Universiti Utara Malaysia

THE IMPACT OF THE LEADERSHIP STYLES ON CRISIS MANAGEMENT: A STUDY AT YEMEN PRIVATE AND PUBLIC INSTITUTIONS

By

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Thesis Submitted to
Othman Yeop Abdullah Graduate School of Business,
Universiti Utara Malaysia, In Fulfilment of the Requirement for
Master of Science Management

2016

Pusat Pengajian Pengurusan Perniagaan
(School of Business Management)

Kolej Perniagaan
(College of Business)
Universiti Utara Malaysia

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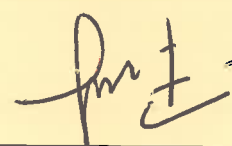|			
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Program Pengajian *(Programme of Study)*	:	**Master of Science Management**

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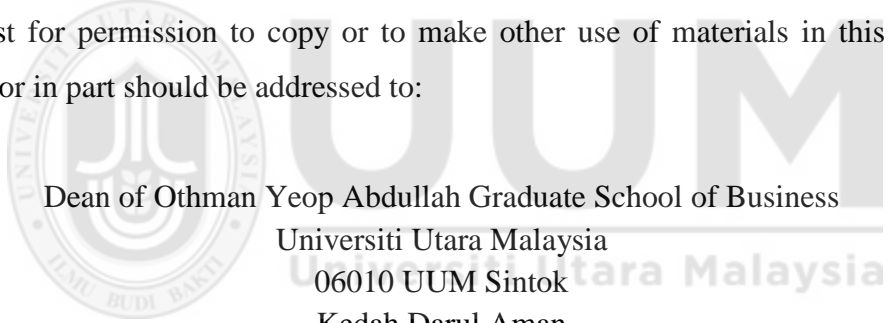|		
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ABSTRACT

Crisis management plays an essential role in an organization to conduct its daily activities, where crisis has to be managed. However, choosing the proper leadership style is the main challenge to avoid disastrous consequences during the current crisis situation in Yemen. Therefore, the main objective of the study was to determine the influence of leadership styles in terms of transformational, transactional and charismatic leadership styles on crisis management in the Yemeni private and public institutions. The study further aimed to determine the most influential leadership style on crisis management. In order to achieve the objectives of the study, a quantitative method was applied and the data were collected from 297 middle managers in the Yemeni private and public institutions. Regression test was used to investigate the relationship between the leadership styles and crisis management as well as to determine the most influential leadership styles on crisis management. The results indicated that transformational, transactional and charisma leadership styles were found to have positive influences on crisis management. Furthermore, the results also indicated that transactional leadership was the best predictor and the most influential factor on crisis management in Yemeni private and public institutions. This was followed by charisma and transformational leadership styles, respectively. Overall, this study has provided a valuable contribution to the body of knowledge in the fields of leadership styles and crisis management. Future research is recommended to focus on the dimensions of the transformational leadership styles and crisis management stages for more specific outcomes.

Keywords: Crisis Management, Transformational leadership, Transactional leadership, Charisma leadership.

ABSTRACT

Pengurusan krisis memainkan peranan yang penting bagi sesebuah organisasi dalam melaksanakan aktiviti hariannya, di mana krisis perlu diuruskan. Walau bagaimanapun, memilih gaya kepimpinan yang betul merupakan cabaran utama bagi mengelakkan kesan buruk dalam situasi krisis semasa di Yaman. Oleh itu, objektif utama kajian ini adalah untuk menentukan pengaruh gaya kepimpinan dari segi gaya kepimpinan transformasi, transaksi dan berkarisma dalam pengurusan krisis di institusi awam dan swasta Yaman. Kajian ini selanjutnya bertujuan untuk menentukan gaya kepimpinan yang paling berpengaruh terhadap pengurusan krisis. Bagi mencapai objektif kajian, kaedah kuantitatif telah digunakan dan data telah dikumpulkan daripada 297 pengurus peringkat pertengahan di institusi awam dan swasta Yaman. Ujian regresi digunakan untuk mengkaji hubungan antara gaya kepimpinan dan pengurusan krisis, serta menentukan gaya kepimpinan yang paling mempengaruhi pengurusan krisis. Hasil kajian menunjukkan bahawa gaya kepimpinan transformasi, transaksi dan berkarisma didapati mempunyai pengaruh yang positif ke atas pengurusan krisis. Selain itu, dapatan kajian juga menunjukkan bahawa kepimpinan transaksi adalah peramal yang terbaik dan merupakan faktor yang paling banyak mempengaruhi pengurusan krisis di Yaman. Ini diikuti oleh gaya kepimpinan berkarisma dan transformasi. Secara keseluruhan, kajian ini telah memberikan sumbangan yang bernilai kepada institusi ilmu dalam bidang gaya kepimpinan dan pengurusan krisis. Kajian akan datang dicadangkan untuk memberi tumpuan kepada dimensi gaya kepimpinan dan peringkat-peringkat pengurusan krisis transformasi untuk mendapatkan hasil yang lebih khusus.

Kata kunci: Pengurusan krisis, kepimpinan transformasi, kepimpinan transaksi, kepimpinan berkarisma.

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ACKNOWLEDGEMENTS

In the Name of Allah, the Most Gracious, the Most Merciful. Praise to Allah S.W.T. for granted me strength, courage, patience and inspirations in completing this work.

I wish to express my sincere appreciation to my supervisor; Dr. Abdul Manaf Bin BOHARI for guiding me constantly towards the completion of this study. Thank you, Prof. for your guidance, motivation, support, critical insight, beneficial feedback, and patience, you are truly exceptional.

My extended appreciation goes to Dr, Sami Mohammed ALHADERI for his valuable guidance, critical insight, encouragement and support to finish this study. I would also like to thank Dr. Ibrahim Almatari for his kind assistance.

I am grateful to human resource managers in ministries and private companies for their kind assistance during data collection. Also, a special thanks to my best sister and her daughter Shima Alsrouri, as well as Mr. Mohammed Alshehari, who helped me during data collection. In addition, to all academic and administrative staff at the College of Business, thank you for your assistance. Finally, to my wife and my daughter, Meera, thank you for your patience and support while I was busy with study.

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LIST OF ABBREVIATIONS

BR	Business Recovery
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CM	Crisis management
CMP	Crisis management plan
CMT	Crisis management team
CR	Contingent Reward
DC	Damage Containment
IC	Individual Consideration
IIA	Idealized Influence-Attributed
IIB	Idealized Influence-Behaviour
IM	Inspirational Motivation
IS	Intellectual Stimulation
KMO	Kaser-Meyer-Olkin
LR	Learning
MBEA	Management-by-Exception-Active
MBEP	Management-by-Exception-Passive
MLQ	Multifactor Leadership Questionnaire
PP	Preparation/Prevention
PPRR	Prevention, preparedness, response, recovery
PR	Personal risk
SCCT	Situational Crisis Communication Theory
SD	Signal Detection
SE	Sensitivity to the environment
SMEs	Small and medium-sized enterprises
SMN	Sensitivity to members' needs
SPSS	Statistical Package for Social Science
SVA	Strategic vision and articulation
TF L	Transformational Leadership
TSL	Transactional Leadership
UB	Unconventional behaviour
UNDP	United Nations Development Programme

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CHAPTER 1

INTRODUCTION

1.1. BACKGROUND

Crisis management is an integrated and comprehensive on-going effort that organizations effectively placed it in an attempt to understand and prevent a crisis, and to effectively manage it, taking into consideration in each step the planning and training activities, and the interest of the stakeholders (Santana, 2004). However, despite the importance of crisis management for organizational success and survival, particularly in today's highly ever-changing environment, there are many indicators which reflected the lack of proper managing and implementing the issue of crisis management. For example, the deterioration of the public and private sector during the crisis of 2011 in Yemen up to date and the estimation of the private sector's losses are about US$8– 17 billion from December 2010 to August 2011(IMF, 2014).

In addition, the cut down of the Gross domestic product (GDP) is estimated around 15 percent, beside the impact of the crisis on the public sector, practically, the employees have experienced the delay of payroll of salaries; displacement of staff from governorates and a reduction in real salaries due to very high inflation (World Bank, 2012). As a result of that, the crisis context has dominated the Arab scene, assistance by the absence of strategies and crisis management mechanisms and tools to control those crises, relying on individual urgent and temporary passive solutions, dealing and interacted emotionally with crisis, (Rashid, 2013). Therefore, crisis management is considered one of the means of controlling and reducing of crisis consequences,

associated with effective leadership (Wooten & James 2008). In addition, crisis management lets the organizations' to conduct its daily activities, whereas the crisis is being managed (Darling, 1994).

Nevertheless, despite the importance of crisis management to reduce the impact of an unexpected event in the existence of an organization, there is little attention has given to the role of leadership style as an important predictor of crisis management. For example, several of previous studies in crisis management were conducted on the impact of strategic factors in terms of (organizational history of crises, organizational size, and strategic leadership and employee competences) on effective crisis management (Wilson & Waiganjo, 2013). Another study investigated the human impact issues for crisis management in organizations (Myer, Conte, & Peterson, 2007). Moreover, Wang (2008) studied the role of organizational learning in crisis management. Thus, this study attempts to fill the gaps between leadership style and crisis management.

Furthermore, numerous studies concentrated on developed countries such as Harwati (2013), Herbane (2013), and Wooten and James (2008). While only very few studies have been done in less developed countries such as Yemen. Further, many researchers have paid more attention to study leadership and crisis management in the private sector, such as Alsamaray (2014) and Davis and Gardner (2012), disregarding the public sector. Therefore, the present study investigated the impact of leadership on crisis management in both private and public sectors in Yemen.

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Leadership has an interpersonal impact for achieving objectives, setting directions and orders, allow organization members to make the act towards common directions, being an example to others, encourage followers and take responsibility as being a leader (Dubrin, 2004). Also, leadership is considered to be particularly important in achieving organizational goals (Mccoll & Anderson, 2002) Moreover, the effective leaders in times of crisis take a crucial action to reduce the concern of the organization members and inform them how the crisis could affect them (Yukl, 2002). Undoable, that Leadership styles have been extensively and intensely studied, whereas leadership in a specific situation has not much explored yet (Cho & Tseng, 2009). Thus, it is necessary to have the right leadership style in complex and uncertain environments, who can lead the organization successfully (Yiing & Ahmad, 2009).

However, there appear to be a number of researchers who strongly support studying leadership capabilities that shown during every phase of the crisis management and gives a structure for framing the process and by providing a direction for decision making (Wooten, 2005). Though, numerous of those studies have been done on the influence of the transformational leadership in the context of financial crisis such as, Cho and Tseng (2009), Kaltenstadler and ksiazkiewicz (2011). And also, Zhang, Jia and Gu (2012) studied transformational leadership on a natural disaster. Therefore, this study focused on the impact of leadership style in term of transformational, transactional and charisma on crisis management under the condition of political instability, security and economic crisis in Yemen using the five stages of crisis management which developed by Person and Mitroff (1993).

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1.2. PROBLEM STATEMENT

Crisis management entails reducing the influence of an unanticipated event in the life of an organization. It includes planning, coordination, and react to the threats that may restrain or impede operational activities, such threats may extremely impact organizations and resulting in economic, social, and environmental damages (Herbane, 2013). In addition, the crisis management is considered one of the means of controlling and reducing of crisis consequences, associated with effective leadership style (Wooten & James 2008). Also, success and growth in the developed and developing countries such as USA, UK, Chain and Malaysia associated with effective leadership (Wai, Sandhu & Kishore, 2009). The effective crisis leadership requires identifying threats to deal with the consequences of the crisis and initiating efforts to mitigate them and, once a serious crisis period has passed, re-establishing a sense of normalcy (Boin, Hart, Tmcconnell & Preston, 2010).

However, despite the change of the parties and leadership was governing, but the situation in the republic of Yemen still suffering from a high percentage of unemployment, poor economic conditions, and corruption (Smith, 2012). As well, the impact of 2011 crisis, which influences the public and private institutions in Yemen, includes employment, small and medium-sized enterprises (SMEs), products and food prices, and basic services. It is estimated that 15 percent of all private-sector workers and 30–40 percent of factory workers lost their jobs, while the salary of most employees was reduced by around 20 percent, and extended unpaid leave of up to six months (World Bank, 2012). Also, Al-Alimi the Deputy Prime Minster of Yemen,

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declared that the existing level of leadership skills is the problems facing change in Yemen, especially in the public sector (Ahmad & Gelaidan, 2011).

Therefore, this lead to investigated the effects of leadership styles in terms of transformational, transactional and charisma leadership as variables that influence crisis management in Yemen using a crisis management theory Person and Mitroff (1993), transformational Bass and Avolio (1994), and charisma leadership theory Conger and Kanungo (1998). Moreover, many studies recommended to investigate the impact of leadership style on crisis management such as, Zhang *et al.* (2012) argued that their results may be limited to the context of a natural disaster and this limitation could be addressed in future research to investigate the effects of transformational leader behaviours in other crisis. Also, Cho and Tseng (2009) recommended that future research could examine the effectiveness of every dimension of transformational leadership during a crisis as a guideline for leaders to react to crisis. In addition, Kaltenstadler and ksiazkiewicz (2011) suggested for the future study that the crisis study containment is more and more significant. This could introduce mechanisms to prevent crisis and identify signals and on the other hand the improvement of crisis leadership skills in a crisis stage. In addition, Jacobsen (2010) proposed that the future study could answer the question of what constitutes success in crisis leadership.

Most existing studies have focused on the impact of the transformational leadership during financial crisis such as, Cho and Tseng (2009), Alsamaray (2014), and Kaltenstadler and ksiazkiewicz (2011). Another study conducted by Zhang *et al.* (2012) investigated the transformational leadership on a natural crisis. Therefore, this

study attempts to minimize these gaps by focusing on the impact of leadership style on crisis management using a crisis management stages which was developed by Person and Mitroff (1993) and updated by Mitroff (2005).

In additional, many studies have paid more attention to investigate the impact of leadership on crisis management in private sector, such as Alsamaray (2014), Davis and Gardner (2012), Wooten and James (2008), and Harwati (2013) disregarding the public sector. Consequently, this study is to cover the above mentioned gaps by investigating the effects of leadership styles in terms of transformational, transactional and charisma leadership as variables that effect crisis management and decided which leadership styles is most suitable to handle the crisis situation in Yemen private and public institution

1.3. RESEARCH QUESTIONS

The primary research questions served as the foundation and guidance for this study: which leadership style is most effective on crisis Management. The questions addressed the direct impact of leadership style on crisis management in order to provide a clear insight to answer the following questions:

1. Is there a significant impact of transformational leadership on crisis management (CM)?

2. Is there a significant impact of transactional leadership on crisis management (CM)?

3. Is there a significant impact of charisma leadership on crisis management (CM)?

4. Which leadership style is the most influential on crisis management?

1.4. RESEARCH OBJECTIVES

In general, this study attempts to explore the impact of leadership style on crisis management and particularly aim to examine the following:

1. To examine the impact of transformational leadership on crisis management.

2. To investigate the impact of transactional leadership on crisis management.

3. To explore the impact of Charisma leadership on crisis management.

4. To identify the most influential leadership style on crisis management.

1.5. SIGNIFICANCE OF THE STUDY

This study contributed significantly towards theoretical and practical knowledge in the context of leadership style and crisis management. In terms of theoretical contribution, this study is to bridge the gap between leadership style and crisis management in Yemen. Also, it enhanced the understanding of the leadership styles that would easily able to overcome the crisis situation by utilizing the effective crisis management. However, previous study such as, Zhang *et al.* (2012), Cho and Tseng (2009), Carlijn (2010) attempted to determine the effects of leadership styles in the context of crisis.

Therefore, this study examined and analyzed the relation between transformational, transactional, charisma leadership styles and crisis management, utilizing crisis management stages which have been developed by Person and Mitroff (1993) and updated by Mitrrof in 2005 as dependent variable while other studies investigate the impact of leadership styles in the context of crisis. Further, it investigated one of the

most important issues in Yemen arena currently which is the current crisis. In addition, the present study is different from previous studies as it combined the variables; transformational, transactional and charisma leadership to explain their impact in the current crisis through effective crisis management.

Moreover, present study increased the understanding of the utilized variables into different cultures and different type of crisis particularly, in the Yemen private and public institutions. Also, the scales of the variables were developed in different countries in the private sector to show strength and validity of the measurements. Previous study suggested that the instrument should be tested with different groups and different settings. In response to their suggestion, current study assessed the applicability of these scales and tested them in Yemen private and public institutions. In addition, the importance of this study lies on the lacks of relevant research on the impact of leadership style on crisis management in public sector, most of the studies paid more attention to the private sector ignoring the public sector. While this study conducted in both public and private sector, which extend the scope and applicability of the underpinning theories.

For practice, this research might guide Yemeni private and public sector's leaders on how the leadership style response to crisis and which style of leadership is the most appropriate to confront the crisis situation. Thus, present study provided evidence that leadership style is considered as the most important main factor, to manage the crisis, and also, to take a crucial action to reduce and prevent the disastrous consequence of

the crisis, and also contributed to the field of crisis management with some important information that can be useful for the future studies in Yemen.

1.6. SCOPE OF STUDY

This study, conducted in the Republic of Yemen in the capital Sana'a, which considered as important city where the main headquarters of the ministries and large private companies are located. Also, the study focused on the middle managers of Yemen private and public institutions. Ten institutions were selected; five from the private institutions and five from public institutions, as they have direct influence to the public and they consider as the largest institutions, according to the Ministry of Civil Service report (2013).

The questionnaires distributed among the middle managers, targeted 297 leaders from those institutions, according to the statistic which has been obtained from the Ministry of Civil Service and the Chamber of Commerce in Capital Municipality. In addition, the sample size selected randomly, due to the confidentially of these leaders positions.

However, the reason behind choosing Yemen as a scope of the study, due to the ongoing crisis situation which is provides a suitable environment to conduct the study. In additional, the lack of relevant research, on the impact of leadership styles on crisis management in Yemen.

1.7. STRUCTURE OF THE THESIS

This thesis consists of five chapters. The first chapter illustrated the aims of this study, which is the impact of leadership styles on crisis management and it contain the background of the study, problem statement, research questions, research objectives, significance and the scope of the study.

The second chapter explained in details the dependent variable crisis management, type of crisis, impact of crisis, crisis management theories, and crisis management stages as well as independent variable leadership styles in terms of transactional, transformational and charisma leadership and also, research framework and hypothesis development.

Chapter three focused on the research method that used for testing the hypotheses, generally, and it explains how the present study was practically carried out and specific issues related to research method such as sampling, data collection, pilot study, instrumentation, and techniques for data analysis.

The fourth Chapter presented the descriptive findings of the data collected. And, it also presents the results of the study based on the statistical tests run to test the hypotheses. Finally chapter five provides the discussion in the main finding and, makes recommendations for future research and also makes conclusion.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter presents a review of the literature that explains in details the concepts of the crisis management and leadership style to justify the direction of the current study. The chapter begins with the literature about the background of the Yemen crisis and followed by the crisis management as the dependent variable and then the independent variable leadership style transformational, Transactional and Charisma leadership as well as framework and hypothesis development.

2.2 BACKGROUND OF THE YEMEN CRISIS

The Arab Spring wave associated with popular uprisings swept into Yemen in the early 2011, Massive anti-government protests spread out everywhere, demanding the ouster of Ali Abdullah Saleh, who had served as president since Yemen's unification in 1990, the uprising was coupled by an elite power struggle among factionalized military commanders, creating a new dissension that many believed could reignite a civil war (Jost, 2013). Demonstrations in Sana'a against the President Ali Abdullah Saleh - inspired by a similar manifestation in Tunisia and Egypt incremental created momentum starting in late January 2011, followed by complaints over high unemployment, poor economic conditions, and corruption. By the following month, several demonstrations had led to violence, and the manifestations had extended to other big cities. By March the opposition had reinforced its demands and was unifying

behind calls for Ali Abdullah Saleh's immediate ouster, and prominent military and tribal leaders began defecting from SALIH's camp (Nguyen, 2014).

In late April 2011, the Gulf Cooperation Council (GCC), in an effort to mediate among the parties of the crisis in Yemen, they proposed an agreement in which the president would step down in exchange for immunity from prosecution. Ali Abdullah Saleh rejected to sign an agreement which was leaded to heavy street fighting and his injury in an explosion in June 2011. The UN Security Council passed Resolution 2014 in October 2011 calling on both sides to end the violence and complete a power transfer agreement. In late November 2011, SALIH signed the GCC-brokered agreement to step down and to transfer some of his powers to Vice President Abd Rabuh Mansur Hadi. Following elections in February 2012, won by Abd Rabuh Mansur Hadi, Ali Abdullah Saleh formally transferred his powers. In accordance with the GCC initiative, Yemen launched a National Dialogue in March 2013 to discuss key constitutional, political, and social issues. Abd Rabuh Mansur Hadi concluded the National Dialogue in January 2014. Subsequent steps in the transition process include constitutional drafting, a constitutional referendum, and national elections (Abdel Nasser, 2015).

However, Yemen is inherently unstable and the government faces multiple threats. Violent unrest is common, particularly in the south, and socio-economic and political protests are prone to occur throughout the country, including the capital, Sana'a. There is an active tribal insurgency in the northeast governorates and the lurking threat of a re-division of the country along north-south lines continues to pose genuine threats to national stability. Terrorism remains a serious concern through the country. Since

January 2009, Al-Qaeda in the Arabian Peninsula (AQAP) has consolidated its presence in the south of Yemen. The group intends to serve as a regional hub and regularly plans and orchestrates attacks against foreign and government interests. Western interests have been periodically targeted in high-profile terrorist attacks that include bombings, kidnappings and murders (Country Risk Report Yemen, 2015).

Many of the serious problems facing Yemen today are partly a consequence of lack of security and economic development. Yemeni economy is suffering from multiple problems. Falling oil production, decreasing net exports of oil, high inflation and high unemployment are just a few issues mentioned. Yemen is since long back affected by security problems. Some serious terrorist attacks have been taking place in Yemen in the last decade. The deteriorating economic situation and the lack of sound macroeconomic management have created a war economy. This has consequences not only for the Yemeni private and public institutions, but also for the Yemeni people and the region as a whole (CIA, 2014).

2.3   CRISIS MANAGEMENT

Crisis management can be defined as "an integrated and comprehensive on-going effort that organizations effectively placed it in an attempt to first and foremost understand and prevent a crisis, and to effectively manage those that occur, taking into consideration in each step of their planning and training activities, the interest of their stakeholders" (Santana, 2004). Further, Gigliotti and Jason (1991) defined crisis management "as the ability of an organization to deal quickly, efficiently, and effectively with contingency operations with the goal of reducing the threat to human

health and safety, the loss of public or corporate property, and adverse impact on continued normal business or operations".

Person and Mitroff (1993) illustrate that corporation is vulnerable to illimitable types of crisis. Moreover, organizations are more vulnerable to crisis than ever before. Further, crisis can occur any time to any organizations, and none of which is protected and it usually occurs as a torrent of urgent, unanticipated (Al-Ghamdi, 2013). Also, Crisis management requires reducing the influence of an unanticipated event in the life of an organization. It includes planning and coordination to arrange, and respond to the threats that may restrict or impede operational activities (Herbane, 2013).

In order to manage the crisis and shift it into chances, it is no longer a question of. If a company will face a crisis; instead, it is a question of "when will a crisis happen, what type of the crisis and "how to arrange for it (Kash & Darling, 1998). Crisis management lets the organization to conduct its daily activities, whereas the crisis is being managed (Darling, 1994). Therefore, the researcher believes that the lack of proper leadership style and effective crisis management is the main challenge for the Yemeni private and public institutions to avoid the disastrous consequences during the current crisis.

2.4 CRISIS

The term crisis comes from the Greek word "krisis", that means judgment, select or decision., it depends on how the term is being used, the context and the researcher's discipline (Preble, 1997). In the other words, the crisis is defined as "a serious threat to

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the basic structures or the fundamental values and norms of a system, which under time pressure and highly uncertain circumstances necessitates making critical decisions" (Rosenthal, Boin, & Comfort, 2001). Further, Alsamaray (2014) illustrated that the Crisis is considered as a threat of amazement by one means or another unsurprising welcomed by the light of some of the indicators, but the difficulty comes from nobody can put the integrated scenario in how to behave and treat it. The event of threat may be normal as earth quake, storms, floods or be a political crisis as in the Arab Spring or economic, as in financial crises or may be smaller at the organizational level. Moreover, Pearson and Clair (1998) argued that the crises in the organization "as a low-probability, high-impact event that threatens the viability of the organization and is described by the ambiguity of cause, influence, and means of resolution, as well as by a belief that decisions must be made quickly".

Managers, when inquired to define crisis, proposed that, crisis is composed of five dimensions: high magnitude, need immediate attention, an element of surprise, the requirement for taking action, and outside the organization's control and it's an event must pose a threat to the organization's reputation and viability to be considered a crisis (Person & Mitroff, 1993). The essential reasons behind any crisis are a combination of personal faults, organizational failure, and fluctuations of environmental (Rosenthal, *et al.,* 2001).

The last twenty years have seen the progress of a large number of researches on crisis and contingency studies, analysis of how crisis cases were managed and of recovery situations. Further, the influence of the crisis on corporations and persons has been

stronger than ever (Wang, 2008). However, the individuals and organizations have been experienced the impact of crises stronger than ever. The organization's leaders need to understand crisis situation. They should possess special skills, which will allow them to arrange, manage, and detect a solution for a potential crisis that could threaten the organization's existence.

2.5 TYPE OF CRISIS

Most of researchers in the field of crisis categorize a crisis into two types, the natural and human-induced crises and in order to understand the characteristics and the nature of crisis events, numerous crisis researchers identify the distinguish between natural and human-induced crises. Efforts like these have led to different research schedules in studying crisis events across disciplinary fields (Hutchins, 2008). Further, Hutchins (2008) tried to categorize a crisis into two different types: "natural and human induced crises as the following:

1. Natural disasters**:** (such as tsunamis, cyclones, fires, and hurricanes) and on issues that affect public health and safety (such as unsafe health practices diseases or).

2. Human-induced crisis: that emphasis on the role that individuals and organizations which might be played in causing a crisis event**.**

Further, Lerbinger (1997) classified a crisis into seven types of crisis.

1. Natural disasters: Destruction created by the forces of nature may appear to be one area where management could not be held responsible. However, unlike many other forms of crises, natural disasters tend to be anticipated only their

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timing and severity continue unknown. While the emergency services have the prime role in disaster recovery, management needs to understood the risks and prepared accordingly.

2. Technology disaster: While natural disasters may strike with such ferocity that they cause severe loss of life. Crises caused by human application of science and technology are far greater in number and consequence". There is also one big difference between the two. No one is held responsible for natural catastrophes. Only the way they are handled. Technological disasters, on the other hand, are seen as the outcome of human failure - blame will be assigned.

3. Crises of confrontation: These are crisis deliberately provoked by individuals or groups determined to win acceptance for their demands and expectations. They may be members of the general public, employees, protesters or single-issue activists.

4. Acts of malevolence: Crises that result from malevolent or hostile action are numerous. Many arc also difficult to foresee and there tore forestall, they include: product tampering, terrorism, extortion, corporate espionage, rumor - mongering and dirty tricks.

5. Misplaced management values: This type of crises provoked by failures of management. And it focuses on shareholders to the detriment of other stakeholders, regarding the interests of the latter "not only as subsidiary but as relatively unimportant.

6. Acts of deception: As negligence is a result of what calls "skewed" management values, so too are deliberate acts of concealment or deception. Such cases occur when, for one reason or another, management hides or even

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misrepresents information that might affect the sale or use of its products or services.

7. Management misconduct: Beyond "skewed" values, there is what defines as acts of "deliberate a morality and illegality ". Those are wonderful acts with no redeeming features which, once publicly revealed, quickly become scandals. Such acts include cheating, fraud, bribery, embezzlement, offering kickbacks and other swindles.

Furthermore, James and Wooten (2005) classified the crisis into two types of crisis as shown in Table 2.1.

Table 2.1
Types of Organizational Crises

Sudden Crisis	Smouldering Crisis
Natural disasters	Whistle blowing
Terrorist attack	Labour disputes
Plant explosion	Class action lawsuits
Workplace violence	Bribery
Product tampering	Rumours/scandals
Environmental spill	Sexual harassment
Sabotage	Consumer activism
Hostile takeover	Mismanagement
Executive kidnapping	Product defects

Technology disruption	Workplace safety

Source: James and Wooten (2005)

Sudden crisis: are those unanticipated actions in which the association has practically no control and perceived limited mistake or responsibility. The associated workplace chaos and ensuing loss of productivity were not blamed on the leaders of the affected organizations, however, the organization's leadership is still anticipated to solve the crisis, and any exhibitions of sympathy become short-lived if stakeholders consider organization leadership as mismanagement the executing of the crisis response.

Smoldering crisis: can be defined as an event which start out as a small problem within organizations and become public to stakeholders. Also, with the time is being escalated to becoming a crisis status as a result of inattention by management. However, according to the ICM database, nearly three-quarters of all business crises fall in the smouldering category, such as, the plethora of cases of business fraud, mismanagement, labor disputes, and class-action lawsuits reported in the news media in the early 2000 (James & Wooten, 2005).

In additional, Shaluf, Ahmadun and Said (2003) classified the crisis into two types, community and non-community crises. Community crisis is a crisis generated by either natural or technological agents are conflict type situations such as wars, civil disturbances, terrorist attacks. Non-community crisis such as transportation accidents are the crisis which does not give impact on the functioning of a community. And the figure 2.1 illustrates all types of community and non-community crisis.

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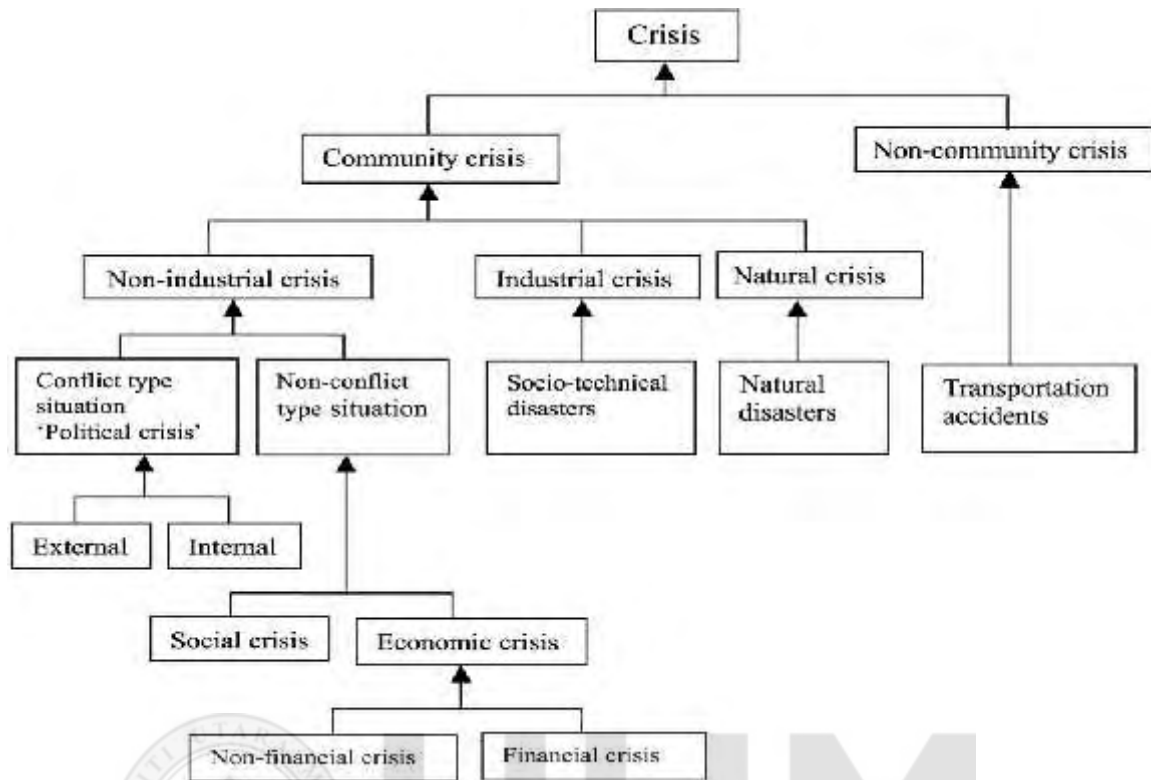
Figure 2.1
Types of community and non-community crisis
Source: Shaluf, Ahmadun, and Said (2003)

The community crisis composed of three types of crisis natural crisis, industrial crises and non-industrial. The natural crisis which result from natural disasters, industrial crises that result from socio-technical disasters and Non-industry crises which result from the conflict type political crisis and non-conflict type crises. Conflict type political crisis are associated with causes and consequences of crisis that create political disruptions (Cho & Tseng, 2009).

In this study, the researcher focused on political instability, security and economic crisis in Yemen which categories under community crisis, non-industrial crisis, non-conflict type situation and economic crisis. The political instability defined by Alesina,

Özler, Roubini, and Swagel (1996) as the propensity of a change in the executive power, either by constitutional or unconstitutional means. Political instability affects growth because it increases policy uncertainty, which has negative effects on productive economic decisions such as investment and saving (Alesina *et al*., 1996).

Further, economic crisis defined by Bra oveanu and Obreja (2009) as an economy facing an economic crisis will most likely experience a falling GDP, a drying up of liquidity and rising/falling prices due to inflation/deflation. Al-Sharani, (2005) defined Security crisis as a set of events or situation that disturb national security and social peace and accelerated the events which increase the actual or potential physical and moral losses, and it requires the mobilization of all organs, authorities, efforts and capabilities, especially political institutions and security services for managing the situation and end the problem in the shortest time, with the lowest costs and losses. The impact of political instability, security and economic crisis in Yemen will be explained in detail in the following section.

2.6   IMPACT OF CRISIS

Seeger, Ulmer, Novak, and Sellnow (2005) stated that a crisis is a fundamental suspension or disruption of organizational stability and status quo. From this statement we could propose that a crisis has a harmful result on the organization stability that leads to the serious question, whether or not organizations would be able to continue after crisis events. It is commonly decided that a crisis has a psychological impact on organization members (Braverman, 2003).

Pearson and Mitroff (1993) indicated that a crisis could increase an individual's stress and they proposed that it would, be hard for subordinates to be actively involved in the effort to make a right decision related to organization existence. In addition, Harwati (2013) argued that constructing a good relationship with the media, particularly before a crisis occurrence, and it is important due to the influence of such a crisis on the organization's reputation. Also, Horsley and Barker (2002) suggested that getting assistance from the press is helpful when it comes to assuring to the public that corporations could endure after periods of crisis. The press might offer valued details related to the actual circumstance. Consequently, it might be easy for corporations to get back the general public confidence.

The 2011 crisis impacted several dimensions of livelihoods in Yemen including employment, small and medium-sized enterprises (SMEs), commodity and food prices, and basic services. It is estimated that 15 percent of all private-sector workers and 30–40 percent of factory workers lost their jobs, while the salary of most employees was reduced by around 20 percent, and extended unpaid leave of up to six months given to others. Unskilled workers were hit particularly hard by the stagnation of the construction sector including the stagnation of private, government and local authorities 'development projects (World Bank, 2012).

The private sector estimated its losses at US$8–17 billion from December 2010 to August 2011, with domestic production falling by around 14 percent. The fuel, electricity and water shortages, combined with increased prices of inputs and the reduced purchasing power of consumers, led to the closure of large amount of private-

sector institutions. While urban households were generally affected more, rural households which depend on financial transfers from family members working in urban areas were severely affected (UNDP, 2012).

Economic activities were progressively reduced throughout 2011, starting from an approximately 30 percent reduction in the first four months, with resulting redundancies in labor and professional staff of 15–20 percent, to redundancies of 30–40 percent of the laborers force in the second four months. The unrest, economic activities in the last four months were brought to breakdown, bringing redundancies to an unprecedented high level and due to the result, job opportunities were limited, and the unemployment rate among skilled and unskilled labor increased to about 80 percent (UNDP, 2012). All of these factors and others encouraged the qualified laborers in particular young graduates, to immigration to the neighboring countries. SMEs, which provide large employment chances to a large number of laborers, was particularly affected during the crisis by, the increased input prices, lack of security, electricity breakdown and the limitation of access to credit, which led to a big number of business` to close down. Large organizations were not impacted to the same extent, due to their political leverage and their access to savings (CIA, 2014).

In additional, the crisis also impacted the employment in the municipalities and the Ministry of Public Works and Highways and its branch offices, with its department in the Sana'a Municipality, have vanished about 150–200 expert staff, many of them are looking for opportunities of employment in neighboring countries (World Bank, 2012).

2.7   CRISIS MANAGEMENT STAGES

Person and Mitroff (1993) believed crises were comprised of five stages that more accurately comprised a full understanding of a crisis as it moves to completion, and those stages are considered more appropriate process to implement the effective crisis management. Crisis researchers recognized that analyzing the crisis phases helped to explain for a more complete approach to have enough knowledge about the crisis phenomenon (Wooten, 2005).

Further, Crondstedt (2002) makes a strong argument, that prevention, preparedness, response, recovery (PPRR) model provides a simple is easily understood framework, which has been widely adopted in emergency management throughout the world. However, there are many frameworks (stages) of crisis management. Table 2.2 (p. 26) summaries the crisis management frameworks, which have been developed several stages of a crisis management during the last two decades.

In general, the researchers in the crisis management field have identified five stages that represent a typical the crisis: (1) signal detection, (2) preparation and prevention, (3) damage containment, (4) recovery, and (4) learning (Mitroff & Pearson, 1993; Mitroff, 2005). Therefore, crises stages would be elaborated in details in order to justify this study as it represented the dependent variable in this study.

Table 2.2

Frameworks for Crisis Management Stage

Frameworks for Crisis Management

3-Stage Framework: General	3-Stage Framework: Smith, 1990	3-Stage Framework Richardson, 1994	4-Stage Framework Myers, 1993	4-Stage Framework: Fink, 1996	5-Stage framework: Pearson & Mitroff, 1993	Crandall, Parnell, & Spillan, 2009
Before the Crisis	Crisis of management	Precrisis/disaster phase	Normal operations	Prodromal crisis stage	Signal detection	Landscape survey
					Preparation/ Prevention	
During the Crisis	Operational crisis	Crisis impact/ rescue phase	Emergency response	Acute crisis stage	Containment/ Damage limitation	Strategic planning
			Interim Processing	Chronic crisis stage	Recovery	Crisis management
After the Crisis	Crisis of legitimation	Recovery/demise phase	Restoration	Crisis resolution stage	Learning	Organizational learning

Source: Crandall, Parnell, and Spillan (2013)

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2.7.1   Signal detection (Early warning signals)

Crisis signals can be any kind of information that indicates a deviation from normalcy. In an organizational context can, therefore, be viewed as messages or pieces of information about anomalies generated by organizational imperfections in the external and the internal environment of the organization that can be interpreted as symptoms or peaks in the development of a crisis (Christophe, 2005). The difficulty in capturing signals is that even under the greatest of conditions all corporations are continually bombed with information. Further, they illustrate that during the signal detection, stage in several cases; corporation not only ignores warning indicators, but could actually utilize considerable action to block them.

The challenge is to learn how to separate those signals detection to be effective which indicative of an impending crisis from the torrent of noise which is part of daily business (Person & Mitroff, 1993). Further, they concluded that corporations that organized efficiently with regard to crises develop a deliberate point to be able to continuously inquire and look at their businesses and organisational chart for possible mistakes or troubles prior to become too big to fix.

In order to, identify the contributions of messengers of bad news and they create clear and open information channels. Paraskevas and Altinay (2013) developed a conceptual framework for a three stage process of crisis signals detection containing of signal skimming, signal capture and signal transmission to the crisis response centre. And describe that signal detection ought to be in the centre of every crisis management effort within the corporation and may come to be its primary line of crisis defence.

2.7.2 Preparation / Prevention

Prevention stage could be considered as taking steps to recognize and then remove or minimizing sources of danger. Further the use of the term 'mitigation', either instead of or in conjunction with the prevention, serves to convey an additional concentration on minimizing any possible effect from a crisis when it is recognize that danger which couldn't be completely removed (MacNeil & Topping, 2009).

Furthermore, the preparation stage, which considered the objective of crisis management as well as the hindering of all crises and it is necessarily standard by which an organization will be judged. The actual purpose would be to conduct as much as possible to avoid crises from happening at the beginning and efficiently control those which still occur regardless of the most effective efforts (Person & Mitroff, 1993).The preparation/prevention stage includes crisis training and simulation exercises as well as creation of crisis teams. Robert and Lajtha (2002) illustrated that it is important to move away from the negative perception of crisis management, and crises should be seen as learning opportunities, but rather they were also promoting the positive characteristics that investment in crisis management training can bring to management elasticity, teamwork, organizational resilience and strategy.

However, Devlin (2006) deliberated four crucial components would be important during the crisis management, preparation and prevention stage: (1) communication plans, (2) crisis management plans, (3) crisis management teams, and (4) leadership.

1- Communication Plans: the communications plan is a vital component to the crisis management plan (CMP). An effective communications plan should " identify strategies to be used in responding to the acute crisis when it occurs, allow your organization to reach key audiences with your message, and provide crisis communications spokesperson with the authority to initiate your crisis communications strategies as soon as possible when the crisis first moves" (Devlin, 2006). Further, an organization requires a communication plan because the purposes of any business is to develop the image and reputation of the company, a communications plan concentrate specifically on this during a crisis. The aims of a communications plan are two-fold: handle public perception and battle rumors (Brungardt, 2013).

2- Crisis Management Plans: every organization requires a crisis management plan (CMP) and each division in organizations should have a CMP (Fink, 2002). A CMP allows for an organization to understand what is required when a crisis hits rather than trying to figure it out once the crisis hits. CMP provides organizations the capability to plan ahead in this manner, saving essential time when the crisis hits; it provides the organization the ability to be proactive rather than reactive (Brungardt, 2013).

3- Crisis Management Teams: the crisis management team (CMT) is also, a vital component of any successful of crisis implementation strategy. The team normally consists of upper management or delegates from the key departments at any organization. Generally, a team will also include communications and information

technology personnel that will help in the planning process as well as helping the organization manage the resolution of the crisis and resumption of business activities (Brungardt, 2013).

4- Leadership: leaders in organizations are similar because they are handling the task of motivating employees to give them the best. Further, during a crisis this is important because each employee has a different set of skills that could advantage for the organization in some way during a crisis. Management of talent is the key for higher management as it can help in the success or failure of the organization (Lawler & Worley, 2011). Exceptional leaders can be developed in different ways during the crisis, it is important that leaders take a role overcoming of the crisis (Brungardt, 2013).

2.7.3 Damage Containment

The purpose of the third stage, damage containment, is to minimize the effects of crisis. Effective management of this stage would explain through a plan for preventing a localized crisis from affecting other uncontaminated parts of the organization or its environment (Person & Mitroff, 1993). Further, Coombs and Holladay (2008) argued that the organization's leaders can use crisis categorizations that they have created as a direction to select a suitable crisis response strategies. However, the response includes quick implementation of effective actions and the utilization of appropriate resources (Macnei & topping, 2009). A plan should not be impediment to effective action, but it would appear significant to know whether the efforts placed into planning and justified by noticeable interest when the plan is endorsed.

2.7.4 Business Recovery

Establishing alternative Business recovery sites is also required at this stage like those required for computer operations and data back-up (Person & Mitroff, 1993). Further, they mentioned the best arranged organizations in the short-term and long-term business recovery should have programs. Further, Sui, Ho and Ann (1999) argued that specialists have recognized key personnel and the significant tasks, products and services that are essential to carry on business operations after a crisis. Moreover, he said that developers understand the particular crucial demands of their business operations; they may be not performing sufficient to guarantee restoration from a crisis circumstance. Without any backups of important business documents or different location to carry out business, a fire in their present workplace might effectively terminate their business operations.

2.7.5 Organizational Learning

The last stage of crisis management is the lessons learned from past crisis could be reflected in adequate plans in the future. Brungardt (2013) explain that that organizational learning stage is an internal activity for the organization and its management teams. The emphasis should be on lessons learned from the crisis and how to better respond in the future should a similar crisis occur as well as examine what the organization and its crisis management team did well in handling the crisis and the impact on the organization. Detailed notes during this process should give attention to resolving existing operational deficiencies and prevention of potential future problems.

However, Pearson and Mitroff (1993) Explained that the aim of crisis management is absolutely not to generate a group of plans; it is actually to get ready a corporation to think creatively regarding the unimaginable so that the most effective decisions are going to be done during the crisis.

2.7.6 Models of Crisis Management Stages

The researcher has summarized the crisis management stages which have been explained in the previous section and the figure 2.2 illustrates crisis management stages and the essential precursor should be taken by leadership for effective crisis management.

Figure 2.2 *Models of Crisis Management Stages*
Source: Adopted from Pearson and Mitroff (1993) and James and Wooten (2005)

2.8 CRISIS MANAGEMENT THEORY

Gonzalez, Herrero and Pratt (1995) as well as Pearson and Mitroff (1993) developed the crisis management theory. This theory explores and studies the processes of the organization management in the crisis situation, which have a general validity. It is trying to find the system of rules and principles which would be independent on the individual willing and thanks to which it would be possible to set up the system of principles methods and order of instructions for efficiency crisis management. (Míka & Ondrusek, 2010).

Gonzalez *et al*. (1995) developed the crisis management model that proposed that crisis management is comprised of three stages: Diagnosis of crisis, planning, and adjusting to changes. The model details that effective crisis management will first work to determine early warning signs of pending crises so that the organization can prepare the organization and employees by taking the necessary measures to prevent or lessen the impact to the organization (Brungardt, 2013).

Pearson and Mitroff (1993) believed crisis management is comprised of five stages that more accurately comprised a full understanding of a crisis as it moves to completion. The five stages are: signal detection, preparation/prevention, containment/damage limitation, recovery, and learning which elaborated in defiles in the previous section under crisis management stages.

However, the direct empirical evidence linking leadership to crisis management has been approved by numerous studies such as Walsh (1995) how argued that leadership

in a crisis situation is cooperative and energetic, and it requires insight and sense of decision making skills in order for to decide suitable ways of action. Also, Zhang *et al.* (2012) illustrated that transformational leadership in crisis time focus on increasing the opportunities of value congruence by means of leader's self-sacrificial behavior and their anticipation toward cheerful future, for the purpose of making member's value consistent with their own value, or the agreed value by corporation, rather than via fusion of goal. Further, under circumstances of crisis, members often look to the leader for instructions (Yukl, 2002). Moreover, Mumford, Friedrich, Caughron, and Byrne (2007) have identified four key attributes of crisis events: limited time for solution development; affect is induced and must be managed by a leader; resources must be allocated to the crisis; and the leader alone cannot resolve the crisis because of its complexity, but must develop a solution that incorporates others who are also under stress from the crisis event. Transformational leadership may have a moderating effect in crisis situations because of how the four behavioral components positively influence followers.

Bass (1998) illustrated that the most effective leader is the one that integrate both duty and relation oriented approach. This indicates that transformational leadership can be valuable during the crisis while it would not be the most effective without integrating with transactional leadership. Also, Boin and Hart (2003) in their study providing a window of chance of transformational leaders to show efficient leadership and improving the possibility that the leader might be terminated if they are not able to react to an emergency in regular basis as well as inspire subordinates to follow their instructions successfully and efficiently.

However, the direct empirical evidence for a link between crisis and charismatic leadership has been mentioned in very few studies (Pillai, 1996; Pillai & Meindl, 1998). Further, Pillai (1996) in his study found that crisis was significantly related to attributions of charisma. Furthermore, Pillai and Meindl, (1998) illustrated that crisis offer leaders with chances to take appropriate and useful action, which can be shown by followers in charismatic terms and may enhance their readiness to follow. And also, the effective leaders in times of crisis take a crucial action to reduce the concern of the organization members and inform them how the crisis could affect them (Yukl, 2002).

The latest effort to evaluate charismatic leadership during the crisis and stress conditions is the study developed by Halverson, Murphy, and Riggio (2004) argued that utilizes fresh groups to be able to analyze the limit circumstances of the relationship between charismatic leadership and operation within crisis situation and the degree to which crisis impacts leader behavior instead of members' perceptions. Bryman (1993) proposed that charismatic leadership should be associated with crisis for two reasons. The first is that a crisis offers charismatic leaders with the chance to show charismatic behavior. Yukl (1999) proposed that the leader's ability to be charismatic would be enhanced by the uncertainty and ambiguity of the crisis situation. The situation of crisis provides the leader the chance to be innovative and deviate and create a solution for the problem. Moreover, a disruptive circumstance provides the leader with a reason for the purpose they may construct assist from the supporters. The second clarification, is the concentrate of the majority of previous research, that those crisis changes organization member's requirements and attitudes, looking forward to attribute charisma of their leader. Furthermore, if we consider leader behavior in

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response to stress or crisis rather than follower perceptions, there is reason to believe that extremely high levels of stress would result in a decrease in charisma (Halverson *et al.,* 2004).

2.9   LEADERSHIP STYLES

Leadership defined as an interpersonal impact for achieving objectives, setting directions and orders, allow organization members to make the act towards common directions, be an example to others, encourage followers and take responsibility as being a leader (Dubrin, 2004). Also, Northouse (2001) defined leadership as a process, includes impact, occurs in a group context, and includes achieving goals. In the other word, leadership is a process by which a person influences others to accomplish an individual or group goals.

Leadership is considered to be particularly important in achieving organizational goals (Mccoll & Anderson, 2002). Being a manager, supervisor or officer gives you the authority or power to accomplish certain tasks and objectives in the organization, but it doesn't make you a leader but instead a boss (Clark, 1997). Therefore, the effective leaders in times of crisis take a crucial action to reduce the concern of the organization members and inform them how the crisis could affect them (Yukl, 2002). Also, Yiing and Ahmed (2009) suggested that it is necessary to have the right leadership style in complex and uncertain environments, who can lead the organization successfully. Leadership in a crisis situation is cooperative and dynamic, and it requires insight and sense of decision making skills in order to decide suitable ways of action (Walsh, 1995).

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In addition, the cause why leadership is highlighted is due to the leader requirements to assume to numerous complicated situations, which required leaders 'skills, abilities and personal characters, allowing them to make a plan, and to get an appropriate to respond and learn under the crisis situation (Wooten & James, 2008). Further, Leadership is considered as one of the most studied in business and still one of the most important fields of inquiry (Phills, 2005). Also, Alsamaray (2014) argued that the basic leadership foundation is an important component of the success of organizations at all levels; many of the organizations and people are attributed to their leaders Further, Burns (2003) has emphasized that "leadership over human beings is exercised when persons with certain motives and purposes mobilize, in competition or conflict with others, institutional, political, psychological, and other resources so as to arouse, engage, and satisfy the motives of followers" (Burns, 2003).

However, there are many styles of leadership, but the researcher chose three types of leadership in term of transformational, transactional and charisma due to the recommendations of previous study such as Zhang *et al.* (2012) recommended for the future research to investigate the effects of transformational leader on other crisis as they investigated it in natural crisis. Also, Cho and Tseng (2009) recommended that future research could examine the effectiveness of every dimension of transformational leadership during a crisis as a guideline for leaders to react to crisis. Further, Carlijn, (2010) conclude that in the uncertainty times the transactional leadership style has the right attributes to assist the organization overcome the crisis. Moreover, Kakavogianni, (2009) argued that Charismatic leadership is perceived as emerging under conditions of crisis further research in the field were also proposed. The table 2.3 shows the

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different and similarity among Transformational, Transactional, and Charismatic leadership.

Table 2.3

Comparison of Transformational, Transactional, and Charismatic leadership.

MLQ Multifactor Leadership Questionnaire	Conger and Kanungo Scales CKS
Transformational Leadership	**Charismatic Leadership**
Inspirational motivation (IM). • Articulation of vision for the future; leaders' optimism and enthusiasm about the future. • Develop employee to finish the job. • Concentrations more on mission and strategies.	Sensitivity to the environment (SE). • The leader assesses the environment for growth opportunities for his/her respective organization criticizes the status quo and proposes radical changes in order to achieve organizational goals.
Idealized influence attributed (IIa). • Instilling pride in and respect for the leader; the followers identify with the leader. • Concerned to purposes and values, morals, and ethics.	Sensitivity to members' needs (SMN). • The leader carefully evaluates his/her followers' needs.
Idealized influence behaviour (IIb). • Representation of a trustworthy and energetic role model for the follower. • Transcends daily affairs.	Strategic vision and articulation (SVA). • The leader formulates a strategic vision for the respective organization. • It is constantly presented to followers in an inspiring way.

Individualized consideration (IC). • Understanding the needs and abilities of each follower; developing and empowering the individual follower. • Rearrange works become meaningful and challenging • Identifying and developing new talent as a human potential.	Personal risk (PR). • Takes high personal risks for the sake of the organization. • In pursuing organizational objectives, engages in activities involving considerable personal risk.
Transactional leadership	Unconventional behaviour (UB).
Contingent reward (CR). • Defining the exchanges between what is expected from the follower and what the follower will receive in return. • Develop employee to finish the job. • Stuck in daily affairs. • Short term and hard data oriented	• Uses non-traditional methods to achieve organizational goal. • Leaders build trust and commitment in followers; provides a role model for followers.
Active management-by-exception (AMbE). • In order to maintain current performance status the focus is on detecting and correcting errors, problems or complaints. • Concerned with power and position, politics and bonuses. • Concentrations on tactical issues.	
Management-by-exception passive (MbEP). • Addressing problems only after they have become serious. • Monitors role expectations by determined to work effectively within current systems. • Trusts on human relations.	

Source: Rowold and Heinitz (2007)

Therefore, leadership style in term of transformational, transactional and charisma explained in details in order to justify this study as they are the independent variable in this study.

2.9.1 Transformational Leadership

A transformational leader is one who makes profound changes and who possess and exhibit the following characteristics: idealized influence attributed idealized influence behavioral, intellectual stimulating, inspirational motivating, and individual consideration for members who appear to be a weak link in the chain (Bommer, Rich, & Rubin, 2005). In the other words, Burns (1978) defined the fundamental concept of transforming leadership as a notion that inspired others to develop theories that gave operational meaning to the idea of transforming leadership, an idea whose relevance to modern organizational leadership.

In crisis times, transformational leadership focus on enhancing the potentiality of value congruence by the way of leader's self-sacrificial behavior and their anticipation toward a positive future, in order to make member's value consistent with their own value, or the prescribed value by organization, rather than via fusion of goal (Zhang *et al.,* 2012). In addition, transforming leader would allow the of followers to implement joint strategies to achieve the common goals with only a minimum of essential supervision, choosing instead to focus on developing the skills of the individuals endeavoring to implement those joint initiatives . In other words, the leader would act primarily as a supportive coach to the people responsible for making the desired organizational transformation happen (Levasseur, 2004). Also, Bass, *et al.* (1987) also

explained that the integrate of organizational vision can be conducted successfully by transformational leaders with daily activities to have a deep impact on member's motivation and performance these features make transformational leaders different with other leader's style.

Transformational leaders also own distinctive characteristics, like stimulating the organization members to improve organizational value and culture, communication with fellow frequently and inspiring the follower to become the leaders. In additional, the organizational vision of transformational leaders with daily leading activities can positively integrate to possess a deep impact on member's motivation and performance (Krishnan, 2002).

However, Ho, Yin, Ching, and Keng (2009) illustrate the five behavioral dimensions of transformational leadership style are idealized influence attributes, idealized influence behavior, inspirational motivation, intellectual stimulation, and individualized consideration. Bass and Avolio (1994) also identified four primary factors of transformational leadership: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration which will be illustrated in details for the purpose of justification of this study as following:

2.9.1.1 Idealized Influence

Idealized influence explains the degree where leaders can be regarded as a motivating role model (Moss & Ritossa, 2007). Also, these leaders tend to be admired, respected, and trusted; so followers determine and go after their leaders (Bass *et al.*, 2003).

Idealized influence comprises of a couple of types; idealized influence attribute in which leaders get trust in addition to respect and idealized influence behavior where leaders display exceptional behaviour and may sacrifice their own requirement to enhance the aims of their organization (Moss & Ritossa, 2007).

Kirkbride (2006) argued that this style of leaders refers to the leader who has become an idealized influence or "role model" for the followers. Such leaders are regarded as a role model either because they exhibit certain personal characteristics or "charisma" or because they demonstrate certain moral behaviors and often seen as being high on morality, trust, integrity, honesty and purpose. Avolio and Bass (2004) argued that the both types of Idealized influence (attributed and behavior) are individuals who exhibit satisfaction, confidence, and values.

2.9.1.2 Inspirational Motivation

Inspirational motivation refers to how leaders explicitly communicate expectations to followers on how to get things done and it considers as a type of leaders inspiring and encouraging the followers by provides encouragement and regarding what needs to be achieved (Avolio & Bass, 2004). In the other words, the inspirational leader illustrates the motivation and freedom commitments in achieving the objectives, and provides a realistic view of the future. With this kind of management, employees can get more than what they originally thought. Therefore, the transformational leaders focus on the concerns and needs of developing subordinates, to assist them study the problems through different viewpoints, and are able to inspire and excite achievement (Armand, Oppedisano & Sherman, 2003).

The aspiration motivation help organization member to understand self-value and motivate them to the higher 1evel of performance in order to win their trust. And a key part of achieving successful is to build trust between leaders and followers (Chen & Zhang, 2011). Further, Kirkbride (2006) illustrated that the inspirationally motivating leader has the ability to motivate followers to superior performance. Such leaders tend to be able to articulate in an exciting and compelling manner a vision of the future that followers are able to accept and strive towards. This dimension can be considered as evidence which illustrate that through inspirational motivation, leaders can succeed in motivating others by giving them with a vision for the future and a clear sense of meaning in their work. This holds crucial importance, especially when leaders face crisis situations.

2.9.1.3 Intellectual Stimulation

Transformational leaders have a vital role reflected in intellectual stimulation dimension; certain individuals like to treat the problems in the traditional way, while Intellectual stimulation factors let the leader to inspire subordinates to stimulate change in the way of thinking about the problem (Chen & Zhang, 2011). Further, Kirkbride (2006) argued that intellectual stimulation essentially involves the leader stimulating followers to think through issues and problems for themselves and thus to develop their own abilities.

Bass *et al*. (2003) illustrated that transformational leaders can create a positive work environment or climate through an emphasis on the utilization of intelligence and creativity, rationality and careful problem solving, while encouraging the rethinking,

reframing, and re-examining of assumptions. Through intellectual stimulation, it is possible for transformational leaders to assist their employees in building their capacity for change and their ability to champion continuous improvement and solve problems by themselves. Intellectual stimulation considers as one type of transformational leadership which assumptions, traditions, and beliefs and develop a new method of doing things as well as reflecting ideas (Avolio & Bass, 2004).

2.9.1.4 Individualized Consideration

It considers as one type of transformational leadership style dimensions which treat the individuals according to their requirements, capacities and ambitions as well as guidance and mentor (Avolio & Bass, 2004). Further, individualized reflect the degree in which the leader gives personal attention to followers. However, Subordinates are considered individually and treated differently according to their needs and capabilities (Chen & Zhang, 2011).

Kirkbride (2006) indicated that individualized consideration is the first of the transformational styles, that leader demonstrates concern for their followers, treats them as individuals, gets to know them well and listens to both their concerns and ideas. And also, Kark and Shamir (2000) in his study illustrating appreciation for some people who did well is the most commonly utilize way in individual consideration dimension together in a mutual and progress pursuit of a higher purpose.

2.9.2   Transactional Leadership

Transactional leaders are leaders who ensure that followers do the job at the right time and in compliance with specifications. Such leaders reward followers accordingly and promptly for meeting targets and punish followers for shortfalls (Barbuto, 2005). In the other words, transactional leaders respond to follower performance in two particular ways (rewarding or disciplining). Further, transactional leadership depends on contingent reward (Bass & Avolio, 1994). Transactional leadership theory indicates that leaders will involve in negotiation -for exchanges with their followers. Further, transactional leadership theory mentioned that leaders will enter into bar involve in negotiation gained-for exchanges with their followers.

Further, the transactional leaders involve in an exchange with their followers, and they are not likely to avoid demands by their followers nor automatically give in and accommodate the demands of their followers. Based on the theory of transactional leadership, it is also reasonable to consider whether or not a positive relationship occurs between leaders' many on transactional leadership and their scores on compromising (Stanley, 2004). On the other words, transactional leadership relies on contingent support either positive contingent reward or the more negative active or passive forms of management-by-exception (Bass & Avolio, 1994).

Zohar and Luria (2004) argue that transactional leadership style will reflect positively on the outcome when dealing with crisis as transactional style enables the organization to carry out more complex operating procedures. And also, Carlijn (2010) in his study

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conclude that in the uncertainty times the transactional leadership style has the right attributes to assist the organization overcome the crisis

However, Avolio and Bass (2004) illustrated that transactional leadership is comprises of three dimensions, contingency reward, management by exception active, management by exception passive and they will be explained in details as the following:

2.9.2.1 Contingent Reward

Contingent reward dimension express the degree in which follower efforts to satisfy organizational goals can be determined the rewards in exchange by leader. Also, it comprises explanation of the work required to get rewards and the usage of motivations to enhance motivation. Leadership could explain the opportunities and current recognition when objectives are achieved (Yukl, 2010). Further, Zagorsek and kerlavaj (2009) illustrated that contingent reward leadership can refer to leaders" behaviors that are more concerned with identifying the role and task requirements and providing subordinates with material or psychological rewards contingent on the fulfillment of contractual obligations.

Transactional leadership dimension contingent reward has been established to be active, but not like the four factors in transformational leadership in inspiring others to accomplish advanced levels of performance and development (Canty, 2005). Further, the leader states what require being complete and promises rewards in exchange for achieving the tasks (Bass & Avolio, 1994).

2.9.2.2 Management by Exception Active

This type of transactional leadership style illustrates the level in which a leader monitors followers closely for mistakes or rule violations (Northouse, 2012). Further, Management-by-exception looks more effectiveness but needed in certain conditions (Canty, 2005). In management by exception-active, the leader actively organized to observe the deviances from standards or mistakes in the follower's tasks and to take the necessary correction action accordingly (Bass & Avolio, 1994). Further, Rewards assist to explain prospects, and the relationship takes the leader knows the values of the organization's members, which could recognize the reactions of the organization's members and recognizes the willing member's to participate in the exchange (Bass & Avolio, 1994).

Kirkbride (2006) argued that an active management by exception leader has extensive and accurate monitoring and control systems to provide early warnings of such problems. He said that followers subject to this style often learn to avoid mistakes by "burying" them. Active management by exception is negatively related to innovation and creativity in the organization. Furthermore, even when done well this style only tends to produce a performance of a moderate standard. Further, the leaders in management-by-exception are actively active observing the member's performance for evidences from standards, in the followers' assignments and correct action as required (Bass & Avolio, 1994).

2.9.2.3 Management by Exception Passive

In passive management-by-exception the leader waits for mistakes, errors or deviations from the negotiated agreement to occur, and then he or she takes corrective action deviations from the negotiated agreement to occur (Bass & Avolio, 1994). Passive management-by-exception is only marginally considered a transactional approach owing to its lack of involvement by the leader. In fact, some a transactional approaches owing to its lack of involvement by the leader. In fact, some researchers contend that it should not be considered part of the transactional construct at all (Bycio, Hackett& Allen, 1995). and it has been shown to receive lower all and it has been shown to receive lower effectiveness rating from superiors and subordinates alike when compared to active effectiveness rating from superiors and subordinates alike when compared to active management-by-exception (Bass, 1990).

Kirkbride (2006) stated that management by exception refers to the process of paying attention to the exceptional rather than the normal. This style of leaders tend to be relatively laissez-faire under normal circumstances, but take action when problems occur, mistakes are made or deviations from standard are apparent. He also stated that this style of leaders only intervene when the exceptional circumstances become obvious. Thus, they tend to have a relatively wide performance acceptance range and poor performance monitoring systems.

2.9.3   Charisma Leadership

The term charisma originated from the Greek word for gift, and it was utilized by the Christian church to define gifts from God, charismata (Conger & Kanungo, 1994).

Further, Conger and Kanungo (1998) Identified charismatic leadership as a diverse social phenomenon with an elusive mystical characteristic. Further, Yukl (2010) stated that charisma arises through social crisis whereby a leader emerges with a fundamental vision that suggestions a solution to the crisis and appeals followers who have faith in action. According to Halverson *et al.* (2004) characteristics of leader charisma and organizational member's commitment have a good impact during the crisis situations and Leadership could make a difference to the performance and result of the corporation during a crisis.

In addition, Charismatic leadership called as an unusual form of impact frequently related to leadership which is apparent as exceptional, gifted, and even heroic (Galvin, Balkundi, and Waldman, 2010). And also provide a vision for the exhibit behaviour and actions to further the vision (Kirkpatrick & Locke, 1996). Charismatic leadership is differing from traditional leadership theories, charismatic leadership shows an importance to symbolic behaviour and making events meaningful for followers and it does not stress rational processes; rather than focus on emotions and values (Michaelis *et al.,* 2009).

However, the five dimensions developed by Conger and Kanungo (1998) which used as independent variable in this study are. "Vision and articulation"; "environmental sensitivity"; "unconventional behaviour"; "sensitivity to follower requirements and Individual hazard which will be illustrated in details as the following:

2.9.3.1 Vision and Articulation

This dimension explains the capability of a leader to be an effective communicator and to develop an inspiring vision (Conger & Kanungo, 1998). In other words, the vision of the leaders is discussed directly or indirectly by the leaders, or through their activities and the deference appeared to be decided by the leaders. However, the personal style of the leader might create these differences (Murphy & Ensher, 2008).

Further, Murphy and Ensher (2008) stated that a convince vision informs members of the organization an idealized goal of the future and the vision has purposed to align the organization around strategic direction. Moreover, the process of motivating and coordinating the team's effort has an important component which is a vision articulation factor. It is constantly presented to followers in an inspiring way that the leader creates a strategic vision for the respective organization (Ray & Ray, 2011).

Charismatic leadership is distinguished from other forms by the followers' perceptions of the manager's formulation of a shared and idealized future vision as well as his or her effective articulation of this vision in an inspirational manner. It is the shared perspective of the vision and its potential to satisfy follower needs that form the basis of attraction to the charismatic leader. It is the idealized aspect, however, that makes such leaders admirable persons deserving of respect and worthy of identification and imitation by followers (Conger & Kanungo, 2000).

2.9.3.2 Sensitivity to Members' Needs

Previous research suggested that follower sensitivity was shown differently according to leader distance (Antonakis & Atwater, 2002). Further, Shastri, Mishra, & Sinha (2010) said that the leader carefully evaluated the followers' needs (Shastri *et al.,* 2010). And also, Murphy and Ensher (2008) in their study illustrate that charismatic leaders were anticipated to display sensitivity to production team member requirements as part of the charismatic leadership process, by using effective techniques that developed joint liking and respect, and they spent time expressing individual concern for the requirements and feelings of the organization members.

2.9.3.3 Unconventional Behavior

A very exceptional behaviour that amazing other members of the organization which exhibit by charismatic leaders and it consider is important in creative groups (Jaussi & Dionne, 2003). Further, Shastri *et al.* (2010) explain that leaders build trust and commitment in the followers; provides a role model for followers. And also, Ray & Ray (2011) argued that a role model provides leader's for followers create trust and commitment in the followers. Moreover, charismatic leaders also act in unconventional ways and use unconventional means to transcend the status quo and create change. However, what makes charismatic leaders winner is the fact that they differ from the normal leaders by virtue of greater self-confidence, energy, enthusiasm, and unconventional behaviour.

2.9.3.4   Sensitivity to Environmental

Charismatic leaders said to own an intensified sensitivity to the environment and carefully scan the patterns that would make them adjust their vision (Murphy & Ensher, 2008). The Sensitivity to environmental styles exposes a leader's capacity to realize chances and restrictions in the environment, members' capabilities and requirements, and in the situation challenges (Conger & Kanungo, 1998). The leader carefully assessed the members' needs (Shastri *et al.,* 2010). In additional, Murphy and Ensher (2002) emphasize that leader should carefully assess characteristic of the company member's from both the external and internal environment to determine the best suitable leadership style.

2.9.3.5   Personal Risk

The last dimension of charisma leadership style is shown the degree to which a leader engaging in unconventional behaviour and assuming personal risk to expose their unusual commitment and exceptionality. These apparent behaviours will, in turn, create the follower commitment and support (Conger & Kanungo, 1998). Further, Ray and Ray (2011) explain that people tend to trust charismatic leaders because they visibly take risks and sacrifice in the name of their beliefs. Charismatic leadership theory says that followers make attributions of heroic or extraordinary leadership abilities when they observe certain behaviours. Studies on charismatic leadership have, for the most part, been directed at identifying behaviours that differentiate charismatic leaders from their non-charismatic counterpart (Ray & Ray, 2011).

2.10 Leadership Theories

2.10.1 Transformational Leadership Theory

Bass (1985) presented his theory including models and measurement factors of transformational leadership, advocating that when transformational leadership is present, followers respect and trust the leader. This could encourage members to perform at higher levels. The transformational leader advice organization member and encourages them to become leaders. In addition, Bass (1998) identified the five factors of transformational leadership: idealized influence attributed, idealized influence behavior, inspirational motivation, intellectual stimulation, and individualized consideration. Also, Bass explained that transactional leadership intend to appear when a situation is stable and expectable, while transformational leadership is probably to be more active when the situation is ambiguous, difficult and insecure.

2.10.2 Transactional Leadership Theory

Max Weber in 1947 is considered as the first researcher who describes the Transactional leadership theory (Burns, 1978). And it emphases the role and task requirements and utilizes rewards contingent on performance. And also it viewed a series of exchanges between leaders and followers based on the relationships between them. Further, Stanley (2004) said that transactional leadership theory emphasizes that transactional leadership do not surrender, but they exhibit a good bargain or negotiate. Also, Heifetz (1994) defined Transactional theory according to "reciprocity where leaders not only influence followers but are under their influence as well".

Hater and Bass (1988) showed transactional leadership as a type of contingent-reward leadership including active and positive exchange between leaders and organization member's, by which followers are rewarded for achieving objectives. Transactional leadership in certain circumstances concentrate on the mistakes, deferred the decisions, or avoided responses. This way is referred to the management- by-exception and can be considered by active or passive transactions (Howell & Avolio, 1993).

2.10.3 Charisma Leadership Theory

Charismatic and transformational leadership consider as the one of the main field of leadership study since the 1980 (Chemers, 2014). Halverson *et al*. (2004) stated that there are three main theories of charismatic leadership which developed by Bass and Avolio (1994) and Conger and Kanungo (1998).

Shamir, House, and Arthur (1993) argued that the charismatic self-concept has been presented based leadership theory which highlighted that achieving the charismatic leadership stimulate outcomes through at least four mechanisms:(1) changing perceptions of the follower by nature of the work itself; (2) offering an attractive future vision; (3) enhancing both individual and groups self-efficacy; and (4) improving a deep joint identity among the followers. They reduce the importance of the extrinsic rewards of work and concentrate on the essential side. Subordinate becomes a chance for individual and group-expression. Further, the charismatic leadership perspective relies on the impact of the leader's attribute and actions to create follower's motivation, attitudes, and behaviours (Howell & Shamir, 2005).

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The model of charismatic leadership which concentrate on three phases of leadership process has been developed by Conger and Kanungo (1998). The leader in the first stage sensitivity to the Environment evaluates the environment which commenced the opportunities of growth for the respective organization and carefully assesses the followers' requirements which means sensitivity to members' needs. The respective leader in the second phase strategic vision and articulation prepares a strategic vision which is continuously shown in an inspiring way. Finally, the leader in the third stage offers a role model by showing unconventional behaviour and personal risk to the followers. The unconventional behaviour and personal risk and build up the followers' trust and commitment on the leaders (Conger & Kanungo, 1998).

In addition, vision in charismatic leadership theory has been elaborated deeply by Conger and Kanungo (1998). Moreover, they concentrates on vision as a vital element of charisma and it is much stronger in this theory where the dimension of charismatic leadership requires possessing the ability of articulate a vision among many other qualities (Conger & Kanungo, 1998).

2.11   RESEARCH FRAMEWORK

The study identifies the relationships among the variables which are dependent variable crisis management and independent variables transformational, transactional and charisma leadership. Quantitative correlational studies rely on the existence of literature and theories of relevant studies to test hypotheses (Creswell, 2013).

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The dependent variable used in this study is Crisis Management stages that comprise of five stages 1) signal detection, 2) preparation and prevention, 3) damage containment, 4) recovery, and 5) learning which can be measured by using Pearson and Mitroff (1993) 29 items. However, the independent variable is leadership style which is constituted of three style of leadership. Firstly, transformational leadership which composed of four dimensions: Idealized influence (attributes & behaviour), intellectual stimulation, inspirational motivation, and individualized consideration and secondly transactional leadership which comprises of contingency reward, management by exception passive and management by exception active. These two types of leadership will be measured using the questionnaire of multifactor leadership which developed by Avolio and Bass (2004). Thirdly, the charisma leader ship dimensions which composed of five elements according to Conger and Kanungo (1998): Vision and articulation, environmental sensitivity, unconventional behaviour, sensitivity to member needs and Personal risk that measured by using Conger and Kanungo (1998) 20 items. As shown in figure 2.3, this study proposed that leadership styles in terms of transformational, transactional and charisma leadership have relationship with crisis management.
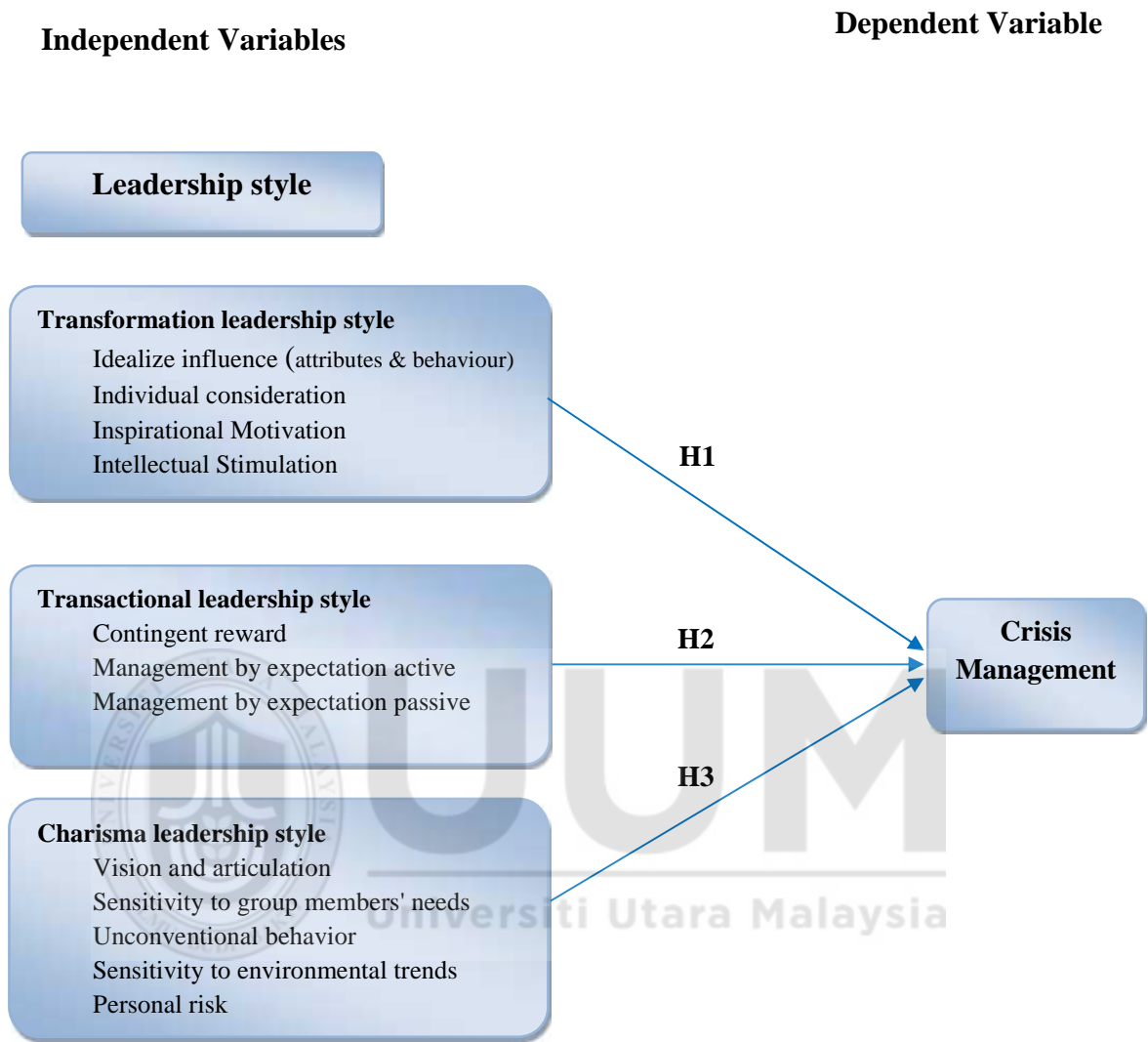
Figure 2.3
Research Framework

2.12 HYPOTHESIS DEVELOPMENT

2.12.1 Transformational Leadership and Crisis management

Bass (1998) argued that transformational leadership is probably to be more active when the situation is ambiguous, difficult and insecure. Bommer *et al.* (2005) defined the transformational leader as one who makes profound changes and who possesses and exhibits the following characteristics: idealized influence attributed, idealized

influenced behavioral, intellectual stimulating, inspirational motivating, and individual consideration for members who appear to be a weak link in the chain.

Avolio and Bass (2002) indicated that genuine transformational leadership changes followers into leaders by extending and increasing their interests and stimulating them to view beyond individual self-interests for the benefit of the group. It is clearly the emphasis of transformational leadership lies in the consideration and care of subordinates who can be brought about by taking part in reflective practices. Further, Ho, *et al.* (2009) in their study explain the five behavioural dimensions of Transformational leadership style: idealized influence behaviour, idealized influence attributes, inspirational motivation, intellectual stimulation, and individualized consideration.

Cho and Tseng (2009) in their study found that transformational leadership was significantly performed by the middle managers in the financial crisis. Zhang *et al*. (2012) suggest that transformational leaders can encourage their followers to perform commands more effectively and efficiently through a crisis by sense making approach and means of self-sacrificial behaviour. Further, Mumford, Friedrich, Caughron, and Byrne (2007) stated that transformational leaders direct members through the process of sense making during a crisis by progressing a compelling vision that highlights transcending self-interest for the overall interest of the collective that may ultimately mean the survival of the organization.

Moreover, Boin and Hart (2003) explain that without integrating transactional and transformational leadership, the implying of transformational leadership can be useful during the crisis but wouldn't be the most effective leadership. So for this reason, the following is hypothesized.

H1: There is a significant relation between the transformational leadership style and crisis management (CM).

2.12.2 Transactional Leadership and Crisis management

Transactional leadership defined as the leaders who ensure that followers do the job at the right time and in compliance with specifications. Such leaders reward followers accordingly and promptly for meeting targets and punish followers for shortfalls (Barbuto, 2005). Further, Transactional leadership is composed of three dimensions, contingency reward, management by exception active and management by exception passive which developed by (Avolio & Bass, 2004).

Contingent reward dimension express the degree in which follower efforts to satisfy organizational goals can be determined the rewards in exchange by the leader. Also, it comprises explanation of the job required to get rewards and the usage of motivations to enhance motivation. Leadership could explain the opportunities and current recognition when objectives are achieved (Limsila & Ogunlana, 2008; Yukl, 2006). Management-by-exception active dimensions, explains the degree in which the leader monitors members closely for violations or mistakes (Northouse, 2012).

Management-by-exception passive dimension, as the study found that the leader waits tor mistakes errors or deviations from the negotiated agreement to occur, and then he or she takes corrective action deviations from the negotiated agreement to occur. Then he or she takes corrective action (Bass & Avolio, 1994). Moreover, Zohar *et al*. (2004) argue that transactional leadership style will reflect positively on the outcome when dealing with crisis as transactional style enables the organization to carry out more complex operating procedures. And also, Carlijn (2010) in his study conclude that in the uncertainty times the transactional leadership style has the right attributes to assist the organization overcome the crisis. So, the following hypotheses are presented:

H2: There is a significant relation between Transactional leadership style and crisis management (CM).

2.12.3   Charisma Leadership and Crisis management

Conger and Kanungo (1998) Identified charismatic leadership as a diverse social phenomenon with an elusive mystical characteristic. Along similar lines, Yukl (2010) stated that charisma arises through social crisis whereby a leader emerges with a fundamental vision that suggestions a solution to the crisis and appeals followers who have faith in action. On the other hand, Conger and Kanungo (1998) developed five dimensions of Charisma Leadership: vision and articulation, environmental sensitivity, unconventional behavior, sensitivity to member needs and Personal risk.

Pillai (1996) conclude that there is a significant relation between crisis and attributions of charisma. Halverson *et al.* (2004) in his study conducted experimental study on

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groups in order to inspect the "boundary conditions for the relationship between charismatic leadership and performance under crisis" and "the extent to which crisis affects leader behavior rather than follower perceptions". Thus, the following is hypothesized:

H3: There is a significant relation between Charisma leadership style and crisis management (CM).

2.13 DISCUSSIONS ON LITERATURE REVIEW

The literature review provided an overview on numerous key factors that enhance the understanding of the study. In other word the purpose of Chapter two is to present and review relevant literature on transformational, transactional and charisma leadership styles, describing the impact of each on crisis management in Yemen public and private sector. While there appear to be a number of researchers who strongly advocate that Studying leadership capabilities that shown during every phase of the crisis management process gives a structure for framing the process by filtering knowledge and by providing a direction for decision making (Wooten, 2005). Every day, public and private sector encounter challenges during a current crisis. However, Crisis management entails reducing the influence of an unanticipated event in the life of an organization. It includes planning and coordination to prepare for, and respond to the threats which might prevent or impede business activities (Herbane, 2013).

In crisis times, leadership focus on enhancing the possibilities of value congruence by the way of leader's self-sacrificial behaviour and their anticipation toward a positive

future, in order to make member's value harmonious with their own value, or the specific value by organization, rather than via fusion of goal (Zhang *et al.,* 2012). In addition, the leader requires to adjust numerous circumstances and phases, which requires leader's skills, capabilities and personal characters allowing them to prepare a plan, and have an suitable response and learn through the crisis (Wooten & James, 2008).

However, it is no longer a question of how the organization will face a crisis, but it's a question of how it interacts with a crisis and perhaps turns it into chances and also, when a crisis will occur, and how to arrange for it (Kash & Darling, 1998). Crisis management lets the organization to continue its daily activities while the crisis is being solved (Darling, 1994). However, this study is designed to contribute to the body of literature on leadership and crisis management.

2.14 SUMMARY

This chapter includes a theoretical and empirical review of the dependent variable crisis management, type of crisis, impact of crisis, crisis management theories, crisis management components and crisis management stages as well as independent variable leadership styles in terms of transactional, transformational and charisma leadership. Also, the importance of crisis management in the public and private sector drives the policy makers to put in their consideration the importance of the of leadership style factors. The method of a quantitative that used in this study outlined in chapter 3, and provided additional insights on what leadership styles can effective on crisis management.

CHAPTER 3

RESEARCH METHODOLOGY

3.1. INTRODUCTION

The chapter explains the research design and methodology that used to answer the research questions. First, it explains the quantitative methodology described in this chapter, which designed to examine and determine if there is a statistically relation between the three variables transformational, transactional, charisma leadership styles, and crisis management. And it also includes an explanation of the instrument of this study, data collection procedures and the technique of data analyses.

3.2. RESEARCH DESIGN

Research design is a master plan that illustrates the methods and procedures for collecting and analyzing the required information (Zikmund *et al.,* 2010). Further, Sekaran and Bougie (2010) argued that research design is vital to achieve the research objectives which include type of data, data collection techniques, and sampling procedure.

However, Sekaran and Bougie (2010) explain that research design contain several type of research design such as, the exploratory, descriptive, hypothesis testing or case study. Since the purpose of this research is to investigate the relationship between three independent variables of perceived leadership style, transformational, transactional and charisma leadership style and dependent variable crisis management. Therefore, descriptive study was undertaken in this study to identify the characteristics of the

respondents as well as hypothesis testing (casual research) was also undertaken to explain the relationship between the independent variables and dependent variable. In addition, a cross sectional survey research was applied in this study because it required less time and it reduced cost and effort. Cross-sectional study design involves collecting data only once, perhaps over a period of days, weeks or months, to meet research objectives (Sekaran & Bougie, 2010).

Moreover, the quantitative method was applied in this research using survey technique. A survey method is employed as being widely used method for collecting primary data about personal and social facts, attitudes, and beliefs (Zikmund *et al.,* 2009). Also, pervious study mentioned that the survey design is one of the best ways in the business studies for collecting of primary data on large sample of individuals (Hair *et al.,* 2006). The unit of analysis for this study was the individual level and the sample was the middle managers working in the Yemen's public and private institutions.

3.3. POPULATION AND SAMPLE SIZE

The population referred to complete group of people or organization which the researcher has an interest in (Zikmund *et al.,* 2009). The target population of this study is a total number of 1302 middle managers working in the selected public and private institutions in Yemen. However, there are 30 ministries in Yemen, but five ministries selected as targeted population, purposefully as they have direct influence to the public and also they consider as the largest institutions, according to Ministry of Civil Service report (2014). The five public institutions surveyed were: Ministry of Civil Service and

Insurance, Ministry of Local Administration, Ministry of Oil and Minerals, Ministry of Education and Yemen Economic Corporation (YEC).

In additional, five big private organizations were surveyed namely: Hayel Saeed Anam Group of Companies NATCO, Al-Gharasi International Trading Group, MAM International Corporation, Al Habari Group and Diamond Trading Ltd Sana'a. While there are 206 big private organizations in Yemen but, they were selected by the reason that they provide employment and stimulate the local economy and they have the largest number of employees according to the Chamber of Commerce in Capital Municipality statistic report (2014).

In this study a total number of 1302 middle managers working in the selected public and private institutions required sample size 297 according to Sekaran (2006). The table 3.1 shows in details all the figures of the sampling frame of this study.

Table 3.1
Sampling Frame

No.	Name of Institutions	No. of Middle Managers	% of Sample	No. of Sample
	Public Sector			
1	Ministry of Civil Service and Insurance	254	19.53	58
2	Ministry of Local Administration	165	12.79	38
3	Ministry of Oil and Minerals	154	11.78	35
4	Ministry of Education	383	29.29	87

5	Yemeni Economic Corporation	64	5.05	15
	Private sector			
1	Hayel Saeed Anam Group of Companies NATCO	77	6.06	18
2	Al-Gharasi International Trading Group	45	3.37	10
3	MAM International Corporation	55	4.04	12
4	Al Habari Group of Companies.	47	3.70	11
5	Diamond Trading Ltd Sana'a	58	4.38	13
	Total	1302	100	297

Source: Ministry of Civil Service statistic report and Chamber of Commerce in Capital Municipality (2014)

In addition, the sample size selected randomly, due to the confidentially of these leaders' positions, and the written permission presented during the survey for this study. However, in order to get the number of sample size that should be distributed in each utility, we divided the total number of the managers in each government institution in the total number of the managers in the government in order to get the rate of the managers in each institution, and then multiply the rate of each government institution in the total number of the target distributed questionnaires.

A survey carried out among middle managers in headquarters of the ministries and the private companies. The justification of the importance of the middle managers explained as they play significant role in the organization because of the importance of their position, and also the middle managers have close interaction and relation to both

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internal and external environment such as employees, subordinates, client and stockholder (Rouleau, 2005).

3.4. VARIABLES AND INSTRUMENT

In the current study, all the measurement items adapted from previous study, which contains 81 items. The questionnaire consists of items to measure four constructs: leadership style in term of transformational, transactional and charisma, and crisis management. The following section described the instruments individually.

3.4.1 Crisis management

The instrument adopted from Jabouri (2011) which consists of twenty nine items. Measure the five stages dimensions of crisis management: signal detection; preparation/prevention; containment (damage limitation); recovery; and learning. Most of the previous studies implement these instruments which adopted from Person and Mitrrof (1993). Also; the use of these instruments is due to the high responses in the previous studies such as Jabouri (2011). These items are measured on a five-point likert scale with '1' "Strongly Disagree," '2' "Disagree," '3' "Neither Agree or Disagree," '4' "Agree," and '5' "Strongly Agree." The twenty six items are:

Table 3.2
Crisis Management Measurement

No	Items
1.	There is a special unit in our organization to observe crises indicators.
2.	The senior management is focused to collect and detect the signs of risks which are expected to be the crises indicators.

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3.	There are interest in the process of classifying and analysing the crises indicators.
4.	There are qualified crews working on rating and analysing the crises indicators.
5.	The internal and external workplace has been surveyed comprehensively and systematically to recognize the expected crises indicators.
6.	The organization chart is complete and flexible to allow usefulness when dealing with occurred crises.
7.	An effective group has been designed to solve several expected crises.
8.	Appropriate support is provided to assist responsible party to plan in diagnosing the expected crises
9.	Clear management briefing has specified the process of dealing with the expected crises.
10.	We provide possible resources required (materials, human, technology, information) in preparing to face the expected crises.
11.	Cooperative effort is available between institutions and government related agencies in crises' management area.
12.	There are sufficient programs and plans in crises' management area, supported by consistent auditing and improvement effort.
13.	There are scheduled meetings to perform mock test in dealing with the expected crises.
14.	Sufficient programs are made available in our organization in crises' management area.
15.	We have successfully control crises when arise and refrain it from spreading continuously in a timely manner.
16.	Fast action taken has resulted in reducing harmful effects of the crises.
17.	Time management is a crucial factor being taken into account when dealing with crises.
18.	There is adequate capacity and fast action to mobilize the necessary material and human resources to contain the crisis.
19.	Effective communication medium is available to detect factors effecting crises.
20.	Top management responds to the distribution of tasks and powers over a short and appropriate period at the crisis time.
21.	Special unit equipped with latest technology is available to detect factors and harmful effects of crises.

22.	Even when dealing in crises period, top management has taken appropriate action to ensure daily operational tasks is performed in timely manner as per usual practice.
23.	Top management is responsible to reduce the harmful effects of crises as well as stopping the crises from continuously occurring.
24.	In order to cure the effects, top management has provided various assistance to website affected by crisis
25.	Top management has provided sufficient assistance to directors to solve crises.
26.	Benefits to future are expected based on lesson learnt from previous crises faced by top management.
27.	Top management is responsible to evaluate crises management and plan for future improvement.
28.	Top management is responsible to ensure lesson learnt from previous experience being collected for future benefits.
29.	Top management is responsible to learn from other agencies on method to deal with crises. .

Source: Jabouri (2011)

3.4.2 **Transformational leadership**

The Multifactor Leadership Questionnaire (MLQ) is one of the most widely utilized instruments used to measure transformational leadership (Avolio and Bass, 2004). This instrument is adopted from (Sadeghi & Pihie, 2012) and it composed of 20 items measure the five dimensions of transformational leadership style: idealized influence attributed, idealized influence behavioral, inspirational motivation, intellectual stimulation, and individualized consideration. These items measured using the following five-point likert scale with '1' "Strongly Disagree," '2' "Disagree," '3' "Neither Agree or Disagree," '4' "Agree," and '5' "Strongly Agree." The twenty items are:

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Table 3.3

Transformational Leadership Measurement

No	Items
1.	I instill pride in others for being associated with me.
2.	I go beyond self-interest for the good of the group.
3.	I act in ways that build others' respect for me.
4.	I display a sense of power and confidence.
5.	I talk about my most important values and beliefs.
6.	I specify the importance of having a strong sense of purpose.
7.	I consider the moral and ethical consequences of decisions.
8.	I emphasize the importance of having a collective sense of mission.
9.	I talk optimistically about the future.
10.	I talk enthusiastically about what needs to be accomplished.
11.	I articulate a compelling vision of the future.
12.	I express confidence that goals will be achieved.
13.	I re-examine critical assumptions to question whether they are appropriate.
14.	I seek differing perspectives when solving problems.
15.	I get others to look at problems from many different angles.
16.	I suggest new ways of looking at how to complete assignments.
17.	I spend time teaching and coaching.
18.	I treat others as individuals rather than just as a member of a group.
19.	I consider an individual as having different needs, abilities, and aspirations from others.
20.	I help other to develop their strengths.

Source: Sadeghi and Pihie (2012)

3.4.3 Transactional leadership

This style of leadership measured utilizing 12 items which developed by Avolio and Bass (2004) that have been adopted from Sadeghi and Pihie (2012). And to measure transactional leadership, it's commonly use the MLQ—Form 5X, (Sadeghi & Pihie., 2012). The items measure the three dimensions of transactional leadership: contigent reward, management-by-exception active, and management-by exception passive. 12 items are measured on the following five-point scale with '1' "Strongly Disagree," '2' "Disagree," '3' "Neither Agree or Disagree," '4' "Agree," and '5' "Strongly Agree." The items are as follows:

Table 3.4
Transactional Leadership Measurement

No	Items
1.	I provide others with assistance in exchange for their efforts
2.	I discuss in specific terms who is responsible for achieving performance targets
3.	I make clear what one can expect to receive when performance goals are achieved
4.	I express satisfaction when others meet expectations
5.	I focus attention on irregularities, mistakes, exceptions, and deviations from standards
6.	I concentrate my full attention on dealing with mistakes, complaints, and failures
7.	I keep track of all mistakes
8.	I direct my attention toward failures to meet standards
9.	I fail to interfere until problems become serious
10.	I wait for things to go wrong before taking action
11.	I show that I am a firm believer in "If it isn't broke, don't fix it"

12.	I demonstrate that problems must become chronic before I take action

Source: Sadeghi and Pihie (2012)

3.4.4   Charisma leadership

The charisma leadership dimensions which composed of five elements according to Conger and Kanungo (1998): vision and articulation, environmental sensitivity, unconventional behavior, sensitivity to member needs and Personal risk, which measured by using Conger and Kanungo (1998) 20 items which have been adopted from Rowold *et al.* (2007). And they measured on the following five-point likert scale with '1' "Strongly Disagree," '2' "Disagree," '3' "Neither Agree or Disagree," '4' "Agree," and '5' "Strongly Agree." . The items are as follows:

Table 3.5
Charisma Leadership Measurement

No	Items
1.	Provides inspiring and strategic management goals.
2.	Inspirational; able to motivate by articulating effectively the importance of what organizational members are doing.
3.	Consistently generates new ideas for the future of the 'Organization.
4.	Exciting public speaker.
5.	Has vision; often brings up ideas about possibilities for the future.
6.	Entrepreneurial; seizes new opportunities in order to achieve goals.
7.	Readily recognizes new environmental opportunities (favorable physical and social conditions) that may facilitate achievement of organizational objectives.
8.	Readily recognizes constraints in the physical environment (technological limitations, lack of resources, etc.) that may stand in the way of achieving organizational objectives.
9.	Readily recognizes constraints in the organization's social and cultural environment (cultural norms, lack of grass roots support, etc.) that may stand in

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	the way of achieving organizational objectives.
10.	Recognizes the abilities and skills of other members in the organization.
11.	Recognizes the limitations of other members of the organization.
12.	Influences others by developing mutual liking and respect.
13.	Shows sensitivity to the needs and feelings of the other members of the organization.
14.	Often expresses personal concern for the needs and feelings of other members of the organization.
15.	Takes high personal risks for the sake of the organization.
16.	Often incurs high personal cost for the good of the organization.
17.	In pursuing organizational objectives, engages in activities involving considerable personal risk.
18.	Engages in unconventional behaviour in order to achieve organizational goals.
19.	Uses non-traditional methods to achieve organizational goals.
20.	Often exhibits very unique behaviour that surprises other members of the organization.

Source: Conger and Kanungo (1998)

3.5. DATA COLLECTION

Data were obtained through focusing questionnaire. The questionnaire addressed the leadership styles, transformational, transactional and charisma as well as the crisis management stages. The questionnaire is divided into five sections with a total of 81 questions. Each section of the questionnaire has its items. The first section focuses on demographic and related information about respondents consisting (7) items including: gender, age, education level, type of institution, occupational and experience. The second section consists of (20) items measuring transformational leadership while the third section includes (12) items measuring transactional leadership. The fourth section comprises of (20) items measuring charisma leadership and finally the fifth section

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consists (29) items measuring crisis management. The table 3.6 summarise the content of the questionnaire.

Table 3.6
Description of Questionnaire

Variables	No. of Items	Section
Demographic factors.	7	A
Transformational leadership	20	B
Transactional leadership	12	C
Charisma leadership	20	D
Crisis management	29	E

The questionnaire is written in two languages English and Arabic. The questionnaire translated by language center in Universiti Utara Malaysia (UUM). An introductory letter, consent form, and survey presented to the sample population to protect the intellectual property of the copyright holder. Questionnaires were distributed to all respondents between, July 14th, 2015 until August 17th, 2015.

The main reason for selecting the quantitative methods by using questionnaire survey is that it affords high predictive value for evaluating the efficiency of the individuals in the societies, especially when the target subject under study is related to individual's perception, belief and opinion (Creswell, 2013).

3.6. PILOT STUDY

A pilot test was performed to identify the reliability of the research instrument and to ensure accuracy and consistency of responses gathered via questionnaire (Hair, Anderson, Tatham & Balck, 2010). In order to make sure the data obtain from the respondent is comprehensive, high degree of content validity, readability, and clarity, the instrument was pre-tested.

3.6.1 Pilot Study

A pilot study can be defined as a small-scale research project that collects data from respondents similar to those that will be used in the full study (Zikmund *et al.,* 2009). Before the questionnaires distributed to the actual respondents, pilot was conducted first. The need for the pilot test is to revalidate the instruments after the translating the items from the English language to Arabic language to assure the understanding of these items. This pilot test conducted among the middle managers in the public and private sectors in the republic of Yemen, by using sample of 50 managers from non-participating institutions which were the United Insurance Company and Sana'a Municipality the capital of Yemen and the 50 questioners were returned and they were not included in the main sample of study. The table 3.7 illustrates the Cronbach's Alpha of Reliability for pilot study. All variables values were between 6.68 and 8.97, which was acceptable.

Table 3.7
Reliability Coefficients of Variables

Variables	No. of Items	Cronbach's Alpha
Transformational leadership	20	8.97
Transactional leadership	12	7.76
Charisma leadership	20	6.68
Crisis management	29	7.75

3.6.2 Validity

Zikmund, *et al.* (2010) indicated that the purpose of having validity is to make sure that the instrument measures what it is supposed to measure. There are many types of validity to assess the validity, such as, content, construct and external validity. This study achieved the external validity due to the high response rate (96%) with a sample size of 286 out of 297. Moreover, the content validity was achieved as all the items used to measure the constructs were adopted from the previous literature and were tested in those studies. Also, the validity tested by four lecturers in business management departments of public Yemeni universities and the suggestions and comments given after reviewing the instrument were critically observed to improve the quality of the instrument.

3.6.3 Reliability

Reliability is the degree to which measurements are free from error (Zikmund, *et al.*, 2003). Further, High reliability indicates minimum error variance (Sekaran, 2006).

Malhotra and Peterson (2006) explained that the results may vary "0" to "1.0", where the alpha value of 0.6 or more indicates satisfactory internal-consistency reliability. Further, Sekaran and Bougie (2010) argued that a Cronbach's alpha slightly lower than .60 was considered to be poor and those in the .70 was acceptable and those over .80 were good. Reliability of Cronbach's alpha has been tested in the pilot study and will be explain in following section.

3.7. DATA ANALYSIS

The statistical SPSS software version 21 used to examine the data in a comprehensive way. Further, the SPSS (Statistical Software Package for Social Science) software version 21.0, used to identify the reliability and validity of the research. Furthermore, this study conducted the data analyses and hypothesis testing, using several statistical means of SPSS software which contain of response rate, demographic profile of respondents, descriptive statistics to describe the characteristics of the respondents and linear regressions and multiple regression analysis to determine the impact of leadership styles on crisis management in the Yemen public and private institutions.

3.7.1 Descriptive statistics

Descriptive statistical tools used to describe the characteristics of the sample, check variables for any violation of the assumptions underlying inferential statistics; and address specific research questions (Pallant, 2001). Further, descriptive statistics is the method used to organize, display, describe and explain a set of data with the use of table, graphs and summary measure. Precisely, descriptive statistics such as mean, standard deviation, range, skewness and kurtosis used for data preparation, data

cleaning, assessing normality, checking outliers and data transformation (Coake, Steed & Dzidic, 2006).

3.7.2   Factor analysis

The need for factor analysis lies on the need to assign the goodness of fit for the scales used because these scales are all adopted from other research. In the other words, factor analysis is also conducted to decrease the number of items used in the measurement of variables to minimize loss of information (Hair, Black, Babin, Anderson, & Tatham 2010).

To determine the appropriateness of factor analysis, the Barlett test of sphericity is examining the presence of a sufficient number of significant correlations among the variables. Further, it provides the statistical probability that the correlation matrix has significant correlations among at least some of the variables (Hair *et al.,* 2010). Statistical measures that help assess the factor ability of data include the following:

1. The result of Bartlett's analysis of sphericity should be significant ($p < .05$) to determine the appropriateness of the factor analysis (Williams, Brown & Onsman 2012).

2. Kaiser–Meyer–Olkin (KMO) is a test that measures the adequacy of the sample, with index ranges from 0 to 1. For an effective factor analysis, then lowest KMO value should be .6 (Tabachnick & Fidell, 2007).

3.7.3   Correlation Analysis

The correlation analysis used to describe the strength and direction of the relationship between two variables. Further, it presents the direction, strength, and significance of relations among the variables of the study (Sekaran & Bougie, 2010). A positive correlation indicates that as one variable increases, the other variables will also increase. However, a negative correlation indicates that as one variable increases the other variables decrease (Sekaran, 2006). A perfect correlation of "±1" indicates that the value of one variable can be determined exactly by knowing the value of the other variable. By contrast, a correlation of "0" indicates no relationship between the two variables.   (Pallant, 2007).

3.7.4   Regressions Analysis

Multiple regressions allow a more sophisticated exploration of the interrelationship among a set of variables based on correlation. Multiple regressions conducted to examine the amount of variance in dependent variable scores can be explained by all independent variables (Pallant, 2001). However, before performing hypothesis testing of this study classical assumption could be carried out to ensure that the multiple regression test tool has been used correctly. There are several steps to do the classical assumption test, namely normality test, linearity test, heteroscedasticity test, and multicollinearity test (Hair et al., 2010).

In this study multiple regressions were carried out to predict the effective crisis management based on higher perception of leadership style, transformational, transactional and charisma leadership style. Four sets of regression analysis were

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performed. Firstly, the relationship between independent variable transformational leadership and dependent variable crisis management was examined. Secondly the relationship between independent variable transactional leadership and dependent variable crisis management was analysed. Thirdly, the relationship between independent variable charisma leadership and dependent variable crisis management was investigated. Finally, the identification of the most significant leadership style on crisis management was performed.

3.8. SUMMARY

This chapter focused on the research method that used for testing the hypotheses. The descriptive study was undertaken in this study to identify the characteristics of the respondents as well as hypothesis testing (casual research) was also undertaken to explain the relationship between the independent variables and dependent variable All items were used for the measurement were adopted from the main theories or from the previous studies. The sample was drawn randomly from middle managers in various institutions in Yemen. Data was collected by using survey questionnaire. The survey questionnaire contained both languages Arabic language and English language, both accompanied by the appropriate consent form for the respondents. In order to analyze the data, SPSS software program was used. The finding, discussion and analysis for this study illustrated in next chapter.

CHAPTER 4

DATA ANALYSES AND FINDINGS

4.1 INTRODUCTION

This chapter includes the result of the study, on the hypotheses set earlier. Further, this study aims to accomplish the objectives as well as to answer the research questions and also to prove the hypothesis assumptions which have already developed. The chapter begins with demographic data, and factor analysis. Followed by, reliability analysis and test of descriptive statistical analysis of the variables. Finally, regression and multiple regressions are used to test the hypotheses of the study.

4.2 DEMOGRAPHIC BACKGROUND OF THE RESPONDENTS

This section consist of demographic and related information about respondents' gender, age, academic qualification (Education), type of institutions, occupation and years of experience for all respondents in Yemen private and public institutions.

The descriptive analysis was run through the analyse-descriptive-frequency procedures explained by Pallant (2013). The results of the descriptive analysis of the demographic profile of the respondents are shown in the Table 4.1 below.

Table 4.1
Demographic Profile of Respondent

Demographic	Categories	Total	Percentage (%)

Gender	Male	244	85.3
	Female	42	14.7
Age	25-29 years	44	15.4
	30 – 39 years	162	56.6
	40 – 49 years	47	16.4
	above 49 years	33	11.5
Education Level	Diploma	25	8.7
	Bachelors	239	83.6
	Master	17	5.9
	PhD	5	1.7
Public Institutions	Ministry of Civil Service and Insurance	58	19.5
	Ministry of Local Administration	37	12.5
	Ministry of Oil and Minerals	35	11.8
	Ministry of Education	87	29.3
	Yemeni Economic Corporation	15	5.1
	Total of distributed questionnaires in the Public Institutions	220	76.9
Private Institutions	Hayel Saeed Anam Group NATCO	18	6.1
	Al-Gharasi International Trading Group	10	3.4
	MAM International Corporation	13	4.4
	Al Habari Group of Companies.	11	3.7
	Diamond Trading Ltd Sana'a	13	4.4
	Total of distributed questionnaires in the Private Institutions	66	23.1

	General Manager	91	31.8
Occupation	Manager	191	66.8
	Executive Officer	4	1.4
	4-10 years	155	54.2
Experience	11-15 years	74	25.9
	Above 16 years	57	19.9
	Total	286	100%

The above table shows that the gender, males has the highest respondents which were 244 respondents that represents (85.3%) of the overall respondents and the female participation is about 42 respondents that represent (14.7%).

In demographic age, Respondents whose age range, between 25-29 years is 44 respondents (15.4%). while the range of age between 30-39 years is 162 respondents which represent (56.6%). Followed by the range of age between 40-49 years, which is about 47 respondents, that represents (16.4%). The category of above 49 is 33 respondents which are (11.5%). From the data above, most respondents fell within the age between 30-39 years is 162 (56.6%).

In terms of education level which, included four groups, the most respondents hold bachelor degree is about 239 respondents that represent (83.6%). Followed by the respondents who have diploma, which were 25 respondents that represent (8.7%). The

master holders were 17 respondents that represent (5.9%). While the PhD holders were 5 respondents that represent (1.7%).

The respondents from the public sector in this study were 220 respondents which represent (76.9%). While the respondents who represent the private sector, were 66 respondents that represent (23.1%). Further, the respondent's occupations in these institutions as shows that the highest percentage of respondents were over (66.8%) for managers category, followed by general manger category which was 91 respondents that represents (31.8%). While only 4 respondents for the executive officer represents 1.4%.

The last demographic is an experience that shows the most respondents who have 4-10 years of experience were 155 respondents that represent (54.2%). Followed by 74 respondents who had about 11-15 years of experience in public and private institutions, represents (25.9%). The respondents above 16 years of experience were 57 respondents that represent (19.9%).

4.3   DESCRIPTIVE STATISTICS

The use of descriptive statistics involves the measures of central tendency and frequencies such as mean, mode, median, range, variance, and standard deviation (Vogt, 2007). Further, Vogt (2007) stated that descriptive statistics help to summarize large data with one number as well as explain the characteristics of a relationship with table and graphical approaches.

However, all variable measured in a Likert scale (1- 5-point scale measurement) which is need for the respondent to rate the statements in the questionnaire; 1 indicates the level of disagreement with question and 5 indicates that the respondent is totally agreed with question. The mean score refers to the level of agreement or disagreement of the respondents towards the items or variable being asked in the survey.

Table 4.2
Descriptive Statistics of Variables

	N	Minimum	Maximum	Mean	Std. Deviation
Crisis management	273	1.00	5.00	3.8345	.86142
Transformational Leadership	273	1.00	5.00	3.8031	.73701
Transactional Leadership	273	1.00	5.00	3.8341	.86843
Charisma Leadership	273	1.00	5.00	3.9293	.72108
Valid N (list wise)	273				

Table 4.2 shows that the mean score of the variable crisis management is 3.8345. The minimum score of the same variable was 1.10, and the maximum is 5.00 with a standard deviation = .86142. Which indicates that leaders having demonstrated power, confidence, and motivation which may have gained respect from their employees. . Further, the mean score for the variable Transformational Leadership .8031, the minimum value is 1.00, and the maximum value is 5.00, with the standard deviation

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=.73701. Furthermore, the mean score for the variable Transactional Leadership is 3.8341, the minimum value is 1.10, and the maximum value is 5.00, with the standard deviation =.86843. Lastly, the mean score for the variable Charisma Leadership is 3.9293, the minimum value is 1.31, and the maximum value is 5.00, with the standard deviation =.72108.

4.4   FACTOR ANALYSIS

Factor analysis is an established tool that helps to determine the construct adequacy of a measuring device (Cooper & Schindler, 2003). In the other words, the objective of factor analysis is to consider a way the information contained in a number of original variables into a smaller set of factor with a minimum loss of information (Hair *et al.,* 2006). Further, factor loadings produced from factor analysis are used to indicate the correlation between each attribute and each score, the higher the factor loading the more significant that attributes is in interpreting the factor matrix (Hair *et al.,* 2010).

However, statistical measures that help assess the factor ability of data include the following:

1. Bartlett's analysis of sphericity to determine the appropriateness of the factor analysis and it should be greater than .05, (p < .05) to be significant (Williams *et al.,* 2012). Further, to determine the appropriateness of factor analysis, the Barlett test of sphericity is examining the presence of a sufficient number of significant correlations among the variables, and it provides the statistical probability that the

correlation matrix has significant correlations among at least some of the variables (Hair *et al.,* 2010).

2. Kaiser–Meyer–Olkin (KMO) is a test that measures the adequacy of the sample, with index ranges from 0 to 1. For an effective factor analysis, then lowest KMO value should be .5 (Tabachnick & Fidell, 2007). In the other words, Hair *et al.* (2010) stated that the KMO measures of sampling adequacy index values range from zero to one which can be interpreted as follows: .90 or above- marvelous; .80 or above- meritorious; .70 or above- middling; .60 or above- mediocre; .50 or above- acceptable, but miserable; and below .50- unacceptable.

In this study, the factor analysis was based on principal component analysis (PCA) with varimax rotation for all components. The results for each factor analysis conducted are summarised and shown in tables 4.2, tables 4.3, tables 4.4 and tables 4.4, for the independent and dependent variables, all 81 items for the transformational, transactional, charisma leadership styles and crisis management were carried out.

4.4.1   Factor Analysis of Transformational Leadership

The factor analysis was conducted on twenty items of transformational leadership. As exhibited in Table 4.3

Table 4.3
Factor Analysis of Transformational Leadership

Items	Factor loading
I instill pride in others for being associated with me.	.513
I go beyond self-interest for the good of the group.	.690

I act in ways that build others' respect for me.	.615
I display a sense of power and confidence.	.660
I talk about my most important values and beliefs.	.626
I specify the importance of having a strong sense of purpose.	.720
I consider the moral and ethical consequences of decisions.	.619
I emphasize the importance of having a collective sense of mission.	.600
I talk optimistically about the future.	.658
I talk enthusiastically about what needs to be accomplished.	.615
I articulate a compelling vision of the future.	.636
I express confidence that goals will be achieved.	.556
I re-examine critical assumptions to question whether they are appropriate.	.627
I seek differing perspectives when solving problems.	.593
I get others to look at problems from many different angles.	.660
I suggest new ways of looking at how to complete assignments.	.543

Eigenvalue	6.206
% of variance	38.785
Kaiser-Meyer-Olkin (KMO)	.909
Bartlett sphericity test	1507.391
df	120
Sig	.000

Table 4.3, shows, that the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy value was 0.909, exceeding the recommended value of 0.50 (Hair *et al.,* 2010). Bartlett sphericity test was also found to be significant (p= .000). Further, from the observed value of Bartlett's sphericity, the result shows that the value was large 1507.391 with associated significance level of 0.000 which was appropriate to be significant

(Williams, *et al.,* 2012). However, four items number 17,18,19 and 20 that had small factor loading (< .50) were deleted the rest of the items were loaded with an acceptable range (Hair *et al.,* 2010). Table 4.2, shows that factor loading were between .513 and .720. Further, the screen plot in Figure 4.1 showed that the plot slopes steeply downward from one factor to two factors and then to three factors before slowly became an approximately horizontal line.
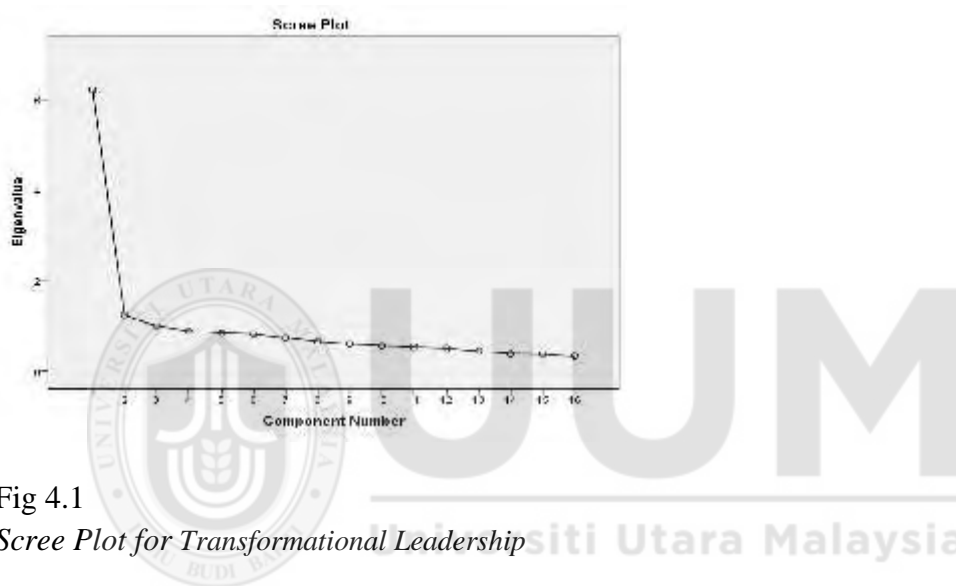
Fig 4.1
Scree Plot for Transformational Leadership

4.4.2   Factor Analysis of Transactional Leadership

The factor analysis for transactional leadership style was conducted on twelve items, as exhibited in Table 4.4.

Table 4.4
Factor Analysis of Transactional Leadership

Items	Factor loading
I provide others with assistance in exchange for their efforts	.713
I discuss in specific terms who is responsible for achieving performance targets	.823
I make clear what one can expect to receive when performance goals are achieved	.868

I express satisfaction when others meet expectations	.825
I focus attention on irregularities, mistakes, exceptions, and deviations from standards	.770
I concentrate my full attention on dealing with mistakes, complaints, and failures	.727
I keep track of all mistakes	.773
I direct my attention toward failures to meet standards	.671
I fail to interfere until problems become serious	.645
I demonstrate that problems must become chronic before I take action	.594

Eigenvalue	5.557
% of variance	55.571
Kaiser-Meyer-Olkin (KMO)	.915
Bartlett sphericity test	1483.297
df	45
Sig	.000

Table 4.4 shows that the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy, value was 0.915, exceeding the recommended value of 0.50 (Hair *et al.,* 2010). The Bartlett sphericity test was also found to be significant (p= .000) Further, Bartlett's sphericity, result shows that the value was large 1483.296 with associated significance level of 0.000 which was appropriate to be significant (Williams *et al.,* 2012). However, two items number 10 and 11 that had a small factor loading (< .50) were deleted the rest of items were loaded with an acceptable range (Hair *et al.,* 2010). Table 4.3, illustrated that the factor loading were between .594 and .868. The screen plot in Figure 4.2 showed that the plot slopes steeply downward from one factor to two factors and then to three factors before slowly became an approximately horizontal line.
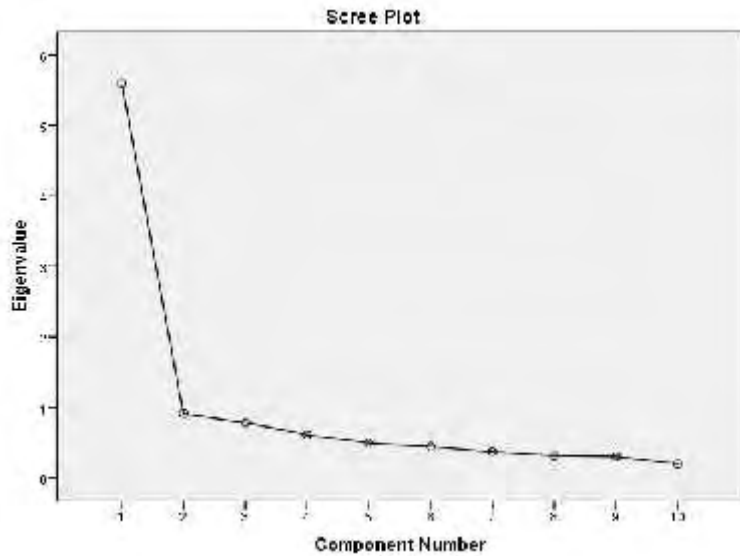
Fig 4.2
Scree Plot for Transformational Leadership

4.4.3 Factor Analysis of Charisma Leadership

Factor analysis for charisma leadership was conducted on twenty items, as shown in

table 4.5.

Table 4.5
Factor Analysis of Charisma Leadership

Items	Factor loading
Provides inspiring and strategic management goals.	.629
Inspirational; able to motivate by articulating effectively the importance of what organizational members are doing.	.608
Consistently generates new ideas for the future of the 'Organization.	.558
Exciting public speaker.	.608
Has vision; often brings up ideas about possibilities for the future.	.570
Entrepreneurial; seizes new opportunities in order to achieve goals.	.717

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Readily recognizes new environmental opportunities (favourable physical and social conditions) that may facilitate achievement of organizational objectives.	.723
Readily recognizes constraints in the physical environment (technological limitations, lack of resources, etc.) that may stand in the way of achieving organizational objectives.	.680
Readily recognizes constraints in the organization's social and cultural environment (cultural norms, lack of grass roots support, etc.) that may stand in the way of achieving organizational objectives.	.515
Influences others by developing mutual liking and respect.	.675
Shows sensitivity to the needs and feelings of the other members of the organization. .	.612
Often expresses personal concern for the needs and feelings of other members of the organization. .	.533
In pursuing organizational objectives, engages in activities involving considerable personal risk. .	.619
Engages in unconventional behaviour in order to achieve organizational goals.	.677
Uses non-traditional methods to achieve organizational goals.	.678
Often exhibits very unique behaviour that surprises other members of the organization.	.688

Eigenvalue	6.424
% of variance	40.150
Kaiser-Meyer-Olkin (KMO)	.900
Bartlett sphericity test	1845.915
df	120
Sig	.000

The result in Table 4.5 indicates that the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy, value was 0.900, which was marvellous and appropriate for factor

analysis (Hair *et al.,* 2010; Pallant, 2013; Tabachnick & Fidell, 2014). The Bartlett sphericity test result shows that the value was large 1845.915 with associated significance level of 0.000 which was appropriate to be significant (Williams *et al.,* 2012). However, four items that had a small factor loading (< .50) were deleted numbers 10,11,15 & 16, the rest of the items were loaded clearly with an acceptable range (Hair *et al.,* 2010). Table 4.4, showed that factor loading were between .515 and .723. The total variance explained by the one component factor extracted was 40.150%. Further, the screen plot in Figure 4.3 shows that the plot slopes steeply downward from one factor to two factors and then to three factors before slowly became an approximately horizontal line.
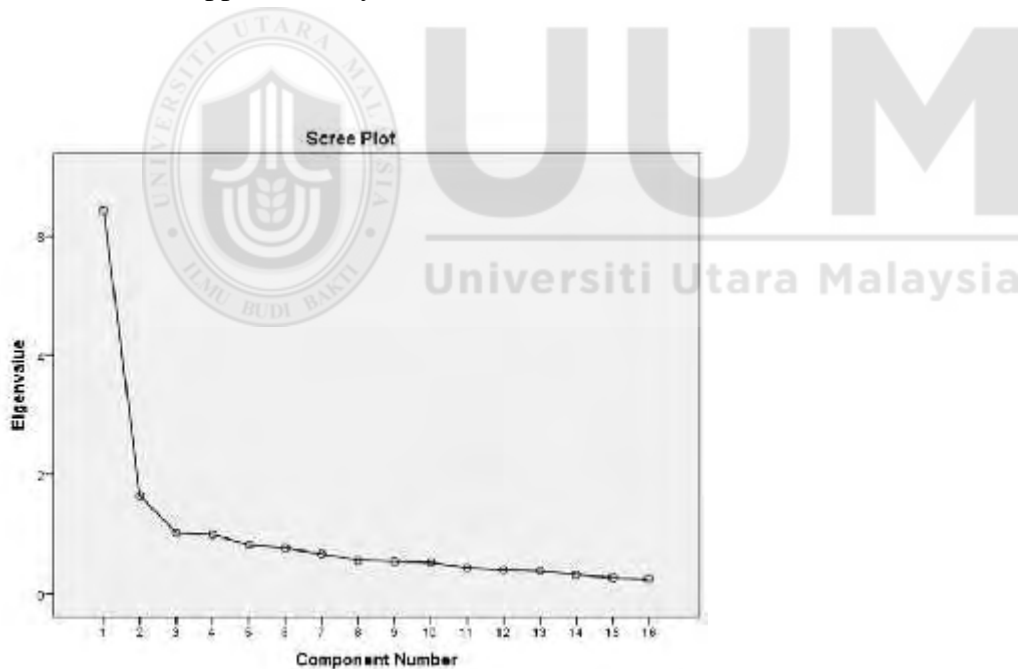
Fig 4.3
Scree Plot for charisma Leadership

4.4.4 Factor Analysis of Crisis Management

The factor analysis was conducted on twenty nine items of crisis management. As exhibited in Table 4.6.

Table 4.6
Factor Analysis of Crisis Management

Items	Factor loading
There is a special unit in our organization to observe crises indicators.	.590
The senior management is focused to collect and detect the signs of risks which are expected to be the crises indicators.	.553
There are interest in the process of classifying and analysing the crises indicators.	.519
There are qualified crews working on rating and analysing the crises indicators.	.527
The internal and external workplace has been surveyed comprehensively and systematically to recognize the expected crises indicators.	.545
The organization chart is complete and flexible to allow usefulness when dealing with occurred crises.	.530
An effective group has been designed to solve several expected crises.	.807
Appropriate support is provided to assist responsible party to plan in diagnosing the expected crises	.822
Clear management briefing has specified the process of dealing with the expected crises.	.812
We provide possible resources required (materials, human, technology, information) in preparing to face the expected crises.	.753
Cooperative effort is available between institutions and government related agencies in crises' management area.	.684
There are sufficient programs and plans in crises' management area, supported by consistent auditing and improvement effort.	.853
There are scheduled meetings to perform mock test in dealing with the expected crises.	.839

Sufficient programs are made available in our organization in crises' management area.	.836
We have successfully control crises when arise and refrain it from spreading continuously in a timely manner.	.830
Fast action taken has resulted in reducing harmful effects of the crises.	.702
Time management is a crucial factor being taken into account when dealing with crises.	.762
There is adequate capacity and fast action to mobilize the necessary material and human resources to contain the crisis.	.815
Effective communication medium is available to detect factors effecting crises.	.824
Top management responds to the distribution of tasks and powers over a short and appropriate period at the crisis time.	.821
Special unit equipped with latest technology is available to detect factors and harmful effects of crises.	.779
Even when dealing in crises period, top management has taken appropriate action to ensure daily operational tasks is performed in timely manner as per usual practice.	.694
Top management is responsible to reduce the harmful effects of crises as well as stopping the crises from continuously occurring.	.749
In order to cure the effects, top management has provided various assistance to website affected by crisis	.758
Top management has provided sufficient assistance to directors to solve crises.	.815
Benefits to future are expected based on lesson learnt from previous crises faced by top management.	.787
Top management is responsible to evaluate crises management and plan for future improvement.	.805
Top management is responsible to ensure lesson learnt from previous experience being collected for future benefits.	.775

Eigenvalue	15.777

% of variance	54.402
Kaiser-Meyer-Olkin (KMO)	.959
Bartlett sphericity test	7001
df	406
Sig	.000

The result in Table 4.6 shows that the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy, value was 0.959, which was marvellous and appropriate for factor analysis (Hair *et al.,* 2010; Pallant, 2013; Tabachnick & Fidell, 2014). From the observed value of Bartlett's sphericity, the result shows that the value was large 7001 with associated significance level of 0.000 which was appropriate. All items were loaded with an acceptable range (Hair *et al.,* 2010), as shown in Table 4.5, the factor loading were between .519 and .853. The total variance explained by the one component factor extracted was 54.402%. Further, the screen plot in Figure 4.4 shows that the plot slopes steeply downward from one factor to two factors and then to three factors before slowly became an approximately horizontal line.
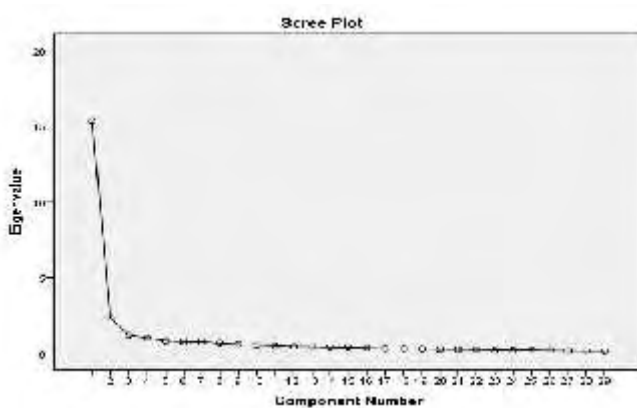

Fig 4.4
Scree Plot for Crisis management

4.5 RELIABILITY

Reliability is the degree to which measurements are free from error (Zikmund, *et al.,* 2003). Further, High reliability indicates minimum error variance (Sekaran, 2006). Malhotra and Peterson (2006) explained that the results may vary "0" to "1.0", where the alpha value of 0.6 or more indicates satisfactory internal-consistency reliability. Further, Sekaran and Bougie (2010) argued that a Cronbach's alpha slightly lower than .60 was considered to be poor and those in the .70 was acceptable and those over .80 were good.

In this study Table 4.7 shows that the result of a Cronbach's alpha for items of Transformational, Transactional, Charisma leadership and Crisis Management ranged from .870 to .967 meeting the minimum accepted reliability as suggested by Sekaran and Bougie (2010).

Table 4.7
Reliability Coefficients of Variables

Variables	No. of Items	Cronbach's Alpha
Transformational leadership	20	.895
Transactional leadership	12	.870
Charisma leadership	20	.902
Crisis management	29	.967

4.6   CORRELATION ANALYSIS

Pallant (2001) explain that correlation analysis is a statistical method used to describe the strength and direction of the linear relationship between two variables. Further, it presents the direction, strength, and significance of relations among the variables of the study (Sekaran & Bougie, 2010). A positive correlation indicates that as one variable increases, the other variables will also increase. However, a negative correlation indicates that as one variable increases the other variables decrease (Sekaran, 2006).

The table 4.8 of Pearson Correlation Statistics for the Variables shows that the values ranged between .561 and .787. All the correlations were found under the threshold of .90 (Hair *et al.,* 2010).

Table 4.8
Pearson Correlation Statistics for the Variables

VARIABLE	Crisis management	Transformational Leadership	Transactional Leadership	Charismatic Leadership
Crisis Management	1			
Transformational Leadership	.561**	1		
Transactional Leadership	.698**	.637**	1	
Charismatic Leadership	.649**	.639**	.787**	1

These results show the correlation between variables. The crisis management has a good relation with other variables specifically, the relationship between Crisis Management and transactional leadership was r = 698. Further, the result of the analysis shows that a positive relation between crisis management and transformational leadership with correlation value of r =. 561. Furthermore, the result of the analysis for the relation between crisis management and charisma Leadership was r = .649.

Moreover, the transformational leadership style also has a good relation with other variables such as, the relation between transformational leadership and transactional leadership shows a significant positive relation with r = .637. Also, the result of the relation between transformational leadership and charisma leadership was r = .639. Finally the relation between transactional Leadership and charisma leadership shows a significant positive relation. The correlation value of these variables was r = .787.

4.7   HYPOTHESES TESTING

To determine the relationship between transformational leadership, transactional, charisma leadership and crisis management, regressions and multiple regression analysis were performed. Pallant (2007) explained that if the significance level is less than 0.05, then the variable is making significant unique contributions to the prediction of the dependent variable. Though, if the significance level is greater than 0.05, then the variable is not making significant unique contribution to the prediction of the dependent variable. First hypothesized stated as follows:

Hypothesis 1: There is a significant relation between the transformational leadership style (TF) and crisis management (CM) in Yemen private and public institutions.

Table 4.9

Regression Result of transformational leadership and Crisis Management

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.339	.228		5.884	.000
	Transformational	.656	.059	.561	11.166	.000

Note: R²= .315; F=124.680

Note: *p< 0.05, **p< 0.01, ***p< 0.001

B= Unstandardized coefficient beta; SEB= Standard error of regression coefficient;

ß= Beta coefficient

Table 4.9 shows that the result of R^2 value = .315, which implies that transformational leadership is explained more than 31% of the variance in crisis management, .Managers with higher perception of transformational leadership style are more likely to report a high level of effective crisis management. Further, Table 4.12 shows that the (Beta=.561, F = 124.680, p=.000) which is significant at .000. In addition, transformational leadership has a significant value= .000, which is less than .05, which confirms that there is a positive significant relationship between transformational leadership and crisis management. The regression result shows that hypothesis 1 is supported. Regression outputs are given in Appendix I.

Hypothesis 2: There is a significant relation between the transactional leadership style (TS) and crisis management (CM) in Yemen private and public institutions.

Table 4.10

Regression Result of transactional leadership and Crisis Management

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	**Std. Error**	**Beta**	**t**	**Sig.**
1 **(Constant)**	1.178	.170		6.951	.000
Transactional leadership	.693	.043	.698	16.065	.000

Note: R²= .488; F=258.078

Note: *p< 0.05, **p< 0.01, ***p< 0.001

B= Unstandardized coefficient beta; SEB= Standard error of regression coefficient;

ß= Beta coefficient

Table 4.10 illustrated that the result of R² value = .488, which implies that transactional leadership is explained more than 48% of the variance in crisis management. Managers with higher perception of transactional leadership style are more likely to report high level of effective crisis management.

Further, Table 4.10 shows that the (Beta=.698, F = 258.078, p=.000) which is significant at .000. In addition, transactional leadership has a significant value =.000, which is less than .05, which confirms that there is a positive significant relationship between transactional leadership and crisis management. The regression result shows that hypothesis 2 is supported. Regression outputs are given in Appendix J.

Hypothesis 3: There is a significant relation between the Charisma leadership style (CH) and crisis management (CM) in Yemen private and public institutions.

Table 4.11

Regression Result of Charisma leadership and Crisis Management

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	**Std. Error**	**Beta**	**t**	**Sig.**
1 **(Constant)**	.786	.220		3.566	.000
Charisma leadership	.776	.055	.649	14.060	.000

Note: R²= .422; F=197.684

Note: *p< 0.05, **p< 0.01, ***p< 0.001

B= Unstandardized coefficient beta; SEB= Standard error of regression coefficient;

ß= Beta coefficient

Table 4.11 shows that the result of R² value = .422, which implies that charisma leadership explained more than 42% of the variance in crisis management. Managers with higher perception of charisma leadership style are more likely to report high level of effective crisis management.

Also, table 4.11 reveals that the (Beta=.649, F = 197.684, p=.000) which is significant at .000. Further, the charisma leadership has a significant value =.000, which is less than .05, which confirms that there is a positive significant relationship between transactional leadership and crisis management. The regression result shows that hypothesis 3 is also, supported. Regression outputs are given in Appendix K.

Multiple regressions

Table 4.12

Multiple regression Result of leadership style and Crisis Management

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
1 (Constant)	.525	.216		2.432	.016
Transformational	.173	.067	.148	2.594	.010
Transactional	.437	.070	.440	6.209	.000
Charisma	.249	.085	.208	2.931	.004

Note: R^2= .526; F=99.430

Note: *p< 0.05, **p< 0.01, ***p< 0.001

B= Unstandardized coefficient beta; SEB= Standard error of regression coefficient;

ß= Beta coefficient

The results in Table 4.12 revealed that R^2 value = .526 which indicates that transformational leadership, transactional leadership and charisma leadership explained 52.6% of the variance in crisis management. And the (F = 99.430, p=0.000). Further, the result in Table 4.15 shows that Beta value of transformational leadership (ß= .148, p<.05 = Sig .010), transactional leadership (ß= .440, p<.05= Sig .000) and charisma leadership (ß= .208, p<.05= Sig .004) all have a significant effect on crisis management.

However, as showed in table 4.12 the transactional leadership style is the most influential leadership style on crisis Management (CM). SPSS output of multiple regression are shown in Appendix L.

4.8   SUMMARY OF FINDINGS

The findings of all hypotheses are presented in this chapter. The hypotheses are tested using multiple regressions. The significant level to test the hypothesis is 0.05. A summary of overall hypothesis testing is shown in the following table 4.13.

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Table 4.13
Summary of the Overall Hypotheses

Hypothesis	Result
H1. There is a significant relation between the transformational leadership style (TS) and crisis management (CM) in Yemen private and public institutions.	Accepted
H2. There is a significant relation between the transactional leadership style (TS) and crisis management (CM) in Yemen private and public institutions.	Accepted
H3. There is a significant relation between the charisma leadership style (TS) and crisis management (CM) in Yemen private and public institutions.	Accepted
Q4. Which leadership style is the most influential on crisis Management (CM)?	Transactional leadership

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1. INTRODUCTION

This chapter aims to discuss and summarize the findings reported in chapter four. Further, it explains the implications of the findings in this study to the crisis management theory, transformational and transactional leadership theory and charisma leadership theory. Further, it provides implication guides to the Yemen private and public institutions managers to manage and control the crisis effectively. Followed by, limitation and recommendation for future research and finally the conclusion of the study.

5.2. DISCUSSIONS OF RESULT

This study has investigated the impact of leadership style in terms of transformational, transactional and charisma on crisis management. Further, it explained in details the findings of each hypothesis tested and how the research objectives had been accomplished. This study supports the following objectives:

1. To examine the impact of transformational leadership on crisis Management.

2. To investigate the impact of transactional leadership on crisis Management.

3. To explore the impact of Charisma leadership on crisis Management.

4. To identify the most influential leadership style on crisis Management.

First objective: The first research objective is to determine the impact of transformational leadership on crisis management. The result in table 4.9 explained that

for every unit increase in transformational leadership, there is an expected increase of .561 in crisis management. That showed a significant positive relationship between transformational leadership and crisis management in Yemen private and public institutions.

Further, in Yemen private and public institutions transformational leaders demonstrate effective leadership and increasing the chance to respond to a crisis in a timely manner and motivate subordinates to follow the leader commands effectively and efficiently. This result is consistent with previous studies such as, Boin *et al.* (2003). This is support for the result of this study.

Transformational leadership style is one of the most dominant leadership styles which its effect to the context of crisis has been extensively discussed within the extant leadership literatures. Furthermore, leader of transformational leadership style is considered as idealize influence (attributed and behaviour) as they become a role model for the followers, whether they exhibit certain personal characteristics or "charisma" often seen as being high on morality, trust, integrity, honesty and purpose. Also leaders tend to be admired, respected, and trusted; so followers determine and go after their leaders. This result is supported by the transformational leadership theory and also argued in the previous studies such as Kirkbride (2006) and Bass *et al. (*2003).

In the public and private institutions in Yemen leaders exhibited aspiration motivation as a part of the transformational leadership style which can be considered as evidence in how the inspirational motivation leaders can succeed in motivating others by giving

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them with a clear vision and positive thinking for the future and a clear sense of meaning in their work. This holds crucial importance, especially when leaders face crisis situations. Moreover, the result of the current study illustrated that intellectual stimulation of transformational leaders in the public and private institutions in Yemen create a positive work environment or climate through an emphasis on the utilization of intelligence and creativity, rationality and careful problem solving, while encouraging the rethinking, reframing, and re-examining of assumptions. This also, was in consonance with the finding by Ahmad *et al.* (2011).

However, the above statement, theoretically confirmed by emphasizing that transformational leadership is significantly related to crisis management in Yemen private and public sectors. Further, the empirical findings in this study are consistent with previous studies such as Kirkbride (2006), Bass *et al.* (2003), Cho and Tseng (2009) Zhang *et al* (2012).

Second objective: Empirical evidence from this study in the second hypothesis (H2) shows that there is a significant and positive relationship between transactional leadership and crisis management in Yemen private and public sectors. Table 4.10 explained that for every unit increase in transactional leadership, there is an expected increase of .698 in crisis management.

The finding in this study illustrated that in the uncertainty times the transactional leadership style has the right attributes to assist the private and public institutions in Yemen to overcome the crisis as they ensure that followers do the job at the right time

and in compliance with specifications. This confirmed by previous studies such as, Zohar *et al.* (2004) and Carlijn (2010).

Moreover, the managers in Yemeni private and public institutions show strong transactional leadership characteristics such contingent reward, also, transactional leadership style reflect positively on the outcome when dealing with crisis. Besides that, transactional leadership style enables the organization to carry out more complex operating procedures. These findings were consistent with some pervious findings such as, Zohar *et al.* (2004) as well as the theory of transactional leadership theory. The leaders in transactional leadership style show the level in which a leader monitors followers closely for mistakes or role violations and to take the necessary correction action accordingly. This was a confirmed by the previous studies such as, Northouse (2012) and Kirkbride (2006).

However, the previous studies in developing countries, argued that transformational leadership can be strong predictor than transactional leadership such as Zhang *et al.* (2012). Additional, Bass (1998) argued that transactional leadership tends to emerge when a situation is stable and predictable, while transformational leadership is likely to be more effective when the situation is uncertain, problematic and unstable. In contradict; the current study result showed that in Yemen private and public institutions, transactional may look more effectiveness leadership style on crisis management than transformational and charisma leadership styles. Moreover, the empirical analysis shows that transactional leadership have stronger effect on all

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dimension of crisis management stages more than transformational and charisma leadership.

In conclusion, a rightly implementation of this result will enhance the ability to overcome the crisis situation in Yemen private and public institutions or at least to reduce the disastrous consequences of crisis situation. However, this finding has theoretically and practically confirmed and also consistent with previous studies such as Zohar *et al.* (2004) and Carlijn (2010).

Third objective: The third objective of the current study is to determine the impact of charisma leadership on crisis management. The results, as presented in Table 4.11 revealed that charisma leadership has a significant value .004, which is less than .05, which is confirmed, that charisma leadership style has a positive impact on crisis management.

Further, the result of this study is in line with the previous study such as Pillai and Meindl (1998) who explained that, crises provide leaders with opportunities to take bold purposeful action, which is then interpreted by followers in charismatic terms and may increase their willingness to follow. Moreover, charisma leadership style has capability to be an effective communicator and to develop an inspiring vision. The leader showed the convince vision by informing members of the organization an idealized goal of the future and the vision has purpose to align the organization around strategic direction. Also, the charisma leadership style could assist to overcome the crisis in private and public institutions in Yemen according the result of this study.

In Yemen private and public institutions charismatic leadership style displayed sensitivity to the member requirements as part of the charismatic leadership process, by using effective techniques that developed joint liking and respect, and they spent time expressing individual concern for the requirements and feelings of the organization members. This result is consistent with previous studies such as Murphy *et al.* (2008).

In additional, charisma leadership style has a very exceptional behaviour that amazing other members of the organization and it consider as important behaviour in creative groups. A role model provided by this style of leadership for the followers, create trust and commitment in the followers. This finding is supported by previous research such as, Jaussi and Dionne (2003). Who explained that a very exceptional behaviour that amazing other members of the organization which exhibit by charismatic leaders and it consider is important in creative groups.

Furthermore, charisma leadership style showed the degree to which a leader engaging in unconventional behaviour and assuming personal risk to expose their unusual commitment and exceptionality. These could influence the followers to adhere the instructions of the charisma leadership style and create the follower support in private and public institutions in Yemen. This result also confirmed by the previous research such Halverson *et al.* (2004) who illustrated that characteristics of leader charisma and organizational member's commitment have a good impact during the crisis situations and leadership could make a difference to the performance and result of the corporation during a crisis.

In conclusion, the rustle of this study is not surprising because charisma leadership plays an important role in providing direction to overcome the crisis situation. Further, under conditions of crisis, followers often look to the leader for direction. This was a confirmed by the previous studies such as Walsh (1995) and Yukl (2002.

Fourth objective: According to the fourth objectives of this study, which is aimed to identify the most influential leadership styles on crisis management? The empirical analysis showed that transactional leadership has a stronger effect on all dimensions of crisis management than charisma and transformational leadership style in Yemeni private and public institutions.

The results, as presented in Table 4.12 revealed that transactional leadership has a significant value .000, which is less than .05 and the other leadership style transformational and charisma leadership style have significant value .010 and significant value .004 respectively. In addition, the result in table 4.12 showed also, that transactional leadership style has a Beta value =.698, and the result for transformational and Charisma leadership style have a Beta value=.561, a Beta value=.649 respectively, which is confirmed, that transactional leadership style is the most influential leadership style on crisis management in Yemeni private and public institutions.

5.3. IMPLICATIONS OF THE STUDY

The results of this study have provided numerous implications for practitioners and academicians. These implications serve the leadership in private and public institutions

in Yemen to deal with the crisis effectively. The implications of this study can be divided into three aspects: theoretical contributions, methodology contributions, and practical contributions.

5.3.1. Theoretical contributions

This study generally aims to investigate the effects of leadership styles in terms of transformational, transactional and charisma leadership on crisis management and to introduce the role played by those leadership styles to deal, control, manage, reduce and prevent the disastrous result of the crisis through effective crisis management in Yemen private and public institutions. This study utilized crisis management theory and transformational, and charisma theories, in an attempt to construct hypotheses and supporting research objectives.

The crisis management theory proposed that support received from leaders as one component in preparation stage of crisis management is crucial element in preventing the crisis generally. However, the current study provided empirical evidence that the transactional leadership style is the most significant leadership style that could be utilized to overcome the crisis situation in Yemen private and public institutions. Further, it has been evidenced that leadership style is considered as the most important main factor, to manage the crisis, and also, to take a crucial action to reduce and prevent the disastrous consequence of the crisis. The finding of this study confirms the relationship between leadership style and crisis management and it could add to the related literature, hence to cover the gap in previous studies.

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In contrast with earlier studies, in developing countries, transformational and charisma leadership can be stronger predictor than transactional leadership, but this study found that, transactional leadership style in Yemen private and public institutions may look more effectiveness. This is due to the different culture and different type of crisis as well as economic difficulties that faced the respondent in Yemen. Thus, this finding had contributed in extending the scope and applicability of the underpinning theories.

This study was the first attempt, known to the researcher, that combined the variables; transformational, transactional and charisma leadership to manage the current crisis through effective crisis management. This could be considered a significant contribution to the theory in its applicability to Yemen private and public institutions.

The original crisis management theory that developed by Gonzalez and Pratt (1995) as well as Pearson and Mitroff (1993) was the original resource of the crisis management stages that was utilized as a dependent variable to measure the crisis management and it considered as a first attempt, known to the researcher to investigate the impact of leadership style under the condition of security, economic and political crisis in Yemen private and public institutions. Finally, with a detailed review of the extant literature and empirical findings, the current study has theoretically contributed to the body of knowledge on how the leadership style could overcome the crisis situation in Yemen private and public institutions.

5.3.2. Methodological Contribution

This study contributes to the methodological perspective in different ways. The quantitative method was used in this study in order to examine the relationship between the leadership styles and crisis management. That would add value and significant contribution to the current finding on the crisis management.

The scope of crisis management study has extended to cover different arena since numerous studies concentrated on developed countries such as Harwati (2013), Herbane (2013), and Wooten and James (2008). Therefore, in this study, the public and private sector in Yemen together were selected as the scope of the crisis management study. The positive result in this current study strengthens the methodology by adding a new setting and research context. However, the scales of the variables were developed in different countries in the private sector to show strength and validity of the measurements, they suggested that the instrument should be tested with different groups and different settings. In response to their suggestion, this study assessed the applicability of these scales and tested it in Yemen private and public institutions.

Therefore, this study provides a clear insight into how crisis management mechanism and tools can reduce the disaster consequences of the crisis in general and how leadership style impact crisis management in Yemen private and public institutions.

5.3.3. Practical Implications

Based on the results of the present study, the research findings of this study have contributed several practical implications that may be important, particularly for leaders to overcome the crisis situation in Yemen private and public institutions.

From the managerial perspective, this study provides valuable inputs for leaders in private and public institutions. There are key aspects that private and public leaders in Yemen should look into, such as; challenges that faced leaders during the crisis situation, this study suggested that private and public leaders adopt three types of leadership transformational, transactional and charisma leadership style which have a profound impact on dealing with crisis situations through effective crisis management. The result of this study, suggests that leaders who practice those three styles of leadership should play an important role during the crisis situation.

The study found several statistically significant relationships with practical applications. Public and private institutions that are interested in implementing effective crisis management must be concerned with leadership style. In order to increase the probability of effective crisis management in public and private institutions, transactional leadership is considered a better predictor followed by transformational and charisma leadership style according to the study result.

Moreover, the study result can be applied to public and private institutions in several ways. Such as, the leaders should take in consideration that the rewards are highly valued by the followers; this will enhance the probability of generating self-motivation.

The leader is therefore responsible to provide various rewards to attract followers. This has been confirmed by Montana and Charnov (2008) that illustrated "This theory emphasizes the needs for organizations to relate rewards directly to performance and to ensure that the rewards provided are those rewards deserved and wanted by the recipients".

However, in order to overcome crisis situations in Yemeni private and public sector, the leaders and those who are responsible for human resource development must pay sufficient attention by conducting several activities such as orientation programs about the characteristic of transformational, transactional and charisma leadership style that should be applied. Such programs will provide the leaders with a general background about the value and the importance of those styles of leadership to overcome the crisis situation.

In addition, training programs should take place for middle managers, on how to deal with the crisis situation. Thus, once middle managers have practical training about the mechanism and tools in how to deal with the crisis situation this would facility the challenge to overcome the consequence of the crisis situation and its disastrous result.

Finally, this study provides a guideline for the leaders in public and private institutions in Yemen to achieve and efficient leadership and effective crisis management, which can lead to successful, overcome the crisis situation.

5.4.   LIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

There were several limitations to this study. Firstly, the generalizability, the findings of this study cannot be generalized in a wider context across cultures of other countries since the data collected for this study was limited to Yemen private and public institutions. Different cultures and different educational environments may furnish different impact of leadership style on crisis management.

Secondly, there was some delay during the distribution of the questionnaire in some institutions due to the lack of appreciation for the academic research. However, the researcher succeeded in distributing the questionnaire in these institutions by using personal communication and permissions from the top management in these institutions.

Further, the unstable circumstances in Yemen and the daily life difficulties as well as economic difficulties, such as, lack of transportation, electricity, internet service, inflation that influence the psychological situation of respondents which might have affected their response.

This study used Pearson and Mitroff (1993) crisis management model to measure the crisis management stages; therefore, another conceptualisation and measurement for crisis management are recommended in the future studies.

Present study combined three style of leadership to investigate their impact on crisis management; future research can integrate those styles of leadership in one style.

Finally, future research is recommended to focus on the dimensions of the transformational leadership styles and crisis management stages for more specific outcomes.

5.5. CONCLUSION

As a conclusion, this study has provided empirical evidence of the impact of transformational, transactional and charisma leadership on crisis management. The research results have provided support for the theoretical hypotheses either fully or partially supported. More importantly, this study has met the research objectives as mentioned in chapter one despite some of the limitations.

Further, this study found several statistically significant relationships with practical applications. According to the result of this study transactional leadership is considered as better predictor and more effectiveness factor for the effective crisis management in Yemen private and public institutions, the following influence factors are transformational and charisma leadership style respectively. Moreover, the theoretical framework of this study supported crisis management theory, Transformational Leadership Theory and charisma Leadership Theory that provide a clear understanding of research framework.

In additional to the theoretical and practical implications, this study also has noted several limitations and made recommendations for future studies. In conclusion, this study was successfully achieved research objectives and has provided a valuable contribution to the body of knowledge in the respective fields.

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APPENDICES

APPENDICES

APPENDIX A:
Questionnaire

Universiti Utara Malaysia

Dear Sir/ Madam

The impact of crisis on organizations and individuals has been stronger than ever. Leaders in organizations need to be aware of these words, they should have specific skills, which will enable them to prepare, manage, and find a solution for crisis that could threaten the existence of their organizations.

This questionnaire has been developed to investigate the impact of leadership styles on crisis management and to introduce the role played by transformational, transactional and charisma leadership styles to improve the crisis management skills on Yemen private and public institution.

You have been selected to participate in this research being undertaken by myself; Mohammed Ali Alkhawlani, a Master student of the College of Business, University Utara Malaysia.

Please be assured that the information you provide is strictly confidential and for academic purposes only. Please complete all questions in the survey and return it directly to the researcher.

Thank you in advance for your precious time and cooperation. If you have any questions, please do not hesitate to contact us.

Yours sincerely,

الاخوة والاخوات الاعزاء

تأثير .   يكونو   بينه
هذا وأن يكون لديهم مهارات   تمكنهم   وإيجاد   يمكن   تهدد
هذه .

تطوير هذا الاستبيان للتحقيق   تأثير أساليب القيادة   والتعريف   تلعبه القيادة
التحويلية، تبادلية الكاريزمية لتحسين مهارات   اليمن
يـ   ماليزيا.   اختيارك   هذا   به انا محمد   ماجستير   كلية

تقدمها ستكون سرية للغاية   الأكاديمية . يرجى   جميع   هذا
وإعادته .
الثمين   لديك .

Supervisor
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QUESTIONNAIRE:

الاستبيان

The following questions are to find out the degree of your agreement or disagreement to statements. Please respond to each statement and designate your level of agreement or disagreement by choosing an appropriate number that best describes your opinion.

الاسئلة التالية   عن طريق اختي   حول العبارات , يرجي الرد علي كل عبارة وتحديد مستوي الذي يصف رأيك.

INSTRUCTION   تعليمات

This questionnaire is divided into three sections (A, B and C). Please indicate your judgment thoughtfully and truthfully on the various aspects related to this research.

يـ   هذا الاستبيان   (A   B   C). يرجى توضيح بهذا   .

General Data: Please tick (   ) on the appropriate circle according to your information.

بيانات عامة: يرجى   (   )   .

Section A: Respondent Information		
الجزء A: بيانات المجيب علي الاستبيانة		
Gender	◯ Male	◯ Female
Age	◯ 25 - 29 years old	بين عشرون وتسعة وعشرون سنة
	◯ 30 – 39 years old	بين ثلاثون وتسعة وثلاثون سنة
	◯ 40 – 49 years old	بين اربعون
	◯ above 50 years old	يـ
Education level المستوي التعليمي	◯ Diploma ◯ Bachelors ◯ Master ◯ PhD/ Doctorate ◯ Others	 بكالوريوس ماجستير (يرجى تحديد)
Type of institution	◯ Public Sector ◯ Private Sector	
Occupation المهنة	◯ General Manager ◯ Manager ◯ Executive Officer ◯ Others (Please specify)	مدير عام مدير ادارة مدير تنفيذي (يرجى التحديد)

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		4 years – 10 years	10	4
Job experience	○	11 years – 15 year	15	11
	○	Above 16 years		16

Please read the following statements and circle only one number which best describes your opinion.

الرجاء قراءة العبارات التالية ووضع دائرة علي واحد من الارقام فقط لكل عبارة والذي يصف أفضل رأي لك.

Section B: LEADERSHIP STYLES الجزء B: الأنماط القيادية	1 Strongly Disagree لا أوافق بشدة	2 Disagree لا أوافق	3 Neither Agree or Disagre e محايد	4 Agree أوافق	5 Strongly Agree أوافق تماما
1. I instill pride in others for being associated with me. في الآخرين لعملهم معي.	1	2	3	4	5
2. I go beyond self-interest for the good of the group. الذاتية .	1	2	3	4	5
3. I act in ways that build others' respect for me. الآخرين .	1	2	3	4	5
4. I display a sense of power and confidence. إظهار حس .	1	2	3	4	5
5. I talk about my most important values and beliefs. أهم قيمي .	1	2	3	4	5
6. I specify the importance of having a strong sense of purpose. أهمية بالهدف.	1	2	3	4	5
7. I consider the moral and ethical consequences of decisions. المعنوية والأخلاق هي النتائج .	1	2	3	4	5
8. I emphasize the importance of having a collective sense of mission. أهمية بالمهمه.	1	2	3	4	5
9. I talk optimistically about the future. .	1	2	3	4	5
10. I talk enthusiastically about what needs to be accomplished. يجب .	1	2	3	4	5
11. I articulate a compelling vision of the future. رؤية .	1	2	3	4	5
12. I express confidence that goals will be achieved. الأهداف .	1	2	3	4	5
13. I re-examine critical assumptions to question whether they are appropriate. أعيد .	1	2	3	4	5
14. I seek differing perspectives when solving problems. وجهات المتباينة .	1	2	3	4	5
15. I get others to look at problems from many different angles. الآخرين ينظرون زوايا .	1	2	3	4	5
16. I suggest new ways of looking at how to complete assignments. جديدة كيفية المهام.	1	2	3	4	5

17. I spend time teaching and coaching. التدريس والتدريب.	1	2	3	4	5
18. I treat others as individuals rather than just as a member of a group. الآخرين بشخصهم وليس .	1	2	3	4	5
19. I consider an individual as having different needs, abilities, and aspirations from others. لديهم احتياجات مختلفة عن الآخرين.	1	2	3	4	5
20. I help other to develop their strengths. ألاخرن لتطوير قدرتهم.	1	2	3	4	5
21. I provide others with assistance in exchange for their efforts. للآخرين الجهود يبذلونها.	1	2	3	4	5
22. I discuss in specific terms that is responsible for achieving performance targets. هو تحقيق الأداء المستهدف.	1	2	3	4	5
23. I make clear what one can expect to receive when performance goals are achieved. يمكن يتوقع عليه عندما يتم تحقيق أهداف .	1	2	3	4	5
24. I express satisfaction when others meet expectations. الارتياح عندما يقوم الآخرين بتلبية .	1	2	3	4	5
25. I focus attention on irregularities, mistakes, exceptions, and deviations from standards. الاهتمام المعايير.	1	2	3	4	5
26. I concentrate my full attention on dealing with mistakes, complaints, and failures. اهتمامي .	1	2	3	4	5
27. I keep track of all mistakes. .	1	2	3	4	5
28. I direct my attention toward failures to meet standards. اوجه انتباهي نحو الفشل للوفاء بالمعايير.	1	2	3	4	5
29. I fail to interfere until problems become serious. أستطيع .	1	2	3	4	5
30. I wait for things to go wrong before taking action. .	1	2	3	4	5
31. I show that I am a firm believer in "if it ain't broke, don't fix it". اظهر ان أنا المؤمنين بعبارة " يتم تصلحه''.	1	2	3	4	5
32. I demonstrate that problems must become chronic before I take action. اظهرأن يجب .	1	2	3	4	5
33. Provides inspiring and strategic management goals. توفير الالهام واهداف الاستراتيجية.	1	2	3	4	5
34. Inspirational; able to motivate by articulating effectively the importance of what organizational members are doing. ملهم. تحفيز طريق التعبير أهمية يقوم به .	1	2	3	4	5
35. Consistently generates new ideas for the future of the Organization. توليد الجديدة .	1	2	3	4	5
36. Exciting public speaker. الخطيب المثير (مفوها).	1	2	3	4	5
37. Has vision; often brings up ideas about possibilities for the future. لديه الرؤية يجلب المستقبلية.	1	2	3	4	5
38. Entrepreneurial; seizes new opportunities in order to achieve goals. ويغتنم الجديدة تحقيق الأهداف.	1	2	3	4	5

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#	Statement					
39.	Readily recognizes new environmental opportunities (favourable physical and social conditions) that may facilitate achievement of organizational objectives. يتعرف البيئة الجديدة بسهولة (المادية والاجتماعية الملائمة) تسهل تحقيق الأهداف التنظيمية .	1	2	3	4	5
40.	Readily recognizes constraints in the physical environment (technological limitations, lack of resources, etc.) that may stand in the way of achieving organizational objectives. يتعرف القيود البيئة المادية بسهولة (القيود التكنولوجية، (طريق تحقيق الأهداف التنظيمية.	1	2	3	4	5
41.	Readily recognizes constraints in the organization's social and cultural environment (cultural norms, lack of grass roots support, etc.) that may stand in the way of achieving organizational objectives. يتعرف بسهولة القيود البيئة الاجتماعية والثقافية (الثقافية ( ) طريق تحقيق الأهداف التنظيمية.	1	2	3	4	5
42.	Recognizes the abilities and skills of other members in the organization. يدرك ومهارات الآخرين .	1	2	3	4	5
43.	Recognizes the limitations of other members of the organization. يدرك الآخرين .	1	2	3	4	5
44.	Influences others by developing mutual liking and respect. يؤثر الآخرين بتطوير .	1	2	3	4	5
45.	Shows sensitivity to the needs and feelings of the other members of the organization. يظهر الميل لاحتياجات الآخرين .	1	2	3	4	5
46.	Often expresses personal concern for the needs and feelings of other members of the organization. كثيراً يعرب قلقه لاحتياجات الآخرين .	1	2	3	4	5
47.	Takes high personal risks for the sake of the organization. يأخذ الشخصية العالية .	1	2	3	4	5
48.	Often incurs high personal cost for the good of the organization. يتحمل الشخصية العالية فيه خير .	1	2	3	4	5
49.	In pursuing organizational objectives, engages in activities involving considerable personal risk. شخصية تحقيق أهداف .	1	2	3	4	5
50.	Engages in unconventional behaviour in order to achieve organizational goals. يشترك غير تحقيق الأهداف التنظيمية.	1	2	3	4	5
51.	Uses non-traditional methods to achieve organizational goals. يستخدم أساليب غير تقليدية لتحقيق الأهداف التنظيمية .	1	2	3	4	5
52.	Often exhibits very unique behaviour that surprises other members of the organization. يتصرف كثير الأحيان فريد ليفاجئ المنظمة الآخرين.	1	2	3	4	5
Section C: Crisis management Stages الجزء C : مراحل إدارة الأزمات		**1** **Strongly Disagree** لا أوافق بشدة	**2** **Disagree** لا أوافق	**3** **Neither Agree or Disagree** محايد	**4** Agree أوافق	**5** **Strongly Agree** أوافق تماما
53.	There is a special unit in our organization to observe crises indicators. يوجد في منظمتنا قسم خاص لرصد مؤشرات وقوع الأزمات.	1	2	3	4	5

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54. The senior management is focused to collect and detect the signs of risks which are expected to be the crises indicators. تولي الإدارة العليا اهتماما .	1	2	3	4	5
55. There are interest in the process of classifying and analysing the crises indicators. هناك اهتمام بعمليات تصنيف وتبويب وتحليل مؤشرات حدوث الأزمات.	1	2	3	4	5
56. There are qualified crews working on rating and analysing the crises indicators. هناك طاقم وظيفي مؤهل ومدرب للقيام جمع وتحليل مؤشرات .	1	2	3	4	5
57. The internal and external workplace has been surveyed comprehensively and systematically to recognize the expected crises indicators.. يتم مسح بيئة العمل الداخلية والخارجية بصورة شاملة ومنتظمة للتعرف على .	1	2	3	4	5
58. The organization chart is complete and flexible to allow usefulness when dealing with occurred crises. يتسم الهيكل التنظيمي بمرونة كافية تساعد في التعامل مع الأزمات حال وقوعه .	1	2	3	4	5
59. An effective group has been designed to solve several expected crises. يتم تشكيل فرق مختلفة ومتعددة لحل العديد من الأزمات المحتملة.	1	2	3	4	5
60. Appropriate support is provided to assist responsible party to plan in diagnosing the expected crises. وفر منظمتنا الدعم المناسب للفريق الذي يقوم بالتخطيط لتشخيص الأزمات .	1	2	3	4	5
61. Clear management briefing has specified the process of dealing with the expected crises. يوجد تعليمات إدارية واضحة تحدد إجراءات التعامل مع الأزمات المحتملة.	1	2	3	4	5
62. We provide possible resources required (materials, human, technology, information) in preparing to face the expected crises. نوفر الإمكانيات المطلوبة (المادية, والبشرية، التقنية والمعلومات) لغرض الاستعداد لمواجهة الأزمات المحتملة.	1	2	3	4	5
63. Cooperative effort is available between institutions and government related agencies in crises' management area. هناك تعاون في إدارة الأزمات مع المؤسسات والجهات الحكومية ذات العلاقة.	1	2	3	4	5
64. There are sufficient programs and plans in crises' management area, supported by consistent auditing and improvement effort. تتوفر برامج وخطط كافية وجاهزة لإدارة الأزمات ويتم العمل علي مراجعتها وتطويرها	1	2	3	4	5
65. There are scheduled meetings to perform mock test in dealing with the expected crises. دورية وتجرى تجارب وهمية للتعامل مع الأزمات المحتملة.	1	2	3	4	5
66. Sufficient programs are made available in our organization in crises' management area. تتوفر في منظمتنا البرامج التدريبية الكافية في مجال إدارة الأزمات.	1	2	3	4	5
67. We have successfully control crises when arise and refrain it from spreading continuously in a timely manner. يتم السيطرة على الأزمة عند حدوثها والحد من انتشارها واستمرارها خلال فترة زمنية .	1	2	3	4	5
68. Fast action taken has resulted in reducing harmful effects of the crises. يتم التأثير في الاحداث واستخدام إجراءات الطوارئ التي تقلل وتحد من الاضرار التي تسببها الأزمة.	1	2	3	4	5
69. Time management is a crucial factor being taken into account when dealing with crises. يؤخذ عامل الوقت بعين الاعتبار عند التعامل مع الأزمات.	1	2	3	4	5
70. There is adequate capacity and fast action to mobilize the necessary material and human resources to contain the crisis.	1	2	3	4	5

هناك قدرة وسرعة مناسبة في تحريك الموارد المادية والبشرية الضرورية لاحتواء .					
71. Effective communication medium is available to detect factors effecting crises. هناك وسائل اتصال فعاله للتعرف على ما سببته ألازمه أو ما قد تسببه.	1	2	3	4	5
72. Top management responds to the distribution of tasks and powers over a short and appropriate period at the crisis time. تستجيب الادارة العليا لتوزيع المهام والصلاحيات خلال فترة قصيرة ومناسبة عند حدوث .	1	2	3	4	5
73. Special unit equipped with latest technology is available to detect factors and harmful effects of crises. يوجد في منظمتنا غرفة عمليات مناسبة مجهزة بالتقنيات الحديثة لاحتواء أسباب	1	2	3	4	5
74. Even when dealing in crises period, top management has taken appropriate action to ensure daily operational tasks is performed in timely manner as per usual practice. النشاطات الاعتيادية في ظروف الأزمات دون أي تأخير.	1	2	3	4	5
75. Top management is responsible to reduce the harmful effects of crises as well as stopping the crises from continuously occurring. تعمل الادارة على تخفيف آثار الأزمات والحد من استمرار حدوثها	1	2	3	4	5
76. In order to cure the effects, top management has provided various assistance to website affected by crisis. تقوم ا الادارة بتزويد المواقع المختلفة التي تتأثر بالازمة بالاحتياجات اللازمة لمعالجة تأثيراتها واستعادة النشاط الاعتيادي.	1	2	3	4	5
77. Top management has provided sufficient assistance to directors to solve crises. تتوسع الادارة في منح صلاحيات كافية للمديرين لحل الأزمة.	1	2	3	4	5
78. Benefits to future generation are expected based on lesson learnt from previous crises faced by top management. منها جهتها .	1	2	3	4	5
79. Top management is responsible to evaluate crises management and plan for future improvement. تتولي الادارة تقييم خطط وبرامج إدارة الازمات السابقة بقصد تطويرها الازمات المستقبلية	1	2	3	4	5
80. Top management is responsible to ensure lesson learnt from previous experience being collected for future benefits. تقوم الادارة بدمج الدروس المستفادة في خطط الازمات المستقبلية	1	2	3	4	5
81. Top management is responsible to learn from other agencies on method to deal with crises. تعمل الادارة على الاستفادة من أساليب معالجة الازمات في المنظمات الاخرى.	1	2	3	4	5

APPENDIX B:
Response Rate, Missing Data,
Outliers and Normality

Response Rate

	Total	Percentage
Questionnaire distributed	297	100%
Collected Questionnaire	286	96%
Uncollected Questionnaire	11	4%

Missing Values

Result Variables

	Result Variable	N of Replaced Missing Values	Case Number of Non-Missing Values		N of Valid Cases	Creating Function
			First	Last		
1	TFIIA1_1	1	1	286	286	SMEAN(TFIIA1)
2	TFIIA2_1	0	1	286	286	SMEAN(TFIIA2)
3	TFIIA3_1	0	1	286	286	SMEAN(TFIIA3)
4	TFIIA4_1	0	1	286	286	SMEAN(TFIIA4)
5	TFIIB5_1	0	1	286	286	SMEAN(TFIIB5)
6	TFIIB6_1	0	1	286	286	SMEAN(TFIIB6)
7	TFIIB7_1	0	1	286	286	SMEAN(TFIIB7)
8	TFIIB8_1	0	1	286	286	SMEAN(TFIIB8)
9	TFIM9_1	0	1	286	286	SMEAN(TFIM9)
10	TFIM10_1	0	1	286	286	SMEAN(TFIM10)
11	TFIM11_1	0	1	286	286	SMEAN(TFIM11)
12	TFIM12_1	0	1	286	286	SMEAN(TFIM12)
13	TFIS13_1	0	1	286	286	SMEAN(TFIS13)
14	TFIS14_1	0	1	286	286	SMEAN(TFIS14)
15	TFIS15_1	0	1	286	286	SMEAN(TFIS15)
16	TFIS16_1	0	1	286	286	SMEAN(TFIS16)
17	TFIC17_1	0	1	286	286	SMEAN(TFIC17)
18	TFIC18_1	0	1	286	286	SMEAN(TFIC18)
19	TFIC19_1	0	1	286	286	SMEAN(TFIC19)

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20	TFIC20_1	0	1	286	286	SMEAN(TFIC20)
21	TSCR1_1	0	1	286	286	SMEAN(TSCR1)
22	TSCR2_1	0	1	286	286	SMEAN(TSCR2)
23	TSCR3_1	0	1	286	286	SMEAN(TSCR3)
24	TSCR4_1	0	1	286	286	SMEAN(TSCR4)
25	TSMBEA5_1	0	1	286	286	SMEAN(TSMBEA5)
26	TSMBEA6_1	1	1	286	286	SMEAN(TSMBEA6)
27	TSMBEA7_1	0	1	286	286	SMEAN(TSMBEA7)
28	TSMBEA8_1	0	1	286	286	SMEAN(TSMBEA8)
29	TSMBEP9_1	0	1	286	286	SMEAN(TSMBEP9)
30	TSMBEP10_1	0	1	286	286	SMEAN(TSMBEP10)
31	TSMBEP11_1	0	1	286	286	SMEAN(TSMBEP11)
32	TSMBEP12_1	0	1	286	286	SMEAN(TSMBEP12)
33	CHSVA1_1	0	1	286	286	SMEAN(CHSVA1)
34	CHSVA2_1	0	1	286	286	SMEAN(CHSVA2)
35	CHSVA3_1	1	1	286	286	SMEAN(CHSVA3)
36	CHSVA4_1	0	1	286	286	SMEAN(CHSVA4)
37	CHSVA5_1	0	1	286	286	SMEAN(CHSVA5)
38	CHSVA6_1	1	1	286	286	SMEAN(CHSVA6)
39	CHSE7_1	1	1	286	286	SMEAN(CHSE7)
40	CHSE8_1	0	1	286	286	SMEAN(CHSE8)
41	CHSE9_1	0	1	286	286	SMEAN(CHSE9)
42	CHSE10_1	0	1	286	286	SMEAN(CHSE10)
43	CHSE11_1	1	1	286	286	SMEAN(CHSE11)
44	CHSMN12_1	0	1	286	286	SMEAN(CHSMN12)
45	CHSMN13_1	0	1	286	286	SMEAN(CHSMN13)
46	CHSMN14_1	1	1	286	286	SMEAN(CHSMN14)
47	CHPR15_1	0	1	286	286	SMEAN(CHPR15)
48	CHPR16_1	0	1	286	286	SMEAN(CHPR16)
49	CHPR17_1	1	1	286	286	SMEAN(CHPR17)
50	CHUB18_1	1	1	286	286	SMEAN(CHUB18)
51	CHUB19_1	0	1	286	286	SMEAN(CHUB19)
52	CHUB20_1	1	1	286	286	SMEAN(CHUB20)
53	CMSD1_1	0	1	286	286	SMEAN(CMSD1)
54	CMSD2_1	0	1	286	286	SMEAN(CMSD2)
55	CMSD3_1	0	1	286	286	SMEAN(CMSD3)
56	CMSD4_1	0	1	286	286	SMEAN(CMSD4)
57	CMSD5_1	0	1	286	286	SMEAN(CMSD5)
58	CMPP6_1	0	1	286	286	SMEAN(CMPP6)
59	CMPP7_1	0	1	286	286	SMEAN(CMPP7)
60	CMPP8_1	0	1	286	286	SMEAN(CMPP8)
61	CMPP9_1	0	1	286	286	SMEAN(CMPP9)
62	CMPP10_1	0	1	286	286	SMEAN(CMPP10)
63	CMPP11_1	0	1	286	286	SMEAN(CMPP11)
64	CMPP12_1	0	1	286	286	SMEAN(CMPP12)
65	CMPP13_1	0	1	286	286	SMEAN(CMPP13)
66	CMPP14_1	0	1	286	286	SMEAN(CMPP14)
67	CMDC15_1	0	1	286	286	SMEAN(CMDC15)
68	CMDC16_1	0	1	286	286	SMEAN(CMDC16)
69	CMDC17_1	0	1	286	286	SMEAN(CMDC17)
70	CMDC18_1	0	1	286	286	SMEAN(CMDC18)
71	CMDC19_1	0	1	286	286	SMEAN(CMDC19)
72	CMDC20_1	0	1	286	286	SMEAN(CMDC20)
73	CMDC21_1	0	1	286	286	SMEAN(CMDC21)
74	CMBR22_1	0	1	286	286	SMEAN(CMBR22)

75	CMBR23_1	0	1	286	286	SMEAN(CMBR23)
76	CMBR24_1	0	1	286	286	SMEAN(CMBR24)
77	CMBR25_1	0	1	286	286	SMEAN(CMBR25)
78	CMLR26_1	0	1	286	286	SMEAN(CMLR26)
79	CMLR27_1	0	1	286	286	SMEAN(CMLR27)
80	CMLR28_1	0	1	286	286	SMEAN(CMLR28)
81	CMLR29_1	0	1	286	286	SMEAN(CMLR29)

Outliers
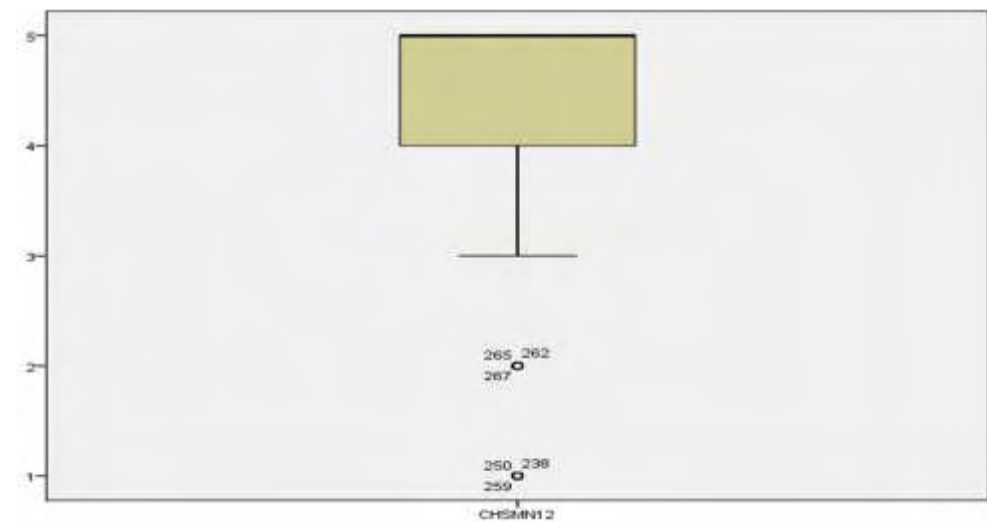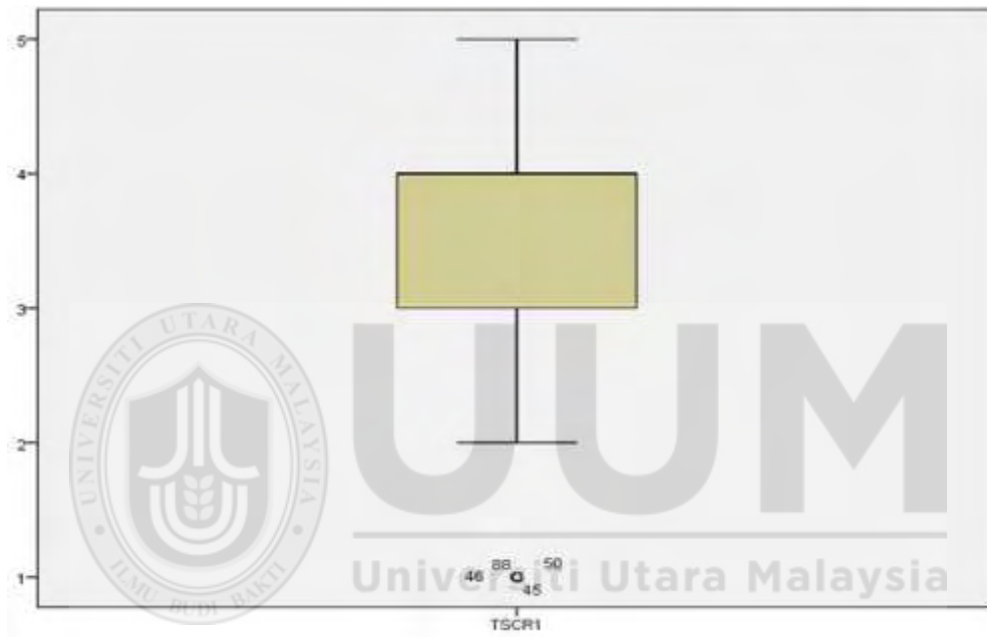
Normality Transformational

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Transformational	273	1.00	5.00	3.8031	.73701	-.854	.147	.871	.294
Valid N (listwise)	273								

Histogram

Dependent Variable: CrisisManagement

Mean = -2.15E-15
Std. Dev. = 0.998
N = 273
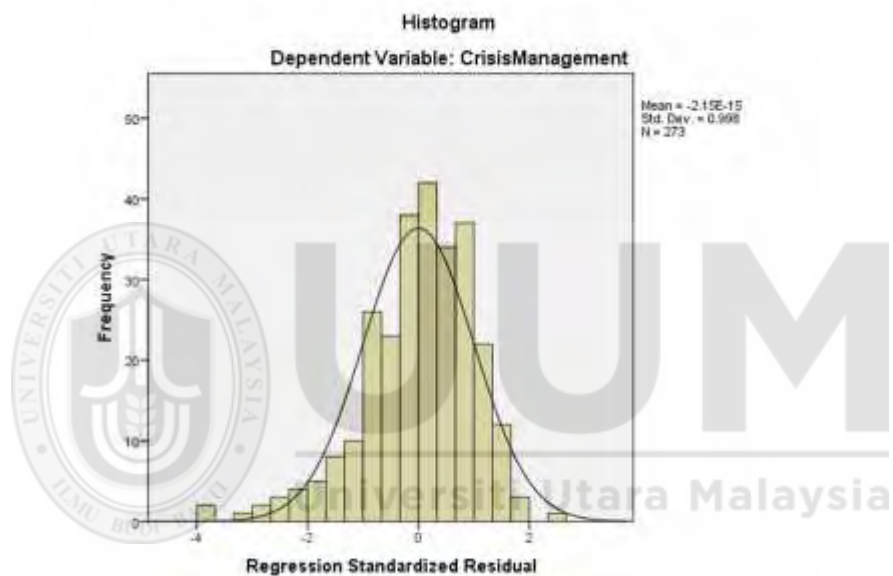
Normality Transactional

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Transactional	273	1.10	5.00	3.8341	.86843	-.628	.147	-.349	.294
Valid N (listwise)	273								

Histogram
Dependent Variable: CrisisManagement

Mean = -1.97E-15
Std. Dev. = 0.998
N = 273
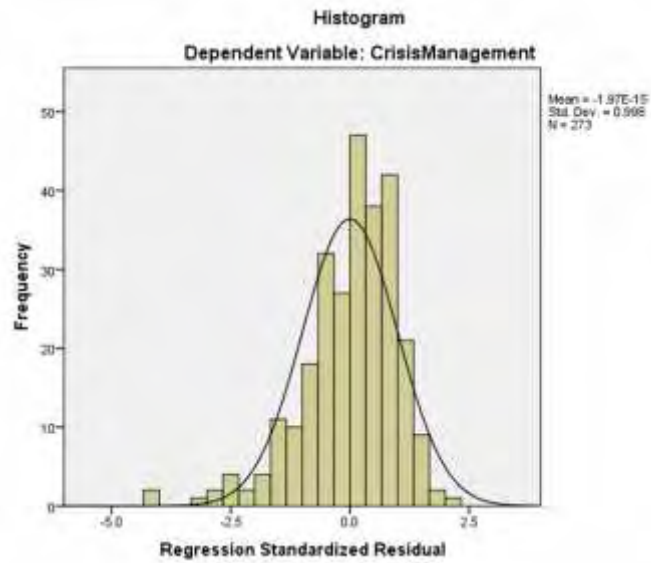
Normality Charisma

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Charisma	273	1.31	5.00	3.9293	.72108	-.695	.147	.403	.294
Valid N (listwise)	273								

Histogram
Dependent Variable: CrisisManagement

Mean = -2.39E-15
Std. Dev. = 0.998
N = 273
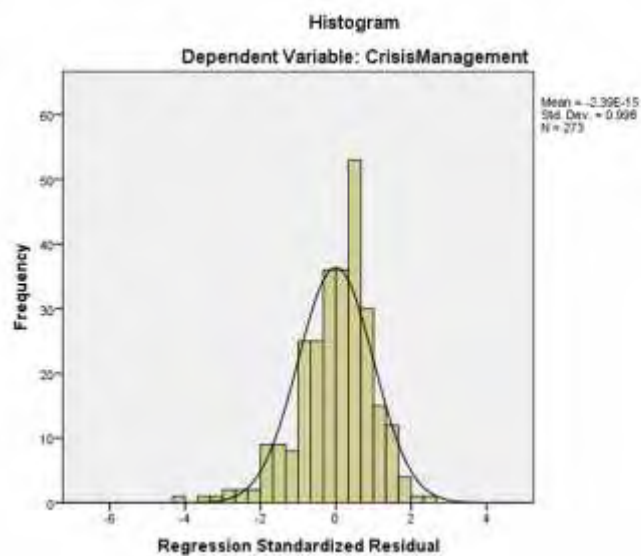
Normality Crisis Management

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Crisis Management	273	1.10	5.00	3.8345	.86142	-.711	.147	.048	.294
Valid N (listwise)	273								

APPENDIX C:
Factor Analysis Transformational
Leadership style

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.903
Bartlett's Test of Sphericity	Approx. Chi-Square	1789.838
	df	190
	Sig.	.000

Communalities

	Initial	Extraction
TFIIA1	1.000	.242
TFIIA2	1.000	.434
TFIIA3	1.000	.359
TFIIA4	1.000	.419
TFIIB5	1.000	.371
TFIIB6	1.000	.508
TFIIB7	1.000	.373
TFIIB8	1.000	.363
TFIM9	1.000	.428
TFIM10	1.000	.371
TFIM11	1.000	.395
TFIM12	1.000	.294
TFIS13	1.000	.396
TFIS14	1.000	.364
TFIS15	1.000	.425
TFIS16	1.000	.323
TFIC17	1.000	.157
TFIC18	1.000	.244
TFIC19	1.000	.184
TFIC20	1.000	.148

Extraction Method: Principal

Component Analysis.

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Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.799	33.996	33.996	6.799	33.996	33.996
2	1.532	7.662	41.658			
3	1.145	5.727	47.385			
4	1.012	5.062	52.447			
5	.956	4.778	57.224			
6	.894	4.468	61.693			
7	.846	4.228	65.920			
8	.787	3.937	69.857			
9	.759	3.797	73.654			
10	.689	3.444	77.097			
11	.610	3.052	80.149			
12	.583	2.917	83.067			
13	.538	2.692	85.758			
14	.526	2.631	88.389			
15	.463	2.317	90.706			
16	.436	2.179	92.886			
17	.394	1.971	94.856			
18	.370	1.851	96.707			
19	.354	1.771	98.478			
20	.304	1.522	100.000			

Extraction Method: Principal Component Analysis.

Component Matrix[a]

	Component
	1
TFIIA1	.492
TFIIA2	.659
TFIIA3	.599
TFIIA4	.648
TFIIB5	.609

TFIIB6	.713
TFIIB7	.611
TFIIB8	.602
TFIM9	.654
TFIM10	.609
TFIM11	.629
TFIM12	.542
TFIS13	.629
TFIS14	.604
TFIS15	.652
TFIS16	.568
TFIC17	.396
TFIC18	.494
TFIC19	.429
TFIC20	.384

Extraction Method:
Principal Component
Analysis.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.909
Bartlett's Test of Sphericity	Approx. Chi-Square	1507.391
	df	120
	Sig.	.000

Communalities

	Initial	Extraction
TFIIA1	1.000	.263
TFIIA2	1.000	.476
TFIIA3	1.000	.378
TFIIA4	1.000	.436
TFIIB5	1.000	.391
TFIIB6	1.000	.518

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TFIIB7	1.000	.383
TFIIB8	1.000	.360
TFIM9	1.000	.433
TFIM10	1.000	.379
TFIM11	1.000	.405
TFIM12	1.000	.309
TFIS13	1.000	.393
TFIS14	1.000	.351
TFIS15	1.000	.436
TFIS16	1.000	.294

Extraction Method: Principal

Component Analysis.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.206	38.785	38.785	6.206	38.785	38.785
2	1.239	7.745	46.531			
3	1.001	6.257	52.788			
4	.878	5.485	58.273			
5	.849	5.307	63.581			
6	.820	5.127	68.707			
7	.737	4.606	73.314			
8	.634	3.964	77.278			
9	.560	3.503	80.781			
10	.558	3.489	84.269			
11	.533	3.332	87.601			
12	.474	2.964	90.565			
13	.426	2.661	93.225			
14	.391	2.441	95.666			
15	.379	2.370	98.037			
16	.314	1.963	100.000			

Extraction Method: Principal Component Analysis.

Scree Plot
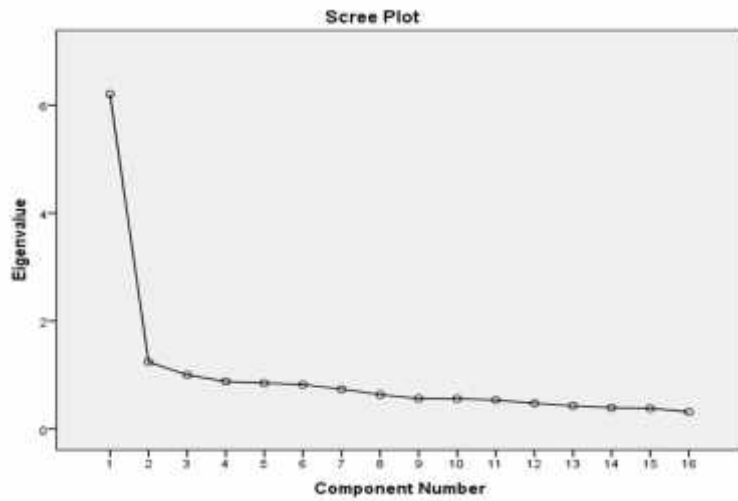
Component Matrix^a

Component Matrix[a]

	Component
	1
TFIIA1	.513
TFIIA2	.690
TFIIA3	.615
TFIIA4	.660
TFIIB5	.626
TFIIB6	.720
TFIIB7	.619
TFIIB8	.600
TFIM9	.658
TFIM10	.615
TFIM11	.636
TFIM12	.556
TFIS13	.627
TFIS14	.593
TFIS15	.660
TFIS16	.543

Extraction Method:
Principal Component
Analysis.

   a. 1 components
      extracted.

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APPENDIX D:
Factor Analysis Transactional
Leadership style

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.892
Bartlett's Test of Sphericity	Approx. Chi-Square	1630.841
	df	66
	Sig.	.000

Communalities

	Initial	Extraction
TSCR1	1.000	.498
TSCR2	1.000	.668
TSCR3	1.000	.746
TSCR4	1.000	.671
TSMBEA5	1.000	.591
TSMBEA6	1.000	.525
TSMBEA7	1.000	.602
TSMBEA8	1.000	.456
TSMBEP9	1.000	.425
TSMBEP10	1.000	.070
TSMBEP11	1.000	.033
TSMBEP12	1.000	.348

Extraction Method: Principal Component
Analysis.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.633	46.940	46.940	5.633	46.940	46.940
2	1.591	13.259	60.200			
3	.873	7.276	67.476			
4	.767	6.391	73.866			
5	.588	4.902	78.768			
6	.496	4.134	82.903			
7	.451	3.756	86.658			
8	.413	3.440	90.098			
9	.375	3.127	93.226			
10	.335	2.791	96.017			
11	.290	2.415	98.432			
12	.188	1.568	100.000			

Extraction Method: Principal Component Analysis.

Component Matrix[a]

	Component
	1
TSCR1	.706
TSCR2	.817
TSCR3	.864
TSCR4	.819
TSMBEA5	.769
TSMBEA6	.724
TSMBEA7	.776
TSMBEA8	.675

TSMBEP9	.652
TSMBEP10	.265
TSMBEP11	.180
TSMBEP12	.590

Extraction Method: Principal
Component Analysis.
a. 1 components extracted.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.915
Bartlett's Test of Sphericity	Approx. Chi-Square	1483.297
	df	45
	Sig.	.000

Communalities

	Initial	Extraction
TSCR1	1.000	.508
TSCR2	1.000	.677
TSCR3	1.000	.753
TSCR4	1.000	.681
TSMBEA5	1.000	.592
TSMBEA6	1.000	.529
TSMBEA7	1.000	.597
TSMBEA8	1.000	.450
TSMBEP9	1.000	.417
TSMBEP12	1.000	.352

Extraction Method: Principal Component
Analysis.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.557	55.571	55.571	5.557	55.571	55.571
2	.934	9.342	64.913			
3	.747	7.472	72.385			
4	.588	5.877	78.262			
5	.496	4.965	83.227			
6	.449	4.491	87.718			
7	.386	3.863	91.581			
8	.352	3.522	95.103			
9	.300	3.002	98.105			
10	.189	1.895	100.000			

Extraction Method: Principal Component Analysis.

Scree Plot
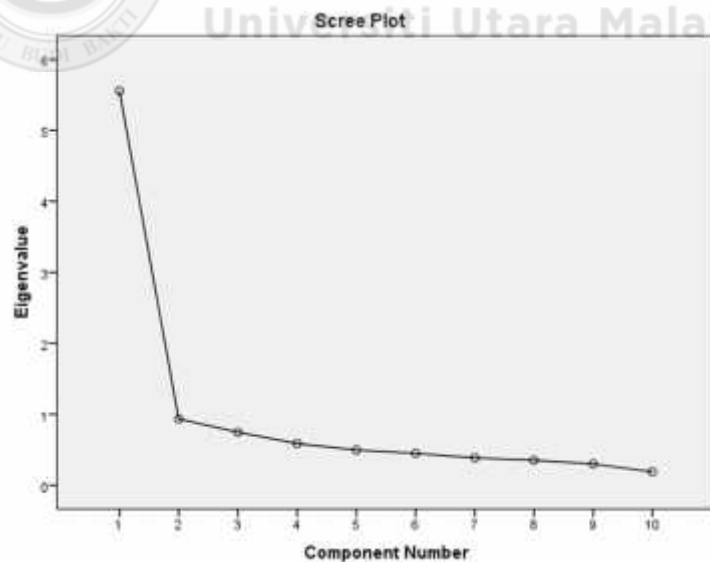
Component Matrix^a

	Component
	1
TSCR1	.713
TSCR2	.823
TSCR3	.868
TSCR4	.825
TSMBEA5	.770
TSMBEA6	.727
TSMBEA7	.773
TSMBEA8	.671
TSMBEP9	.645
TSMBEP12	.594

Extraction Method: Principal
Component Analysis.
a. 1 components extracted.

152
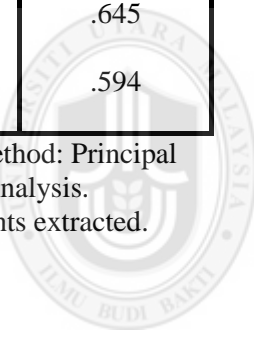
APPENDIX E:
Factor Analysis Charisma
Leadership style

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.898
	Approx. Chi-Square	2213.720
Bartlett's Test of Sphericity	df	190
	Sig.	.000

Communalities

	Initial	Extraction
CHSVA1	1.000	.389
CHSVA2	1.000	.342
CHSVA3	1.000	.281
CHSVA4	1.000	.335
CHSVA5	1.000	.301
CHSVA6	1.000	.495
CHSE7	1.000	.527
CHSE8	1.000	.466
CHSE9	1.000	.276
CHSE10	1.000	.199
CHSE11	1.000	.170
CHSMN12	1.000	.479
CHSMN13	1.000	.390
CHSMN14	1.000	.297
CHPR15	1.000	.240
CHPR16	1.000	.266
CHPR17	1.000	.370
CHUB18	1.000	.437

CHUB19	1.000	.446
CHUB20	1.000	.453

Extraction Method: Principal Component
Analysis.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.160	35.800	35.800	7.160	35.800	35.800
2	1.672	8.359	44.159			
3	1.424	7.122	51.281			
4	1.265	6.326	57.607			
5	.963	4.813	62.420			
6	.827	4.136	66.556			
7	.788	3.938	70.494			
8	.738	3.688	74.182			
9	.635	3.177	77.359			
10	.581	2.903	80.263			
11	.543	2.716	82.979			
12	.528	2.642	85.621			
13	.523	2.613	88.234			
14	.427	2.133	90.367			
15	.403	2.016	92.382			
16	.378	1.888	94.270			
17	.347	1.736	96.007			
18	.299	1.496	97.502			
19	.262	1.311	98.813			

20	.237	1.187	100.000			

Extraction Method: Principal Component Analysis.

Component Matrix^a

	Component
	1
CHSVA1	.624
CHSVA2	.585
CHSVA3	.530
CHSVA4	.579
CHSVA5	.548
CHSVA6	.704
CHSE7	.726
CHSE8	.683
CHSE9	.526
CHSE10	.447
CHSE11	.412
CHSMN12	.692
CHSMN13	.625
CHSMN14	.545
CHPR15	.490
CHPR16	.515
CHPR17	.608
CHUB18	.661
CHUB19	.668
CHUB20	.673

Extraction Method: Principal
Component Analysis.
a. 1 components extracted.

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KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.904
Bartlett's Test of Sphericity	Approx. Chi-Square	1912.194
	df	136
	Sig.	.000

Communalities

|	Initial	Extraction
CHSVA1	1.000	.398
CHSVA2	1.000	.362
CHSVA3	1.000	.306
CHSVA4	1.000	.364
CHSVA5	1.000	.323
CHSVA6	1.000	.505
CHSE7	1.000	.523
CHSE8	1.000	.465
CHSE9	1.000	.262
CHSMN12	1.000	.459
CHSMN13	1.000	.373
CHSMN14	1.000	.291
CHPR16	1.000	.238
CHPR17	1.000	.379
CHUB18	1.000	.453
CHUB19	1.000	.459
CHUB20	1.000	.474

Extraction Method: Principal Component
Analysis.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.634	39.022	39.022	6.634	39.022	39.022
2	1.644	9.672	48.694			
3	1.055	6.207	54.901			
4	.996	5.856	60.757			
5	.860	5.061	65.818			
6	.770	4.532	70.350			
7	.757	4.452	74.802			
8	.653	3.840	78.642			
9	.554	3.260	81.902			
10	.527	3.098	85.000			
11	.521	3.063	88.063			
12	.433	2.550	90.613			
13	.396	2.330	92.943			
14	.379	2.227	95.170			
15	.317	1.867	97.037			
16	.263	1.546	98.583			
17	.241	1.417	100.000			

Extraction Method: Principal Component Analysis.

Component Matrix[a]

	Component
	1
CHSVA1	.631
CHSVA2	.602
CHSVA3	.554

CHSVA4	.603
CHSVA5	.568
CHSVA6	.710
CHSE7	.723
CHSE8	.682
CHSE9	.512
CHSMN12	.677
CHSMN13	.611
CHSMN14	.539
CHPR16	.488
CHPR17	.616
CHUB18	.673
CHUB19	.677
CHUB20	.688

Extraction Method: Principal
Component Analysis.
a. 1 components extracted.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.900
Bartlett's Test of Sphericity	Approx. Chi-Square	1845.570
	df	120
	Sig.	.000

Communalities

	Initial	Extraction
CHSVA1	1.000	.396
CHSVA2	1.000	.370
CHSVA3	1.000	.312

CHSVA4	1.000	.370
CHSVA5	1.000	.325
CHSVA6	1.000	.514
CHSE7	1.000	.523
CHSE8	1.000	.463
CHSE9	1.000	.265
CHSMN12	1.000	.456
CHSMN13	1.000	.374
CHSMN14	1.000	.284
CHPR17	1.000	.383
CHUB18	1.000	.458
CHUB19	1.000	.460
CHUB20	1.000	.473

Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.424	40.150	40.150	6.424	40.150	40.150
2	1.643	10.267	50.417			
3	1.022	6.387	56.804			
4	.993	6.209	63.013			
5	.818	5.114	68.127			
6	.765	4.781	72.908			
7	.665	4.159	77.067			
8	.562	3.513	80.580			
9	.541	3.380	83.960			

10	.525	3.279	87.239			
11	.436	2.723	89.962			
12	.398	2.489	92.451			
13	.382	2.387	94.838			
14	.318	1.985	96.823			
15	.265	1.657	98.480			
16	.243	1.520	100.000			

Extraction Method: Principal Component Analysis.

Scree Plot
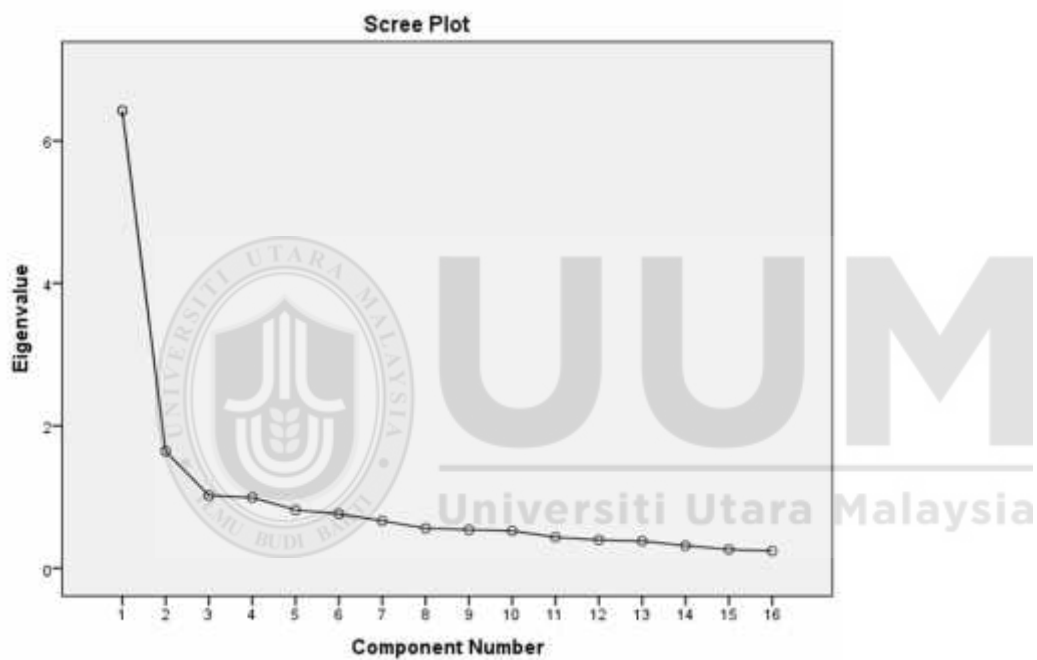
Component Matrix^a

	Component
	1
CHSVA1	.629
CHSVA2	.608
CHSVA3	.558
CHSVA4	.608
CHSVA5	.570

CHSVA6	.717
CHSE7	.723
CHSE8	.680
CHSE9	.515
CHSMN12	.675
CHSMN13	.612
CHSMN14	.533
CHPR17	.619
CHUB18	.677
CHUB19	.678
CHUB20	.688

Extraction Method: Principal
Component Analysis.
a. 1 components extracted.
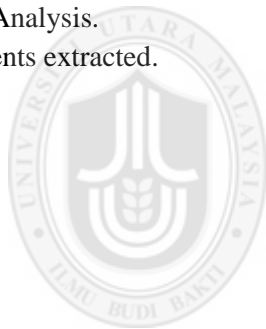
APPENDIX F:
Factor Analysis Crisis Management

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.959
Bartlett's Test of Sphericity	Approx. Chi-Square	7001.920
	df	406
	Sig.	.000

Communalities

	Initial	Extraction
CMSD1	1.000	.349
CMSD2	1.000	.306
CMSD3	1.000	.269
CMSD4	1.000	.277
CMSD5	1.000	.297
CMPP6	1.000	.280
CMPP7	1.000	.651
CMPP8	1.000	.676
CMPP9	1.000	.660
CMPP10	1.000	.567
CMPP11	1.000	.468
CMPP12	1.000	.727
CMPP13	1.000	.704
CMPP14	1.000	.700
CMDC15	1.000	.689
CMDC16	1.000	.493
CMDC17	1.000	.581
CMDC18	1.000	.664

CMDC19	1.000	.680
CMDC20	1.000	.674
CMDC21	1.000	.607
CMBR22	1.000	.481
CMBR23	1.000	.562
CMBR24	1.000	.574
CMBR25	1.000	.665
CMLR26	1.000	.619
CMLR27	1.000	.649
CMLR28	1.000	.601
CMLR29	1.000	.308

Extraction Method: Principal Component
Analysis.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	15.777	54.402	54.402	15.777	54.402	54.402
2	2.340	8.071	62.472			
3	1.124	3.877	66.350			
4	1.005	3.464	69.814			
5	.828	2.856	72.669			
6	.786	2.709	75.378			
7	.719	2.480	77.858			
8	.642	2.215	80.074			
9	.532	1.833	81.907			
10	.520	1.792	83.699			
11	.446	1.539	85.238			
12	.395	1.361	86.599			
13	.361	1.244	87.843			
14	.354	1.221	89.064			
15	.324	1.116	90.180			
16	.314	1.084	91.264			
17	.302	1.042	92.307			
18	.284	.978	93.285			
19	.256	.883	94.168			

20	.247	.852	95.019				
21	.221	.762	95.781				
22	.206	.710	96.491				
23	.199	.685	97.176				
24	.173	.597	97.773				
25	.150	.517	98.291				
26	.136	.470	98.761				
27	.129	.446	99.207				
28	.120	.413	99.620				
29	.110	.380	100.000				

Extraction Method: Principal Component Analysis.
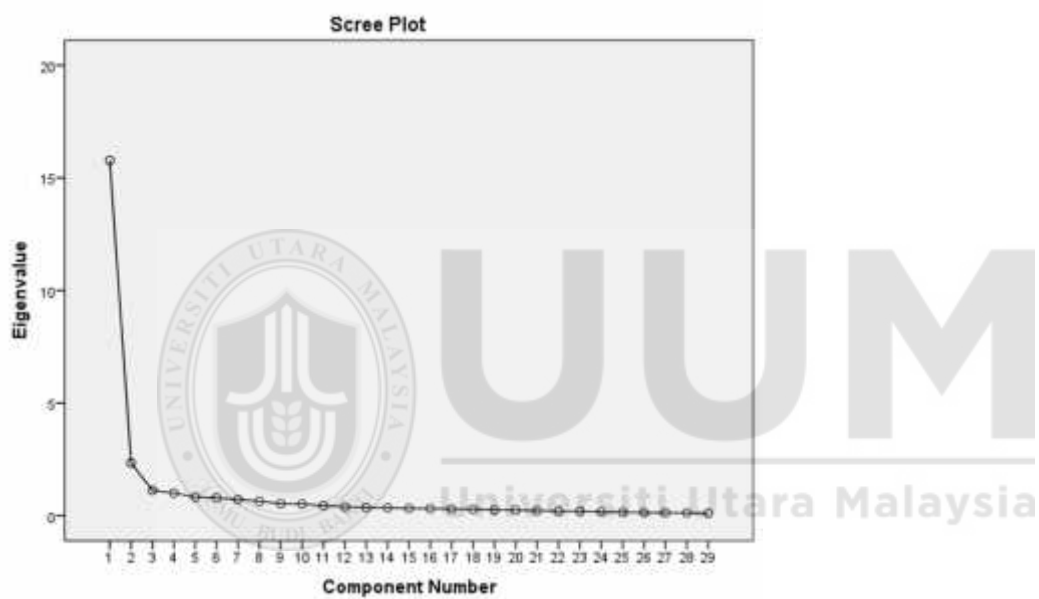
Component Matrix[a]

	Component
	1
CMSD1	.590
CMSD2	.553
CMSD3	.519
CMSD4	.527
CMSD5	.545
CMPP6	.530
CMPP7	.807
CMPP8	.822

CMPP9	.812
CMPP10	.753
CMPP11	.684
CMPP12	.853
CMPP13	.839
CMPP14	.836
CMDC15	.830
CMDC16	.702
CMDC17	.762
CMDC18	.815
CMDC19	.824
CMDC20	.821
CMDC21	.779
CMBR22	.694
CMBR23	.749
CMBR24	.758
CMBR25	.815
CMLR26	.787
CMLR27	.805
CMLR28	.775
CMLR29	.555
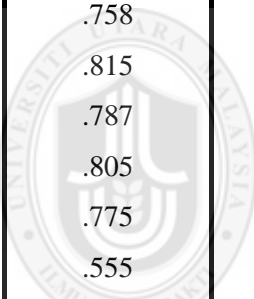
Extraction Method: Principal
Component Analysis.
a. 1 components extracted.

APPENDIX G:
Reliability

Reliability Transformational

Case Processing Summary

		N	%
Cases	Valid	273	100.0
	Excluded[a]	0	.0
	Total	273	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.895	20

Item Statistics

	Mean	Std. Deviation	N
TFIIA1	3.7729	1.13423	273
TFIIA2	3.8498	1.21092	273
TFIIA3	3.7802	1.25560	273
TFIIA4	3.8205	1.22205	273
TFIIB5	3.7729	1.14712	273
TFIIB6	3.7985	1.18495	273
TFIIB7	3.7839	1.16355	273
TFIIB8	3.7070	1.21957	273
TFIM9	3.8205	1.20386	273

TFIM10	3.7802	1.18634	273
TFIM11	3.7766	1.18720	273
TFIM12	3.8388	1.18027	273
TFIS13	3.8425	1.17921	273
TFIS14	3.8278	1.17089	273
TFIS15	3.7875	1.18147	273
TFIS16	3.8901	1.14837	273
TFIC17	3.7985	1.23360	273
TFIC18	3.8681	1.14925	273
TFIC19	3.8205	1.20080	273
TFIC20	3.7473	1.19059	273

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
TFIIA1	72.3114	173.973	.427	.892
TFIIA2	72.2344	168.114	.588	.888
TFIIA3	72.3040	169.176	.529	.889
TFIIA4	72.2637	168.173	.579	.888
TFIIB5	72.3114	170.561	.539	.889
TFIIB6	72.2857	166.749	.650	.886
TFIIB7	72.3004	170.211	.542	.889
TFIIB8	72.3773	169.464	.538	.889
TFIM9	72.2637	168.114	.592	.887
TFIM10	72.3040	169.742	.546	.889
TFIM11	72.3077	169.214	.564	.888
TFIM12	72.2454	171.884	.477	.891

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TFIS13	72.2418	169.199	.569	.888
TFIS14	72.2564	170.118	.542	.889
TFIS15	72.2967	168.680	.585	.888
TFIS16	72.1941	171.179	.517	.890
TFIC17	72.2857	175.050	.351	.895
TFIC18	72.2161	173.052	.452	.891
TFIC19	72.2637	174.283	.388	.893
TFIC20	72.3370	175.886	.340	.895

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
76.0842	188.033	13.71252	20

Reliability Transactional

Case Processing Summary

		N	%
Cases	Valid	273	100.0
	Excludeda	0	.0
	Total	273	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.870	12

Item Statistics

	Mean	Std. Deviation	N
TSCR1	3.6667	1.01218	273
TSCR2	3.9084	1.16428	273
TSCR3	3.9158	1.16168	273
TSCR4	3.9744	1.16129	273
TSMBEA5	3.8608	1.21072	273
TSMBEA6	3.8755	1.19399	273
TSMBEA7	3.7143	1.20616	273
TSMBEA8	3.7070	1.21655	273
TSMBEP9	3.8095	1.16961	273
TSMBEP10	3.1099	1.52275	273
TSMBEP11	2.6740	1.62470	273
TSMBEP12	3.9084	1.22281	273

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
TSCR1	40.4579	80.683	.583	.859
TSCR2	40.2161	76.633	.703	.851
TSCR3	40.2088	75.556	.763	.847
TSCR4	40.1502	76.584	.708	.850
TSMBEA5	40.2637	76.614	.672	.852
TSMBEA6	40.2491	77.813	.621	.855
TSMBEA7	40.4103	76.110	.701	.850
TSMBEA8	40.4176	77.957	.599	.857
TSMBEP9	40.3150	78.849	.582	.858

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TSMBEP10	41.0147	81.603	.305	.879
TSMBEP11	41.4505	83.197	.219	.887
TSMBEP12	40.2161	80.280	.481	.864

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
44.1245	92.315	9.60809	12

Reliability Charisma

Case Processing Summary

		N	%
Cases	Valid	273	100.0
	Excluded[a]	0	.0
	Total	273	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.902	20

Item Statistics

	Mean	Std. Deviation	N
CHSVA1	3.8022	1.22071	273
CHSVA2	3.7179	1.22367	273
CHSVA3	3.8791	1.15843	273

CHSVA4	3.9158	1.15533	273
CHSVA5	3.9890	1.08290	273
CHSVA6	4.0513	1.02053	273
CHSE7	4.1538	1.02817	273
CHSE8	4.0147	1.07091	273
CHSE9	3.9817	1.15509	273
CHSE10	3.9267	1.14490	273
CHSE11	3.9451	1.15392	273
CHSMN12	4.1429	1.15273	273
CHSMN13	4.0147	1.14073	273
CHSMN14	4.0256	1.14536	273
CHPR15	4.1136	1.16550	273
CHPR16	4.0989	1.13489	273
CHPR17	3.6593	1.23865	273
CHUB18	3.7143	1.23627	273
CHUB19	3.8864	1.18116	273
CHUB20	3.9194	1.10518	273

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
CHSVA1	75.1502	164.533	.568	.896
CHSVA2	75.2344	165.908	.521	.898
CHSVA3	75.0733	168.362	.470	.899
CHSVA4	75.0366	167.050	.517	.898
CHSVA5	74.9634	169.050	.483	.898
CHSVA6	74.9011	165.876	.643	.895
CHSE7	74.7985	165.125	.668	.894
CHSE8	74.9377	165.559	.621	.895
CHSE9	74.9707	168.396	.470	.899
CHSE10	75.0256	170.657	.396	.901
CHSE11	75.0073	171.507	.363	.902
CHSMN12	74.8095	163.493	.645	.894

CHSMN13	74.9377	165.823	.568	.896
CHSMN14	74.9267	168.075	.486	.898
CHPR15	74.8388	169.165	.439	.900
CHPR16	74.8535	168.831	.465	.899
CHPR17	75.2930	164.906	.546	.897
CHUB18	75.2381	163.520	.594	.895
CHUB19	75.0659	164.106	.606	.895
CHUB20	75.0330	165.231	.611	.895

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
78.9524	183.825	13.55821	20

Reliability Crisis Management

Case Processing Summary

		N	%
Cases	Valid	273	100.0
	Excluded[a]	0	.0
	Total	273	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.967	29

Item Statistics

	Mean	Std. Deviation	N
CMSD1	3.5751	1.28440	273
CMSD2	3.8571	1.24474	273
CMSD3	3.6300	1.29142	273
CMSD4	3.4689	1.36121	273
CMSD5	3.4579	1.33086	273

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	Mean	Std. Deviation	N
CMPP6	3.4322	1.34355	273
CMPP7	3.9560	1.10725	273
CMPP8	3.9744	1.11279	273
CMPP9	3.9927	1.11472	273
CMPP10	3.8718	1.16397	273
CMPP11	3.5714	1.36238	273
CMPP12	3.9780	1.14383	273
CMPP13	4.0256	1.12593	273
CMPP14	4.0952	1.07362	273
CMDC15	3.8901	1.22280	273
CMDC16	3.8535	1.16338	273
CMDC17	3.9194	1.08842	273
CMDC18	3.8974	1.14585	273
CMDC19	3.7363	1.21421	273
CMDC20	3.9707	1.11765	273
CMDC21	3.8571	1.18419	273
CMBR22	3.6337	1.31922	273
CMBR23	3.8974	1.15225	273
CMBR24	3.7582	1.20971	273
CMBR25	3.9304	1.14673	273
CMLR26	3.9377	1.09131	273
CMLR27	3.9707	1.12093	273
CMLR28	4.0256	1.14856	273
CMLR29	4.0366	1.03901	273
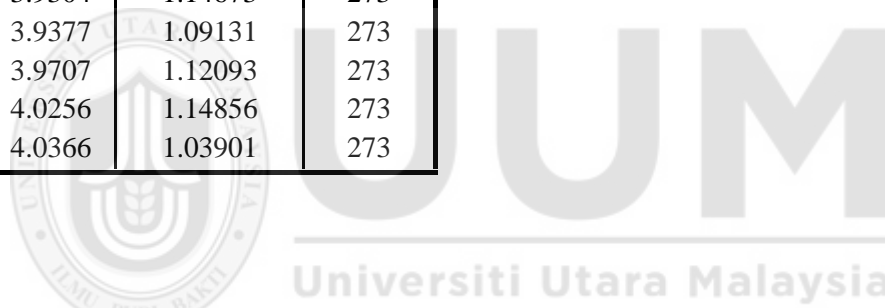
s

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
CMSD1	107.6264	585.404	.596	.967
CMSD2	107.3443	589.227	.551	.967
CMSD3	107.5714	589.275	.528	.968
CMSD4	107.7326	586.770	.537	.968
CMSD5	107.7436	586.780	.551	.968
CMPP6	107.7692	587.502	.534	.968
CMPP7	107.2454	581.318	.778	.966
CMPP8	107.2271	580.485	.790	.966
CMPP9	107.2088	580.960	.779	.966
CMPP10	107.3297	581.832	.728	.966
CMPP11	107.6300	579.065	.658	.967

CMPP12	107.2234	577.726	.819	.966
CMPP13	107.1758	578.998	.808	.966
CMPP14	107.1062	581.309	.804	.966
CMDC15	107.3114	575.524	.802	.966
CMDC16	107.3480	585.051	.669	.967
CMDC17	107.2821	584.409	.731	.966
CMDC18	107.3040	579.381	.786	.966
CMDC19	107.4652	576.036	.799	.966
CMDC20	107.2308	580.325	.789	.966
CMDC21	107.3443	579.697	.753	.966
CMBR22	107.5678	579.937	.667	.967
CMBR23	107.3040	582.529	.723	.966
CMBR24	107.4432	579.961	.732	.966
CMBR25	107.2711	579.470	.784	.966
CMLR26	107.2637	583.114	.754	.966
CMLR27	107.2308	581.237	.769	.966
CMLR28	107.1758	581.682	.741	.966
CMLR29	107.1648	595.881	.534	.967

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
111.2015	624.066	24.98131	29

APPENDIX H:
Correlations

		Crisis Management	Transformational	Transactional	Charisma
Crisis Management	Pearson Correlation	1	.561[**]	.698[**]	.649[**]
	Sig. (2-tailed)		.000	.000	.000
	N	273	273	273	273
Transformational	Pearson Correlation	.561[**]	1	.637[**]	.639[**]
	Sig. (2-tailed)	.000		.000	.000
	N	273	273	273	273
Transactional	Pearson Correlation	.698[**]	.637[**]	1	.787[**]
	Sig. (2-tailed)	.000	.000		.000
	N	273	273	273	273
Charisma	Pearson Correlation	.649[**]	.639[**]	.787[**]	1
	Sig. (2-tailed)	.000	.000	.000	
	N	273	273	273	273

**. Correlation is significant at the 0.01 level (2-tailed).

APPENDIX I:
Regression Transformational

Variables Entered/Removed a

Model	Variables Entered	Variables Removed	Method
1	Transformational b	.	Enter

a. Dependent Variable: CrisisManagement

b. All requested variables entered.

Model Summary b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.561a	.315	.313	.71422	1.662

a. Predictors: (Constant), Transformational

b. Dependent Variable: CrisisManagement

ANOVA a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	63.600	1	63.600	124.680	.000b
	Residual	138.238	271	.510		
	Total	201.838	272			

a. Dependent Variable: CrisisManagement

b. Predictors: (Constant), Transformational

Coefficients a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	1.339	.228		5.884	.000			
	Transformational	.656	.059	.561	11.166	.000	.561	.561	.561

a. Dependent Variable: Crisis Management

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.9954	4.6198	3.8345	.48355	273
Residual	-2.84349	1.85734	.00000	.71290	273
Std. Predicted Value	-3.803	1.624	.000	1.000	273
Std. Residual	-3.981	2.601	.000	.998	273

a. Dependent Variable: CrisisManagement
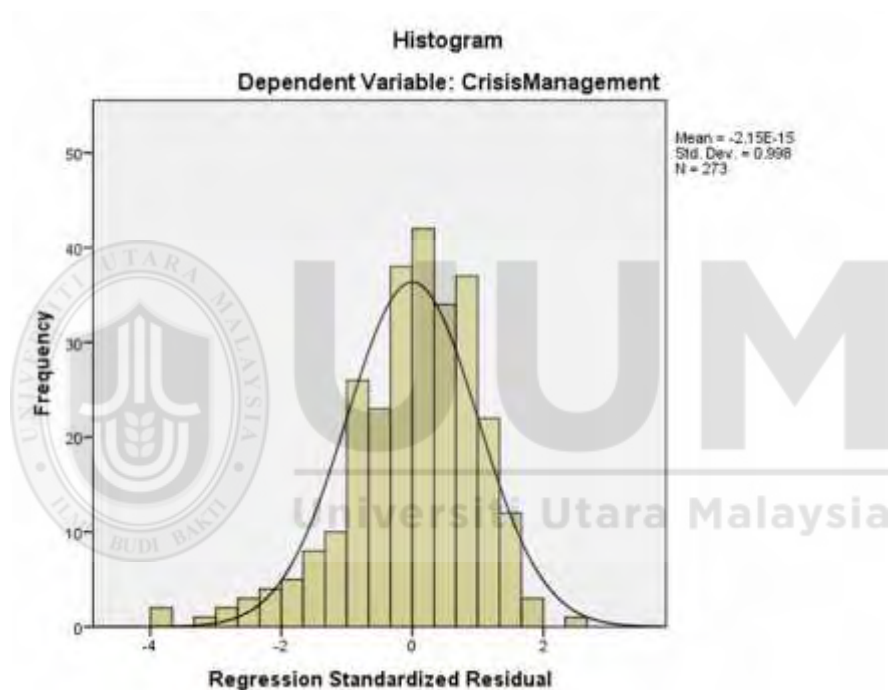
Charts

Histogram

Dependent Variable: CrisisManagement

Mean = -2.15E-15
Std. Dev. = 0.998
N = 273

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: CrisisManagement
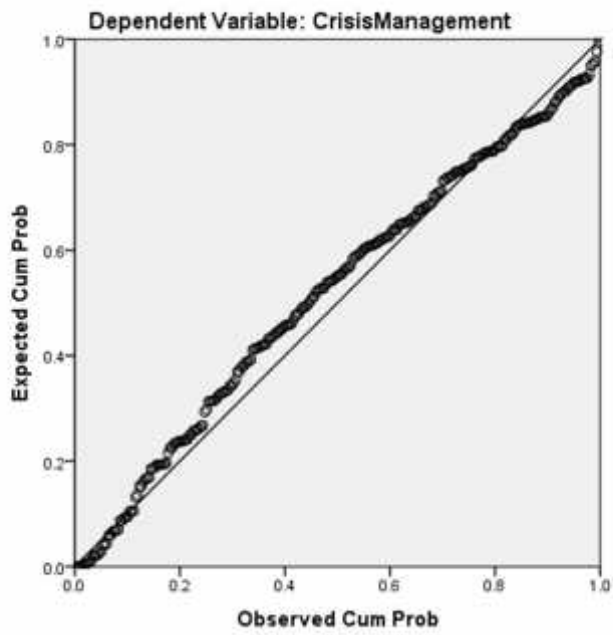
Scatterplot
Dependent Variable: CrisisManagement
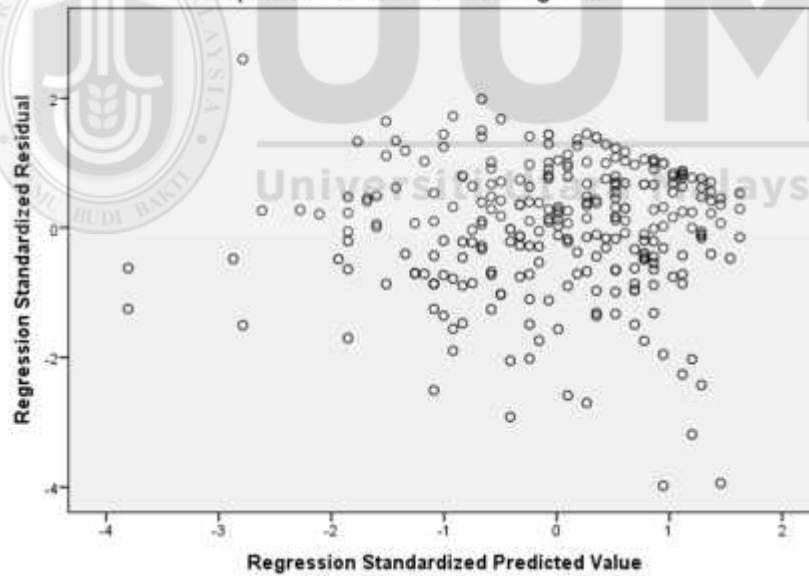
APPENDIX J:
Regression Transactional

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	Transactional[b]	.	Enter

a. Dependent Variable: CrisisManagement

b. All requested variables entered.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.698[a]	.488	.486	.61764	1.826

a. Predictors: (Constant), Transactional

b. Dependent Variable: CrisisManagement

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	98.456	1	98.456	258.087	.000[b]
	Residual	103.382	271	.381		
	Total	201.838	272			

a. Dependent Variable: CrisisManagement

b. Predictors: (Constant), Transactional

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	1.178	.170		6.951	.000			
	Transactional	.693	.043	.698	16.065	.000	.698	.698	.698

a. Dependent Variable: Crisis Management

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	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.9404	4.6423	3.8345	.60164	273
Residual	-2.67488	1.43453	.00000	.61651	273
Std. Predicted Value	-3.148	1.343	.000	1.000	273
Std. Residual	-4.331	2.323	.000	.998	273

a. Dependent Variable: CrisisManagement

Charts

Histogram
Dependent Variable: CrisisManagement

Mean = -1.97E-15
Std. Dev. = 0.998
N = 273

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: CrisisManagement

Scatterplot
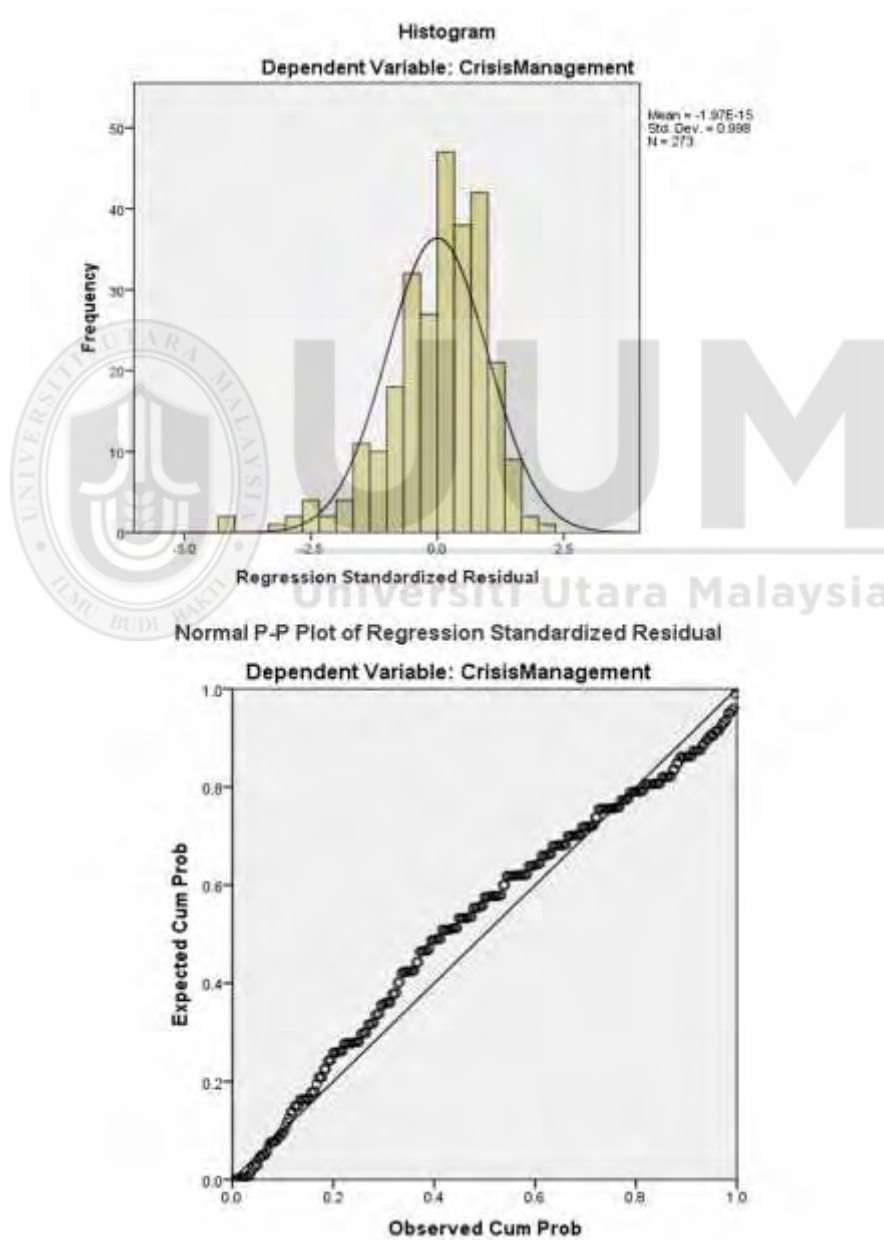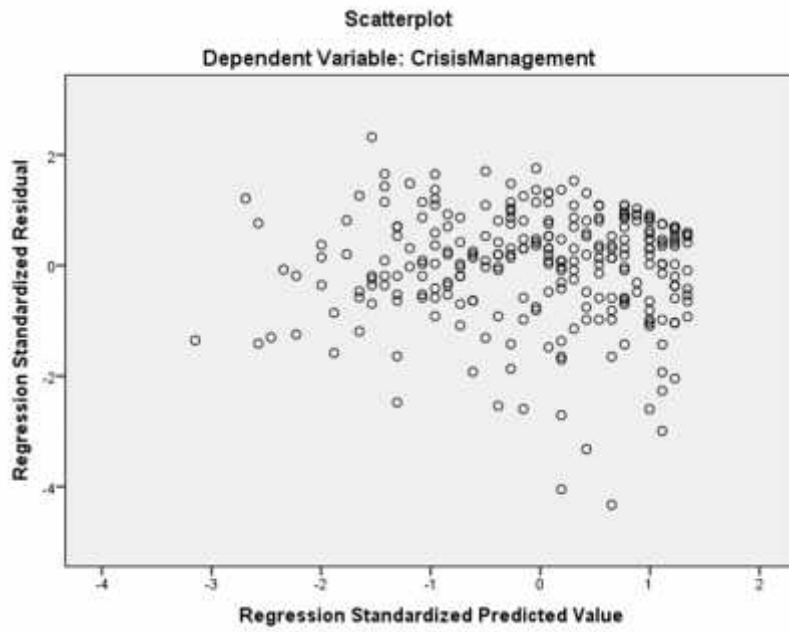
Dependent Variable: CrisisManagement

APPENDIX K:
Regression Charisma

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	Charisma[b]	.	Enter

a. Dependent Variable: CrisisManagement

b. All requested variables entered.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.649[a]	.422	.420	.65624	1.875

a. Predictors: (Constant), Charisma

b. Dependent Variable: CrisisManagement

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	85.132	1	85.132	197.684	.000[b]
	Residual	116.706	271	.431		
	Total	201.838	272			

a. Dependent Variable: CrisisManagement

b. Predictors: (Constant), Charisma

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	.786	.220		3.566	.000			
	Charisma	.776	.055	.649	14.060	.000	.649	.649	.649

a. Dependent Variable: Crisis Management

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.8043	4.6653	3.8345	.55945	273
Residual	-2.78058	1.71618	.00000	.65503	273
Std. Predicted Value	-3.629	1.485	.000	1.000	273
Std. Residual	-4.237	2.615	.000	.998	273

a. Dependent Variable: CrisisManagement

Charts

Scatterplot
Dependent Variable: CrisisManagement
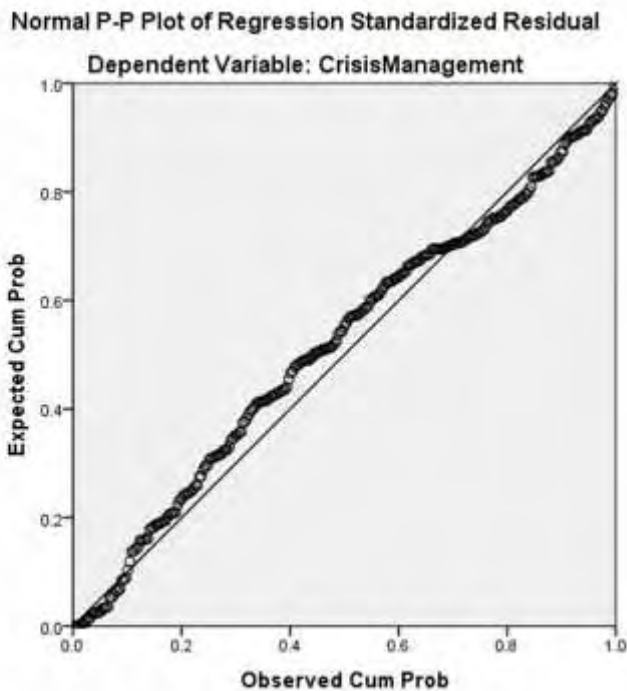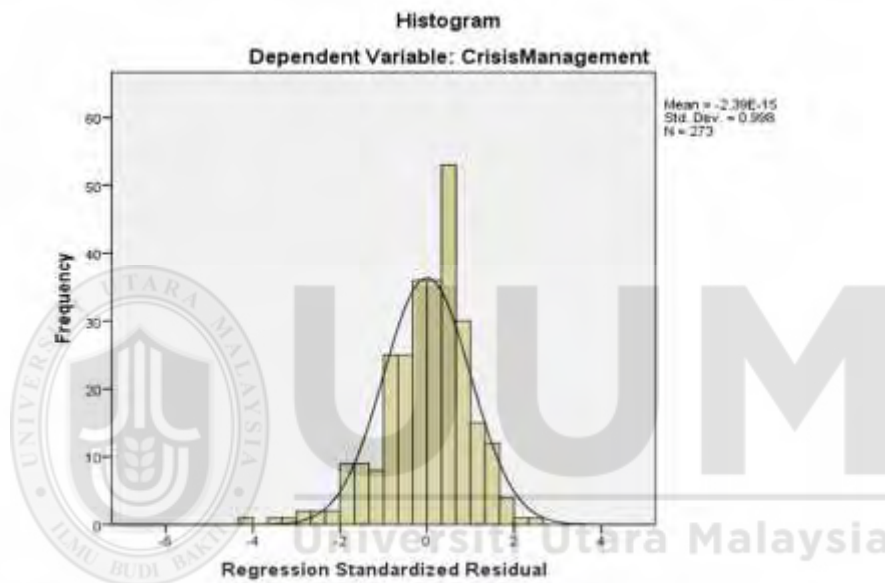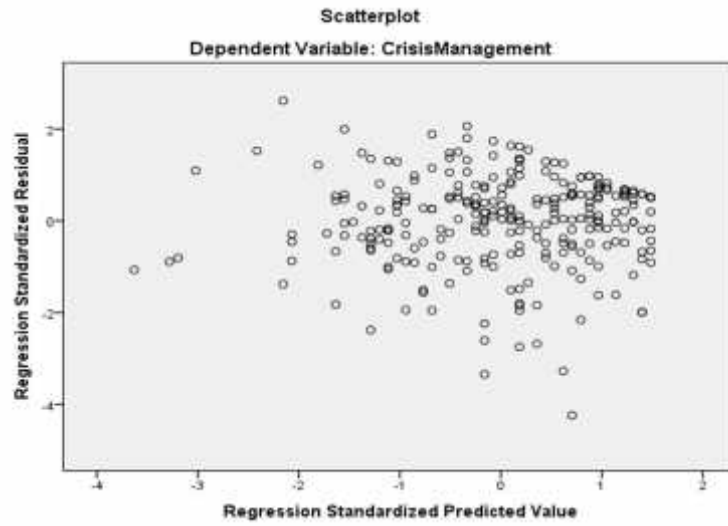
APPENDIX L:
Multiple Regression Result

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	Charisma, Transformational, Transactional[b]	.	Enter

a. Dependent Variable: CrisisManagement

b. All requested variables entered.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.725[a]	.526	.521	.59648	1.816

a. Predictors: (Constant), Charisma, Transformational, Transactional

b. Dependent Variable: CrisisManagement

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	106.130	3	35.377	99.430	.000[b]
	Residual	95.709	269	.356		
	Total	201.838	272			

a. Dependent Variable: CrisisManagement

b. Predictors: (Constant), Charisma, Transformational, Transactional

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	.525	.216		2.432	.016			
	Transformational	.173	.067	.148	2.594	.010	.561	.156	.109
	Transactional	.437	.070	.440	6.209	.000	.698	.354	.261
	Charisma	.249	.085	.208	2.931	.004	.649	.176	.123

a. Dependent Variable: CrisisManagement

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.5049	4.8170	3.8345	.62465	273
Residual	-2.70557	1.83438	.00000	.59319	273
Std. Predicted Value	-3.730	1.573	.000	1.000	273
Std. Residual	-4.536	3.075	.000	.994	273

a. Dependent Variable: CrisisManagement

Charts

Histogram
Dependent Variable: CrisisManagement

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Normal P-P Plot of Regression Standardized Residual
Dependent Variable: CrisisManagement

Scatterplot
Dependent Variable: CrisisManagement

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