenomenology (interpretivism). Positivist epistemology regards behaviour as being caused by external sources, and people are assumed to have neither an active response nor choices to these sources (McNeill, 1990). Within the positivist tradition, the explanation and predication of these behaviours and events within type of philosophy are based on regulations and logical thinking (O’Brien, 1993) and the truth is acquired with the consideration of its value freedom and objectivity (McNeil, 1990). On the other hand, from an interpretive or phenomenological epistemological position or what is called anti-positivism, people are seen as, "active, conscious, aware of what is going on in a social situation, and capable of making choices about how to act" (McNeill, 1990, pp. 118-119).

The third set of assumptions is related to human nature which reflects the relationship between the individual and his/her environment or organisation, as being a creative, free-willed and controller of the environment as the case with voluntarism or as being a product, value-freed and controlled by the environment as the case with
determinism. Therefore, determinism assumes that the human being has no choice on the encountered situations, activities or experiences, and they are the outcomes of the environment whereas voluntarism is the opposite that assumes the human being has a choice and control on the environment. Moreover, there is in-between position that accounts for the influence of both the individual and environment on the activities.

The fourth set of assumptions is related to the nature of methodology used to examine the phenomena under investigation which is much dependent and associated with the three groups of assumptions mentioned above. The type of methodology and design is determined after choosing the appropriate related ontology, epistemology and model of human behaviour that describe the topic under investigation. The objectivists or positivists approach the social world as observers through nomothetic methodology by analysing and explaining the relationships and regularities objectively through the available universal laws, quantitative research methodology and hypothetico-deductive techniques to prove the truth. Quantitative or survey or research methods from the objectivist or positivist tradition have been applied heavily to investigate and test phenomena or theory in the natural and social sciences (McNeill, 1990; Easterby-Smith, Thorpe and Lowe, 1991). It aims in asking people questions in a structured format based on the research question in order to generate sort of statistics that describe quantitatively or numerically the population of the study (Fowler, 1984; McNeill, 1990). People’s action, values and influence are not considered in the survey research since it underpins the tradition of positivism that assumes knowledge comes from outside forces not by people’s consciousness or choices (de Vaus, 1996). Thus, survey research follows the epistemology of positivism that relies mainly on cause-and-effect relationships to reach to the required knowledge (Foddy, 1993). It is an objective and a deductive process whereby the researcher tests and validates concepts, theories and
hypotheses to assist in explaining the subject under investigation (Burrell and Morgan, 1979; Cassell and Symon, 1994).

On the other hand, the subjectivists or interpretivist approach the social world as participants through ideographic methodology by understanding the subjective reality and how the individual interprets it through qualitative research methodology and inductive techniques to construct the truth. McNeill (1990) indicated that the type of data collected in interpretive sociology is qualitative in nature rather than quantitative as the case with positivist sociology. Knowledge of qualitative research relies on a subjective phenomenological and interpretive reality that expresses the researcher’s insights, meanings and values for action guidance (Gill and Johnson, 1997). Thus, reality in qualitative research is socially constructed not determined as the case of positivism and theory is constructed from the gathered data not analytically deduced through testing the assumed hypotheses as the case with positivism (Cassell and Symon, 1994). Knowledge is produced from people through qualitative data collection by allowing interaction and values to take place (Easterby-Smith et al., 1991). Qualitative research offers a holistic picture of the topic of interest, participants and organisations that assists in understanding the behaviours of the subjects and the organisations in their natural contexts (Cassell and Symon, 1994). Knowledge comes from people’s understandings, experiences and meanings in natural settings (Gill and Johnson, 1997). Burrell and Morgan emphasised that interpretivism is the most appropriate method to allow subjective meanings and the expression of perceptions to emerge in order to facilitate this type of inquiry. Van Maanen (1983) summarised the above discussion about qualitative research as:

…an umbrella term covering an array of interpretive 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. (Van Maanen, 1983, p. 9)
3.2.2 Research Paradigms

Furthermore, Burrell and Morgan described the nature of society from the perspective of regulation-radical change dimension, as illustrated in figure 3.2. While the regulation model of society is concerned with the study of stability, cohesion and order; the radical change model of society is concerned with the study of radical change, contradiction and conflict. Burrell and Morgan further analyzed the dimensions related to the nature of social science and the nature of society, and developed four paradigms: functionalist, interpretive, radical humanist and radical structuralist.

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<th>SUBJECTIVE</th>
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<td>Radical Humanism</td>
<td>Radical Structuralism</td>
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<tr>
<td>Interpretive</td>
<td>Functionalist</td>
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**Figure 3.2:** Four paradigms for the analysis of social theory (Figure 3.1, p. 22)


3.2.2a Functionalist Paradigm

The functionalist paradigm, the dominant research framework, follows the objectivist approach and attempts to tackle issues related to the sociology of regulation in the study of societies and organizations. This paradigm is concerned "for providing explanations of status quo, social order, consensus, social integration, solidarity, need satisfaction and actuality" (Burrell and Morgan, 1979, p. 26). These characteristics related to regulatory type of society are studied from a realist ontology, positivist epistemology, determinist human nature and nomothetic methodology. Examples of
related philosophical theories include objectivism, social system theory, integrative theory, and interactionism and social action theory.

3.2.2b Interpretive Paradigm

The interpretive paradigm follows the subjectivist approach in analysing the social world and attempts to explain and understand the concerns of regulatory type of society and organizations such as status quo, social order, consensus, social integration, solidarity, need satisfaction and actuality from the eyes of the subjects. The approach of this paradigm is ontologically nominalist, epistemologically anti-positivist, human naturally voluntarist and methodologically ideographic. Examples of related philosophical theories include phenomenology, hermeneutics and phenomenological sociology.

3.2.2c Radical Humanist Paradigm

The radical humanist paradigm goes in parallel with the interpretive paradigm in analysing the social world subjectively that is nominalist in ontology, anti-positivist in epistemology, voluntarist in human nature and ideographic in methodology. However, it uses this approach to understand and explain the concerns of radical change model of society and organizations such as, "radical change, modes of domination, emancipation, deprivation and potentiality" (Burrell and Morgan, 1979, p. 32). The intent of this paradigm is to be transformative that tends to change the situation or settings. Examples of related philosophical theories include critical theory, French existentialism and anarchistic individualism.

3.2.2d Radical Structuralist Paradigm

The radical structuralist paradigm goes in parallel with the functionalist paradigm in approaching and analysing the social world objectively from a realist ontology, positivist epistemology, determinist human nature and nomothetic methodology. However, it uses this approach to explain the concerns of radical change.
model of society and organizations as in the radical humanist paradigm except that its significance is on "structural conflict, mode of domination, contradiction and deprivation" (Burrell and Morgan, 1979, p. 34). The intent of this paradigm is to be transformative that tends to change the situation or settings. Examples of related philosophical theories include conflict theory, Russian social theory and contemporary Mediterranean Marxism.

3.3 CHOICE OF METHODOLOGY AND JUSTIFICATION

The previous sections of this chapter provided a review of research in general in order to facilitate the choice of the appropriate research methodology to explore the perceptions of occupational stress caused by executive functions. The search in literature, as acknowledged in chapter 2, showed that most occupational stress studies were based on quantitative methodology, hypothetico-deductive techniques, and on a priori selection of stress variables. Moreover, measurements of stress vary in the literature and the dominant instrument is through self-administrative survey questionnaires. These studies generally approached stress by measuring the perceptions of the participants, the physiological and psychological symptoms, indicators of stress or related health problems such as cardiovascular problems (increase heart rate and blood pressure) and biochemical indicators (cholesterol, blood sugar, uric acid levels).

However, the choice of methodology for the present study was based on the framework developed by Burrell and Morgan (1979) in examining the nature of social science and the nature of society or organization. By determining the appropriate research philosophy, the methodology and techniques to answer the research questions was chosen accordingly.

3.3.1 Appropriateness of the Research Approach

As explained in chapter 2, the management and business literature identified four main basic managerial or executive functions that contribute to the success of the
executive and organization. These are: planning, organising, leading and controlling. Each function is considered as a workload and responsibility to the executives. However, the effects and stress contribution of this workload on the executives was not given adequate attention for exploration. The practice of these basic functions varies from an executive to another and from an organization to another. Also, the operation of business organizations very significantly in the market depending mainly on their type, dynamism and activities. Executives of these organizations would do their best to ensure that their jobs progress for the success of their organizations.

However, there is a hidden price caused occupational stress to be paid by executives from the account of their well being in order to practice and exercise their functions efficiently and effectively. This phenomenon of occupational stress exists within the individual and has to be experienced. It is soft, intangible and based on personal experience, insights, interpretation, feelings and perceptions of the individual. Exploring the perceptions, insights, practices and experiences of executives were necessary to understand how executive functions could contribute stress to executives. This would require an interaction with executives to gather the required data to learn their perceptions and experiences regarding stress and the practices of their executive functions. Since the topic under study would require specific and subjective data to be gathered from the eyes of the executives, occupational stress caused by executive functions was seen ontologically nominal and subjective depending on the executive’s cognition, insights and experience. The objective measurement was found not appropriate for the present research since this study would require the interaction of the executives to gain knowledge and understanding from anti-positivist perspective.

Accordingly, from ontological point of view, the topic under study were seen internal to the executives and it was dependent on their perceptions, experience, understanding, cognition, interpretation and reaction with these functions, which were
of human nature. Thus, the reality was modelled as seen and experienced by the executives under study. The nature of knowledge of occupational stress was regarded epistemologically anti-positivist since it was seen to be based on experiences, perceptions and insights of the executives. In addition, the necessary data collected for this study was achieved through subjective, nominal, experienced and intangible means.

The assumption of human nature that relates the individuals to their environments was regarded in this project to be in-between the two extremes of determinism and voluntarism. The individual sometimes would have a choice to perceive and interact with occupational stress, and sometimes it would not be the case since the external and stress factors might be over the perceptions and capability of the individual. The internal or external locus of control of the individual that has limited capability by nature was defined as, "the perception of the amount of personal control you believe you have over the events that affect your life" (Greenberg, 1990, p. 136). Greenberg argued that external locus of control is where people feel that they have low control on their sources of stress whereas internal locus of control is where people feel that they have high control on their sources of stress. Furthermore, he added that the individual may have a choice of her or her perception but the control over the environment is not achievable since it is not on the hand of the individual. Hence, the relationship between the executives as participants on the study and the workplace as an environment is in-between voluntarism and determinism. Sometime, the nature of the work and settings dictate on the executives and controls their behaviours or the executives may create their environment and deal with it from their free-will and insights.

Furthermore, the idiographic methodological assumption was seen more appropriate than nomothetic methodology for the present study since it would require the researcher to be very close to the data gathered and subjects, and obtain face-to-face
knowledge, insights and experiences through qualitative data collection process and induction techniques (Burrell and Morgan, 1979; Filstead, 1979). This in turn would allow the researcher to construct the reality and build a thorough and practical experience and understanding. Therefore, the present study was based on perceptions, experiences and insights of the subjects.

In light of the above, the subjectivist approach to investigate the topic under study was found the most appropriate to answer the research questions. The approach is ontologically nominalist, epistemologically anti-positivist and methodologically ideographic. The assumption of human nature was found in-between determinism and voluntarism.

3.3.2 Appropriateness of Interpretive Research Paradigm

The most appropriate research paradigm to investigate the present study was chosen after describing the nature of society or organization. Occupational stress, as explained in the introduction and review of literature chapters, has been a concern of the oil and gas companies as part of regulatory type of organizations, and efforts to understand and explain stress to achieve the need of satisfaction have been exerted by different researchers. The perceptions of stress depend on the subjective experience of the individual and data would be collected via the interaction and participation of the subjects with the researcher. Therefore, the interpretive or phenomenological paradigm, which is different from the traditional positivist hypothetico-deductive approach, was seen the most appropriate approach to be adopted for this study since its reality was seen to be constructed rather than to be proved truth. This interpretive paradigm follows the subjectivist approach that is ontologically nominalist and epistemologically anti-positivist and methodologically ideographic. The intermediate stance between determinism and voluntarism was adopted since the relationship between the subjects and their organizational environment and activities was influenced by both the situation
and the choice of the individuals or executives. Subsequently, qualitative research methodology of interpretive paradigm was seen appropriate to answer the research questions since the study investigated the perceptions of occupational stress caused by executive functions.

On the other hand, positivist or functionalist paradigm would not be appropriate since this study was subjective based on the perceptions and experiences of the subjects. Critical research, radical change or radical humanist paradigms would not be appropriate since the study attempted to understand and explain the perceptions of stress caused by executive functions subjectively and within the model and concerns of sociology of regulation. In addition, it was not intended to be transformative to change the situation or settings.

3.3.3 Qualitative Research Methodology

In the previous section of this chapter, it was concluded that qualitative research methodology of interpretive paradigm was appropriate to explore the topic under study. Qualitative research methodology is an inductive and subjective approach attempted to discover, describe, understand holistically and explain the meaning underpinning the perceptions, attitudes, feelings, opinions, insights, experiences beliefs, activities and practices of individuals (Patton, 1990; Hakim, 1992; Marshall and Rossman, 1995). Therefore, qualitative research attempts to represent reality through the eyes of the subjects and it focuses on:

…the meaning of human behavior, the context of social interaction, an empathetic understanding based on subjective experience, and the connections between subjective states and behavior. The tradition of verstehen or understanding places emphasis on the human capacity to know and understand others through empathetic introspection and reflection from detailed description and observation. (Patton, 1980, p. 45)

This subject experience is collected through certain qualitative techniques that is interpreted and explained during the analysis phase (Easterby-Smith et al., 1991). Among the key data collection techniques utilised to conduct qualitative research are
interviews, observations, focus groups and document analysis (McNeil, 1990; Easterby-Smith et al., 1991; Gill and Johnson, 1997; May, 1997). Filstead (1979) pointed out that qualitative research data collection techniques permits the researcher to live closely with the research and the subjects, which in turn, can facilitate the research analysis and explanation process by means of building theoretical, practical and thorough knowledge and experience from the field data. These key techniques are introduced in the following subsections.

3.3.3a Qualitative Interviewing

Qualitative interviewing is the fundamental data collection technique of qualitative methodology that enables the researcher to have a direct face-to-face contact, interaction and dialogue with the interviewees to respond to questions, explore ideas, perceptions, experiences, understanding and meaning, establish new patterns and examine the verbal and nonverbal signs (Easterby-Smith et al., 1991). King (1994, p. 14) emphasised that the prime objective of the qualitative interview is "to see the research topic from the perspective of the interviewee, and to understand how and why he or she comes to have this particular perspective". The format of questions of the interviews can be structured (objective and close-ended queries), unstructured (subjective and open-ended queries) and semi-structured (combined set of open and close ended queries).

3.3.3b Observation

Observation technique, as the name implies, allows for gathering data from participants through watching, noticing, interacting, learning and monitoring the subjective experiences, behaviours, events and activities in real settings to ensure that an understanding can be made and to discover issues that participants may be unaware of or attempt not to discuss (Easterby-Smith et al., 1991; Patton, 1990). Waddington (1994) also indicated that observations can be carried out overtly (participants are aware
of being observed) or covertly (participants are not aware of being observed) depending on the nature, setting and requirements of the research project. The different roles of field research that may be adopted by the researcher when conducting observations may include "researcher as employee; research as explicit role; interrupted involvement; and observation alone" (Easterby-Smith et al., 1991, p. 96). In other words, these researcher roles can be thought of as a continuum from the first extreme of complete participant where the researcher is covertly involved in the activities of the group under study to the other end extreme of complete observer where the researcher is uninvolved in the activities of the group and passively records observations at a distance (Adler and Adler, 1987; Vinten, 1994). In addition and between these two extremes, the two other roles lie including participant-as-observer where the researcher is overtly involved in the activities of the group and observer-as-participant where the researcher attempts to rely on predetermined formal and occasionally observations rather than informal participation. Moreover, Easterby-Smith and his colleagues highlighted that the researcher is required to decide on which role to adopt based on the research purpose and conditions including access and ethical considerations.

3.3.3c Focus Group

Focus groups, as the name implies, are narrow purpose, in-depth and small group interviewing organised and facilitated normally by the researcher with a number of specific individuals (ideally 3 to 12 participants) who share some characteristics, background and experience relevant to the topic under study (Langer, 2001; May, 1997; Strong, Ashton, Chant, and Cramond, 1994). Furthermore, Krueger (1994) also indicated that these focus groups are informal assembly that capitalizes on group dynamics and interaction to generate data, ideas, opinions, perceptions, experiences and insights that would be unlikely to emerge without the group interactions and discussions. Kitzinger (1995, p. 299) thus stated: "The idea behind the focus group
method is that group processes can help people to explore and clarify their views in ways that would be less easily accessible in a one to one interview.

### 3.3.3d Document Analysis

Lincoln and Guba (1985) defined a document as the recorded materials under possession of the participants or organizations that are not prepared specifically for the purpose of the research project. These include but not limited to annual reports, mission statements, visions, strategies, values, policies, procedures, memos, speeches, letters and personal diaries, (Forster, 1994). Forster further emphasised that these materials constitute rich, valuable and comprehensive information that can enhance the overall research analysis. Gill and Johnson (1997) also pointed out that these documents are normally difficult to access for the reasons of confidentiality and sensitivity.

### 3.3.4 Choice of Primary Data Collection Technique

Qualitative research methodology utilising a semi-structured interview technique, as a primary data collection method for the present research, was seen as the most appropriate primary method to explore and understand the perceptions of occupational stress caused by executive functions, and interpret its meanings from perspective of the executives. In addition, other secondary qualitative data collection methods such as observations, focus groups and documentary analysis were used to support the qualitative interviews. This primary technique of qualitative interview allowed the interviewer to ask mostly the interviewees specific and open-ended questions to explore the situation while the demographic information (age, gender, level of education, marital status, job title, years of experience, experience) was obtained through closed-ended questions (May, 1997). King (1994) pointed out that qualitative research interview is most appropriate when studying the perceptions of individuals on
certain organisational processes. Rubin and Rubin (1995) also emphasised that qualitative interviewing is a rigorous and in-depth data collection technique that looks at a broader perspective, realities, insights and knowledge, and enriches the learning process about the research participants and behaviours.

Furthermore, qualitative research interview method can produce "rich insights into people’s experiences, opinions, aspirations, attitudes and feelings" (May, 1997, p. 109) and it is "the most widely used qualitative method in organisational research" due to its flexibility, in-depth data collection and comfort to interviewees (King, 1994, p. 14). Through this technique, the researcher would be able to interact, learn and hear more from the interviewees and have a dialogue with them to explore ideas, understanding, meanings, hints and evidences (Easterby-Smith et al., 1991; Gill and Johnson, 1997). Qualitative interview technique would also allow for more in-depth examination and probing of the specific social issue of interest and provide an evaluation of the experienced patterns and behaviours in the organisations (King, 1994). Therefore, the researcher would be able to determine, evaluate and grasp the verbal, nonverbal and body language signs that would facilitate the process of gathering qualitative data (Easterby-Smith et al., 1991; Gill and Johnson, 1997). Although the limitations of this approach were acknowledged, as being subjective understandings and descriptions of the participants under study, it was seen the most appropriate for this study since it permits to understand, from the executives' perspectives, factors related to occupational stress and coping strategies as they experienced in their day-to-day business.

3.4 RESEARCH INSTRUMENT DESIGN

The interview research instrument, based on the critical review and discussions of the theoretical and empirical literatures and the developed model of stress presented in chapter 2, was designed to appropriately answer the research questions and explore the
The topic under study. This review of literature showed that stress understanding has been approached primarily through the investigation of one of the following: sources, consequences and coping strategies of occupational stress. However, this present study explored together these components of stress, which provided an exploratory investigation and a wider perspective in understanding stress with the focus on the executive functions. The environmental and country contextual stress factors that contribute to executives stress were also considered to ensure that the overall aspects of stress process are tackled in relation to the research context. The following figure 3.3 illustrates the integrative approach or roadmap used to develop the research instrument and explore empirically these various components of stress process addressed earlier in figure 2.9, as part of the developed conceptual model of executive stress process. These were earlier explored empirically in section 2.4. These components included: 1) basic executive functions of planning, organising, leading and controlling as sources of executive stress; 2) environmental and contextual stress factors; 3) consequences or manifestations of the basic executive stress; 4) coping strategies. The used approach to investigate the topic under study attempted first to identify specifically the activities of the executives associated with the basic functions. This would facilitate the determination of the specific sources of stress related to the basic functions from the executives themselves. Thus, the first part of the model presented in figure 2.9 (p. 83) was explored to identify the sources of stress as executive function stressors associated with the basic executive functions. Similarly, the second part of the same developed in chapter 2 associated with the consequences or manifestations of stress as executive function strains were examined. The third part of the model related to environmental and cultural factors identified as part of the environment component (acts of God, physical, economical, political, work, technological, social and cultural) were interactively explored in order to attain an understanding of the comprehensive stress
process. Last, the coping strategies coupled with the basic executive functions were also investigated. This investigation approach was meant to be interactive in order to allow the executives to express themselves in detail and share their perceptions and experiences. This would facilitate the understanding of the executive stress process.

Subsequently, several research questions were developed to be answered through this present study utilising the above research investigation approach. The first question would ensure that the executives provide the overall aspects of their activities related to the basic functions. Accordingly, the sources of stress associated with these functions could be identified. The effects of the environmental and contextual factors on the executive stress process would be determined from answering the third question. After identifying the sources and consequences of executive stress, the coping strategies, as implemented by the executives and organisations, would be discovered from answering the fourth question. Then, the executives would be given the chance to elaborate more in the stress process by providing some recommendations regarding the effective ways and means to cope with their stressors. This investigation approach described above
would provide a comprehensive and empirical understanding of the model presented in figure 2.9 as part of chapter 2. Accordingly, the following specific research questions were developed to be answered through this present study utilising the later developed qualitative interview guide as a research instrument:

1. What executive function related activities (planning, organizing, leading and controlling) do executives perceive to be stressors?

2. In what ways do executives perceive these stress effects to manifest themselves?

3. What are the stress factors related to the particular work environment (organizational or context of Saudi Arabia) make the executive functions stressful?

4. What individual and organizational strategies are available to executives in order to help them deal with the effects of stress?

5. How do executives think that the effects of stress might best be dealt with?

3.4.1 Interview Guide Development

This development of the research interview guide, as indicated by King (1994), is regarded as one of the key elements in designing the qualitative interviews to facilitate the interview process. Weiss (1994) defined the interview guide as, "a listing of areas to be covered in the interview along with, for each area, a listing of topics or questions that together will suggest lines of inquiry" (p. 48). Therefore, the qualitative interview guide is a handy tool with the interviewer to facilitate the interview process and should be prudently designed.

Subsequently, the development of the qualitative interview guide for the present study to answer the above research questions and explore the topic under study underwent a number of revisions and was not a trouble-free task. At the beginning, a draft version of the interview guide in English language was developed and distributed to some of the local professors and colleagues for review and comments.
official language used in the oil and gas industry and spoken fluently by the employees. Based on the received comments along with the remarks of the research project supervisor during the design phase of the interview instrument, two new versions of the interview guide were prepared. One was kept with the interviewer and was used during the interviews. The other one was given in advance to the interviewees along with an invitation letter to ensure that they were aware of the interview overall topics and nature of their participation. These significant reviews showed when the guide was overweighed or unneeded and where it was short and skimpy. Also, they allowed for practical learning and adjustment as required. They suggested how to start the questions and their order, which topic to cover first and to keep the demographic questions at the end of the interview.

3.4.1a Interviewee Guide Version

The interviewee guide version or agenda included in Appendix A covered the topics for discussion and exploration, and the directions of the interview process. The following table lists the contents of the interviewee guide version:

<table>
<thead>
<tr>
<th>Table 3.1: Interviewee Guide Version Content List</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Introduction and overview of the purpose of the study.</td>
</tr>
<tr>
<td>2. Discussion about the executive functions and occupational stress</td>
</tr>
<tr>
<td>3. Discussion about measures and strategies for coping with occupational stress</td>
</tr>
<tr>
<td>4. Clarification and conclusion on interview</td>
</tr>
</tbody>
</table>

This type of preparation was necessary to ensure that the interviewees were aligned with objectives of the research and were motivated by their expected valuable participation, which led to successful interviews. May (1997, p. 116) advocated that these interviews, "...are social encounters and not simply passive means of gaining information". May also indicated that preparing the executives for the interview is considered as a necessary step and more importantly an ethical requirement to enrich the dialogue with the executives; otherwise, the interview process may encounter difficulties in gaining the required information and time management.
3.4.1b Interviewer Guide Version

The interviewer guide version included in Appendix B has specific and detailed information, core questions, probes, observation and demographic information sections whereby the interviewer conducted successfully the interviews. The information included in this guide was specifically designed for the interviewer, which included things that were not recommended to be uncovered to the executives such as probes, observations, and detailed questions (King, 1994). Probes are techniques utilised by the interviewer to interrupt the interviewee positively by asking additional questions for the purpose of more exploration, elaboration, in-depth focus and understanding confirmation (Easterby-Smith et al., 1991). Easterby-Smith and his partners pointed out that this useful intervention technique could enhance, highlight new concepts and issues, and focus the process of data gathering. The following table lists the questions related to each basic executive function. These questions were primarily developed based on the model of stress depicted in figure 2.9 as part of chapter 2 and the research instrument development approach shown above in figure 3.3. These questions cover the main components of executive stress process that include sources, consequences or manifestations and coping strategies of stress as well as the environmental and contextual stress factors.

Table 3.2: Interviewer Guide Version Question List

| 1. | With regard to your responsibility for this executive function in your current job, what related activities do you perform? |
| 2. | Which are of these activities are sources of stress for you? How does this stress manifest itself? |
| 3. | Are there factors in your particular work environment (organisational or context of Saudi Arabia) that make this executive function stressful? If so, what and why is this? |
| 4. | What strategies do you employ to prevent and/or cope with stress caused by this function? |
| 5. | Is this stress caused to you by this function recognised by your colleagues/organisation? If so, do they help you to prevent and/or cope with this stress in any way? How? |
| 6. | Are there any organisational strategies for helping you to deal with the stress caused by this function? If so, what are they? Do you use them? |
| 7. | What do you think would be a good strategy for preventing and/or dealing with the stress caused by this function? |
3.4.2 Pilot Study

Early June 2002, the two developed versions of the interview guide explained above were piloted by conducting three interviews with willing lower level supervisors from Company A listed in Appendix G. This was required to finalize the design of the interview guide and strengthen this exploratory and qualitative study before the formal field testing. These pilot interviews essentially allowed for gaining the overall experience and insights, and showed how the interview guide was useful for improved focusing and attention during the actual interview process. It should be noted that the gathered data of these pilot interviews did not contribute to the analysis component of the present study. In fact, they only conducted and used to test the interview guide and gain experience to facilitate the formal study qualitative interviews.

3.5 Appropriateness of the Research Sample

This present exploratory and qualitative study, unlike quantitative research which targets a random sample, employed a purposive sampling technique to appropriately fit the purpose of this project, involve the participants who were experienced and successful top managers of oil and gas firms and explore themes in-depth. According to Merriam (1988), qualitative research is best fulfilled and approached subjectively by nonprobability or purposive sampling. Merriam, Guba and Lincoln (1989), Miles, Huberman (1994) and Cooper and Emory (1995) also pointed out that purposive sampling is appropriate for qualitative research since it is consistent with its approach that focuses on subjectivity, discovery and understanding to gain better insights, experiences and learning from the selected small group sample in the context under study. Patton (1990) and May (1997) indicated that the purposive sampling should be based on a specific criteria. Accordingly, the criterion employed here for selecting purposively the qualitative research participants was to ensure that the participants were appropriate for the purpose of the study, share certain characteristics and experiences
and adequately answer the research questions. In line with this understanding of purposive or nonprobability sampling, Cassell and Symon (1993, p. 169) reiterated the aim of the purposive or nonprobability sampling technique by stating, "...the purpose is not to establish a random or representative sample but rather to identify those people who have information about the process". More importantly, the present study focused on exploring qualitatively the perceptions of occupational stress caused by executive functions rather than having quantifiable measures of the distribution of the executives input (Babiuch and Farhar, 1994).

### 3.6 CONCLUSION

In this chapter, the philosophical assumptions underpinning this research were presented and discussed as well as the choice of research methodology, justifications and the empirical techniques adopted were introduced to facilitate the exploration of the present study. The appropriateness of qualitative methodology of interpretive paradigm for the present study was justified. In addition, the qualitative interview was selected to be the primary data collection technique to explore and answer the research questions. Other methods such as observations, focus groups and documentary analysis were also used as secondary qualitative data collection methods. The interviewee and interviewer guides as the research instrument of qualitative interview were developed and tested prior to the commencement of field study. Thus, the present study was designed to explore the following concerning each executive function of planning, organising, leading and controlling: identification of executive functions, sources of stress, work environment and contextual interrelated stress factors, stress symptoms, self-coping strategies, stress recognition and support by colleagues/ organization, stress coping strategies and programs exercised by the organization and proposed stress coping strategies. Exploration here was required for this type of new research in order to achieve clarity, understanding, and discovery of the topic under study and its associated
concepts (Cooper and Emory, 1995). Therefore, this study focused on the participants and their perceptions rather than their organisations. This type of investigation was considered as a significant contribution by this present study since it was one of the few studies that integrate the above mentioned stress process ingredients qualitatively and to understand and explore the topic under investigation.

Moreover, the last section of this chapter provided a basis, criteria and justification for selecting the research sample and participants through the purposive sampling technique. With this developed research methodology and design, the project proceeded to the data collection and analysis phase.
CHAPTER 4

METHODOLOGICAL ASPECTS OF DATA COLLECTION AND ANALYTICAL PROCEDURES

4.1 INTRODUCTION

This chapter presents the data collection and analysis process and procedures. The present project formally started late 2000 upon receiving the approval letter of the project proposal that is included in Appendix D, and it was an exploratory type of research. Then, related literatures were gathered and analyzed as presented in chapter 2. This study particularly followed an intensive review of literatures on stress, executive functions and related topics, which provided solid conceptual background for the study. This was followed by arriving to the appropriate research methodology used to answer the research questions. The research design selected for this investigation was qualitative-based utilizing in-depth or qualitative interview method. The objective of this in-depth investigation of executives was to develop a model of executive stress by exploring, describing, understanding and reconstructing the thoughts and perceptions of occupational stress caused by executive functions.

4.2 DATA COLLECTION PROCEDURE

In relation to the described research context that the participants operate in, data for this study were generated from a variety of sources to be holistically examined to maximise validity and reliability of the research. These included in-depth interviews, observations, focus groups and document analysis. The approach used here was to be fully explorative, analytical and descriptive of the perceptions and behaviours of each executive during the course of contact by the researcher. It should be noted that the researcher of this study is a Saudi national and an engineer in one of the major oil and gas companies, which facilitated the data access and collection processes.
Accordingly, this section discusses the procedure used for collecting data in accordance with the research methodology explained on the previous chapter. It includes the following subsections: sample and participants, qualitative interviewing, observations, focus groups and document analysis.

4.2.1 Sample and Participants

Following the final design of the primary research instrument or qualitative interview guide late May 2002, the public relations departments of the known oil and gas companies in Saudi Arabia were approached via frequent telephone calls and visits to request the participation of their executives in the qualitative interviews and answer the research questions. After several attempts, five major oil and gas companies showed the interest to participate in the study. For confidentiality reason, the names of the firms and brief description about these companies are covered as part of Appendix G, and can be revealed to the Doctoral Committee only. Contacts then were established with the Saudi oil and gas executives to introduce them to the study. Specifically, electronic mails and personal contacts were used frequently to explain the purpose of the study, solicit participation and clarify research related matters. Detailed information and contacts were obtained from those executives who agreed and showed interest in participating in the research project for future use and reference during the progress of the project.

Accordingly, forty-three male executives from the abovementioned five oil and gas firms were purposively selected for participation in the qualitative interviewing of this exploratory study. The overall criteria for the sample consideration to suit the purpose of the present study included: 1) large size and hierarchal structure oil and gas firms in Saudi Arabia; 2) top managers (executives) of oil and gas firms in Saudi Arabia; 3) executives who showed a willingness and interest to participate in the qualitative interview; 4) executives who held their present position for at least one year.
The study sample thus included top managers of oil and gas firms in Saudi Arabia: presidents, chief executives officers (CEO’s), senior vice presidents, vice presidents, executive directors and general managers. These Saudi executives occupy most of the executive levels in Saudi Arabia in line with the Saudisation or localisation plan initiated and mandated by the Saudi Government on all sectors (Farahat, 1993). These executives were recently subjected to various pressures evolved from the political and economic changes and developments generally in the world and in particularly the Middle East region. In turn, these changes have a great influence on the local and regional business conditions. The executives were selected to examine their perceptions of occupational stress due to their crucial roles as change agents and policy makers. Once the understanding of the importance of stress felt by those executives, they can rectify stress problems and make the appropriate corrective actions and changes to happen in their organizations. Muna (1980, p.1) valued this understanding of the critical position of the executive in the organization by stating: "the top executive, by virtue of his position in the organization, sees himself as the head of a family: employees are perceived as members of that family".

4.2.2 Qualitative Interviewing

Subsequently, an official invitation letter along with the designed interviewee guide or agenda included in Appendix A was submitted personally to those forty-three executives from five oil and gas firms soliciting their participation and commitment in the research. During these personal invitation meetings, the interview and phone follow-ups with the executives were scheduled depending on their business commitments and availability. The present study thus was explored primarily through semi-structured face-to-face qualitative interviews with those executives who were interviewed in their work offices by the author of this dissertation over a period of eight months from June 2002 to January 2003. The schedule of these interviews is included
in Appendix H. In addition, the duration for each interview averaged forty minutes during which the executives were generally enthusiastic and interested in participating in the interviews. During all interviews, the researcher used his version of the interviewer guide included in Appendix B and described earlier as part of table 3.2 in chapter 3. This guide included interview directions, core questions, probes, observations and demographic information sections to guide the interview process. Probes were frequently used during the interviews by asking additional related in-depth questions to explore and understand the topic under investigation. In line with the designed interview guides or schedules, the purpose of the study to each executive was explained before participating in the interview, and an assurance of the confidentiality of the content of the interview was made clear. Specifically, the researcher assured the participated executives that their names, responses, documents and companies will not be shared with anybody and will not appear in the official records of the University by any means. The gathered information also will be protected with complete confidentiality and anonymity. Moreover and before the interviews, the executives generally showed their cooperation and understanding of the purpose of the study and they would provide true and honest responses to the questions of the interviews. The executives responded cooperatively to the questions and added a value to the interviews. A description and profiles of these participants are provided in the next chapter.

Furthermore, all interviews were audiotaped with a prior agreement, support and understanding from the executives to facilitate later the data analysis process. Notes were also taken during the interviews and care was taken to avoid leading questions. The audiotapes after each interview were fully heard several times, transcribed and converted to Microsoft Word processor. Then, this was followed by a preliminary manual analysis of the interview contents. The interviews covered a wide-range of topics including management functions and practices, their stressors and
coping strategies, work-home interface and culture. The main points and research findings are presented and discussed in the next chapter.

4.2.3 Observations

During the qualitative interviews and interactions with the oil and gas executives, the researcher managed to observe some behaviours, styles, and verbal, nonverbal and body language signs to facilitate the understanding of the overall executives’ perceptions on the matter under investigation. The researcher noted these close observations during the interviews and they were examined thoroughly with the other data collection methods.

In addition, the researcher participated on a five-day intensive visionary leadership program for one of the oil and gas companies included in Appendix G at its main compound in Riyadh, Saudi Arabia. The program started on October 12, 2002 and completed on October 16, 2002. The Management of this company offered the researcher as one of their employee this significant opportunity to participate in the program and share knowledge and experience. This program or workshop was attended by thirteen executives along with the two outside US facilitators and two company training representatives as complete observers. The researcher adopted the role of "participant-as-observer" where he was openly and actively involved in the activities of the program. The objective of the workshop was to identify the Company’s current reality and the desired results where the gap between the current state and the desired state could be determined. During the program, the executives defined clearly workable vision and mission statements, identified inside and outside problems, highlighted strength, capabilities and weaknesses, shed light on the current and desired working environment, and arrived at quantitative measurable results to reach the desired state. Flipcharts were used to reflect the ongoing discussions and contributions of the executives. This workshop was very educational and beneficial for the present study.
since it provided an overall picture of the Company’s business, environment, culture, problems and desired results. Actually, the executives among the critical issues on the current working environment identified the high-level occupational stress as a dilemma in their day-to-day executive activities. All of these points and others were considered in the research entirely and thoroughly with other available data.

4.2.4 Focus Groups

The researcher benefited from his participation in two oil and gas conferences held at different times to conduct two focus groups at same location of the conferences with petroleum executives from different Arabian Gulf States in order to enrich the study. The first one was entitled "The Middle East Petroleum Forum", held in Dubai, UAE during February 17-19, 2003. In this focus group, three executives from Kuwait, Oman and United Arab Emirates (UAE) agreed to participate and share inputs and experiences. The other focus group was entitled "The 3rd Middle East Oil and Gas Pipelines Conference", held in Muscat, Oman during October 19-20, 2003. In this second focus group, four executives from Oman, Qatar, Bahrain and UAE shared willingly their insights and respond to topics under investigation.

The two one-hour focus groups were facilitated and moderated friendly and informally by the researcher, utilising an overhead projector to share the developed group interview guide included in Appendix C. The topics covered by this guide were similar to the questions covered by the qualitative interview guide included in Appendix A and described earlier as part of table 3.2 in chapter 3. The discussed topics of the focus groups incorporated the following: 1) Sources and symptoms of stress caused by executives’ activities; 2) Sources of stress related to environment (organisational and country’s context); 3) Stress coping strategies (self, organisational and proposed). In addition, a flipchart was used to facilitate writing the comments and insights, and document the ongoing discussions and conclusions. Both focus groups started with an
opening statement explaining the aim of the focus group and the study. The participants were advised about the significance, mechanism, organisation and expectation of the focus group. The ethics and confidentiality of the participants and gathered information were also emphasised. Moreover, the topics presented to the participants were undertaken one at a time and each participant was encouraged to participate and express freely and truly his opinion without any influence from the researcher and other participants. The discussions continued until understanding and consensuses were reached among the participants. These discussions were reflected on the available flipcharts to allow for response and information sharing, and contribution documentation. The concluded consensus and remarks were then noted, and tackled systematically and collectively with other gathered data in order to attain an overall understanding of the entire topic under study.

4.2.5 Document Analysis

In addition to the gathered data from interviews, observations and focus groups, some oil and gas executives, after completing each respective qualitative interview, shared with the researcher typical documents, which demonstrated the type of business, activities, style, leadership and roles. These included some speeches, mission and vision statements, organization charts, and business and operating plans, as indicated in Appendix H. These data assisted in understanding the topics of interest and concerns in the mind of the executives.

4.3 DATA ANALYSIS PROCEDURE

This section discusses the data analysis procedure undertaken to explore the study. The research data analysis was ongoing and continued throughout all phases of the research project. This analysis generally endeavoured to learn, reveal, understand, explain and examine the embedded themes, concepts and categories in the gathered qualitative data in order to make a sense out of them in a meaningful way. Jorgensen
(1989) provided a useful definition of the qualitative data analysis that described the analysis process embarked on by this study. Jorgensen stated:

Analysis is a breaking up, separating, or disassembling of research materials into pieces, parts, elements, or units. With facts broken down into manageable pieces, the researcher sorts and sifts them, searching for types, classes, sequences, processes, patterns or wholes. The aim of this process is to assemble or reconstruct the data in a meaningful or comprehensible fashion. (Jorgensen, 1989, p. 107)

Similarly, Charmaz (1983) used the concept of assembling, disassembling and reassembling through the coding process. Charmaz stated:

Codes serve to summarize, synthesize, and sort many observations made of the data...Researchers use codes to pull together and categorize a series of otherwise discrete events, statements, and observations which they identify in the data. (Charmaz, 1983, p. 112)

In the literature, there are various rigorous methods of qualitative data analysis that could be used to examine the gathered data and reach sound conclusions based on the objective of the research project. Miles and Huberman (1984/ 1994) suggested employing cyclic qualitative data analysis process, which consists of three main activities. These are data reduction, data display and conclusion drawing/ verification. The reduction phase involves field data reading, thinking, focusing, noticing, annotation, selection, simplification, transformation and management. The display phase involves data coding, categorising, linking, organisation, representation and preparation for conclusion drawing. The conclusion drawing/ verification phase involves finalisation of analysis, evaluating and drawing conclusions, and data validity verification, testing and discussion. Alternatively, Weiss (1994) proposed a different qualitative analysis approach based on the objective of the research report (issue-focused or case-focused) and the level of generalisation. Moreover, Easterby-Smith et al. (1991) distinguished between two main general methods of qualitative data analysis: content analysis and grounded theory. The former is consistent with positivism (section 3.2.1, p. 88) that aims toward objectivity and deduction by mainly counting significant words and phrases, and then analysing the corresponding frequencies for testing the
hypothesis. Whereas the later is consistent with interpretivism (section 3.2.2b, p. 93) that aims toward subjectivity and induction by mainly generating key concepts, themes, categories and patterns for explanation and evaluation. Although the labels and overall process of the qualitative data analysis methods identified in literature differ, this does not change that fact that they all do serve the same purpose of developing meaningful themes, and include common and core data analysis procedures, i.e. data coding, categorising, sorting, linking, interpretation and verification. This present study was not restricted to a certain and single data analysis method because it was an exploratory type of research that required specific and different means of data management and interpretation. Accordingly and as illustrated in table 4.1, a thorough and systematic qualitative data analysis procedure was developed and adopted by capitalising on main analysis techniques considered on abovementioned qualitative data analysis methods in order to achieve data richness and rigour.

<table>
<thead>
<tr>
<th>Table 4.1: Systematic Qualitative Data Analysis Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Organised the gathered data and notes from interviews, observations, focus groups and documents.</td>
</tr>
<tr>
<td>2. Edited and uploaded electronically these gathered data to NUD<em>IST qualitative analysis software for electronic analysis. NUD</em>IST software was useful in creating the related project and document, and editing, processing and managing data, memos, notes, nodes, codes, categories throughout all the analysis phase.</td>
</tr>
<tr>
<td>3. Reviewed manually, independently and collectively the gathered data with focus analytical thinking and annotations.</td>
</tr>
<tr>
<td>4. Re-read, identified, highlighted and annotated meaningful and recurring concepts that emerged out of key words, phrases, paragraphs or lines from the gathered raw data.</td>
</tr>
<tr>
<td>5. Identified and counted these repeated key words and meanings.</td>
</tr>
<tr>
<td>6. Assigned the corresponding open codes, tags or labels (abbreviations or symbols) to the identified concepts and initially categorise the words, phrases or paragraphs for more data simplification, reduction and management. A codebook was used for reference and keeping a handy master file for all generated codes. The major codes are included in Appendix J.</td>
</tr>
<tr>
<td>7. Grouped the identified codes into interpretive categories and subcategories to organise, synthesise data, and identify and explore common codes or themes.</td>
</tr>
<tr>
<td>8. Performed, refined and revised, as necessary, the processes of data coding of the concepts, categorising, indexing, cross-indexing, re-indexing, condensing, sorting, linking, constantly matching and comparing categories to identify new patterns or relationships among categories, links, relationships and meaningful data, and develop core categories (selective coding).</td>
</tr>
<tr>
<td>9. Illustrated the gathered data, executive stressors, stress symptom, culture influence, coping strategies, and the relationship among the developed themes, categories and patterns by drawing integrative diagrams, figures, flowcharts, loops, tables and matrixes to facilitate understanding and interpretation. A sample and format of the result matrix used in this</td>
</tr>
</tbody>
</table>
study is included in Appendix I.
10. Reviewed and refined further the final coding and categorisation schemes.
11. Interpreted and further verified and confirmed data analytically for useful meaning and sense making.
12. Analysed and compared the study findings with existing stress theories, models and findings of previous studies illustrated in chapter 2.
13. Analysed findings in the context of Saudi Arabia.
14. Reviewed and shared findings with eleven randomly selected executives who participated in the qualitative interviews, i.e. "member checks" group.
15. Finalised analysis and summarised findings.
16. Obtained other views on the analysis and findings by involving two concerned local Management professors from King Fahd University of Petroleum and Minerals (KFUPM).
17. Finalised further findings and displayed results.
18. Developed the conceptual framework to describe findings.

This overall, specific and integrative qualitative analysis process commenced formally upon the completion of the field data gathering process via in-depth interviews, observations, focus groups and documents. The preliminary reviews and analysis of the gathered data were essentially ongoing and iterative process throughout the data collection phase. The analysis initially proceeded by considering a discrete examination of each set of the gathered data from its respective data collection method. For instance, all data gathered via interviews were initially transcribed and examined independently from the other contents of data collection techniques. Then, the entire examined data sets were collectively studied, interpreted, understood, linked and compared to each other in order to generate the overall emerged concepts, codes, themes and categories. The study of data separately and collectively facilitated the understanding and the emergence of concepts and themes. These gathered data transcriptions and notes were then analysed qualitatively and thematically.

In conjunction with the field notes made throughout the interviews, the converted audiotapes transcriptions were used to discover the categories that emerged from the content of the interviews. The contents of the interviews along with the other gathered data from observations, focus groups and documents were analysed mainly manually, and by the latest qualitative data analysis computer package version called N6 of NUD*IST (Non-numerical Unstructured Data Indexing, Searching and Theorising).
This multi-functional qualitative software toolkit supports different philosophic or methodological forms of social research, including ethnography, grounded theory, phenomenology or content analysis (Richards and Richards, 1994). Accordingly, it is based on the coding of text documents for deep exploration and analysis of the sorts of data including interviews, focus groups, observations or journals or speeches. Whilst NUD*IST was found very time consuming and difficult to process, it aided clerically and mechanically the researcher to effectively handle new and existing categories via its powerful features that allowed mainly to create, reorganise, sort, search, compare, index/re-index and present concepts, codes, themes, categories, notes, memos, transcripts, observations and speeches. Its key feature was the development of hierarchal coding trees as a means to organise and link the emerging categories. In these lines, the researcher constantly handled manually the major conceptual qualitative data analysis part throughout all the phases of the research. The overall research findings are presented in the next chapter.

4.3.1 Qualitative Interview Analysis

The analysis of the gathered forty-three audiotaped qualitative interviews involved primarily the examinations of the words, phrases, concepts, themes verbal patterns and nonverbal behaviours, i.e. facial expressions, gestures and body language. This also included the analysis of the demographic data of executives. These interviews were classified and identified by assigning abbreviations associated with the executive sequence number, organisation and method of data collection. For instance, "ExA-I1" refers to the first (1) executive (Ex) from company (A) participated through qualitative interview (I).

Furthermore, the analysis of interviews adopted primarily the procedure spelled out on Table 4.1 to identify emergent themes and explore the topic under study. At the beginning, the researcher heard and examined more than once the contents of
each audiotaped interview immediately after completing the interview with the executives at their offices. Then, the hand write-up of the audiotapes together with the interview notes were converted and transcribed electronically into Microsoft Word Processor. The researcher also printed out cleaned copies of the interview transcripts and contents to facilitate and continue the main manual analysis. These interview transcripts totalled four hundred and forty one pages.

4.3.2 Secondary Techniques Analysis

The analysis of the gathered data from observations, focus groups and documents were examined systematically and collectively with the qualitative interview data by adopting the procedure mentioned on Table 4.1 to achieve as overall understanding of the topic under examination. The observed behaviours, styles, and verbal, nonverbal and body language signs of the executives during the primary qualitative interviews along with the observations and notes made during the five-day intensive visionary leadership program were analysed thoroughly. Moreover, the concluded consensus and remarks accomplished during the two focus groups held in UAE and Oman were tackled systematically and analytically along with the other gathered data. In relation with the above, the analysis of the documents provided by some of the participated executives including thirty-three speeches, three each mission and vision statements, two organisation charts, and three each business and operating plans were examined as part of the overall analysis and understanding of the topic under study. Details of the associated findings are discussed in the next chapter.

4.4 ETHICAL CONSIDERATIONS

As the present study involved human participants, the ethical issues were always considered before, during and after the research, specifically when embarking on data collection and analysis, and reporting findings. Miles and Huberman (1994) categorised essential research ethical concerns, which were followed in the present study. These
include: 1) Privacy, confidentiality, and anonymity; 2) Honesty and trust; 3) Harm and risk; 4) Informed consent; 5) Intervention and advocacy.

In these lines, all involved executives were informed about the researcher’s background in business administration area besides his experience on the oil and gas industry as being an engineer in one of those companies mentioned in Appendix G. In addition, the researcher introduced to all executives the research, intentions, directions and what expected from them and through a formal invitation letter included in Appendix A, and verbal communication during the course of contact and data collection process utilizing the interview guide included in Appendix B. General safeguards to the executives during the course of data collection included a discussion of the interview guide or agenda and allotted timeframe to ensure that a common understanding and awareness were attained. The utilisation and advantage of an audiotape recorder to facilitate the process of the collection and understanding of valid and accurate data was explained to the executives. The research collected data, comments, discussions, analysis and findings were treated and protected with the utmost confidentiality and anonymity. The identity of the executives and their organisations were held in confidence. Moreover, those involved executives were treated with respect, trust and honesty. The executives were also assured to get a copy of the summary of the final research findings to obtain a feedback on their participation and possible implementation and awareness of the findings.

Furthermore, the research data were gathered and analysed in an honest, ethical and professional manner. The entire research was fulfilled responsibly, professionally and academically to the best of the author’s knowledge, understanding, experience and abilities.
4.5 CRITERIA OF EVALUATION

In qualitative research, the researcher is acknowledged as, "a kind of instrument in the collection and analysis of data" (McCracken, 1988, p. 18). In this present study, the researcher essentially carried out the processes of data gathering, investigation, analysis and editing. The researcher also assumed the role of interviewer, facilitator and observer, and interacted actively with the participants to provide an accurate description and presentation of their opinions, insights and experiences. Whilst the present study was qualitative in nature, the researcher was aware of the significance of producing a plausible research, and acknowledged the related issues such as ethics, subjectivity, interests, confidentiality, access gaining, neutrality and biases that might influence the research. In these lines, the trustworthiness of the study was addressed by employing the following qualitative criteria suggested by Guba and Lincoln (1989): credibility, transferability, dependability and confirmability.

4.5.1 Credibility

The credibility or validity criterion of qualitative research to represent and described accurately the views of the participants was satisfied by ensuring that the research findings were made credible or believable from the perspectives of the participants (Guba and Lincoln, 1989). As described earlier in section 4.2, the present study employed multiple qualitative data gathering methods to provide methodological triangulation, including qualitative interviews, observation, focus groups and document analysis. This strengthened the data collection and analysis processes, allowing the capture of a more holistic and contextual interpretation of the topic under study, minimizing biases and thus enhancing the credibility and conformity of the research findings. In this regard, Gill and Johnson stated, "...strengthening qualitative research findings by combining participant observation, interviewing and documentary sources"
This methodological triangulation by combining several methods or data collection techniques within the same study of the same phenomenon under investigation is one type of triangulation identified in literature. In general, triangulation refers to the combination or use of multiple data, methods, methodologies, theories and/or investigators in a study (Denzin, 1989). Through these several methods, each participant or executive by his mouth and experience offered deep, rich, valid perceptions about occupational stress caused by executive functions. In addition, audiotaping the interviews and the use of open questions and probes enhanced the credibility of the research findings since they allowed for more open and focus response, clarification, exploration, and understanding confirmation. The credibility of the research results also were improved by obtaining feedback on the findings from the participants. Eleven randomly selected participants out of the forty-three interviewed executives confirmed commonly the research results. The perceptions, understanding and experiences of the executives were found generally congruent with the research findings. Lincoln and Guba (1989) and Merriam (1998) referred to this technique as the "member checks" qualitative technique that enhances further the credibility of the findings. Furthermore, the findings of the study were shared with two local professors from KFUPM University who appreciated the adopted methodology, views of participants, analysis procedure and the main findings of this present qualitative study. Their feedback is included in Appendix L.

4.5.2 Transferability

The transferability or generalisability criterion of qualitative research to generalise or transfer the findings of the present study to other contexts or settings was enhanced by describing thoroughly the present research context and employing various data collection techniques and involving different participants (Guba and Lincoln,
The participants of this study were primarily oil and gas executives with the focus on the context of Saudi Arabia. Although the intention of this study to be generalised within the research context, additional data were gathered through focus groups from other oil and gas executives working on different firms in the Gulf Corporation Council’s (GCC’s) countries including Bahrain, Kuwait, Oman, Qatar and UAE. These findings of these participants from other GCC’s countries of similar contexts provided a further enhancement on the transferability of the findings. Therefore, the similarity of research contexts could be one significant factor in replicating and transferring the study findings. Moreover, the transferability of the research was improved by linking and comparing the research findings with existing models, theories and studies, as illustrated in chapter 5.

4.5.3 Dependability

The dependability or reliability criterion of qualitative research is concerned with obtaining and repeating the same research results as an indication of the consistency of the findings (Guba and Lincoln, 1989). In this study, the dependability criteria was enhanced by describing thoroughly the research methodology, data collection and analysis procedures, interviews audiotaping, reflexivity, constant comparison and reinterpretation processes that lead to refined and focused understandings of the topic under study. Accordingly, other researchers can benefit from these established methodology and procedures under this present study to ensure that consistent and reliable findings are attainable.

4.5.4 Confirmability

The confirmability, objectivity or neutrality criterion of qualitative research to confirm the results by others was facilitated by establishing the research credibility, transferability and dependability (Guba and Lincoln, 1989). It was also enhanced by
describing thoroughly the research data gathering and analysis procedures, methodological triangulation, interviews audiotaping and transcribing, member checks, expert consultations, reflexivity, overt observations, trust and interpersonal communication with the participants. More importantly, the researcher knew nothing about the topic under study since it was a pioneering study to be explored and understood. This ensured that the researcher did not influence the study results, as there was neither a predetermined knowledge nor similar and existing theories or studies about the topic under investigation.

4.6 SENSE MAKING OF THE EXPLORATORY DATA

This section intends to explain the philosophy behind how sense was made out of the exploratory data. In qualitative research, data analysis, specifically data coding process, is about making sense of the gathered data and it is the building blocks for developing the corresponding theory or model (Coffey and Atkinson, 1996; Stake 1995). The nature and type of the present study was essentially an exploratory and qualitative research. This entailed employing the corresponding qualitative data collection and analysis methods underpinning the interpretive or phenomenological philosophical approach in order to induce and create meanings and patterns, build context, understand how the different themes holistically bind together to form a whole, make sense of the gathered data and realities, and construct theoretical, practical and thorough knowledge, insights and experiences. Sense making of the gathered data thus was accomplished through the processes of thorough reading, inference, inductive, understanding or verstehen reasoning, conceptualisation, coding, categorisation, linkage, comparison and interpretation. Specifically, the following steps were undertaken to make sense of the exploratory data and ensure rigour in the research: 1) through and intensive review of existing literatures; 2) detailed description of research methodology and design; 3) detailed description of research context; 4) detailed
description of data gathering procedure; 5) through systematic data analysis procedure; 6) methodological triangulation by employing various data gathering methods to yield detailed and rich information about how executive perceive, understand and cope with occupational stress; 7) consultation of experts; 8) member checks; 9) through and in-depth analysis of findings; 10) trustworthiness of the research; 11) thorough conclusions.

4.7 CONCLUSION

In this chapter, detailed descriptions of data collection and analysis procedures were provided. This chapter also illuminated certain research issues such as ethical considerations and criteria of evaluation including credibility, transferability, dependability and confirmability. Lastly, the philosophy and method of research inference, inductive, understanding or verstehen reasoning to make sense of the exploratory data were explained as part of the interpretive or phenomenological philosophical approach employed in this study to induce and create and construct meanings, themes and patterns holistically. In view of that, these corresponding research findings are displayed and discussed in the following chapter.
CHAPTER 5
RESEARCH FINDINGS AND DISCUSSIONS

5.1 INTRODUCTION

This chapter presents and discusses the findings of this exploratory study on occupational stress caused by the executive functions of planning, organising, leading and controlling. It starts by describing and presenting the findings of the demographic data of the participants under study. Then, the emerged categories and themes resulted from analysing the responses on sources and manifestations of occupational stress, associated stress factors with work environment and context of Saudi Arabia and stress coping strategies are discussed and illustrated throughout this chapter.

5.2 DESCRIPTION OF THE PARTICIPANTS

The overall results of the gathered demographic data of the research participants were qualitatively explored, sorted and categorised, as summarised below in table 5.1. This analysis included the data from forty-three Saudi executives who participated in the qualitative interviews, seven executives in the two different focus groups and thirteen executives in the observed visionary leadership workshop. All sixty-three participated male and married executives with an age of more than forty years old speak English language fluently since it is the official language used by their companies. These demographic results are examined and discussed further in the following subsections.

Table 5.1: Overall Demographic Analysis Results

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Executives</td>
<td>63</td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
</tr>
<tr>
<td>Age</td>
<td>Greater than 40 years old</td>
</tr>
<tr>
<td>Marital Status</td>
<td>Married</td>
</tr>
<tr>
<td>Number of Children</td>
<td>More than 3 children</td>
</tr>
<tr>
<td>Education Level</td>
<td>Graduate- Mostly Engineering</td>
</tr>
<tr>
<td>Years of Experience</td>
<td>More than 20 years</td>
</tr>
<tr>
<td>Years in Current Job</td>
<td>1-12 years</td>
</tr>
</tbody>
</table>
5.2.1  **Job Titles / Positions**

The analysis of the demographic data revealed that the positions of the executives at the time of the study varied, as shown in the following figure 5.1. The majority of participants held the job title of "Vice President", followed by the position of "Senior Vice President". Moreover, the nature of the specific activities among the executives under study varied according to the size of their organisation and area of responsibility that included, production, refining, distribution, engineering, project management, personnel, finance, marketing and sales.

**Figure 5.1**: Job Titles/ Positions of Participants

5.2.2  **Age Range**

The gathered age data of the participated executives were examined and classified in ranges, as shown below in Table 5.2. The range of the gathered age data mostly was found between 50 to 54 years old.
Table 5.2: Age Range of Participants

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Number of Executives</th>
</tr>
</thead>
<tbody>
<tr>
<td>40-44</td>
<td>11</td>
</tr>
<tr>
<td>45-49</td>
<td>17</td>
</tr>
<tr>
<td>50-54</td>
<td>25</td>
</tr>
<tr>
<td>55-59</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
</tr>
</tbody>
</table>

5.2.3 Years of Experience

The years of experience also varied among the executives under study, as indicated below in Table 5.3. The participated executives were found mostly with an experience range between 30 to 34 years.

Table 5.3: Years of Experience of Participants

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>Number of Executives</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-24</td>
<td>11</td>
</tr>
<tr>
<td>25-29</td>
<td>19</td>
</tr>
<tr>
<td>30-34</td>
<td>22</td>
</tr>
<tr>
<td>35-39</td>
<td>9</td>
</tr>
<tr>
<td>40-44</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
</tr>
</tbody>
</table>

5.2.4 Years in the Current Job

Thirty-three executives reported between one to four years in occupying the present executive position, as shown below in Table 5.4. Eleven executives have between 9 to 12 years in the current job at the time of the study.

Table 5.4: Years in the Current Job of Participants

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>Number of Executives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-4</td>
<td>33</td>
</tr>
<tr>
<td>5-8</td>
<td>19</td>
</tr>
<tr>
<td>9-12</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
</tr>
</tbody>
</table>

5.2.5 Education Level

The majority of executives under study were collage graduates while the rest had advanced degrees in different disciplines, as shown below on Table 5.5. In addition, the education background of most executives was in the engineering disciplines.
### Table 5.5: Education Level of Participants

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Number of Executives</th>
</tr>
</thead>
<tbody>
<tr>
<td>BS Degree</td>
<td>41</td>
</tr>
<tr>
<td>Master Degree</td>
<td>16</td>
</tr>
<tr>
<td>Doctoral Degree</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
</tr>
</tbody>
</table>

#### 5.3 OCCUPATIONAL STRESS OF EXECUTIVE FUNCTIONS

The findings of this present exploratory and qualitative study revealed significant categories and themes related to occupational stress caused by the executive functions of planning, organising, leading and controlling. These categories and themes emerged from analysing the input of executives on sources and manifestations of occupational stress, associated stress factors with work environment and context of Saudi Arabia and stress coping strategies. In addition, other important factors that emerged as recurrent themes out of the executive functions were information management, performance management, human resource management and strategic management. Each of these factors is examined below in detail. In addition, these expanded categories of occupational stress caused by the executive functions explored and developed by this present study are outlined below in Table 5.6.

After the analysis of the gathered primary interview data, 2007 nodes or categories were achieved, and then they were further analysed and triangulated with the gathered secondary data that resulted in achieving 180 condensed categories to represent and describe the concepts, phrases and words gathered and explored from the research participants. These categories were further analysed, condensed and prioritised into 13 core categories or themes. The summary analysis report of NUD*IST software is included in Appendix K. Considerations were also given to the feedback on the results received from the "member checks" group and experts. These resulted main topics of the study and their underlying themes and categories are discussed and detailed on the coming subsections.
Table 5.6: Outline of Expanded Categories of Stress Caused By Executive Functions

1.0 Stress Factors of Focused Executive Activities

1.1 Information Management
   1.1.1 Acquiring
      1.1.1a Memos
      1.1.1b Letters
      1.1.1c Reports
      1.1.1d Meetings
      1.1.1e Presentations
      1.1.1f Phone calls
      1.1.1g Conference calls
      1.1.1h Government Directives
   1.1.2 Analysing
      1.1.2a Contents
      1.1.2b Initiatives
      1.1.2c Needs
      1.1.2d Significance
      1.1.2e Urgency
      1.1.2f Uncertainty
      1.1.2g Changes
      1.1.2h Risk
   1.1.3 Negotiating
   1.1.4 Protecting
   1.1.5 Making decisions
   1.1.6 Providing feedback

1.2 Performance Management
   1.2.1 Operations Management
      1.2.1a Managing safety
      1.2.1b Managing production
      1.2.1c Managing productivity
      1.2.1d Managing efficiency
      1.2.1e Managing quality
   1.2.2 Financial Management
      1.2.2a Managing financial records
      1.2.2b Managing budget
      1.2.2c Managing profits
      1.2.2d Managing investments and projects

1.3 Human Resource Management
   1.3.1 People Management
      1.3.1a Handling conflicts
      1.3.1b Staffing
      1.3.1c Supporting
      1.3.1d Appraising
      1.3.1e Developing
   1.3.2 Task Management
      1.3.2a Solving problems
      1.3.2b Delegating tasks
      1.3.2c Handling diversity
   1.3.3 Organisation Management
      1.3.3a Creating effective organisational & communication structures
      1.3.3b Managing public relations

1.4 Strategic Management
   1.4.1 Identifying
1.4.1 Opportunities
1.4.1b Challenges
1.4.1c Threats
1.4.1d Risks

1.4.2 Developing
1.4.2a Values
1.4.2b Policies
1.4.2c Procedures
1.4.2d Rules

1.4.3 Setting
1.4.3a Visions
1.4.3b Missions
1.4.3c Strategies
1.4.3d Goals

1.4.4 Overseeing
1.4.4a Business plans
1.4.4b Operating plans
1.4.4c Strategies
1.4.4d Accountability reports

2.0 Environment Stress Factors

2.1 Internal
2.1.1 Organisational Structure
  2.1.1a Hierarchy
  2.1.1b Size
  2.1.1c Bureaucracy
  2.1.1d Rules and Policies
  2.1.2 Work Style
  2.1.2a Organisational Work Approach
    2.1.2a1 Do more work with less resources
    2.1.2a2 Zero tolerance for mistakes
    2.1.2a3 Power distance
    2.1.2a4 Uncertainty avoidance
    2.1.2a5 Short-time planning orientation
  2.1.2b Executive Interactional Behaviours
    2.1.2b1 Office politics
    2.1.2b2 Micromanagement
    2.1.2b3 Favouritism

2.2 External
2.2.1 Government interventions
2.2.2 Market influences
2.2.3 Media focus
2.2.4 Social conflict
  2.2.4a Home-work interface
  2.2.4b Social isolation

3.0 Manifestations of Executive Stress

3.1 Personal Moderating Factors
  3.1.1 Experience
  3.1.2 Personality type
  3.1.3 Cognitive appraisal
  3.1.4 Self-Esteem

3.2 Positive Manifestations
3.2.1 Satisfaction
   3.2.1a Enjoyment
   3.2.1b Pleasure
   3.2.1c Happiness
   3.2.1d Comfort
   3.2.1e Relaxation

3.2.2 Motivation
   3.2.2a Excitement
   3.2.2b Stimulation
   3.2.2c Enthusiasm
   3.2.2d Optimism
   3.2.2e Full of energy

3.3 Negative Manifestations
3.3.1 Psychological
   3.3.1a Fears
      3.3.1a1 Anxiety
      3.3.1a2 Tension
      3.3.1a3 Worthless
      3.3.1a4 Guilt
   3.3.1b Dissatisfaction
      3.3.1b1 Anger
      3.3.1b2 Frustration
      3.3.1b3 Boredom
      3.3.1b4 Sadness
      3.3.1b5 Demoralisation
   3.3.1c Exhaustion
      3.3.1c1 Loss of focus
      3.3.1c2 Loss of interest

3.3.2 Physiological
   3.3.2a Rate Abnormality
      3.3.2a1 Breathing
      3.3.2a2 Blood
      3.3.2a3 Heart
   3.3.2b Pains
      3.3.2b1 Head
      3.3.2b2 Eyes
      3.3.2b3 Neck
      3.3.2b4 Stomach
      3.3.2b5 Back
      3.3.2b6 Knees
      3.3.2b7 Muscles

4.0 Executive Stress Coping Strategies

4.1 Self
   4.1.1 Avoidance
      4.1.1a Soft drinking
      4.1.1b Smoking
      4.1.1c Internet browsing
      4.1.1d Passiveness
   4.1.2 Relaxation
      4.1.2a Deep breathing
      4.1.2b Eye relaxation
4.1.2c  Walking
4.1.3  Altered behaviour
   4.1.3a  Being calm
   4.1.3b  Being patient
   4.1.3c  Being realistic
   4.1.3d  Being listener

4.2  Social
   4.2.1  Talking to close colleagues/friends
   4.2.2  Joining clubs/societies

4.3  Organisational
   4.3.1  Incentives
      4.3.1a  Rewarding
      4.3.1b  Development
   4.3.2  Healthcare
      4.3.2a  Awareness campaigns
      4.3.2b  Medications
      4.3.2c  Recreations

4.4  Proposed
   4.4.1  Self
      4.4.1a  Time management
      4.4.1b  Readings
      4.4.1c  Self Knowledge
      4.4.1d  Spiritual practices
   4.4.2  Organisational
      4.4.2a  Internal environment improvement
      4.4.2b  Stress preventive programmes

5.3.1  Stress Factors of Focused Executive Activities

The participated executives in the study reported different sources of stress related to their basic functions as part of their responses to questions number 1 and 2, listed in the research interview guide. The findings of the present study indicated that these executive activities could be described as being indefinite and diversified. In addition, the general descriptions of activities provided by various research participants indicated that the nature of their work is normally reactive, brief and focused on responding to demands and business requirements, and make decisions accordingly.

However, the in-depth qualitative analysis of the sources of stress perceived by the research participants from their activities revealed that the stressful activities that entailed performing simultaneously the functions of planning, organising, leading and controlling could be further rearranged, reclassified and grouped into four important
core categories or themes underpinning the basic executive functions. These included the following focused stressful activities: 1) Information Management; 2) Performance Management; 3) Human Resource Management; 4) Strategic Management. The term management was added to the labels of the specific core categories to indicate that these types of activities involve simultaneously exercising four executive functions of planning, organising, leading and controlling. Accordingly, these final categories were developed to achieve commonality among the different executive activities. This was a significant contribution and development by this present exploratory study since the in-depth analysis of the reported executive activities guided to discover and understand four aforementioned significant and specific themes underpinning the basic four executive functions. Moreover, these related stressful activities were found to be associated with executive schedule, judgment and hard work. These findings also could be linked to Karasek's Demand-Control theory that relates occupational stress to the different levels of workload versus decision latitude.

The findings of the study also indicated that the determination of the effects of stress whether positive or negative is heavily dependent on the differences or characteristics of the individual. Although the majority of the executives under study perceived occupational stress mostly from the negative side (distress), there were considerable variances in the overall responses of the executives regarding their reactions to occupational stress. For instance, there were executives who considered the activity of controlling the budget as being a source of positive stress or interesting whereas some considered the same activity as being a source of negative stress or headaches. Some perceived handling people conflicts as an enjoyable task whereas some perceived them as a cause of "guilt" feelings. These four important themes are illustrated in the next subsections.
5.3.1a Information Management

First, the executives under study reported common information related activities perceived to cause stress. These were assessed, sorted and grouped under a core category of information management (IM). This core category was specifically developed after examining the important categories, subcategories and codes identified from the responses of the executives obtained through different qualitative data collection methods. Subsequently, these were further examined and sorted into the following six developed categories: 1) information acquirement; 2) information analysis; 3) information negotiation; 4) information protection; 5) information decision making; 6) information feedback providence.

Moreover, various executives attributed the significant contribution of information related activities to their level of stress from mainly the perspective of associated time pressure, thinking, efforts and reactions. One of the executives stated, "…communicating constantly via various ways and means is my entire business despite its headaches, time constraints and drawbacks" (ExE-I11, 7/8/2002)\(^1\). Essentially, the collective qualitative data analysis showed that executives deal with different sources of information to make appropriate decisions and directions. They acquired different information through written correspondences such as memos, letters, reports and directives. Others were through verbal channels such as planned and unplanned meetings, presentations, conferences and phone calls. Thus, the abovementioned types of information exchange activities described by various executives were assigned the category of information acquirement. To illustrate these points, one executive stated strongly, "We are not only attending the meetings and presentations just for the purpose of attending, but they are part of our commitments to ensure that we do provide the

\(^1\) Denotes Executive number 11 from Company E interviewed on 7 August 2002.
necessary support and directions on timely manner and as required" (ExA-I2, 16/6/2002).

The analysed data from various methods further showed that the executives under study took into consideration when handling different sources of information the examination of the nature of information contents, initiatives, needs, significance, urgency, uncertainty, changes and risk. According to several executives, these mentioned activities related to information acquirement and analysis are not trouble-free since they require different means of further negotiations; protection; decision making and appropriate feedback. To illustrate the significance of these activities, one of the executives under study pointed out the following remark, "Now, we do not have the necessary time to make decisions and sometime with inadequate or incomplete information we are required to make tough decisions affecting everything" (ExE-I6, 3/7/2002). Similarly, another executive mentioned one example of how many overlapped information, programmes and initiatives affecting him. He said, "One of the concerns is the consideration and implementation of many overlapping initiatives and programs for improvement in performance on the same time. This really makes it difficult to implement" (ExC-I42, 26/1/2003). On the other hand, another executive addressed the information protection matter by saying, "The confidentiality of information and its flow is my "A" priority job. I always find it a commitment and self assurance to safeguard completely our correspondences" (ExE-I8, 15/7/2002). Accordingly, these mentioned activities performed simultaneously as part of the planning, organising, leading and controlling functions indicated how stressful to manage the information related activities from both facets of occupational stress.

5.3.1b Performance Management

The second common executive activities causing stress related to their firm's overall operations and finances were assigned the core category of performance
management (PM). This core category was developed based on the relation and influence of the underpinning activities of operations and financial managements to the performance of the individual and firm that required performing the basic executive functions of planning, organising, leading and controlling. To illustrate the significant relationship between the operations and financial management activities in contributing to the level of occupational stress, one executive stated, "Two vital and demanding things I have to watch very carefully during my work: the fluctuations in the oil prices and net direct expenditures" (ExA-I7, 10/7/2002). The monitoring of oil prices and the net direct expenditures, as described by this executive, represent a major indicator of operations and financial matters, respectively. Another executive indicated his sources of stress are caused by different performance management activities, especially his overall responsibility in his company. He stated:

My stress comes from my responsibilities of everything I perform related to the success or failure in the company. My shoulder carries the overall responsibilities of activities related operations, engineering services, sales and marketing, research and development, finance and accounting, personnel, budgets, and so on. I have to make sure that what we do is safe, reliable, efficient, productive and cost effective. (ExA-I12, 12/8/2002)²

5.3.1b-1 Operations Management

Various executives highlighted several key stressful operations and financial management activities related to the performance of their organisation. The operations management activities reported by different executives collectively included the management of safety, production, productivity, efficiency and quality. In addition, a number of executives reported different concerns that contributed to increasing their level of distress. One stated, "I am disturbed with the much time spent on day-to-day operations" (ExA-I17, 4/9/2002). Another one highlighted different aspects related to operations including, safety, technical involvement, business stability:

² Bold text indicates the revealed codes or concepts from the research responses to develop the categories.
My conflicts and stress come from the way I deal with **different activities** in the **deep operations, safety, risks** and other **technical matters**. I just **wait for the problems to react to and fight them** or try to **work by crises and avoid the associated risks**. Such things lead to **stressful decisions to make** related to **business interruptions, plant damage or public safety**. (ExB-I23, 3/10/2002)

Similarly, several executives participated in the first focus group held in Dubai of UAE during February 2003 highlighted the related concerns of reactive management approach, and its significant intense time and conflicts with planning activities: "Fire fighting and crisis management consume our time so that nothing is left for good planning and uncovering and eliminating the root causes of problems".

### 5.3.1b-2 Financial Management

The financial management activities that cause stress included the management of financial records, budgets, profits, investments and projects. Moreover, the analysis of the mission and vision statements provided by various executives highlighted four important common elements related to performance management. These included safety, reliability, efficiency and cost effectiveness. This reflects the presence of positive or negative sources of stress originally in the organisation mission and vision statements!

Moreover, various executives reported different related concerns to performance management that cause distress. For instance, one executive pointed out that distress comes from "the frequent uncontrollable overruns in the budget and expenditures" (ExC-I14, 21/8/2002). Another executive emphasised the constraints of financial resources as a main contribution to occupational stress. He said:

The issue we often **suffer** from is our work depends on the **availability and adequacy** of the **required resources** to fulfil the required jobs. This is not the case always and we have to **rush things** and **jump here and there** to acquire the needed **funds, materials, facilities, contracts, etc**. So, it causes **potential stress** in order to bring things to normal. (ExD-I9, 22/7/2002)
5.3.1c  **Human Resource Management**

The third common executive activities causing occupational stress was assigned the core category of human resource management (HRM). The related categories underpinning this theme were further examined, and found to mainly include the management of people, task and organisation. Furthermore, this identified core category of human resource management was highlighted by Executive 30 of Company A, as part of his speeches addressing his firm’s corporate values of innovation, reliability, performance, trust, fairness, integrity and responsiveness:

The **character of our company** is **built upon a series** of what we call the **corporate values**, or **guidelines** which **attribute** such **traits** as **innovation**, **reliability** and **performance**. We view these **core values** for what they are: **the basis on which our company operates**. They include such values as **trust**, **fairness** and **integrity** and **responsiveness**. Not surprisingly, **human resources element** is at the top of the list because we know, as does any company **worth its salt**, that **people** remain the **key to success**. It is a simple matter of **economic survival**. The companies that succeed will be those with personnel who can adapt quickly to **new work-place techniques and innovations**. The **obsolescence rate of skills** is increasing **faster** than ever before.

5.3.1c-1  **People Management**

The first developed category of people management was based on various stressful activities associated with the continuous interaction between the executives and their people. These interactive activities reported by various executives under study were further sorted out into the following related main tasks: handling conflicts, staffing, supporting, appraising and developing people. In addition, several executives highlighted the significant distress contribution associated with the activity of managing conflicts among people. For instance, one executive described his feelings in this regard by stating:

**I feel** that we have been put **intentionally** in **conflicting positions** and **situations** with others. You may find yourself in a very **competitive**, **unfair**, **political** and **conflicting environment** which is very **individualistic** and **focused on oneself survival**. (ExA-I43, 28/1/2003)
Similarly, some executives associated the related stress caused by managing people from the perspective of influencing organisational culture such as the tendency toward operations side more than people side. For instance, the following executive stated in this regard,

I suffer much from managing my employees. I can say this due to the we have been developed to be more or less operations oriented and we pay less to our employees, their careers and interests though they are our most important assets. May be we need to balance our workload between production and people. (ExE-I26, 29/10/2002).

Furthermore, several executives highlighted the concern related to the recruitment and staffing process in their organisations. For instance, one executive stated the following about the interference of their superiors on their selection of manpower, "…continuous interference from our Management in the selection triggers our stress since it disrupts our plans, needs and efficiency" (ExC-I21, 17/9/2002). Another executive elaborated on this issue by saying, "It invites the bad attitude and practice of what is known wasa³, and put the wrong people in the wrong places" (ExA-I12, 12/8/2002). Likewise, the executives who participated in the visionary leadership workshop held during October 2002 pointed out to the concern associated with unfair manpower distribution.

From another perspective, various research participants indicated their willingness and satisfaction toward the support extended to their subordinates. For instance, one executive valued the practice of empowering his people and stated accordingly, "…empowering our staff require is my top priority job. Our staff require to have clear information about our visions and goals and changes a head of time since such thing affects positively their morale and performance" (ExA-I2, 16/6/2002).

Similarly, another executive indicated in this regard the importance of advising, coaching and motivating his people. He said:

³ Arabic word used frequently to indicate nepotism or favouritism.
I like to advise my employees and be close to them always because I believe that if I support my people they will support me and they are the reason for my success as well. Even just showing interest and opinion in any matter, it has a meaning to them. For myself, I do chat with my leaders every morning and try to give them my opinions and coach them as needed. (ExB-I31, 30/11/2002)

On the other hand, some executives regarded the activities associated with appraising the subordinates as a stressful process. This process was found to include mainly the following executive activities that varied in their perceptions: recognising, rewarding, promoting, warning or punishing. For instance, one executive said about this complex process:

…it is not easy thing to do. It is everything. Here, you will know the true reaction and position of the employee. To tell you the truth, this is the end result for the employee work during the year and everybody wants good merits, promotions, recognition, etc. I admit we are not perfect in this and this why it is so stressful to us. (ExD-I32, 4/12/2002).

Moreover, several executives pointed out to the associated concerns with the existing development system of his employees. To illustrate this issue, one executive indicated the concern with the unavailability of overall developmental plans for employees. He said:

…the problem I am in now, I do not have ready developmental plans for my employees at all. I do not see a clear picture about them. I want to know who I shall develop or train. I want to know who has a high potential to watch and reinforce from those who need long-term developmental plans. At this time, this is bothering me too much. We need to have an integrated and online recording and tracking system for all employees to enable us to know their capabilities and performance. This would facilitate our decisions and assure us good plans for our employees are well maintained. (ExD-I16, 28/8/2002)

Along with the abovementioned people management activities, various executives under study spoke about their key function related to people development. For instance, the following executive described this activity by saying:

We are very manpower intensive and demanding company. One thing that we should note is that our labour accounts for more than 70% of our costs. So, we are committed to the development of our employees to increase their knowledge, experience, career and productivity. Also, another thing to note we are devoted to build up our people sense of responsibility and competency to be able to control their business and performance. (ExA-I25, 21/10/2002)
Furthermore, among the key points shared by the participated executives in the workshop held during October 2002 was the discrepancy in perceptions toward people development, positions, accountability, ownership and career progress between the executives and his people. These different perceptions, as described by the following executive, led to low productivity in the overall organisational performance:

The problem is, our subordinates perceived us as unfair and not concerned about their career and development. They feel stuck in their current positions and careers. We also feel there is a need to watch them closely and there is a need for more ownership and accountability. Our subordinates do react by their feelings as they are not appreciated, supported or trusted. Thus, we realise our subordinates do not perform well as expected and little innovation and productivity entirely in our company are so resulted. (ExB-I19, 11/9/2002)

Besides, some executives showed their dissatisfaction with the shortage of manpower that hindered their people development. In view of that one executive stated, "...sometimes I cannot send my people to outside departments to broaden their knowledge and experience because I need them in their current positions. It is not frustrating for them only, but also for me as well" (ExB-I40, 14/1/2003). The participants of the two focus groups and the workshop under study also raised these two main concerns associated with people development task. Besides, a few executives highlighted the concern related to the way executives progressed and developed. For instance, one executive said:

Why only engineers do move up upstairs? Why is this focus only on engineers for development and climbing leadership ladder? I am wondering too much in this subject. There should be equal opportunities to all people based on their efforts and sincere contribution to work. (ExA-I35, 19/12/2002)

5.3.1c-2 Task Management

The second category of task management was developed based on task related stressful activities reported by different executives under study. These mainly included solving problems, delegating tasks and handling diversity. One of the most stress contributor highlighted by various executives is related to solving critical
problems associated with a number of tasks. For instance, the following executive showed his satisfaction with the related job of problem solving:

...the different tasks I perform are a sort of cockatiels. It is interesting to deal with these tasks fashionably and with clear mind and enthusiasm to resolve them for the benefit not only myself, but also for the organisation. We have to have numerous choices to assure productive solutions for any problem. So, it releases our anxieties and tensions. (ExA-I20, 15/9/2002)

Ironically, some executives perceived the delegation and problem solving tasks as distressful processes. For instance, the following executive highlighted the significance of autonomy, freedom, responsibility and authority when solving problems or managing assignments. He stated the following in this regard:

...I am up to the challenge and I can handle these delegated assignments, but the difficulty is how much I have been given when solving problems from an autonomy point of view first and a freedom level in decision making second. Our bosses should realise that when authorising us to perform certain tasks they should enable us and strengthen us in terms of full responsibility and authority. With this in mind, I can tell you frankly we are not meeting these essential requirements. Then, do not be surprised if you hear some of us complaining about lacking freedom and autonomy when solving problems. Otherwise, what the benefit we are gaining from this delegation with no empowerment. (ExB-I31, 30/11/2002).

Furthermore, several executives highlighted the nature of their work diversity and its relation to stress. To illustrate this point, the following executive addressed the diversity issue and the need for prioritising tasks and taking the benefits from the given power and authority in managing tasks. He said:

The nature of our work is quite unpredictable and expandable in the same time. Yes, we perform different tasks. Some of them enjoyable and some are not...if I have the same tasks everyday it will be boring too much. Doing things routinely is not healthy. But, also doing more than one task at the same time causes problems and anxieties to us. We need to prioritise our tasks and utilise our power and authorities wisely. (ExB-I13, 18/8/2002).

5.3.1c-3 Organisation Management

Last, various stressful human resource activities related to the organisation were integrated into the category of organisation management. These activities primarily included the creation of effective organisational and communication structures and management of public relations.
While most research participants stressed on the vital role of creating effective organisational structure to strengthen the communication flow, some executives showed the difficulty associated with creating productive and partnership climates across the organisation. For instance, the following executive highlighted the value of existing organisational vertical structure in keeping effective structure for the organisation and communication:

Our power and means of control are very tight. See, the barriers now between us and our people are kept at a distance. We mostly spend our time communicating basically with our bosses and direct subordinates. This means, we always direct and monitor our people closely. See, we want to avoid those things that could go wrong any time with, for example, improper channel of command and hierarchical communication. (ExC-I3, 19/6/2002)

However, there were some executives who complained about the communication deficiency in the existing vertical hierarchical structure. One executive said about it:

So, there is not adequate communication between the top and middle management. This has to do mostly with our structure in being very formal vertical hierarchy. We basically need to strengthen our team building. I can tell you, there is no real team building exercised at the time being. Also, many things are not filtered down as supposed to be to the lower level. You may say the same thing among the departments as well. There is a need to partner with other departments in order get rid of the friction being observed nowadays. (ExA-I20, 15/9/2002)

Furthermore, several executives spoke about the important role of being public oriented toward building constructive relationships, reinforcing executive management and subsequently improving the image of the organisation. The following executive provided a significant representation of this perspective:

I call upon every one of us to pass through the department of public relations along his career in order to learn and understand the importance of this function in building the required skills and competencies to help people inside and outside the company. It is a reputation and image of us, our people and our company. It enables you to feel comfortable when handling these related matters. Currently, we are in a time that needs our efforts to be exerted in dealing with PR’s [Public Relation] activities. We are no more isolated from the rest of this global world. Nice word, good writing, smiling and so on are needed now more than before. It is true that it is hard to always exercise them, especially when people got accustomed to deal with people as with other resources within his control. (ExB-I13, 18/8/2002)
5.3.1d Strategic Management

The final core category or theme identified in this study as a source of executive stress is strategic management (SM). This theme was developed to represent the related strategy-making stressful activities performed by the executives under study. These different activities could be grouped into four key categories: identification, development, setting and overseeing. First, the analysis of the gathered data indicated that executives are directly involved in identifying opportunities, challenges, threats and risks for the strategic success of their organisations. Second, the overall descriptions provided by the participated executives indicated that the development of values, policies, procedures and rules are greatly influenced by these executive heads. Third, the findings of the study showed the significance of the executive workload pertinent to the settings of the overall visions, missions, strategies and goals for the organisation. Last, the findings revealed the serious responsibilities of the executives in overseeing the cyclic business plans, operating plans and accountability reports.

Furthermore, various executives expressed their concerns about existing formal top-down strategic planning process. For instance, one of the executives described this process and its effects by saying:

Our five-year corporate planning process and its updates are rigid, less thorough, formal and short term oriented. This cycle is limited since the necessary information is not available besides the sophisticated nature of the world and energy economic environment and market. External related data is scarce and information is obtained frequently through personal contacts. It causes the executive to base his judgements subjectively about the future trend. In addition, it increases the rate of failure because high economic uncertainty is involved. (ExA-I28, 10/11/2002)

Likewise, another executive described the nature of the planning system and its relationship with executive stress by stating:

All activities I have just mentioned have a pressure on me to a certain extent. However, some of them cause often troubles to me more than the others. Our planning system of the five-year business, capital and budget plans are very formal, routine and periodic. These planning activities begin at a certain and fixed day of the month every year. The corporate calendar of related project-planning activities
is set for us and we have to comply with. This routine and constant activity does bother me a lot and makes me feel anxious and strained. This job needs concentration and a thorough review of its contents since it does touch sensitively the corporate budget. Any information submitted has to be accurate. I always feel bored, anxious, exhausted...to an extent that I may not trust my work. (ExA-I20, 15/9/2002).

Moreover, some executives highlighted crucial reasons for increasing stress at workplace due to failures in planning process. Among them were: the discontinuity, inconsistency and lack of implementation and control of the plans and strategies.

My anxiety appears from lacking continuity and consistency with the work and strategies which have already gone and those that need to take place today in these specific areas. The problems arise even when we plan, we do not monitor our plan implementation and its success. (ExB-I13, 18/8/2002)

For the same reasons mentioned above, several executives under study imperatively expressed their dissatisfaction regarding "the current practices and experience related to planning, selection, implementation and monitoring their strategies and desired results" (ExD-I10, 31/7/2002). Several executives under study also indicated that their engineering background affects negatively their performance on strategic management activities because they still focus on "technical matters more than the management matters of company strategies and business plans" (ExC-I15, 26/8/2002).

In addition, one executive highlighted how stressful the implementation of the strategic plans by stating:

The way the corporate plans being handled in our big size organisation is one of the major dilemma to us. Having these plans on paper is good but it will not serve the purpose of successful implementation. We need to be able to share these plans with our managers, challenge them and discuss with them certain changes that are needed for implementation. Our main headaches come from lacking commitment, engagement in technical and operational problems and accountability in making the appropriate related decisions from the side of our managers. Subsequently, we spend much time and exert a lot of energy in working vigorously with our people to achieve the needed results. (ExA-I1, 11/6/2002)

From another perspective, one of the executive highlighted the importance of developing corporate values to the vision of the company by stating:
If vision is where the company is going, values tell how the company gets there. Values outline acceptable behaviour. We convey values through actions and reactions to others. Our certain actions convey indirectly a message to our customers about the way we handle our work. This is why building teams, shared values, honesty and openness are not easy tasks to attain without stressing on our health. (ExD-I39, 8/1/2003).

Furthermore, Executive 12 from company A addressed in one of his speeches the three significant factors that have to be recognised as part of the strategies of the oil and gas industry: globalisation, economic development and environment. He said:

Three central issues usually emerge when speaking about energy in the modern context: One is globalization, another is economic development, and a third is the environment. All three are central and strategic to our interests at the oil and gas companies. As moving toward globalization, we are increasingly interconnected, and have open markets, free-flowing capital and energy, and a healthy measure of international cooperation. This leads me to the second factor - economics. Primed with new developments in technology, international finance, information processing and communications, many regions formerly on the economic fringe have new chances to enter the mainstream of commerce. These backwaters of economic deprivation are gradually becoming relics of the past. With regard to environment, there is a broad consensus among energy consumers, producers and governments that a clean environment is just as important a goal as economic development, and it must receive close attention. The oil and gas industry fully recognizes this crucial need. Our coming vision must then focus more on these three mentioned and challenging objectives: globalisation, economic development and environmental protection. Such balanced vision requires strict policies applied by the oil and gas companies including the emphasis on proven energy technologies, plentiful supplies, reasonable prices, commercial access, and full use of the energy infrastructure currently in place. Thus, we must acknowledge that it is natural - in times of traumatic and unpredictable events in the oil and gas industry - to experience stress and anxiety.

In relation to the above, Executive 18 from company B during one of his speeches emphasised the strategic role and challenges of information technology in the oil and gas industry. He said:

The technological advancements in the Information Technology field pose a challenge and at the same time add an obligation to each of us in his or her respective field. A challenge; since it demands new innovative approaches to resolve problems and address situations that not too long ago were considered daily routine jobs. Our obligation is to adapt pioneering strategies that will allow us to move forward matching the speed of change that is overwhelming our industries today…Information Technology role in this transformation is the enabling key to move this transformation to much higher levels of customer services, responsiveness and innovation. This will require out of the box approaches, shifting away from being companies that provide energy as a commodity to becoming organizations that provide energy as a service and will use technology for the delivery of this service.
5.3.2 Environmental Stress Factors

The executives under study reported various executive stress factors related to their work environment, as part of their responses to question number 3 of the interview guide. Subsequently, the findings of this study when analysed, sorted, contrasted, linked together and indexed fully revealed that the reported sources of stress, caused by the frequent interactions within the organization or within the country context through people, family and office, were mostly perceived by the executives from the negative perspective, as a source of distress. These reported environmental stress factors associated with the executive functions of planning, organising, leading and controlling were then grouped into two core categories. These included internal and external distress factors. These reported influencing environmental factors could be linked to the transactional appraisal and coping theory that concerns the evaluation process of the dynamic interaction between the individual and work environment.

5.3.2a Internal Factors

The study revealed the following two main categories of executive stress factors caused by the internal environment of the organisation at workplace. These included organisational structure and work style.

5.3.2a-1 Organisational Structure

The first category of organisational structure was assigned to account specifically for the different reported sources of distress caused by the structure of the organisation itself such as its hierarchy design, size complexity, bureaucracy, rules and policies that directly disturbing the executives. For instance, various executives indicated the difficulties and barriers associated with their organisations’ existing vertical hierarchal structures that significantly hinder their performance, and consequently increasing their level of tensions and conflicts. To illustrate this point, one of the participated executives described critically this issue by saying:
We talk a lot about work deficiencies but we rarely address the ways and means we operate in this very large company. Although we are now in very global and changing petroleum market, we still maintain the same organisation set up we had from 1960’s. The set up is still organised in a top-bottom hierarchy and somehow very stressful centralised decision making and bureaucratic system. It is clear for everybody that this rigid and complicated set up is not suitable in these days, especially when freedom and flexibility in decision, prompt and useful information and communication are essential for innovation and success nowadays. (ExA-I29, 19/11/2002)

This executive and others under study attributed the increase in the level of stress to the rigidity of the existing centralised and bureaucratic organisational design and system that lead to ineffective flow of information, communication and decision making within such existing settings. On the other hand, another executive highlighted various stressful consequences associated with the size and complexity of the organisation by saying:

…may be this vertical arrangement is suitable for small companies but for a large company like us, it is a complicated matter. We are truly facing problems in accountability, commitment, trust, openness, top-down influence, conflict across departments, overload in information up the hierarchy, internal tension and competition, poor communication and low responsiveness particularly during crises, adapting innovations and changes, and so on. (ExB-I18, 9/9/2002)

Similarly, the above findings were partially consistent with the executive stress factors addressed by Fairhurst (1975) and reviewed in chapter 2. These included bureaucratic promotion programs, risk and uncertainty, the nature of the task, luck-labelling, self-identity.

Accordingly, these abovementioned organisational consequences should open the eyes to a significant subject regarding the effects of organisational culture and organisational settings in reshaping the executive stress. They also indicate the importance of focusing, addressing and improving the area of human resource to alleviate effectively these problems associated with the executive himself and the quality of the organisational settings.
5.3.2a Work Style

The second category of work style was assigned to represent the sources of distress caused by different executive work styles. In addition, the two subcategories of organisational work approach and executive interactional behaviours were identified under this category.

5.3.2a.1 Organisational Work Approach

Under the first subcategory of organisational work approach, the following five different work styles and practices were developed to cause distress as perceived by various executives: 1) do more work with less resources; 2) zero tolerance for mistakes; 3) power distance; 4) uncertainty avoidance; 5) short-time planning orientation. The executives under study described these five developed subcategories in different ways. For instance, several executives, as stated below, highlighted a typical conflict between existing resources and demands that in turn adds to their level of distress, "...we are always being asked to fulfil more with very insufficient resources, do more with less strategy" (ExB-I23, 3/10/2002). Another executive expressed his concerns about his company's practice of zero tolerance theory by stating:

We are always anxious to be blamed when things go wrong. Management always intervenes in our work and they do not allow for any mistake and do not accept any risk. We feel that nobody in the top pays attention to the critical consequences of imposing this thinking on people. (ExA-I25, 21/10/2002)

Similarly, the aforementioned findings on the stressful messages related to internal culture were partially supported by the arguments presented by Arroba and James (1992). These included: 1) "you should do the job very well"; 2) "you should do the job very quickly"; 3) "you have to push yourself hard to accomplish this task"; 4) "you must depend on yourself to do this job"; 5) "your work has to please the others".

Furthermore, most executives under study referred to the effects of maintaining related aspects of high power distance, uncertainty avoidance and short-time planning orientation culture in their organisations as sources of distress and
dissatisfaction. The following response by one of the top-level executives illustrated this point and its relation to present practice of responsibility and risk avoidance, business and environment stability maintenance and bureaucratic system inclination:

...we normally at the top avoid responsibility and taking risks. We work definitely for stable environment and business though we face a lot of challenges and crises...You can notice that when we personally monitor and control the business very closely, and avoid delegating many authorities. Also, we assign tasks to those who we trust most and are very close to use...More than that, it is still good to keep a distance for better respect and power. (ExA-I12, 12/8/2002)

In particular, these study findings related to the organisational power distance and distance and uncertainty avoidance aspects were consistent with the findings of Hofstede (1991), and Bjorn and Al-Meer (1993), which were presented in chapter 4.

Moreover, another executive said about the short-time planning orientation, "I am annoyed about our quick fixes. We need to be proactive and envision our future problems, needs and consequences of our actions and establish our choices accordingly" (ExC-I42, 26/1/2003). Similarly, the participants of the focus group held in Dubai of UAE during February 2003 suggested the following to improve work style and planning system: 1) "Adaptation of proactive planning management tactic"; 2) "Prevention of sudden movement of management and discontinuity"; 3) "Establishment of true centres for research and development". In addition, some executives shared the confusion on comparing the different leadership approaches and styles should be adopted as brought up by one of the participants in the focus group held in Muscat of Oman during the month of October 2003. Subsequently, this difference in perspectives contributed to executive stress. He stated:

...we here facing continuous internal and external pressures and often we fail to make the right decisions thereby we are not performing well. We receive criticisms from other companies about our way of conducting business. Some of them say that this era differs from before and you need to enter the competition with the appropriate management style and you cannot do business with yesterday’s methods to be successful today and tomorrow. These issues really create a big stress on us. We do not know what is the best approach or
direction to employ. Our company now is focusing on improving the leadership styles by providing up-to-date courses and workshops. However, others and myself do not believe that the leadership is the key. We should not leave out Management skills that we use all of these years.

5.3.2a-2.2 Executive Interactional Behaviours

Under the second subcategory of executive interactional behaviours, the following three specific conducts were identified from the analysis of the gathered data:

1) office politics; 2) micromanagement; 3) favouritism. For instance, a number of executives showed their true concerns regarding these specific styles and behaviours in the organisation. The majority of the executives under study indicated that their behaviours and actions are mostly not perfectly natural, and are influenced by some cautions, politics and restrictions on behaviours that in turn increase their tensions. These also included individualistic work thinking and decision making, inadequate sharing and involvement of knowledge and information, more show-offs, and untrustworthiness.

In relation to this argument, the following executive described such office politics and ineffective behaviours by saying:

…it is worrying and demotivator when you see people not wearing the company hat and are not working according to their principles and beliefs. We need to increase the level of shared values among us. There is reluctance among several senior management teams to share knowledge, information and decision making…People sometimes put their personal or group interest above the company interest. They work hard to show others their accomplishments even if they on the account of others…The accountability factor is missing here…People make decisions as they see them significant and of interest for them only. Add to this, many decisions are often made on the upstairs without our involvement…you can notice now all of what I have mentioned to you are additional pressures on us beyond the regular workload itself. (ExB-I31, 30/11/2002)

Similarly, the above office politics and behaviours were also felt and experienced by various research participants in the workshop held during October 2002. Among the written recommendations marked in the wallpaper by the participants to improve the current reality related to the executive relationships were the following: 1) "dissolve barriers and develop common language"; 2) "break down silos and barriers"; 3) "minimise management interference in operations". The executives under study as a
source of stress repetitively highlighted unsatisfactory work relationships. These differences and barriers highlighted above were even observed and appeared in various interactions among the executives during the period of the workshop.

Moreover, another executive illustrated below the negative consequences of micromanagement practice on their decisions from the perspectives of the boss and employee:

We frequently get worried and often intervene until assuring decision is made and work is accomplished as desired. This should not be thought of as mistrust. No, it is in fact our intervention has a hidden cost and drawbacks on our work, health, lifestyle, but what to do? Not only that even from subordinates side, we feel it is also somehow bothering and you can imagine what are the feelings and perceptions of our employees when we navigate deeply in their ocean. Again, what to do? (ExC-I15, 26/8/2002)

Correspondingly, one of the key points shared by the executives who participated in the workshop held during October 2002 was the concern of micromanagement exercised by top management. This micromanagement issue, as a source of distress, was also highlighted by the executives participated in the two different focus groups held in UAE and Oman during February and October 2003, respectively.

Furthermore, several executive indicated their worries about the existing issue of favouritism that affected negatively their performance, commitment and job satisfaction. Some executives were concerned specifically about the relationship between organisational top positions and favouritism. For instance, the following research participant said about it, "...positions are created to suit specific individuals" (ExE-I26, 29/10/2002). In addition, various executives under study attributed this practice to the concept of first impression exercised by management. For instance, one executive critically elaborated:

I do not feel that I am rewarded or recognised for my efforts. People who go up are the ones who are talkative and show off a lot. One of our problems is that management tend to make a prior belief or assumption on others before dealing
with them which makes our relationship unclear, cautious and win-lose thinking. This is not fair and we should be appraised based on our efforts. So, such practice increases our disappointment. (ExD-I32, 4/12/2002)

In relation to the favouritism dilemma, various executives also indicated from another perspective the significant role of a new developing organisational and cultural phenomenon known as "executive groupings" in the expense of their colleagues and organisation. This new and significant phenomenon that causes distress and conflicts was described by one of the executives as, "...people establish specific related groups to constantly enjoy and help each other to achieve their common interest and objectives by any means" (ExA-I30, 27/11/2002). Another executive said, "...certain people get together to grow and promote themselves by show-offs, making propaganda about themselves and lobbying for themselves at the highest management level" (ExA-I20, 15/9/2002). Accordingly, several executives indicated some drawbacks caused by this new phenomenon such as "...negative competition, personal conflicts, nepotism, unfairness, overpower, carelessness, low performance and productivity and consideration of early retirement" (ExA-I22, 25/9/2002). The following executive showed his worries about the negative feelings and impressions of his colleagues about his action that thought to be unfair by stating, for instance:

Yes, our type of work in Project Management requires us to do continuous communication with others in order to achieve the targeted objectives and milestones. However, inviting candidate contractors as part of the project planning process to execute certain projects are firing back on us. You will hear people pointing fingers on you saying: see this how wasa works. This is definitely affecting my professional ethics. (ExB-I18, 9/9/2002)

5.3.2b External Factors

In addition to the executive stressors pertinent to the internal environment, the study revealed four main categories of executive stress factors related to the external environment at workplace. These external stressful factors were related to government actions, market influences, media focus and social conflict.
5.3.2b-1 Government Interventions

The first category of government interventions was developed to account for the significant concerns raised by some of the executives regarding the frequent government related actions that necessitate changing the already corporate decisions and plans. For instance, one executive highlighted this conflict by saying:

Please note the government owns our company. We report directly to the Oil Ministry which directly and indirectly dictates somehow on us their needs, directives, policies, etc....As I told you, we are not 100% private company. So, the nature of our work is somehow affected by these interventions. Sometimes, we are put on a position to agree on certain things we do not see real benefits out of them to the Company....We often feel disappointed but this is part of our commitment to the Country. (ExA-I24, 8/10/2002)

Similarly, the executives who participated in the visionary leadership workshop conducted during October 2002 recorded this concern of managing government actions as a key element in the desired reality. These executives also provided several examples of certain imposed government actions such as "crude production and exports control, foreign investments control, fuel gas restricted charging, energy and economic reforms and recruitment policies".

5.3.2b-2 Market Influences

The second category related to the influences of the oil and gas market was identified as a source of executive stress since it was regarded by various executives under study as a critical, uncertain, risky and sudden interruption of their stability, workload, schedule and resources. To illustrate this point, Executive 1 from company A described in one of his international speeches the importance of oil industry, role of Saudi Arabia to the stability of oil market, associated investments, risks and challenges, and the political and social pressures. In addition, he indicated the influence of the social and political aspects on the oil and gas industry. He stated: We all appreciate the importance of oil in the world's economic scheme since it has been a major driver of international growth. Saudi Arabia has long recognized its prominent role as a world oil supplier. This role has two important implications: one is to afford strength in and stability to the world oil market, and the other is to provide an economic base for our own domestic growth. Both must operate in tandem...The Saudi petroleum industry is the backbone of the Saudi economy. Its contribution is not limited to the production and distribution of petroleum, but
covers many areas...Saudi Arabia was able to provide this protection for the world’s economies because it has maintained, at considerable expense, large quantities of spare production capacity...This powerful commodity is itself the product of very complex firms. These firms of course are subject to high risk, long lead times, costly investments, a scientific and technological base, and an intensely competitive market environment. Also, the political and social influences greatly affect the oil and gas industry. Few, if any, other industrial products are subject to such heavy taxation, or their processes so restricted by regulatory policies.

Similarly, Executive 12 from company A highlighted in one of his speeches the existing concerns with the current petroleum market such as ambiguity, inconsistent laws, policies and standards and conflicts among the world oil executives. Also, he highlighted the conflict among OPEC’s (Organisation of Petroleum Exporting Countries) executives and officials. He stated:

...our industry suffers from a lack of transparency. By that I mean the right data is often elusive. There seems to be no true consensus on consumption, oil stocks and production at any given time...This makes forecasting an extremely difficult and error-prone exercise. There is also no accepted international standard for many aspects of the oil industry. Regulatory restrictions in one area may be absent in another, while laws regarding transportation, refining, product configuration and environmental protection vary widely from country to country. While the industry itself has taken great pains to establish certain high standards for quality – particularly in refined products like jet fuels, lube oil and gasoline – the standards in other areas seem wide open. Some groups even attack or ignore each other for various reasons. Officials from OPEC and the International Energy Agency, for example, refused to talk to each other for more than 15 years. Even after they resumed contact, about a decade ago, there still lacks full cooperation and concurrence. Top executives of some oil companies are not yet able to organize a meeting or even hold a panel discussion on technical issues.

Moreover, Executive 43 from company A commented on the present instability of oil prices that have significant drawbacks on energy, capital, investments and forecasting aspects. He said:

...the lack of market price stability. This chronic condition seems to defy solution, although we in the industry have long stressed the need to stay a reasonable course. Only too recently we have seen this phenomenon. In 1997, you’ll recall, the price of benchmark Brent crude oil peaked at $25 a barrel. Less than a year later, it had sunk to as low as $10, then soared to $35 a barrel hardly a year after that. Such wide fluctuations ultimately have a traumatic impact around the globe. Further, they make forecasting very difficult, especially for budgeting investments and other capital outlays that are heavily reliant on
projected energy demand. Equally affected are transportation systems striving to deliver petroleum products on time.

Similarly, several oil and gas executives indicated that high uncertainty and anxiety are also associated with the frequent "OPEC jumping announcements and settings of crude exports and prices" (ExA-I7, 10/7/2002).

Furthermore, several executives under study reported their thoughtful and preparation, outlook and experience on gradually joining the new challenge related to the World Trade Organisation (WTO) and its impact on their company. He stated:

...accession preparation to WTO is being handled very thoroughly and carefully...This WTO business is being now strongly imposed on all companies...We are exerting now big efforts to be ready for this accession and we want it to be very smooth. As a matter of fact, we are reshaping our business and responding actively to specific demands by WTO. The problem we are hesitant and not sure of its success if we get under WTO umbrella. It is a big concern with its uncertainties as the case with debatable foreign investments and threats of oil and gas transportation technologies. For sure, there is an embedded WTO risk that everybody should be aware of. (ExC-I36, 24/12/2002)

5.3.2b-3 Media Focus

The third category of media focus was assigned to represent the concerns highlighted by some executives about the disturbance of different local and international media related business news in some parts of the company's internal and external matters. Specifically, one executive commented, "...such incorrect news affect public wise the image and reputation of the company" (ExD-I16, 28/8/2002). Another executive stated, "We are open...the press is welcomed at any time to share our highlights, but this should be through the proper channels, our Public Relations Department not by rumours or something like it" (ExB-I40, 14/1/2003).

Moreover, Executive 1 from company A commented on the unclear relationship, conflict and future understanding and deal between the oil and gas industry and media by saying:

…the unclear relationship between the oil and gas industry and the news media is a new challenge we are currently facing. I don't wish to paint an adversarial
picture when in fact most reporting is honest and fair. However, when it isn't, and when reporters and their editors don't seek clarification before publishing, it creates an unnecessary burden. At times this can be costly for us, the industry and for consumers. Taking into account that "media" itself is a very broad term, which covers general and business news, industry-focused reports and the trade publications, there is little wonder that accounts vary. We pay the consequences when published opinions and reporting reflect bias or incomplete facts. That these unfortunate events make news is a given, but I would hope – like better dialog among our various factions – that greater understanding if not appreciation can be cultivated with the fourth estate.

5.3.2b-4 Social Conflict

The final sources of executives stress related to the external environment identified by the present study were grouped into the category of social conflict. This category of social conflict was developed to account for two key related subcategories reported by the executives under study including home-work interface and social isolation. Surprisingly, all responses by the executives under study showed their significant concern regarding the continuous interface and conflict between work and home. The eleven randomly selected participants of the "member checks" group who reviewed the study results also confirmed this considerable finding. For instance, one of the participated executives described part of the homework conflict by saying:

My performance really is very bad at home compared to my performance at work. I spend much time at work and not only this, but I take some of our work home. I will be very honest with you here. I am facing difficulties in maintaining good relationship between work and family. I do not know why I take the work demands aggressively and I neglect frequently my family demands and needs. I always say: I will balance my work and manage my time, but many times I fail to do so. I see it is not an easy job to handle with my big responsibilities at work. (ExA-I30, 27/11/2002)

Another executive said, "...one day I was about to divorce my wife, to tell you the truth, because of my frequent late arrivals. See, how I have been troubled by my work with my family" (ExC-I15, 26/8/2002).

Similarly, the majority of the executives under study complained about their lifestyle being interrupted and often isolated from their surrounding family or members of the society. To illustrate this crucial point of work-home conflict, one executive explained it by stating:
We work more than eight hour per day continuously. We go to work early morning and return home late afternoon with being totally exhausted and ready for deep sleep. Same thing occurs in the next day with this constant life. We rarely see our children, relatives and neighbours. We are totally isolated from the society. (ExC-I21, 17/9/2002)

5.3.3 Manifestations of Executives Stress

In the previous sections, the study findings pertinent to sources of executive stress were explored, presented and described. In this particular section, the findings associated with the manifestations of executives stress reported by various research participants, as part of their responses to question number 2 of the interview guide, will be also offered and illustrated.

The analysis of the gathered data revealed three related core categories reported by the participated executives. These included personal moderating factors, and positive and negative manifestations of executive stress. In addition, the study findings indicated that the reported extensive manifestations of executive stress vary from one participant to another, and they could be neither traced accurately to a single source of stress nor isolated from other multiple or accumulated sources of stress. According to some executives under study, their symptoms of stress are not always uniform if a similar stressor is encountered at different occasions. To illustrate this point, one executive said, "It is hard for me to tell you the exact effects of this stress or link it to a certain cause" (ExA-I17, 4/9/2002). Another executive said, "…you need to realize one thing, I am not working in a vacuum. I am exposed to different things at the same time. Of course, these combinations change our choices in this life" (ExD-I32, 4/12/2002). A third executive described his responses to stressors by stating, "At some circumstances when get overloaded or uncertain about urgent actions, simply start to exhibit unusual things and attitudes: overreact, be excited, be anxious or jump to quick conclusions" (ExA-I27, 3/11/2002). Before addressing the related categories revealed under positive and negative stress manifestations, the following section will discuss the findings related to the personal moderating factors of executive stress.
5.3.3a  Personal Moderating Factors

The analysis of the gathered data revealed significant personal related factors that influence the response of the executives to different sources of stress. Various executives under study, as significant factors shaping the consequences and manifestations of executive eustress or distress regarded experience, personality type, cognitive appraisal and self-esteem.

5.3.3a-1  Experience Factor

The first factor that was found to influence the response of the executives to different sources of stress was the experience element of the executives. According to various executives, the experience provides the individual with the required knowledge, background, familiarisation and readiness to respond to different stressors and relieve their consequences. For instance, the following participant pointed out to the importance of experience of the executive in limiting the effects of stress, "...the problem we do not know we are stressful unless it is after the fact. This is not good at all. I am sure, the old timer individual with good experience and background play a big role on getting along with stress" (ExB-I19, 11/9/2002). Similarly, another executive said, "Causes of stress are coming again and again...I am currently familiar with some causes of stress. It eases the painful effects" (ExA-I24, 8/10/2002).

5.3.3a-2  Personality Type Factor

The second factor of personality type of the executive associated with individual’s nature, strength, tolerance, ability and adjustments of behavioural patterns was described by the following executive as one of the tailoring factors in reacting to different stressors:

…the effects of stress are inevitable whether we like it or not. What we should pursue is building our strong reliable personality to gain advantage of the stress situation and convert it to our side. We need to be tolerant, cool, alerted and wise in our reactions. See, adjusting our behaviours can help in tailoring the stress and use it for our advantage.  (ExE-I26, 29/10/2002).
From a different perspective, another executive indicated the worth of being normal and rational in responding to different stressors, "...before I was so odd, but now I am used to be very calm, natural, practical when exposed to difficult demands or put in tough circumstances" (ExD-I39, 8/1/2003).

5.3.3a-3 Cognitive Appraisal Factor

The third factor of cognitive appraisal and its underlying attributes such as perceptions, mental model, expectations and understanding processes of stress was highlighted by various executives as one of the significant influential processes and balancing factors in shaping and relieving the sources and consequences of stress. For instance, the way the stressful situation is perceived was considered to be "either survivor or destroyer of life" (ExA-I29, 19/11/2002). In additions, the role of expectation in reacting to different sources of stress was regarded as "a useful means and practice to prevent strains" (ExC-I36, 24/12/2002).

Furthermore, the following executive indicated the importance of understanding the process of stress by saying, "If I do not give enough attention to appreciate beforehand my reaction to my work overload, I will definitely fail ultimately" (ExD-I16, 28/8/2002).

5.3.3a-4 Self-Esteem Factor

The four factor of self-esteem was found to be one of the key internal characteristics in responding to various stressors. The responses of different executives indicated that their behaviours to the encountered stressors are affected by their thoughts of themselves, attitudes, capability, acceptance, confidence, faith, pride, commitment, dedication, accountability and responsibility. To illustrate this factor, one executive critically stated:
…sometimes, my plans settings and participation in the organisation's decisions are risky and not done well because I am always anxious and uncertain of my work, numbers and competencies. Ok, imagine yourself as a leader and trying to handle any major job independently and you are being irritated, frustrated and you see others are not cooperating with you. With this, how you can be capable of leading your people and your own personality originally is being shaky. (ExC-I15, 26/8/2002)

From another perspective, one executive highlighted the importance of the responsibility factor in shaping the consequences of stress. He said, "By being fully responsible, it allows me to be powerful, tolerant and successful in my life and work" (ExB-I41, 20/1/2003). Another executive stressed on the value of self-confidence in handling stress by stating, "I am very confident to be able to overcome the business failures and be successful and proud of my accomplishments, regardless of its negatives" (ExE-I4, 23/6/2002). In addition, a strong personal faith and the satisfaction of God's fate were also considered by various executives as preventive means to respond positively to any type of stress: "…plus being faithful is one of the great catalyst to rely on, in this very unstable environment" (ExB-I40, 14/1/2003).

Furthermore, these abovementioned individual moderating factors to internally affect the resistance of the executive and regulate his response to stress before it manifests itself outside the individual control where stress coping strategies can be effective or ineffective. For instance, one executive explained his effective capability of turning out negative stressor to positive effect (eustress), "…often I am exposed to bad stress. I eventually turn it to my advantage. It is like something passing through me and I do not get it inside me. See, I feel good about it" (ExB-I19, 11/9/2002). Similarly, another executive indicated that his response to negative stressors was occasionally constructive. He said, "About a year ago, the board asked me to cover a position located at a remote area at a time I keenly need to be very close to my family. What I did, I took it positively and considered it as a development for me" (ExC-I15,
Accordingly, these responses indicate that the effects of negative stressors are not necessarily unpleasant or distressful.

5.3.3b Positive Manifestations

The analysis of the gathered data indicated that the types of positive manifestations reported by different executives under study were only psychologically feeling related. These positive psychological feeling manifestations of executive stress resulted from the reactions with different sources of stress were developed to account for two key categories of subsequent feelings described by the majority participated executives. These included feelings of satisfaction and motivation.

5.3.3b-1 Satisfaction

Various executives regarded the general feelings of satisfaction and its underlying attributes such as enjoyment, pleasure, happiness, comfort and relaxation as an evidence of favourable responses to encountered stressors. For instance, one of the participants highlighted his feeling of enjoyment when supporting his people in their career:

I always enjoy helping and supporting my employees to progress in their career regardless of the consequences. A case in point, I am currently fighting aggressively for my people next merits and promotional plans. Despite the conflicts I am facing, I truly feel good and satisfied about it. (ExC-I34, 13/12/2002).

Similarly, another executive pointed out to his feeling of happiness as a natural response when evaluating his people to build up their future. He said:

You are asking me how I do react when performing these appraisals of my subordinates. I can openly tell you…at natural ease with full relaxation and happiness even with the confrontations and feedback I have been involved in. It is part of my job…Commenting on people naturally is not a good news for many employees, but this feedback has to be made for their benefits and development’ (ExB-I23, 3/10/2002).

Furthermore, the feelings of comfort and relaxation were addressed by different executives under study to indicate the outcome of their interaction with certain
sources of stress. To illustrate this point, one executive said, "I feel very comfortable when I managed to get the challenging records to take the corresponding decision" (ExE-I8, 15/7/2002). Similarly, another executive stated, "Even though of my aggressive fights with different organisations to negotiate and agree on certain accomplishments related to our ongoing partnership, I still feel secured and relaxed from inside about decisions made and resulted actions" (ExC-I15, 26/8/2002).

5.3.3b-2 Motivation

The participated executives expressed the common feelings of motivation, as a response to a positive stressor, in different ways including excitement, stimulation, enthusiasm, optimism and full of energy. To illustrate this point, one of the executives expressed his feeling upon a positive course of stress by saying, "Some of these workloads, like communicating useful information or inspiring people let you feel excited from inside. In fact, I found them interesting" (ExA-I30, 27/11/2002). Another executive described his feeling of stimulation resulted from performing a varieties of challenging activities as, "a self boost allowing me to continue working hard and hard" (ExD-I39, 8/1/2003). Similarly, a third executive attributed his positive feelings to the need of hard work to accomplish more, "I am working hard. It gives me the feeling to work more and more" (ExA-I2, 16/6/2002).

Furthermore, one executive associated his positive energetic feeling with controlling his budget efficiently. He said:

…the mode and condition I have experienced stresses at work are varied from time to time from task to task from situation to another situation. See, these are not fixed to be honest with you. Sure, the stress reflection on us is apparent…I can tell when I find I meet our budgeted NDE\(^4\) at the year end, it extremely boosts my power. (ExD-I9, 22/7/2002)

\(^4\) Net Direct Expenditure
From another perspective, the feelings associated with the continuous forecasting and planning efforts to promote and sell the products was described by the following executives as, "stuffs giving optimistic feeling" (ExB-I13, 18/8/2002).

5.3.3c Negative Manifestations

The other type of effects associated with executive stress revealed by this present study was assigned the core category of negative manifestations. Whilst positive manifestations were identified to be only psychologically related, two key categories under negative manifestations were developed to account for the psychological and physiological signs of executive stress, as reported by various research participates. In addition, the data analysis showed that the participated executives put more emphasis on the negative manifestations of executive stress. This was evident from the significant number and descriptions of the negative manifestations reported by the research participants. It was also an indication of the more perceptions to the side of distress than eustress.

Moreover, these psychological and physiological manifestations of executive stress were found to be interrelated and manifested in the behaviours of the executives. For instance, various executives under study reported their immediate acts of impatience, hesitance, blaming, lips biting or feet tapping when reacting to distressful conflicts and demands. Although such acts at the beginning were apparently thought to be psychologically related, the thorough analysis of the gathered data and responses of the executives under study revealed these actions to be physiological related, as well. Accordingly, these mentioned behaviours were found to be triggered by a combination of psychological and physiological reactions to distressful events.
5.3.3c-1 Psychological Manifestations

Under the first category of psychological manifestations, three essential related subcategories were identified: fears, dissatisfaction and exhaustion. These three subcategories are discussed and illustrated in the following section.

5.3.3c-1.1 Fears

First, the feelings of fears were found to include anxiety, tension, worthless and guilt. These were identified as the most significant recurring psychological symptoms among the executives under study. The feeling of anxiety was scored high by various executives. For instance, one executive stated, "My anxiety is totally linked to my actions I need to control. It is something going along with me all the time whether I like it or not" (ExD-I37, 30/12/2002). Another executive showed his fears through extreme tensions. He said, "I do not know sometimes what I did. You know, cleaning my disk from this paperwork is too much worrying...I cannot stop it. It even increases my tensions and thinking" (ExE-I5, 26/6/2002). Similarly, a third executive stated, "I could not organise my office work. It makes me nervous…many frequent and conflicting disruptions…many telephone interruptions, loads of unmanageable emails…” (ExB-I13, 18/8/2002).

Furthermore, a few executives criticized their present status in their companies that escalated their fears and anxieties. For instance, three executives described their fears associated with being worthless in the same manner:

The most painful thing when you feel unwanted in your company. They put you on special assignments or send you to work in remote areas to get rid of you. They do not involve you in their decisions. You feel there is no value for you at all in the company. This certainly let you think seriously of early retirements or resignations. I think that the problem is really coming from treating special people and putting them as stars in the expense of us. Where are the corporate values that we are bragging…fairness and integrity. I am just wandering. (ExA-I28, 10/11/2002)

From another perspective, the fears of powerlessness and failures coupled with high responsibility, workload and demands led some executives to feel guilty. For
instance, blaming each other for every conflicting issue was considered as "undesirable hectic attitude" (ExB-I13, 18/8/2002). Subsequently, another executive stated, "At the beginning, our before, during and after the fact ineffective thinking and the limitless self blaming are automatically hurting us much" (ExC-I36, 24/12/2002).

5.3.3c-1.2 Dissatisfaction

Second, the feelings of dissatisfaction were found to be greatly associated with anger, frustration, boredom, sadness and demoralisation in the part of the participated executives. To illustrate this point, one executive highlighted the symptoms of anger and frustration as indications of dissatisfaction. He said:

Every one of us **manages stress** by different ways and means. Of course, some of us are better than others, but this does not mean we are **perfect**. My self sometimes I **get angry** very **suddenly** if I **see** things at work I **do not like** or **unhappy with**. For example, my **secretary normally helps me to organise and screen my top important and rush emails, but she failed to do so**. I got to know this significant related matter through a **phone call** requesting an **urgent email feedback** to respond this **crucial issue**. What you expect, of course, I **got panic and was so angry and frustrated from her action**. This tells everybody that I am **not following my work and not communicating effectively**. This is **really bad**...very bad. (ExA-I25, 21/10/2002).

Moreover, other executives showed common symptoms of stress related to the feeling of boredom. For instance, one executive described his regular required participation in routine meetings as, "very boring stuff" (ExD-I10, 31/7/2002). From another perspective, the following executive pointed out to the concern of handling safety matters by saying, "It is too sad. I could not believe it. Every year, we fail to control the motor vehicle accidents" (ExA-I2, 16/6/2002). Similarly, another executive said, "The weekly company loss prevention highlights never forget us. Approximately for every month, one of our employees’ badge numbers and our organisation codes are highlighted for safety violations…bad records, measurable" (ExA-I20, 15/9/2002).

5.3.3c-1.3 Exhaustion

Third, several executives under this present study described their exhaustion concerns from the perspective of losing focus, memory, interest and hope as a result of
excessive workloads or conflicting demands. These indications were identified as significant interrelated negative psychological manifestations of executive stress. For instance, one executive stated on the loss of focus distress symptom:

> I normally act honestly and perform my tasks with exerting high efforts in order to maintain my image, company image and excellence. It is now repeatedly affecting my health. Even, I cannot concentrate on my other tasks effectively, especially the development of my people. I am even forced by this to rush things to catch everything. (ExE-I8, 15/7/2002).

Similarly, another executive highlight his memory loss due to combined stressful factors such as work demands and work-home conflicts:

> The pressing operational sales demands and the continuous organisational commitments to the market have a direct influence on me. I am starting forgetting some important matters. In fact, I am taking work home to cover and I am having conflicts with my family about my work interference and coming home frequently late. (ExC-I38, 4/1/2003).

Moreover, some executives reported the loss of interest as an indication of their distress. The following executive clarified this concern associated with the distressful culture of his company and suggested for a quick change. He said:

> …this is fine with me if work is managed according to defined principles and ethics known in the company. Sometimes, they are people in the company who are much powered want things to go up to their wishes and interests, not for the benefit for everybody in the company. Really, my interest in the current work now has been negatively impacted with these self practices and ways to manage business. We need really a change in our current culture to move forward, a big change. (ExE-I6, 3/7/2002).

5.3.3c-2 Physiological Manifestations

Under the second category of physiological manifestations, two distinctive subcategories were identified from the responses of the executives: rate abnormality and pains. These subcategories are discussed and illustrated in the following sections.

5.3.3c-2.1 Rate Abnormality

The subcategory of rate abnormality was assigned to account for three main abnormal breathing, blood and heart rates, as identified from the responses of different executives under study as signs of distress. Several executives highlighted the problem
of rapid breathing rate as an indication of distress. For instance, the following executive said, "I will know if I am under high stress or not by watching my breathing. It is getting faster and deeper" (ExE-I4, 23/6/2002). Another executive described his health case with high blood pressure rates by stating, "...I am currently suffering from hypertension although I am taking some medications on it. You know...if I am under tension, my blood pressure rises...I can feel it right away" (ExC-I15, 26/8/2002). Similarly, the following executive indicated his abnormal heart rates when put on a stressful situation. He said, "My stress manifests itself through noticeable excessive heart pulses. It beats strongly and faster...I get shaky and tense" (ExA-I7, 10/7/2002).

5.3.3c-2.2 Pains

The subcategory of pains was assigned to account for the recorded seven distress symptoms associated with aching head, eyes, neck, stomach, back, knees and muscles. Most executives complained about headaches when subjected to stressful events. For instance, the following executive responded to distress by stating, "...my severe headaches are frequently and specifically coming and coming from my people behaviours. It is bothering too much. I cannot handle their conflicts up to my wish. If I exercise the company policies, it increases my problem more and more" (ExB-I41, 20/1/2003). Another executive described the manifestation of distress through his eye problems. He said, "...when I interfaced with heavy and urgent workload, my eyes start moving irregularly up and down. It is very irritating" (ExA-I17, 4/9/2002). In addition, several executives indicated their manifestations of distress through painful muscles. One executive said, "...stress is stressful especially you see yourself forced to take decisions for others or review other people work. I can feel my muscles are being stiff and under tension" (ExD-I33, 8/12/2002).
5.3.4 Coping Strategies of Executive Stress

The section details the findings associated with the coping strategies of executive stress reported by different research participants, as part of their responses to questions number 4, 5, 6 and 7 listed in the interview guide. The developed core categories incorporated the following four coping strategies of executive stress that achieved commonality among planning, organising, leading and controlling executive functions: self, social, organisational and proposed. They were also found to be linked to the personal moderating factors of experience, personality type, cognitive appraisal and self-esteem. In addition, the qualitative analysis of the gathered data significantly showed that the reported coping strategies were associated mainly with distress, and the responses of the executives to different occupational stressors were mostly exhibited through escaping from them. Accordingly, this finding indicates that the executives under study employed the "flight" response more than the "fight" response. This concept of "fight or flight" response was originally suggested by Walter Cannon and developed by Hans Selye as part of his GAS model, explained in chapter 2.

5.3.4a Self Coping Strategies

First, three common categories were developed under self-coping strategies including avoidance, relaxation and altered behaviour. These accounted for the reported responses to question number 4 listed on the interview guide.

5.3.4a-1 Avoidance

The first category of avoidance was developed to represent certain stress self-coping strategies employed by the executives under study to relieve their stressors. These included mostly soft drinking, smoking, internet browsing and passiveness. Most executives under study avoided stress through regular drinking of water, tea or coffee: "When I am under stress, I drink a lot of water. I really found it helpful" (ExA-I7, 10/7/2002).
Some of the participated executives to relieve stress also used smoking cigarettes heavily: "Nobody can claim of getting grid of stress. What I do, I go outside the office to smoke…say every two hours. It gives me sort of relaxation" (ExD-I33, 8/12/2002). Moreover, some executives took advantage of internet availability to browse certain desired websites, as a relief from work and its pressures: "As you know, I do navigate through internet from time to time to get away from business and its headaches" (ExA-I27, 3/11/2002).

From another perspective, several executives attempted to be passive when dealing with different types of stressors: "I occasionally dump some responsibilities to somebody else, especially during meetings where required actions to be assigned" (ExD-I16, 28/8/2002). Only one executive to relieve his occupational stress mentioned an interesting technique. He said: "I normally take a pen and paper and start writing and drawing anything and whatever in mind to let whatever inside out and out" (ExD-I39, 8/1/2003). Although this different technique of writing and drawing was reported by one executive to relieve stress at workplace, it deserves more investigation and experimentation by social scientists and other interested researchers to verify its effectiveness in relieving occupational stress.

5.3.4a-2 Relaxation

The second category of relaxation was developed to account for the main identified self-coping strategies such as deep breathing, eye relaxation and walking. The majority of the executives under study relaxed from stress through taking a deep breathing. For instance, the following executive described his method of coping with stress by saying:

**Business never stops.** However, our heart may one time is **going to stop** if we do not watch it very well. The air that we **breathe** in and out may also be **stopped suddenly**. So, it is good to **balance the activities** and ensure there are some **stop signs** in between. I do it by **having a deep breathing every half an hour**. It is **in our hand** and does **not require any technology** to bring it or to go somewhere to exercise it. It is **very effective**. (ExB-I13, 18/8/2002).
Furthermore, some executives indicated that coping with stress can be handled through eye relaxation: "See, I do not know what happens to me when reading or exhausted. My eyes are getting lousy little bit…I normally sit down and close my eyes and resting for five minutes" (ExB-I18, 9/9/2002). On the other hand, several executives thought of waking around their office and building to relieve their stress: "One of the things I found workable to boost up my health during upsets is by going for a little and slow walk in the building to clear mind, calm down and pass by my people to say hi " (ExE-I26, 29/10/2002).

5.3.4a-3 Altered Behaviour

The last developed category related to the reported behaviours altered by the executives to cope with stress such as to be calm, patient, realistic and listener. Although the executives under study less reported this category than the categories of avoidance and relaxation, it is important to address it here in order to illustrate the difference between type-A and type-B executives in coping with distress. These abovementioned altered behaviours represent Type-B personality as explained in chapter 2 (p. 52), which the literature showed that it is unlikely to contribute to distress compared with type-A personality. This also could explain why most participated executives felt mostly distressful from workplace, as appeared from their responses and observed behaviours during the interviews, workshop and focus groups. Accordingly, self-coping strategies highlighted above also indicates that some of the participated executives acknowledged their contributing behaviours to distress, and attempted to change them from type-A to type-B behaviour in order to manage distress. To illustrate this point, the following executive responded to different types of stressors by "absorbing heat and getting calm before firing actions" (ExB-I31, 30/11/2002). Similarly, another executive considered patience as a good strategy to manage stress:

...in dealing with different market fluctuations, I normally react immediately and take the necessary steps toward them. Sometimes, I do hold my self and give it a time to think, understand and make my choices before going further.
Please note that it needs some practices... We are not perfect by anyhow. We are human beings. (ExA-I43, 28/1/2003)

Furthermore, the study showed that some of the executives attempted to be realistic when encountering different sources of stress: "yesterday was about to have a conflict during the meeting but I recognise the thing we are requesting is not really logic and practical at all. I did appreciate their position and I pulled myself out" (ExD-I10, 31/7/2002). From another perspective, the following executive said about being a good listener, "...sometimes, I do jump on others to achieve what I want...Why imposing ourselves on others? Listening is 70% of communication...let you understand more" (ExA-I17, 4/9/2002).

5.3.4b Social Coping Strategies

Second, the participated executives reported different social strategies to manage occupational stress, as part of their responses to question number 5 listed on the interview guide. Two common social coping strategies were identified including talking to close colleagues and friends, and joining clubs and societies. Talking to close colleagues and friends at workplace was found to constitute the majority of the responses of research participants. To illustrate this stress coping strategy, the following executive stated in this regard:

Sure, talking with my colleagues in the same building and chat with them, hear from them and seek their advices have helped me much to reduce the pressures of work and others. The problem sometimes we feel that nobody is pressurised except us. I can tell nobody of us free of such things. Everybody is suffering and we need to go around and survive. We have no other choice except living with it and challenge it. Of course, building good relations with your friends lower the weight of stress. Personal relationships are very good stress manager. (ExC-I38, 4/1/2003)

Similarly, some executives highlighted the significance of building strong and effective interpersonal relationships with friends to share ideas and exchange experiences: "I find myself in this part in a good hand since I have good friends at work
who share with me my feelings and thoughts inside and outside work. This gives me more power and confidence” (ExA-I29, 19/11/2002).

On the other hand, several executives indicated the importance of joining clubs and societies to change the work environment and enjoy life outside work. For instance, the following executive stated:

One thing note, the socialisation part in our business is missing. We know only work and work. Nothing else like machines... Really, believe it or not. I am now going with the recreation club inside our camp as a break from killing work and life routines... In this club, we chat together, play and watch TV. (ExB-I40, 14/1/2003)

Accordingly, these findings were consistent of the findings of Kirkcaldy and Furnham (1999) reported in chapter 2. Kirkcaldy and Furnham indicated that stable relationships, seeking social support and the advice of superiors were among the most coping strategies practice by the investigated participants.

5.3.4c Organisational Coping Strategies

Third, the research participants reported different executive related factors and programmes supported by their organisations, as part of their responses to question number 6 listed on the interview guide. Subsequently, two essential and common categories were developed and assigned primarily the subcategories of incentives and healthcare.

However, these organisational factors were regarded by most executives under study as ineffective stress coping strategies and indirectly associated with their occupational stress management. Alternatively, various executives emphasised the importance of the vigorous organisational environment in handling and alleviating their stress, which will be addressed in the next section of proposed stress coping strategies.

5.3.4c-1 Incentives

This first category was developed to account for the different organisational incentives reported by various executives under study. These were grouped under the following two main subcategories: rewarding and development. The most significant
finding is that executives under study did not value much the effectiveness of existing organisational related incentives in relieving permanently their occupational stress. These findings could be linked to the transactional effort-reward imbalance theory that attributed the cause of occupational stress to the mismatch between a person’s efforts exerted in the job and the rewards gained. Various executives under study thought of the organisational incentives as a requirement for keeping good performance.

5.3.4c-1.1 Rewarding

First, different existing organisational rewarding methods were indicated by some of the participated executives and perceived as motivating factors to maintain their good health and status such as "power and prestige" (ExD-I39, 8/1/2003), "salary, bonuses and loans homeownership" (ExB-I23, 3/10/2002), and "recognition and service awards" (ExA-I27, 3/11/2002).

In relation to the above, one executive said about these abovementioned rewarding factors, "...good rewarding incentives, but they are not directly related to stress and cannot relieve stress or prevent dissatisfaction" (ExA-I7, 10/7/2002). Another executive attempted to show that money related rewarding factors do not directly affect their decision making process, "...when making decisions, we are not thinking or relating it to our incentives and bonuses. Money is not every thing. These incentives were available since day one but did it help the situation" (ExB-I18, 9/9/2002).

5.3.4c-1.2 Development

Last, several executives reported specific organisational incentives that were grouped into the subcategory of development. For instance, the following executive indicated the importance of his future developmental plan and opportunity in sustaining his positive performance, "See, as I join the company, my boss told me you are targeted for the vice president job. I was so excited and working hard to reach that position"
Another executive highlighted the importance of the promotional plans on his satisfaction by stating, "…our employees may think we do no need to be promoted. No and no, we as them like to go up and up. I thank God, I am satisfied with my promotions and they all came on timely manner" (ExC-I36, 24/12/2002). Similarly, another executive described his satisfaction with his training and career progress by saying:

I find my training and career progress is interesting and rewarding...If anybody asks me about another job outside this organisation, I definitely will not accept it. I am getting my promotions on time and I have been rotated over the company. My family are also happy about my current job and position. (ExA-I12, 12/8/2002)

5.3.4c-2 Healthcare

The last category related to organisational stress coping factors was developed to describe the healthcare factors highlighted by several executives under study. These included awareness campaigns, medications and recreations supported by their organisations to maintain their wellbeing. For instance, the following executive described the health awareness campaigns carried out by his organisation, "Yes, our company does conduct an annual health campaign and exhibition, and stress is part of it. May be, the problem with it does not help us to zoom in our stresses. It is general" (ExA-I29, 19/11/2002). Similarly, another executive emphasised the importance of these stress awareness programs, "…people think that we do not require support and this is entirely incorrect. We need from our company very specialised stress management programs to help us, and it has nothing to do with our privacy at all" (ExC-I36, 24/12/2002).

Furthermore, medical care for executives was also provided by the organisations as reported by various executives. However, several executives indicated that "these clinics are not helpful since it is after the fact. We need them to help us to deal with stress at the early stage or even before" (ExC-I21, 17/9/2002). In addition, several executives confirmed that their organisations do have "special recreations to
benefit from and maintain strong body through exercises, playing different sports and so on" (ExB-I19, 11/9/2002).

During one of his speeches, Executive 35 from company A said the following about their company’s health programs:

Our Medical Services have developed extensive and far-reaching occupational health programs. We have a section is just to identify health hazards and taking measures to improve overall workplace conditions. We, like others, desire to protect the workforce. Many firms in the public and private sectors recognize occupational health as a viable cost of doing business. Safeguarding employees makes sense whether you look at from a humanitarian or an economic perspective. Yet, emphasis on worker health and safety cannot be limited to hazardous industrial sites. We are concerned with any condition that might in some way affect an individual’s well-being.

5.3.4d Proposed Coping Strategies

Last, two main categories were explored under the proposed stress coping strategies at workplace, as identified from the responses of executives under study to question number 7 listed on the interview guide. These included self and organisational stress management factors.

5.3.4d-1 Self

The first identified group of proposed coping strategies at work by executives under study was assigned the subcategory of self coping strategies. These mainly included time management, readings, self knowledge and spiritual practices. For instance, several executives proposed some time management techniques to handle occupational stress such as taking "mini breaks" (ExC-I14, 21/8/2002), managing "interruptions" (ExA-I24, 8/10/2002), limiting "meetings" (ExE-I5, 26/6/2002), breaking down "tasks" (ExD-I10, 31/7/2002), and adopting "aggressive attitudes" (ExA-I17, 4/9/2002).

Moreover, various executives thought of readings as an effective occupational stress coping strategy. Specifically, some executives suggested reading "newspapers" (ExE-I5, 26/6/2002), "articles and stories" (ExA-I35, 19/12/2002), "The

These abovementioned findings were partially consistent with the findings of Ho (1995) on Singaporean executives where he found that the most stress coping strategy employed by these executives was the "switch off" technique, which included the leisure travelling, reading and listening to music.

From another perspective, several executives believed that "self knowledge and evaluation" are critical for building successful and tolerant person (ExB-I18, 9/9/2002). Similarly, some executives regarded "preying to God" and adopting "sense of faith" based on God's fate and blessing as effective spiritual techniques for stress management (ExA-I2, 16/6/2002).

5.3.4d-2 Organisational

The other subcategory of proposed stress coping strategies is related to organisational interventions. These primarily included improvements of internal environment and initiation of stress focused preventive programmes. Surprisingly, the majority of the executives under study emphasised the need for improving the internal organisational environment, and was regarded as the most significant proposed stress relieving strategy. For instance, there were certain proposed stress relieving factors highlighted by the research participants for the organisations to adopt in order to improve existing internal environment such as "recognition" (ExA-I17, 4/9/2002), "openness, transparency and trust" (ExA-I12, 12/8/2002), "honesty, ethics and principles" (ExB-I19, 11/9/2002), "flexibility" (ExE-I26, 29/10/2002), "effective communication, participative management and group thinking" (ExC-I21, 17/9/2002), "ownership, accountability and sense of responsibility" (ExD-I33, 8/12/2002), and "equal opportunity and fairness and integrity" (ExA-I11, 11/6/2002).
Similarly, Executive 7 from company A on one of his speeches, proposed a new valuable outlook that calls for improving the organisational culture. It included three main cultural distinguishing traits: 1) respect for knowledge; 2) employee empowerment; 3) respect and commitment to innovation. He said:

**Corporate culture** is the sum total of business and professional values that a company believes in. But it is not the words alone that matter. It's a company's adherence to such values in all its activities that makes up the actual culture. It starts at the top of an organization and radiates down to all levels of employees and activities...In our industry, business opportunities have always been captured by those companies that have developed a corporate culture with values that promote innovation, creativity, and teamwork. The issue has not been simply whether these companies promote such values but more so whether they were effective in utilizing them to keep pace with the demand for new solutions for the industry's challenging requirements...In my experience, there are three qualities that distinguish a culture that has a proven record of innovation. They are: a culture that has a fundamental respect for knowledge (respect for knowledge must include transparency, honesty and the free flow of information at all levels and in all areas of business within a company), employee empowerment - particularly the empowerment of high potential employees (one of the most basic and important forms of empowerment is the delegation of decision making-authority, with matching responsibility and accountability) lastly a genuine respect and commitment to innovation (one of the most powerful mechanisms to promote innovation is a pervasive and fair corporate recognition and reward system that meets the expectations of its recipients. If we don't actively recognize and reward employees, human nature will drive them to pursue other interests).

Furthermore, some executives emphasised the importance of the preventive health programmes in managing stress. For instance, the following executive stated in this regard:

Our company should help us to develop the necessary stress prevention tools and health attitudes to overcome frustration and depression, and to cope with work stress. We need a periodic awareness and care programmes to understand and handle stress. (ExA-I17, 4/9/2002)

Likewise, various interviewed executives and specifically those who participated in the workshop and focus groups indicated the need to understand, handle and extend further stress management from an organisational perspective rather than from only an individual perspective, for effective stress awareness and management. The following executive explained this organisational approach by saying:

...it is generally difficult to depend on the varying individual capability to manage stress. The company should assist on establishing healthcare
workshops to help us... We need to realise that stress is not physically apparent as the case with the other physical diseases in order to depend on the individual to ask for treatment. (ExB-I18, 9/9/2002)

So far, this section focused on presenting the research findings in detail to allow for further explanation and discussion in order to understand collectively the overall components of the executive stress process based on the initial developed model illustrated in figure 2.9 as part of chapter 2. Again, these components include sources, manifestations, coping strategies and environmental factors of executive stress process as part of the used system approach to understand occupational stress. Thus, the next section connects these components together to develop a comprehensive executive stress model based on the empirical findings.

5.4 RESEARCH DISCUSSIONS

As mentioned earlier throughout this report, the primary purpose of this present research project was to understand and develop a model of stress by exploring and understanding theoretically and empirically the perceptions of occupational stress caused by executive functions in the complex and dynamic work environment of five major oil and gas companies in Saudi Arabia. These included planning, organising, leading and controlling basic executive or managerial functions. Subsequently, the responses to the developed questions, presented in chapter 1 and listed in the study interview guide based on the integrative model of stress depicted in figure 2.9 of chapter 2, were explored, discussed and illustrated thoroughly from the perspective of the Saudi executives. This was achieved by utilising qualitative methodology of interpretive or phenomenological philosophical approach to induce, create and construct meanings, themes and patterns holistically.

Accordingly, the above findings were further understood by discussing the study connected themes and categories from the perspective of executive characteristics, occupational stress, basic executive functions and work environment. These were the
main components interacting with each other as part of the overall stress process illustrated in figure 2.9 of chapter 2. In this initial model, the basic executive functions were reflected in the "executive functions stressors" box, the executives in the "individual" box, and the work environment in the "environment" envelop surrounding the overall process. Such significance discussion approach was necessary to understand, make sense and construct a broader view of the topic under investigation, with emphasis on Saudi Arabia as a research context. In addition, the discussions cover the implications to the oil and gas industry.

5.4.1 Executive Stress Process and the Executive

First, the "individual" or "executive" part constitutes the main transformation process of the system model illustrated in figure 2.9 as part of chapter 2. This section discusses the overall research findings related to this transformation process that includes mainly the personal differences, manifestations and coping strategies of executive stress process. Thus, this present study explored the perceptions of occupational stress and its related aspects among sixty-three oil and gas executives gathered by different primary and secondary data collection methods. The primary data were collected from forty-three executives through qualitative interviews. Those interviewed executives were all Saudi male top managers. According to various interviewed executives, the reason behind the occupations of the top management positions by Saudis was due to the early and rapid implementation of Saudisation or localisation program across Saudi firms mandated by the Saudi Government as highlighted in section 1.5.2 as part of chapter 1. This is another indication of how Government influences operating firms in Saudi Arabia to improve the employment rate and opportunities for Saudi qualified citizens. However, this issue of job security mentioned here could be associated with the culture itself. If the executive believes, for instance, that his job would not be lost because of the strict protection of the regulations
of the Government regarding the national employees, he might not think of being fired regardless of his work status. These culture-related issues could have a direct impact on the executive's level of stress.

Furthermore, the secondary data were collected from other twenty oil and gas executives from Arab countries of Bahrain, Kuwait, Oman, Qatar and UAE. These secondary data were gathered through different qualitative methods that included observations, focus groups and document analysis. These participated male oil and gas executives were all college graduates and well educated who work in different business functions including producing, production, refining, distribution, engineering, industrial services, project management, personnel, training, finance, and marketing and sales. In addition, the education background of most executives under study from the demographic data analysis was found to be in the engineering disciplines. This majority or tendency toward the engineering or operations backgrounds among the executives explains why the reoccurring patterns in their responses related to the difficulty of people management, micromangement behaviour and engineering attitude. This also indicates a failure to build an executive attitude to handle the overall corporate matters rather than focusing mainly on operational or technical matters. Similarly, this was even apparent in the responses of various executives under study by repeating that "people are the most important assets". This frequently used term of "asset" to refer to people could be explained from the perspective of the dominant engineering and operational background enjoyed by most executives under study. This stance of considering people as assets or considering people and other types of assets in one basket without a clear distinction is suggested to be revisited and qualified to represent the human resource uniquely since the term of asset is connected with other owned properties. Executives should realise that they do not own their employees, as the case with properties! Accordingly, this designated engineering attitude, as revealed from the
responses of the participated executives, created reflexively a chaos state in managing people and operations. Moreover, the majority of the executives under study were characterised by the stressful type-A behaviour aspects as explained above.

Moreover, the most striking finding is that the majority of oil and gas executives under study claimed that they experienced or somehow suffered from distress. For the positive manifestations, only the psychological feelings of satisfaction and motivation were found by this present study. However, the executives under study did not report any severe physical manifestations or strains. This might be explained by the high-class and prestigious positions and offices of the executives that would not affected by the physical surroundings such as noise and lighting. Further, the discovered negative symptoms were only psychologically associated with the executive’s fears, dissatisfaction and exhaustion, and physiologically associated with body’s abnormality and pains. This might be attributed to the personal role and culture of Saudi Arabia. In fact, the investigation made on existing occupational stress related policies and standards in Saudi Arabia revealed that the country and operating firms did not have at the time of the study an official policy with regard to occupational stress and its effects on health and the requirements of compensations. There were no related occupational safety and health regulations found as in the US and Europe, i.e. OSHA standards (Occupational safety and Health Act). Hence, recorded health cases pertinent to occupational stress are presently not officially and significantly evident in Saudi Arabia. However, a significant quantity of stress claims may appear if these occupational safety and health regulations and organisations were established and operated officially within Saudi Arabia.

A further remarkable discovery was that these physiological symptoms were found to be initially triggered by psychological symptoms, and their combination could be manifested in a behavioural change in the side of the executives. In addition, the
overall responses of the executives under study indicated that the effects of negative stressors are not necessarily unpleasant or distressful. These findings could be explained by acknowledging that the determination of the effects of stress whether positive or negative is heavily dependent on the characteristics of the individual who is subjected to various sources of stress inside and outside workplace. These personal related factors of experience, personality type, cognitive appraisal and self-esteem were regarded by various executives under study as significant factors that can shape the manifestations of executive eustress or distress. In relation to the above, the research participants were found with an experience more than twenty years, and an age above 40 years old. Therefore, the study findings were also consistent with the arguments presented by Sutherland and Cooper (2000) on how stress is perceived differently among different people, whether positive or negative. From this perspective, the findings of the study were consistent with the psychological interactional and transactional models discussed in chapter 2. These existing models take into account mainly the following: 1) cognitive appraisal that looks to stress as a subjective reality; 2) experience that takes accounts for the individual’s past exposures, training, and education; 3) interpersonal effects that accounts for the surrounding individuals and colleagues who affect the way stress is perceived or coped with. This finding could be considered as a validation of this concerned part of both models. However, the present study considered dynamicity of these mentioned moderating factors. Moreover, these findings of the study related to the relationship between the executive and the work environment were consistent with the model presented by Levi (1996) discussed in chapter 2. However, the present study treated stress as a process with variable stress responses and considered both types of stress, i.e. eustress and distress, not only the negative side of it.
Furthermore, these reported stress moderating factors of knowledge, background, understanding, perceptions, mental model, expectations, self-esteem, self-confidence, personal faith, and sense of commitment, responsibility and accountability of the executives facilitated their familiarisation and readiness to manage stress before it manifests itself outside their control. This is why the manifestations of executive stress can vary from one participant to another, and they could be neither traced accurately to a single source of stress nor isolated from other multiple or accumulated sources of stress. In addition, the overall qualitative examination of the reported self (avoidance, relaxation, altered behaviour) and organisational (incentives and healthcare) coping strategies used by the executives under study showed that they were mostly characterised by being short-term and reactive practices. Specifically, social coping strategies of talking to close colleagues and friends or joining clubs and societies were found enjoyed mostly by the participated executives. This can be explained by the collectivist culture that Saudi Arabia is characterised by. This is also an indication of the effects of culture in coping with executive stress. Moreover, the study revealed important self-coping strategies proposed by the participated executives that indicated a sort of deficiency toward employing them effectively. These included time management, readings, self-knowledge and spiritual practices. Again, the Saudi culture shaped by Islam played a significant role on these proposed coping strategies. In particular, God’s fate variable as part of the faith of the executive could influence positively the reaction to any stressor. This faith element signifies the freewill of the person with belief of Allah’s fate and blessing in the entirety. These proposed strategies could be further standardised among the concerned executives with the assistance of their organisations through establishing a comprehensive stress management and awareness programs. The above arguments indicated that the appropriate workable
stress coping strategy could be to understand stress and learn how to manage it effectively.

Therefore, the above findings indicated that stress responses or states are non-specific in nature, and they count on multiple dynamic factors not only on a single factor. These findings were also consistent with Selye’s General Adaptation Syndrome (GAS) for the description of the nature of stress, explained in chapter 2. Hans Selye was able to describe these physiological changes within the human body in the GAS model, which assumes that the human body would undergo three main phases or sequence of events when is being stressed: alarm reaction, adaptation or resistance and exhaustion.

5.4.2 Executive Stress Process and the Basic Functions

Second, the other main element of the integrative executive stress process, illustrated in figure 2.9 of chapter 2, concerns the discussion of the basic executive functions as sources of stress. This present study significantly revealed the following four emerged important themes underpinning the four basic executive functions of planning, organising, leading and controlling that contributed to executive eustress or distress. These themes are information management, performance management, human resource management and strategic management. Out of these four mentioned themes, information management and performance management were found to be the most stress contributors to executives, followed by human resource management and strategic management. More importantly, executives under study indicated that they pay strong attention to organisational performance more than strategic plans. Specifically, most executives focus more on the performance of the overall organisation’s matters. Executives, as revealed from this present study, are commonly interested on operations efficiency, and budget and manpower control. This was evident from their nature of work, which was found to be distinguished by the following particular six patterns:
variety, intensive communication, reaction oriented, uncertainty avoidance, power
distance and intensive disk work. Moreover, common patterns were even identified in
the responses of executives under study associated with their different sources of
occupational stress including unmanageable work demands, time pressures and
interpersonal conflicts. Therefore, these specific patterns can explain why the
executives normally spend additional hours at work and home in order to cope with
their typical type of work. This also can explain the work-home conflict experienced by
the majority of the executives under study. Subsequently, this brings up the real need to
balance between the entire executive work and lifestyle.

5.4.3 Executive Stress Process and the Environment

Third, the discussion continues to address the environment component
reflected in figure 2.9 of chapter 2 that is part of, surrounds and interact with the
integrative stress process itself. In fact, the reported sources of stress, caused by the
frequent interactions within organization or within the country context through people,
family and office, were mostly perceived by the executives from the negative
perspective, as a source of distress. In the following subsections, the corresponding
overall thoughts and examinations of the findings related to internal and external
environment stress factors are presented and discussed.

5.4.3a Executive Stress Process and Internal Environment

The majority of the executives under study raised the concerns associated
with the rigidity of existing centralised, bureaucratic and authoritarian organisational
settings of the oil and gas firms. They also highlighted significantly the corresponding
organisational and cultural problems associated with accountability, commitment, trust,
openness, top-down influence, micromanagement, conflicts, favouritism, executive
groupings, show-offs, poor communication, office politics, low responsiveness, power
distance, uncertainty avoidance, information overload and short-time planning. As a
result, these concerns disturbed directly the flow of information, communication, decision-making, commitment and performance associated with the executive focus functions revealed by the study that included information management, performance management, human resource management and strategic management.

In lines with the above findings, the comprehensive qualitative examination of the proposed coping strategies under study showed that there were significant emphasis on the true need for further improving the internal environment or organisational culture and initiation of stress focused preventive programmes to cope effectively with executive stress. These included the following distinguishing cultural traits highlighted by the research participants: openness, transparency, trust, honesty, fairness and integrity, respect for knowledge, respect and commitment to innovation, employee empowerment, flexibility, participative management, group thinking, proactive planning management, and sense of ownership, responsibility and accountability. Accordingly, these findings enforced further the argument to tackle stress management from an organisational perspective rather than only from an individual perspective, for effective stress awareness and management.

5.4.3b Executive Stress Process and External Environment

The overall qualitative examination of the findings pertinent to the external environment stress factors showed that the existing stress concerns related to home-work interface, social isolation, disturbance of media, and market’s ambiguity, uncertainty, inconsistency, changes and conflicts have significant drawbacks on performance, health, energy, capital, investments and forecasting aspects. Part of these findings were consistent with the argument of Greenwood and Greenwood (1979, p. 46) regarding the experience of "summit isolation". They advocated that executives, as they rise in their hierarchal positions, tend to be alone and have less social and family communications. In addition, these findings were partially consistent with the findings
of Cooper and Sutherland (1991) on the problem of "work spill-over" presented in chapter 2. Cooper and Sutherland highlighted the reported stressors experienced by the research participants to include long working hours, work overload, time pressures and business trips. Thus, these results indicated that the executives need to maintain a balance between work and home to enjoy their work and maintain good level of job stress.

Accordingly, these stress factors associated with the external environment, as addressed above, can be overcome by adopting a new and different executive’s effective approach that encourages open, transparent and flexible industrial world management styles. Moreover, the Kingdom of Saudi Arabia in general and oil and gas firms in particular can adopt more appropriate business practices and models of countries that share similar culture and environment to overcome the aforementioned environment related problems and ensure that the ongoing reforming efforts in politics, economy and other core businesses are implemented successfully. Badaway (1980) and Doktor (1990) indicated a similar suggestion reviewed in chapter 2 as part of review of literature that the recognition of the nature of the environment and the cultural background within which executives operate could facilitate the understanding of the specific practices and behaviours of executives. This would promote a vibrant economy and broader public and political participation of Saudi nationals. It will open employment and investment opportunities. In this regard, current economic reforms attempted by Saudi Arabia should focus more on modernizing laws and regulations that encourage trade and investment, as well as the removal of obstacles to encourage private sector investments from inside and outside the country.

Therefore, the above discussions focused on putting together the various components of executive stress process and their interactions. The discussions further provided an enhanced understanding of the executive stress process. Accordingly, the
next chapter reviews the initial developed conceptual framework of executive stress process depicted in figure 2.9 of chapter 2 (p. 83) and examines the enhanced and enlarged empirical model revealed by the study findings.

5.5 CONCLUSION

This chapter presented and discussed the findings of this exploratory study on occupational stress caused by executive functions of planning, organising, leading and controlling utilising qualitative methodology of interpretive or phenomenological philosophical approach to induce, create and construct meanings, themes and patterns holistically. The study involved sixty-three oil and gas executives, out of which forty-three executives were Saudis who participated in the qualitative interviews as a primary data collection method. In addition, the analysis and findings presented in this chapter included the demographic data of the research participants. Subsequently, the emerged categories and themes resulted from analysing the responses of executives on sources and manifestations of occupational stress, associated stress factors with work environment and context of Saudi Arabia and stress coping strategies were discussed and illustrated.

Furthermore, the study findings revealed four significant interrelated and stressful themes underpinning the basic executive functions of planning, organising, leading and controlling. These information management, performance management, human resource management and strategic management required the practice of the basic function simultaneously and were found to be the direct reason behind the executive stress. In addition, the study resulted into additional stress factors related to the organisational structure and work style of the internal environment of the organisation. There were also other stressful contributing factors associated with Government interventions, market influences, media focus and social conflict of the external environment of the organisation.
More importantly, the research participants perceived occupational stress from its both aspects, i.e. eustress and distress. However, it was mostly perceived from the distress perceptive. Moreover, the study revealed important personal related factors that can shape and regulate the manifestations of executive eustress or distress. These included experience, personality type, cognitive appraisal and self-esteem factors. In particular, the study revealed that culture is a significant influencing factor to the entire executive stress process that made it difficult to have it as a subprocess. Accordingly, culture was considered in this study as an essential inherent and coherent part of the stress subprocesses as illustrated throughout this chapter.

Accordingly, the contributions of stress associated with these focused executive activities and other interrelated internal and external factors were found generally associated with the following important patterns: unmanageable work demands, difficulty of people management, micromanagement behaviour, engineering attitude, uncertainty avoidance, power distance, intensive communication and disk work, time pressure, thinking, efforts and reactions. The study further indicated that executives and organisations need to adopt proactive mode of operation and management rather than reactive and fire fighting practices to deal with their stressors in a long-term and preventable manner.

Finally, executives and organisations need to give more attention to the above explored executive stress components and its underlying attributes to ensure that the associated stress is managed effectively not only from executive perspective but also from organisational perspective.
CHAPTER 6
AN EMPIRICAL FRAMEWORK FOR THE
EXECUTIVE STRESS PROCESS

6.1 INTRODUCTION

This chapter presents the development of an empirical integrative framework for the executive stress process based on the research findings resulting from the exploratory and qualitative analysis presented in the last chapter. It also discusses the main findings and implications related to the components of the empirical executive stress process, which include the executive activities, internal/external environment, personal moderating factors, manifestations and coping strategies.

6.2 CONCEPTUAL FRAMEWORK OF EXECUTIVE STRESS PROCESS

In section 2.5 of chapter 2 (p. 83), the conceptual framework of the study for the executive stress process, which was formulated after critical review of the literature, was presented and discussed. It is reproduced in the following figure 6.1 to facilitate the development of the final framework, subsequent to the analysis and discussion of the data that was incorporated in chapter 5.

The conclusion of chapter 2 emphasised that stress should be regarded as a function of a series of interrelated components or ingredients that include the dynamic and non-specific contract between stress stimulus and response, individual characteristics, coping strategies and influencing environment related factors. These were viewed in this study as interrelated components of an interdependent process that operate, and react to each other in a dynamic system. Accordingly, stress in this present study was not treated merely as stressors, responses or an interaction process between stressor and response, but the study incorporated all above mentioned stress interrelated components together under a dynamic and non-specific process concerning the whole individual based on a system approach.
Initially, the conceptual executive stress process depicted above considered specifically the basic executive functions of planning, organising, leading and controlling as stressors or sources of stress in addition to the physiological, psychological and behavioural manifestations as strains or consequences of stress. This stress process integrated the active and dynamic interaction of the executive with the
surrounding environment through reacting to the various sources of stress. It included the environment factors (acts of God, physical, economical, political, work, technological, social and cultural) and the personal factors (mental model, perception, appraisal, type of personality, type of locus of control, physical health, abilities, skills, education, experience, needs, desires, goals, self-esteem, values and faith).

The above mentioned process typically transforms inputs to outputs through a dynamic interaction and behaviour shaped by the environment, coping strategies and feedback/forward loops. These feedback/forward loops subprocess were conceptualised to regulate the system for a corrective action in order to achieve the desired results. The type of reaction whether positive (pleasant) or negative (unpleasant) is dependent on the personal characteristics, differences and cognitive processes based on which the consequences of stress or strains are determined after appraising, perceiving, recognising, identifying, evaluating and handling the stressors and then feeding forward some coping strategies and the perceived demands and abilities to cope with them. If these strategies, personal characteristics and the supportive environmental factors do not reduce the observed stress and strains, a feedback process would start to regulate the reaction to the different stressors until an appropriate coping strategy is employed successfully. Otherwise, negative strains or outcomes would follow and the health of the individual will be at risk.

Accordingly, the next section aimed to open and examine the closed boxes identified in above conceptual framework of executive stress process based on the study field findings and discussions presented in chapter 5. This conceptual framework of executive stress process facilitated the development of the research questions and the design of the research instrument as illustrated in chapter 3. This framework considered together the existing limitations of stress models associated with the influence of the surrounding environment or context, individual characteristics or differences, types of
stress (eustress and distress), dynamic and non-specific nature of response to stress and total human being interaction with the environment, and stimulus and response of stress.

6.3 EMPIRICAL FRAMEWORK OF EXECUTIVE STRESS PROCESS

The conclusion of chapter 5 provided a practical examination on the stress process based on executive functions. The discovered and emerged concepts, codes, categories, themes and patterns developed under study were summarised in table 5.6 (p. 133). Accordingly, these expanded categories were then integrated into the following empirical comprehensive framework of executive stress process as depicted below in figure 6.2. This framework was based on exploring and expanding the established conceptual framework of executive stress as illustrated above in figure 6.1 and earlier in figure 2.9 (p. 83). To explain this point further, the findings of this present study indicated firstly that stress is a dynamic, interactive, non-specific and complex process concerning the whole individual in the workplace, not parts of the individual.

Secondly, it consists of stressors or sources of stress, personal moderating factors, reaction to these stressors, consequences or manifestations of this dynamic reaction that is called strain, and coping strategies. Thirdly, the sources of stress also vary and are linked together that include workplace and environment related stressors. Fourthly, stress can be positive (eustress), negative (distress) or in between response. Lastly, this dynamic process is subjected to the individual characteristics or moderating factors in addition to the interfaced environmental factors, which affect the process and consequence of stress by its feed forward or feedback process. This important finding of the influence of the personal related factors, and surrounding internal and external environments in responding to various sources of stress provided an enhanced understanding over the psychological transactional theories to the study of stress, explained in chapter 2 (p. 43). These theories emphasised the subjective nature and experience of stress. Specifically, the stress process starts at the mind by the perception,
cognitive appraisal and reappraisal process, but this is not the whole process since the reaction and effects of these stressors continue to affect positively or negatively the whole individual.

**Figure 6.2:** Empirical Framework of Executive Stress Process
Hence, the personal moderating factors of experience, personality type, cognitive appraisal and self-esteem are the determinants of stress whether it results in positive or negative consequences (strains) upon the dynamic and interactive reaction process. These resultant psychological and physiological interactions could permit for a behavioural change by the individual. This influence of these personal moderating factors in balancing the stress level indicates that the focus on improving and reinforcing these factors is necessary for effective preventive stress management. Accordingly, the field study findings associated with this framework were consistent with conceptual framework of executive stress the study and definition of stress reviewed at the beginning of this chapter.

Subsequently, the following subsections shed light on in details the main findings and implications related to the components or subprocesses of the empirical framework of executive stress process as illustrated above. These include the focused executive activities, internal and external environments, personal moderating factors, manifestations and coping strategies.

6.3.1 **Focused Executive Activities**

As illustrated above in figure 6.1, four significant interrelated and emergent stressful themes underpinning the basic executive functions of planning, organising, leading and controlling were revealed by the present study. The study indicated that these information management, performance management, human resource management and strategic management require the concurrent practice of the four basic executive functions of planning, organising, leading and controlling. It was found that these focused executive activities were the main source of executive stress. These related stressful activities were associated with variations on the executive schedule, judgment and hard work. Out of these four mentioned themes, information management and performance management were the most stress contributors to
executives, followed by human resource management and strategic management. More importantly, the executives under study indicated that they pay strong attention to organisational performance more than strategic plans. Therefore, this finding indicates that the executives should optimise their workload, and not concentrate primarily on operations efficiency, and budget and manpower control matters. Subsequently, the common identified patterns associated with different sources of executive stress including unmanageable work demands, time pressures and interpersonal conflicts could be managed appropriately.

Furthermore, the study indicated that executives and organisations should adopt a proactive mode of operation and management rather than reactive and fire fighting practices to deal with their stressors in a long-term and preventable manner. This majority or tendency toward the engineering or operations backgrounds among the executives explains why the reoccurring patterns in their responses related to the difficulty of people management, micromanagement behaviour and engineering attitude. This also indicates a failure to build an executive attitude to handle the overall corporate matters rather than focusing mainly on operational or technical matters.

Therefore, it is suggested that organisations could benefit from these findings of the study by considering these developed themes as competencies in the executives' future development programs to manage stress. These programs should promote type-B behaviour characteristics discussed in section 2.4.1 (p. 52) to improve the capability and tolerance of the executives to cope with occupational stress. Executives should be more responsive, patient, reasonable and practical.

6.3.2 Internal/ External Environmental Factors

The study indicated more review, improvement and optimisation are needed in relation to the existing organisational internal and external environments to manage executive stress effectively, specifically in the areas pertinent to organisational
structure, policies, work style and culture, Government interventions, market influences, media focus and social conflict. In particular, the study revealed that organizational culture played a significant influencing role to the entire executive stress process that made it difficult to be considered as a subprocess by itself. These findings were evident from the emerged important patterns related to executive stress: unmanageable work demands, difficulty of people management, micromanagement behaviour, engineering and operations attitude, uncertainty avoidance, power distance, intensive communication and disk work, time pressure, thinking, efforts and reactions.

These findings were emergent from the raised concerns associated with the rigidity of existing centralised, bureaucratic and authoritarian organisational settings of the oil and gas firms along with the significant corresponding organisational and cultural problems related to accountability, commitment, trust, openness, top-down influence, conflicts, favouritism, executive groupings, show-offs, poor communication, office politics, low responsiveness, information overload and short-time planning. These concerns disturbed directly the flow of information, communication, decision-making, commitment and performance associated with the executive focus functions revealed by the study. In addition, the study also brought up the real need to balance between the entire executive work and lifestyle by managing time appropriately.

6.3.3 Personal Moderating Factors

The study indicated that the related personal moderating factors could play an important role in balancing the executive stress. Therefore, executives and organisations are encouraged to emphasise more on these factors related experience, personality type, cognitive appraisal and self-esteem that could shape and regulate the manifestations of executive eustress or distress. This was also evident from the discussions and analogy made between the physical stress and human stress, which suggested building and strengthening up the tolerance capability of the individual in
order to cope and overcome the encountered stressors or forces since avoidance of stressors often is not viable. This could be adopted through various training programs and practices, which would regulate the effects of these stressors. This also suggests that stress should be addressed organisationally rather than individually.

In addition, it should be tackled from the perspectives of the country and industry since the significant prevalence of executive stress within all the oil and gas organizations participated in the study may be a serious threat to the future viability of the organization and country. Thus, it may ultimately affect the entire survival of the oil and gas industry worldwide. Accordingly, Saudi Arabia and its industries should tackle the stress management matters formally and strategically, and work together to initiate occupational stress regulations as the case with US (OSHA).

6.3.4 Executive Stress Manifestations

The responses to stressors or states were perceived in the study as non-specific in nature, and they count on multiple dynamic factors not only on a single factor. They were perceived from two aspects, i.e. eustress and distress. However, it was mostly perceived from the distress perceptive. There were no severe physical manifestations or strains reported by the executives under study. In addition, only psychological symptoms were associated with executive eustress, and psychological and physiological symptoms were associated with executive distress under study. The physiological symptoms were found initially triggered by psychological symptoms, and their combination could be manifested in a behavioural change in the side of the executives.

Accordingly, this indicated that the participated executives were moderately in control of the stress. This also could be attributed to the significant roles of their mature age, experience and education in managing stress along with the other highlighted personal moderating factors. In this regard, Saudi Arabia and the concerned
firms should establish related occupational safety and health regulations, as in the US and Europe, i.e. OSHA standards (Occupational safety and Health Act).

6.3.5 Executive Stress Coping Strategies

The study indicated the reported executive coping strategies associated essentially with distress were linked to the personal moderating factors of experience, personality type, cognitive appraisal and self-esteem. In addition, the overall qualitative examination of the reported self (avoidance, relaxation, altered behaviour) and organisational (incentives and healthcare) coping strategies used by the executives under study showed that they were mostly characterised by being short-term and reactive practices. In this perspective, the "flight” response was employed more than the "fight” response. The study also indicated that the social support, i.e. talking to close colleagues and friends or joining clubs and societies, was an effective coping strategy. This could be attributed to the Saudi collectivist cultural characteristic. Hence, it is suggested that these related social support aspects are invested in among the Saudi executives to manage executive stress.

Furthermore, the proposed executive stress coping strategies that include time management, readings, self-knowledge and spiritual practices could be further standardised among the concerned executives with the assistance of their organisations through establishing a comprehensive stress management and awareness programs in order to appropriately understand stress and learn how to manage it effectively. Accordingly, these findings enforced further the argument to tackle stress management from an organisational perspective rather than only from an individual perspective.

6.4 IMPLICATIONS OF EXECUTIVE STRESS PROCESS

The developed and enlarged framework of executive stress process provided particularly an insight of the nature of the specific executive's job. It was an enlargement of the conceptual integrative stress model depicted in figure 2.9 (p. 83) and
reproduced in figure 6.1 (p. 196). This empirical framework was developed after an intensive review of literatures, the analogy made on stress/strain relationships from the viewpoints of engineering and management sciences, the proposed model to the study of stress and the research findings and discussions. These provided an insight and focused view from the human perspective about the nature of stress and strain process utilising a dynamic system approach.

In particular, the view of the basic executive functions of planning, organising, leading and controlling to contribute directly to executive stress was viewed differently by the responses of the executives according to the findings of this present study. Along these lines, the executives under study perceived stress not through the Fayolian or basic functions of planning, organising, leading and controlling introduced in section 1.3 (pp. 4-7), but through focused activities underpinning these basic functions. These focused activities include information management, performance management, human resource management and strategic management. Thus, the outcome of the study indicated these Fayolian functions were not of direct significance to the perception of stress by the participants under study. These were the evolved main focused executive functions that should be focused on to improve the executive job, and subsequently manage stress effectively. This empirical framework was found efficient for describing the executive stress process. It can be also used as a guide to improve the executive stress by benefiting from the discovered self, social and organisational stress coping strategies addressed in section 5.3.4 as part of chapter 5.

Furthermore, this exploratory study closed the gaps in the existing approaches to the study of stress. As mentioned in chapter 2, each of the existing engineering, physiological or psychological approach to the study of stress has its own limitations to represent accurately the nature of stress process. In fact, this developed empirical
framework depicted in figure 6.2 provided an enhanced understanding and significantly added value over the following widely used definition of stress presented in chapter 2:

...an adaptive response, mediated by individual differences and/or psychological processes, that is a consequence of any external (environment) action, situation, or any event that places excessive psychological and/or physical demands on person. (Gibson, Ivancevich and Donnelly, 1994, p. 263)

Specifically, the study dealt with stress as a non-specific and dynamic process based on a system approach rather than a single stimulus or response element. This process starts by dynamically interacting with various encountered sources of stress and related internal and/or external environmental related factors. This dynamic action/reaction subprocess would result in either positive (eustress) or negative (distress) manifestations, depending on the influence of the other interacting subprocesses related to the personal moderating factors and implemented feedback/forward coping strategies. Subsequently, this continuous interaction involves the whole individual and can result in a behavioural change.

Moreover, the study empirical framework of executive stress process based on examining the activities underpinning the Fayolian functions provided a significant improvement over the existing frameworks of occupational stress presented earlier in chapter 2 (pp. 49-52), including those developed by Cooper and Marshall (1977), Matteson and Ivancevich (1982), Schermerhorn and his colleagues (1994) and Siu, Luo and Cooper (1999). In particular, this framework developed by the present study considered all stress process ingredients pertinent to executive work based initially on the conceptual integrative framework of executive stress process depicted in figure 6.1 (p. 196). Hence, this conceptual model was found useful through its specific description of the stress process, which in turn allowed for developing the subsequent comprehensive empirical model concerning primary the executive stress process.

However, there are some differences between the conceptual frameworks of figure 2.8 (p. 80) and 2.9 (p. 83) and the empirical model of figure 6.2 (p. 199). In
particular, the Fayolian or basic functions as sources of stress were firstly found to include the focused executive functions (information, performance, human resource and strategic managements). Secondly, the "executive" component as a transformation process of the system model was found to include the personal moderating factors such as experience, personality type, cognitive appraisal and self-esteem based on the findings of the study. Thirdly, the "environment" influencing factors were found to include the internal (organisational structure and work style) and external (Government interventions, market influences, media focus and social conflict) environmental factors. Fourthly, the executive stress consequences, manifestations or strains were found to include positive (psychological) and negative (psychological and physiological) manifestations. These two categories of psychological and physiological manifestations would then result in behavioural changes. Finally, the coping subprocess was found to include self, social and organizational strategies.

An important factor that characterised the study findings is the self-esteem as a moderating variable in the stress process. This factor, as explained in chapter 5, plays a significant role in coping process and the satisfaction of the individual. In particular, the personal faith in Allah's or God's fate and blessing as part of the self-esteem factors reflects the significance of culture in moderating the stress process. This again signifies the role of Islam in shaping the Saudi culture since Allah's fate and blessing is an essential element of faith in Islam. It would improve, the person understanding and reaction to any situation or event since he or she would realise it is from God or Allah where he believes that everything from Allah is good and for the favour of the person. Accordingly, the person would be patient and satisfied of the outcome even if it negative. This important element was not considered in the initial conceptual models of stress depicted in chapter 2 since the reviewed literatures and models of stress did not signify the role of faith in Allah's fate and blessing. The reason might be attributed to
the role of culture that differentiates a country from another. Here, Saudi culture is entirely dependent on Islamic teachings that emphasise the role of faith in the person's life. Furthermore, these study conceptual models could be improved by replacing the "Individual" or "Executive" box with "Personal Moderating Factors" to correspond to the empirical findings of the study.

6.5 CONCLUSION

The above explorations, findings and discussions on the study empirical comprehensive framework further provided an enhanced understanding of the nature executive stress process compared to the initial and conceptual developed framework depicted in figure 2.9 of chapter 2 (p. 83) and reproduced in figure 6.1 (196). Moreover, the study argued the strengths and weaknesses of the developed frameworks of stress, and highlighted the potential contributions made through this study along with addressing the limitations.

Accordingly, the significant contribution of the study was the development of the empirical integrative framework of executive stress process developed and discussed throughout this chapter. This empirical framework reflected the nature and definition of stress, and addressed simultaneously its main ingredients that include stressors, strains, coping strategies, personal moderating factors and environmental factors.
CHAPTER 7

CONCLUSIONS

7.1 INTRODUCTION

This final chapter brings together the entire work presented and discussed throughout this pioneering research project in line with the established objectives in chapter 1. In addition, it summarises the research findings, potential contributions, limitations, a critique of the research and suggestions for further work by utilising this dissertation as a basis for future research topics.

In this inductive process and interpretive qualitative study, the aim was to understand and develop a model or framework of executive stress process based on describing and reconstructing the thoughts, insights, meanings, experiences and perceptions of the oil and gas executives in Saudi Arabia about occupational stress caused by the executive functions of planning, organising, leading and controlling. The study achieved the research objectives and the subsequent questions listed in section 1.3 as part of chapter 1. Common recurring categories, themes and patterns were identified in relation to sources of stress, manifestations and coping strategies along with stressful factors related to internal and external environments. The study findings revealed four significant interrelated eustressful and distressful themes underpinning the basic executive functions of planning, organising, leading and controlling. These were related to information management, performance management, human resource management and strategic management. The findings revealed that the participants perceived these focused executive functions as a direct source of occupational stress instead of the basic executive functions that were thought of at the beginning of the research. The emerged key patterns related to these focused activities included difficulty of people management, micromanagement behaviour and engineering attitude.
Moreover, the study resulted into additional stress factors related to the organisational structure and work style of the internal environment of the organisation. There were also other stressful contributing factors associated with Government interventions, market influences, media focus and social conflict of the external environment of the organisation. Furthermore, the study revealed important personal related factors that could shape and regulate the manifestations of executive eustress or distress. These included experience, personality type, cognitive appraisal and self-esteem factors.

Accordingly, a comprehensive and empirical framework of executive stress process based on a dynamic system approach was developed summarising the explored executive stress process and its underlying attributes. Specifically, the stress process was regarded in this study as a non-specific and dynamic process based on a system approach rather than a single stimulus or response element.

7.2 RESEARCH CONTRIBUTIONS

The research potential contribution associated with the developed and enlarged framework of executive stress process depicted in figure 6.2 (p. 199) provided an insight of the nature of the specific executive's job. It was an enlargement of the conceptual integrative stress framework depicted in figure 2.9 (p. 83) and reproduced in figure 6.1 (p. 196). It was an initial attempt to provide an insight into the executive stress process caused by the executive functions. This comprehensive and integrated framework has not been previously acknowledged in the literature. This framework was developed after intensive and critical reviews of existing literatures, theories and models of stress, and the results of the field study.

Despite the significance role of the executives in the organisations, their perceptions of occupational stress related to their functions have not yet received adequate research consideration. Accordingly, the present study sought to rectify the
lack for knowledge regarding the topic under study and contribute to a better understanding of occupational stress caused by executive functions from the perspectives of oil and gas executives in Saudi Arabia.

A distinct contribution to the body of knowledge was achieved by being an original exploration of the topic under study. This study contributed to the body of knowledge in different manners. For instance, it was one of the few studies utilising qualitative methodology of interpretive or phenomenological philosophical approach to explore the executive stress versus the existing predominant quantitative methodology of positivism. For this purpose, table 7.1, following, summarises the characteristics of qualitative research used in this research to develop the final comprehensive framework of the executive stress process shown in figure 6.2 (p. 199). The researcher closely explored the subject under study. Thoughts, insights, meanings, experiences, themes and patterns were subjectively constructed from qualitative data by means of an inductive, emergent and naturalistic inquiry process from a holistic perspective. This was part of the constructive approach employed by this study through the cyclic process of qualitative data searching, verifying, indexing, categorising, sorting, contrasting, linking, refining and confirming.

Table 7.1: Qualitative Research Characteristics (developed by the researcher)

<table>
<thead>
<tr>
<th>Philosophy</th>
<th>Phenomenological and interpretive process and the reality is socially constructed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methodology</td>
<td>Ideographic, qualitative, inductive, exploratory and naturalistic inquiry.</td>
</tr>
<tr>
<td>Data Collection</td>
<td>Qualitative in the form of words and observations, rather than numbers, unstructured, rich, deep, use of multiple methods and subjective perception, understanding, insights and experience</td>
</tr>
<tr>
<td>Data Analysis/Findings</td>
<td>Emergent and inductive process, creative synthesis, search for codes, categories, patterns, themes, relationship, extracts meaning from data, interprets results in context and from holistic perspective for model or theory development.</td>
</tr>
<tr>
<td>Role of Researcher</td>
<td>Insider, close to the data and participants, observes, describes and interprets settings as they are and as natural outcome of the study.</td>
</tr>
</tbody>
</table>

In addition, the explored thinking and explanation toward understanding the physical stressor, stress and strain relationship and its analogy to human stress identified
in the fields of social sciences were considered as a new contribution to the existing body of knowledge. A correction was made by this study on the misconception about engineering or physical stress in related literatures. Thus, stress was regarded as a response in this study rather than a cause. Further, the study reflected the philosophical foundation of the existing model of stress that was overlooked in the literature. For instance, the physiological, engineering and interactional models of stress focus more on the objectivist approach or positivism. On the other hand, the transactional models of stress are close to the phenomenological paradigm since the emphasis is on the subjective experience.

Accordingly, a general and integrative stress process was developed reflecting the nature of stress and its main components including sources, consequences, coping strategies as shown earlier in figure 2.9 part of chapter 2. This conceptual model facilitated the development of the research questions and the design of the research instrument by considering together these limitations associated with the influence of the surrounding environment or context, individual characteristics or differences, types of stress (eustress and distress), dynamic and non-specific nature of response to stress and total human being interaction with stressors and strains. Subsequently, occupational stress was defined in the present research as a dynamic, non-specific and complex process concerning the whole individual in the workplace and the surrounding environment.

Hence, this present study provided an exploratory investigation and a wider perspective of occupational stress caused by executive functions through exploring the following concerning each executive function: identification of executive functions, sources of stress, work environment and contextual interrelated stress factors, stress symptoms, self-coping strategies, stress recognition and support by colleagues/organization, stress coping strategies and programs exercised by the organization and
recommended stress coping strategies. This study further revealed four significant themes underpinning the basic executive functions of planning, organising, leading and controlling. These included information management, performance management, human resource management and strategic management. In addition, it identified existing leadership behaviours, styles and practices, and explored new approaches that may be less stressful and more appropriate to the modern leadership requirements in Saudi Arabia. More importantly, the study contributed to identify what really executives do and worry about at workplace.

Accordingly, this type of investigation was considered a significant contribution by this present study since it is one of the few studies that addresses all main stress research ingredients simultaneously to understand, develop a model of executive stress and explore the topic under investigation, i.e. sources of stress, stress symptoms and stress coping strategies. This new and original study was hoped to add to the existing knowledge in various related areas such as occupational health and safety, industrial/organisational psychology, organisational behaviours, the human resource management, strategic management and organisational cultures. This research could add value to the field of occupational stress in Arabic context in particular and the world in general since there was little research about the types and effects of job-related stress at the time of the study. The findings of this study can also serve not only the executives as individuals, but also the organizations to set relevant stress coping measures and programs within their strategic management plans.

7.3 LIMITATIONS OF THE STUDY

As the case with the normal reported limitations of studies related to social sciences that can prevent generalisability of the findings, this present study is no exception. The study was limited to the male Saudi national executives and oil and gas firms in Saudi Arabia, and conditions existing in Saudi Arabia may be applicable to
other countries. Therefore, other private and public industries were not included in this study. The participation of women in the executive levels of the oil and gas firms in Saudi Arabia was not available due to various cultural and educational reasons. It should be also noted as a common point in all methods of qualitative research that this study was designed interpretively and qualitatively for exploration or discovery of the topic under investigation. Exploration here was required for this type of new research in order to achieve clarity, understanding, and discovery of the topic under study and its associated concepts. Accordingly, the findings presented in this study should be generalised with respect to the limited geographical and specific industrial sample representation, and may not reflect collective conditions throughout the world of other public or private sectors.

Furthermore, the research design selected for this investigation was qualitative-based utilizing in-depth interview method as a primary method of data collection, and was triangulated by other secondary methods such as observations, focus groups and documentary analysis. The qualitative interview characterised by in-depth investigation of individuals, provides a means by which a general problem can be illuminated and understood by the examination of a specific instance or instances. The objective of this study was to develop a model of executive stress by describing and reconstructing the thoughts and perceptions of occupational stress caused by executive functions. The limitations of this approach were acknowledged, as being subjective perceptions, understandings and descriptions of the oil and gas executives under investigation. However, it was seen appropriate for this type of study since it permitted to understand, from the participants’ points of views, factors related to occupational stress and coping strategies as they experienced in their day-to-day business.

Moreover, this study followed an intensive review of literature on stress and management related topics. Whilst these provided a solid conceptual background for
the study, the research participants were guided the directions of the study, provided their insights to the topic under investigation and reported useful data that were explored and analysed qualitatively to construct analytically the corresponding themes and concepts. In addition, the study analysis followed a comprehensive and systematic research analysis procedure, and findings were compared to the existing empirical studies and theories, and concurred by the consulted KFUPM professors and the "member checks" group, for validation purposes.

In summary, the researcher was aware of the significance of producing a plausible research, and acknowledged the related issues such as ethics, subjectivity, interests, confidentiality, access gaining, neutrality and biases that might influence the research. Accordingly, this entire research was fulfilled responsibly, professionally and academically to the best of the author’s knowledge, understanding, experience and abilities. In these lines, the trustworthiness of the study was addressed by employing the qualitative research evaluation criteria related to credibility; transferability, dependability and confirmability, which were addressed in more detail as part of section 4.6 of this report.

7.4 A CRITIQUE OF THE RESEARCH

This section offers a critique of the research and reflections on all phases of research including review of literature, methodology and design, data collection and analysis, findings and conclusions. This was thought to be necessary to provide a general examination and insights of related research issues encountered throughout this long research journey and how they were handled. This would be very beneficial for this new researched topic and type of study. Part of this evaluation was highlighted in section 4.6 of this report, as well. As an overall remark, this study did not claim perfection, and points of improvements are possible. The researcher actually followed a thoughtful, systematic and vigilant approach of thinking preparation, and
implementation throughout the research phases to serve the purpose of the study and satisfy the qualitative research evaluation criteria of credibility; transferability, dependability and confirmability. It should be noted that these research activities consumed significant time and efforts since this present study was exploratory and qualitative in nature that have not researched before.

7.4.1 Review of Literature

First, this study particularly followed an intensive and critical review of theoretical and empirical literatures on stress and management related topics, which provided a solid conceptual and empirical background for the study. More than 1000 useful and related references were reviewed and screened including books articles, reports, proceedings, etc. These were further optimised to include only 200 sources or references to satisfy the research project requirements, as reflected on the section of references at the end of the dissertation report. The Saudi local university libraries lacked the needed and related articles and books on this specific topic under study. However, the local libraries and online access to electronic resources that were made available by the University of Hull such as ATHENS, JSTOR and ProQuest websites were found beneficial for the purpose of the research. In addition, there were some books and articles purchased from AMAZON.com electronic website as well as two visits to USA to collect specific and related journals, books and reports.

This intensive and critical review process was very cautious to ensure that the gathered literatures could serve and address effectively the purpose of the new topic under investigation as well as a thorough understanding could be attained before proceeding to the next phase of the research. Several methods were used to comprehend these literatures including reading, writing notes, identifying key texts, marking, linking similar concepts, critical commenting, comparing concepts and arguments, synthesising and reflecting on them. Accordingly, the foundations for the
dissertation were laid including the research problem and questions, justifications and significance. On these foundations, the dissertation proceeded with a detailed description of the research, philosophy, stress definitions, concepts and its wide applications, culture, nature of basic executive functions, sources, consequences and management of stress to improve understanding and successfully address the topic under study.

7.4.2 Research Methodology and Design

Second, the abovementioned intensive and critical review of literatures facilitated the evaluation of the philosophical assumptions underpinning the research, choice of research methodology, justifications and the empirical techniques adopted to explore the topic under study. This was followed by arriving to the appropriate research methodology, development of the qualitative interview guides used to answer the research questions and explore the topic under study. This process underwent a number of attempts and revisions and was not a trouble-free task. The difficulty encountered at the beginning of this research was related to which philosophical assumptions, paradigm or criteria to rely on for the research since the literatures included different schools of thought in social research and categorisations of research approaches. This critical review of different research paradigms indicated that research was generally associated mainly with either positivism or interpretivism, and the philosophical framework developed by Burrell and Morgan (1979) was used in this study to drive the appropriate philosophy, methodology and techniques. This framework was selected since it provided an overall understanding and analysis of research philosophy by examining the nature of social science and the nature of society or organization. In addition, the design of the research instrument to address appropriately the research questions were not free from complications. The researcher's analytical thinking and creativity along with the literature review assisted in finalising the development of the
new designed qualitative interview guides. These research problems were associated with the originality of the research in this area of occupational research.

Accordingly, it was justified that qualitative methodology of interpretive paradigm was appropriate for the present study. It should be noted that the majority of the research studies in the domain of stress were conducted by utilising traditional surveys and self-administration questionnaires that have an advantage of managing large samples. However, this methodology would not be efficient when the intention is to develop a model of executive stress by exploring and describing the perceptions, attitudes and experiences of the research participants. In addition, the qualitative interview was selected to be the primary data collection technique to explore and answer the research questions. The interviewee and interviewer guides as the research instrument of qualitative interview were developed and tested. Moreover, the basis, criteria and justification for selecting the research sample and participants through the purposive sampling technique were offered. This present exploratory and qualitative study, unlike quantitative research which targets a random sample, employed a purposive sampling technique to appropriately fit the purpose of this project for discovery, involve subjectively research participants who were experienced and successful top managers of oil and gas firms and explore themes in-depth.

7.4.3 Data Collection and Analysis

Third, qualitative data were collected through direct interactions with the research participants through face-to-face interviews, observations, focus groups and documentary analysis based on detailed and systematic descriptions of data collection and analysis procedures as well as consideration were given to subjectivity, ethics, information protection, sensitivity, honesty and biases throughout this research phase to produce a plausible research. Thus, these issues were handled by employing the study related qualitative trustworthiness criteria of credibility, transferability, dependability
and confirmability. In addition, these various data collection methods were intensive and time consuming. However, there were very essential in order to warrant richness of data and deeper insights into the topic under study.

Furthermore, the research participants were approached friendly several times via telephone calls, mail and emails to clarify the purpose and significance of the study. It was made clear to all visited executives at the time of soliciting their participation on the study that the purpose of the research would neither negatively influence them nor their organisations. At the beginning, there were significant hesitations from the side of some of the executives in accepting the invitations for participation in the research interviews. In fact, there were various access problems and interview scheduling difficulties. However, the participated executives later on showed their cooperation and understanding of the purpose of the study and they provided true and honest responses to the questions of the interviews. The executives actually responded cooperatively to the questions and added a value to the interviews. The lesson learned in this process was that personal and face-to-face communication, contacts and referrals were found the most effective and culturally accepted means to invite participants into the research as compared to other used methods of telephone calls, mail and emails. Therefore, it is advised for future research that the business executives to be contacted initially via face-to-face meetings in order to obtain effective responses and subsequently manage the research time.

Moreover, the participated executives refused initially to use the audiotapes to record the interviews. However, several discussions with the executives under study were made to clarify the benefits that would be gained from recording the interviews for data analysis success and enabling the researcher to focus more on the questions and contents during the course of the interviews. Subsequently, they all were convinced of the importance of recording the interviews. Thus, all interviews were audiotaped with a
prior agreement, support and understanding from the executives to facilitate later the data analysis process.

Concerning the data analysis, the extensive gathered raw qualitative data through different methods, unlike quantitative data, could not be tackled statistically. It was found difficult to entirely handle them manually. Accordingly, an evaluation was made on several latest known computer software packages that could facilitate the analysis of the significant amount of these gathered qualitative data including Atlas, Ethnograph and NUD*IST. After a thorough review and consultation with colleagues on the capability of these different electronic packages, the decision was made to purchase and utilise the latest version of NUD*IST called N6. It took significant time and efforts to learn it and be acquainted with. Whilst NUD*IST was found very time consuming and difficult to process, it aided clerically and mechanically the researcher to effectively handle new and existing categories via its powerful features that allowed mainly to create, reorganise, sort, search, compare, index/re-index and present concepts, codes, themes, categories, notes, memos, transcripts, observations and speeches. However, it was not efficient in handling the data analysis conceptually, analytically and meaningfully. In these lines, a detailed and systematic data analysis procedure was developed to effectively handle the major gathered qualitative data, identify emergent themes and explore the topic under study, as reflected in Table 4.1 of chapter 4.

Accordingly, the qualitative data analysis was ongoing and continued throughout all phases of the research project in order to holistically learn, reveal, understand, explain and examine the embedded themes, concepts and categories in these gathered qualitative data, and then made a sense out of them in a meaningful way.
7.4.4 Research Findings and Conclusions

Last, the significant findings of this exploratory study resulted from the thorough analysis were based on analysing collectively the related qualitative data from 63 oil and gas executives, out of which 43 executives were Saudis who participated in the qualitative interviews as a primary data collection method. This significant research sample and methods were considered appropriate for such type of exploratory and qualitative study. The aim was to construct useful meanings, themes and patterns.

However, there were frequent difficulties encountered that were associated with determining the appropriate way of presenting and displaying the analysed qualitative data and findings that could communicate the most important research aspects and reflect the explored big picture. These issues were handled systematically as appear in the format of chapter 5. In addition, these were managed by establishing a matrix to define, summarise and facilitate holistically the research topics, codes, themes and elements. Subsequently, this matrix facilitated the repeated categorisation process and organisation of the findings. A blank sample and format of this result matrix used in this study is included in Appendix I. Although this matrix was initially very useful in grouping, combining and analysing the data analytically, it could not be readable due to the significant number of active and extended sheets resulted from the continuous related activities of indexing, contrasting, transferring, organising, sorting and refining. Accordingly, the overall results of these activities associated with the matrix were transformed into an appropriate display format illustrated in table 5.6 as part of chapter 5.

Moreover, the contribution of the "member checks" group and local consultants to review, evaluate and confirm these findings was found very effective. Subsequently, the study theoretical and field findings, and emerged categories and themes resulted from analysing the responses of executives on sources and
manifestations of occupational stress, associated stress factors with work environment and context of Saudi Arabia and stress coping strategies were reported, discussed and concluded to reflect the big picture and within the context of Saudi Arabia, as reflected in chapters 5 and 6. Finally, areas of improvements in this research are still valid. This dissertation was an initial attempt in this new researched topic, and it was hoped to achieve its objectives for contributing to the body of knowledge and future related research considerations.

7.5 SUGGESTIONS FOR FUTURE RESEARCH

In relation to the abovementioned research findings and conclusions, there are certain aspects of this study that identify areas and suggestions for further work by utilising this dissertation as a basis for future research topics. There are a number of ways in which further work can be carried out by benefiting from the findings of this study. It can be by either replicating and testing the findings or focusing more on specific parts of the findings for further potential research development. Specifically, there is an opportunity to validate and test the developed comprehensive framework of executive stress, illustrated in figure 6.1, in other contexts and/or industries.

Future research should also pay close attention to the concepts and themes discussed in this study related to sources, manifestations and coping strategies of executive stress, stress factors associated with work environment and context and personal moderating factors or characteristics. Moreover, it is suggested for future research that landmark theory is considered in order to quantitatively assess and analyse the qualitative data of this present study. This technique turns the gathered qualitative data into quantitative data by assigning symbolic landmark values of either 0, 1 or in between values such as 0.25 or 0.5 as a representation of qualitative events. More detailed description on landmark theory can be found in Yolles (1998, 1999).
Accordingly, the following possible focused research questions can be further investigated based on the study findings:

1. How can the recognition of the nature of internal environment or organisational culture factors within which executives operate improve the understanding of the specific practices and behaviours of executives in relation to executive distress caused by information, performance, human resource and strategic management related activities?

2. In what ways can organisations promote type-B behaviours in the executive positions?

3. How can cognitive appraisal and self-esteem personal related moderating factors be capitalised to manage executive stress?

4. What is the relationship between executive distress and engineering and operations attitudes?

5. How can external environment (Government interventions, market influences and Media focus) distress related factors be coped with?

6. How can strategic partnership of business, political and economic practices, experiences and reforms of a successful country such as Malaysia with another developing country such as Saudi Arabia, with some cultural similarities improve stress associated with the external ambiguous and uncertain economical and political environment as perceived by executives of that developing country? For example, there appear to be some marked similarities in culture and interests between Saudi Arabia and Malaysia while some marked differences in performance do exist. From the perspective of Hofstede’s cultural dimensions, both countries share the same results (PDI: 104, UAI: 36, IDV: 26 and MAS: 50). However, the findings of Hofstede and Bjorn and Al-Meer for Saudi Arabia showed a high score on the dimension of uncertainty avoidance whereas the score was relatively low for
Malaysia. This may be an indication of the reason behind the present political and
economic success of Malaysia where few laws and rules exist, human resources
development is emphasised, reasonable and lenient handling of uncertainties, and
the political system and market are very open and decentralized. According to the
World Factbook of CIA (2003a), Malaysia exhibits Healthy foreign exchange
reserves. Its GDP and growth are $210 billion and 4.2%, respectively.

Finally, the findings of the present exploratory study may assist in developing an
action research by utilising the study theoretical knowledge and practical experience for
specific problem solving that can achieve sound recommendations and contribute to a
desired change in any of these concerned organisations. This can assist in handling
executive stress more effectively and providing the opportunity to executives to review
the organisational present processes of these basic and focused functions in relation to
occupational stress.

7.6 CONCLUSION

In conclusion, this final chapter wrapped up the efforts of the entire research work
and summarises the related research findings resulted from this original and pioneering
exploratory and qualitative study. Moreover, the study highlighted the potential
contributions made through this study along with addressing the limitations. What is
unique about this study was the development of an integrative and empirical framework
of executive stress process based on a system approach through exploratory and
qualitative methodology. Further, there is an opportunity to validate and test the
developed comprehensive framework of executive stress, illustrated in figure 6.2, in
other contexts and/or industries. In addition, a critique of the research and suggestions
for future research work were provided.
REFERENCES


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# APPENDICES

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