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THE UNIVERSITY OF HONG KONG

**ORGANIZATIONAL CULTURE, CONFLICT
MANAGEMENT AND ORGANIZATIONAL COMMITMENT
IN HONG KONG CONSTRUCTION INDUSTRY**

**A DISSERTATION SUBMITTED TO
THE FACULTY OF ARCHITECTURE
IN CANDIDACY FOR
THE DEGREE OF
BACHELOR OF SCIENCE IN SURVEYING**

DEPARTMENT OF REAL ESTATE AND CONSTRUCTION

BY

MAK TSZ MEI

APRIL 2010

DECLARATION

I declare that this dissertation represents my own work, except where due to acknowledgement is made, and that it has not been previously included in a thesis, dissertation or report submitted to this University or to any other institution for a degree, diploma or other qualification.

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ABSTRACT

It is undoubted that most of the companies would like to enhance their performance and effectiveness by increasing the profitability and productivity in order to success. However, they ignore some important elements that could affect the organizational effectiveness strongly. It could even lead to a failure for the company if the organization does not pay attention to it. It is called organizational culture. It is so powerful that it could affect everything in the organization. It is understandable that a lot of the peoples do not notice it as it is really hard to find out. A long period of investigation and outsiders may be needed. To reflect it, conflict management is analyzed in this research. It is chosen to study due to two reasons. It can reflect the organizational culture. Besides, conflict management is essential in a company because conflict is unavoidable.

On the other hand, it is found that the turnover rate is high in construction sector compared with other sectors in Hong Kong. Turnover rate relates to the organizational commitment. Members are important towards an organization. Without them, an organization cannot be existed. Therefore, level of organizational commitment is investigated in this study.

In this study, relationship between organizational culture, conflict management and organizational commitment in Hong Kong construction industry is investigated mainly by conducting a questionnaire survey. It is found that if the organizations are dominated by the clan culture, their conflict solving approach are integrating and compromising. These could lead to affective commitment which is beneficial to the organizations.

It is hoped that what I found in this study could arouse the interest in Hong Kong construction industry. Members in this industry could pay more attention on them and manage them well. Then, they could become successful internally and externally.

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Chapter 1 Introduction

1.1 Background

According to the Third Quarter 2009 survey of Manpower Statistic conducted by the Hong Kong Institute of Human Resource Management, the overall turnover rate for the third quarter of 2009 in Hong Kong was 2.72% which was 1.09 % higher than the previous quarter (1.63%). Among different sectors in Hong Kong, the property development/ real estate/ construction sector recorded the highest turnover rate, followed by the retail (5%) sector (refer to appendix 1). The turnover rate in these sectors remains high in this several years. In the highest point, it reached to 13.88% in second quarter 2007. The actual turnover brings a negative impact on the organization significantly. (Price, 1989). For example, it produces less integration among the organization. As turnover increases, the development of close and continuing social relationships at work becomes more difficult (Mowday *et al.*, 1982). “Social relationships at work” here means integration. It may also have negative impacts in productivity, satisfaction, accuracy of communication and etc.

When the members decided to leave the organization, no one could stop them as they should have made the decision after numerous considerations. For example, the organization is no longer suitable for them, they could not tolerate the practice inside

the organization or they get a better offer or etc. According to Mowday *et al.* (1982), employee retention has consistently been viewed as an important consequence of organizational commitment. Therefore, it indicates that the commitment of the employees in property development/ real estate/ construction sector is low compared with the other sectors like engineering and manufacturing(refer to appendix 1).

However, commitment of the employee is so important to an organization that it cannot be ignored. More and more people concern commitment in the organizations now as researchers like Locke *et al.* (1981), Hollenbeck *et al.* (1989), Tubbs (1993), and Siders *et al.* (2001) state that commitment is positively related to performance.

Therefore, for the organizations that want to perform well or succeed, it is an essential for the organization to hold the employees. There are different antecedents for organizational commitment. Employees who do not commit to the organization could be due to some personal reasons. For instance, their ability and personality mismatch with the job tasks. They also choose to leave because of the internal issues in the organization like the practice, people inside. Provided that two organizations in the same sector have the identical characteristics like brand name, resources, payment and etc but with different practices, one may choose the organization with the practice that suits him. It binds him into the organization. To some extent, he may be willing to sacrifice everything for the good of the organization.

Every organization has its own practice that differentiates from others because they have distinct history, experience, challenge, obstacle and etc. The members in the organizations need to solve the problems together. The experience they shared would become the value or belief. Day after day, they are so deep-rooted that it is hardly traceable and become basic underlying assumption. It is called organizational culture. Therefore, organizational culture can be described as values, beliefs and behaviors that are shared by the members in the organization. Culture is intangible and no one can observe it directly. However, it is very powerful. Numerous organizational scholars and observers view organizational culture as a power tool to enhance the performance and long term effectiveness now. There are some real examples that verify the importance of the organizational culture (Cameron & Quinn, 2006). The successful companies like Circuit City, Tyson Food focus more on their culture like company values, personal belief and vision rather than the market force like large market share, high bargaining power and competition.

Not only do the organizational scholars and observers pay more attention to the organizational culture but also the organizations themselves do. When a company employs a new staff, one of its considerations is whether the new staff can suit the culture of the company. Training is also provided in order to let the new member understand and fit in the corporate culture.

Organizational culture could affect the behaviors of the members in the organization. Through studying their behaviors, the organizational culture could be reflected. Conflict resolution is a kind of overt behaviors that reflects the organizational culture. Besides, conflict was the fifth most frequently mentioned among 65 topics in the content analysis of syllabi on organizational behavior coursed for master of business administration students. (Rahim, 1981) Conflict is therefore chosen as an indicator of the organizational culture.

Conflict is unavoidable. Wherever there are people, there are conflicts. It is undesirable to prevent the conflict as it could trigger an even larger conflict. Conflict should not be minimized. Robbins (1984) stated that numbers of the conflicts may affect the performance in the organization. Rather, we should handle it carefully so that it becomes constructive towards the organization.

In this study, the relationship between organizational culture and the conflict management is found. The reasons underlying are studied. Besides, relationship between the three aspects will also be studied because it is more meaningful to see how organizational culture affects the commitment of employees which influences the performance of the organization

1.2 Objectives of the Research

In order to have a comprehensive understanding of the relationship among them, the following objectives are needed to achieve in the study:

1. To examine organizational culture in construction industry
2. To identify the current practice of different conflict solving approaches used in construction industry
3. To study the relationship between organizational culture in construction industry and conflict-solving approaches
4. To find out the pros and cons in different companies using different approaches
5. To investigate the level of organizational commitment
6. To study the relationship between organizational culture, conflict solving approach and organizational commitment
7. To make recommendations for the change of organizational culture and the use of the conflict solving approaches as it will affect the organizational commitment

1.3 Hypotheses of the Research

Two research questions are set in order to verify the study:

1. Do differences in organizational culture in construction sector lead to different conflict solving approaches?

2. Do different organizational cultures with different conflict solving approaches affect the commitment of employees?

The hypotheses of the research are set as follows:

1. Clan culture will not choose dominating conflict solving approach.
2. Clan culture will not choose avoiding conflict solving approach.
3. Clan culture will not choose obliging conflict solving approach.
4. Clan culture will choose integrating conflict solving approach.
5. Clan culture will choose compromising conflict solving approach.
6. Hierarchy culture will choose dominating conflict solving approach.
7. Hierarchy culture will choose avoiding conflict solving approach.
8. Hierarchy culture will choose obliging conflict solving approach.
9. Hierarchy culture will not choose integrating conflict solving approach.
10. Hierarchy culture will not choose compromising conflict solving approach.
11. Adhocracy culture will not choose dominating conflict solving approach.
12. Adhocracy culture will not choose avoiding conflict solving approach.
13. Adhocracy culture will not choose obliging conflict solving approach.
14. Adhocracy culture will choose integrating conflict solving approach.
15. Adhocracy culture will choose compromising conflict solving approach.
16. Market culture will choose dominating conflict solving approach.

17. Market culture will not choose avoiding conflict solving approach.
18. Market culture will not choose obliging conflict solving approach.
19. Market culture will not choose integrating conflict solving approach.
20. Market culture will not choose compromising conflict solving approach.
21. Company with small size will choose clan culture.
22. Company with small size will choose adhocracy culture.
23. Company with large size will choose hierarchy culture.
24. Company with large size will choose market culture.
25. Younger company will choose clan culture.
26. Younger company will choose adhocracy culture.
27. Older company will choose hierarchy culture.
28. Older company will choose market culture
29. Hypothesis 4, 5, 14 and 15 will lead to higher level of affective and normative commitment and lower level of continuance commitment.
30. Hypothesis 6, 7, 8 and 16 will lead to lower level of affective and normative commitment and higher level of continuance commitment.

1.4 Importance of the Research

Organizational culture is highlighted as a key ingredient for success. (Cameron and Quinn, 2006) However, not much research has been done to diagnose the

corporate culture in the construction sector. Without the understanding of corporate culture, many things like behaviors and practice cannot be explained as those things reflect the organizational culture. If they do not know the reasons to behind, no improvement could be done as they do not even know why they behave in this way and whether they are doing the right thing. It leads to a failure. Besides, even if they find something wrong in the organization, they want to have some changes like the policy or the system. It is hard to initiate if the deep-rooted culture cannot be changed. Therefore, to become a successful organization, every member should know their culture. This research is to diagnose the organizational culture in the construction sector so that they can understand more on it. Hence, they can use it as a powerful tool to improve the effectiveness or performance of the organization.

The issue of conflict management has been elevated to one of the most important contemporary challenges faced by the construction industry. (Loosemore *et al.*, 2000) Traditionally, they used the preventive approach for solving the conflicts. However, it is being questioned if it is efficient or not. Some studies state that preventing conflict undermines relationships and performance in teams and supply-chain partnership. (Chen & Tjosvold, 2002; Wong *et al.*, 1999) People work as teams in construction industry. It means avoiding conflict could bring undesirable outcome in the industry. In this research, conflict solving approach is analyzed in construction sector to see

what approach they use in conflict management and whether is it beneficial to the organization for increasing the commitment of employee.

It is unhealthy if members always leave the organization and the organization always recruits the new members. It is a vicious cycle. The organization wastes more resources for the trainings of the new members. Besides, the organization will lose the experienced employee that is beneficial to the organization. To prevent it from happening, the organization needs to increase the level of commitment of the employee so that they intent to remain rather than quit. From the statistic, the turnover rate in construction sector is high compared to other sectors. It means the level of commitment inside the company is low. As commitment is crucial in the organization, the organization should use its best endeavor to improve the level of commitment.

The organization itself (which is influenced by culture) can affect the commitment of the employee. In this research, the relationships between them are studied so the organizations could find how the culture could affect the organizational commitment.

Hence, improvement can be done.

From studies, organizational culture, conflict management and organizational commitment contribute to the performance in the organization. Therefore, they should all be managed well. In this research, it aims at understanding those three aspects

clearly and finding the relationship among them so that suggestions can be made to enhance the organizational performance.

1.5 Methodology

Data required in the research is collected in both quantitative and qualitative ways. As the three aspects (organizational culture, conflict solving approach and commitment) are some kinds of human behavior. Qualitative ways via interview is used so the feelings and opinions of the respondents could be expressed. Data is collected via literature review, questionnaire survey and interviews

a) Literature Review

In order to understand the concept of organizational culture, conflict solving approach and commitment, literature is reviewed. There are a lot of literatures about those three aspects. The history, definition, types, pros and cons, functions of them are studied. Based on the knowledge obtained from the literature, a more comprehensive analysis is done.

b) Questionnaire Survey

Questionnaire is distributed to the different companies in the construction industry in order to find out the existing situation. Four sections are included in the

questionnaire. The first section is the background of the company and the interviewee. For example, the year establishment of the company, position of the interviewee and etc are asked. As they may be the variables that affect the organizational culture, they should be taken into consideration in order to make the analysis more accurate.

The second section is the diagnosis of organizational culture in the companies. There are different types of organizational culture. Organizational culture in this research is classified as clan, adhocracy, hierarchy and market culture which is identified by Cameron and Freeman (1991). Organizational Culture Assessment Instrument (OCAI) introduced in the book “Diagnosing and Changing Organizational Culture” by Kim S. Cameron and Robert E Quinn is used for the diagnosis of organizational culture. OCAI is in form of the questionnaire containing six dimensions of the culture. They are dominant characteristics, organizational leadership, management of employees, organizational glue, strategic emphases and criteria of success.

The third section will be the conflict solving approaches. In this section, Rahim Organizational Conflict Inventory-II (ROCI-II) is used for the analysis of the five conflicts solving approaches. They are integrating, obliging, dominating, avoiding

and compromising approaches. The ROCI-II is made up of 28, 5-point Likert items that range from strongly agree to strongly disagree. The higher the score got, the more likely the approaches used.

The fourth section is commitment measurement. There are three types of commitment namely affective, normative and continuous commitment. To measure each commitment, six questions that are 7-point Likert items ranging from strongly agree to strongly disagree are asked. The higher the score got, the greater the commitment is.

The data collected in the questionnaire is then analyzed. Relationship between the three aspects could be found.

c) Interview

Interview is used as the topic in the research is related to human behavior which cannot be accurately measured through literature, data or etc. Interview is the best choice among them as it reflects the thoughts of the interviewees.

Even though the data is collected from the questionnaire and the correlation is found in the study, the underlying reasons could not be found by the questionnaire survey. The reasons could be found through literature review. However, it is not

updated as the behavior could change from time to time. Using interview could solve this problem as the data collected from it is the most up-to-date.

Interview is done in order to know the real situation of the company in a more comprehensive way. The interview acts as the supplementary of the questionnaire.

The questions that could not be asked in the questionnaire will be asked in the interview. More information could be collected so that the research could become more valid and comprehensive.

1.6 Outline Content of the Dissertation

The dissertation is mainly divided into 3 parts as follows:

- Part 1: Introduction (Chapter 1)
- Part 2: Literature Review (Chapter 2, 3 & 4)
- Part 3: The Research (Chapter 5, 6, 7 and 8)

Part 1: Introduction

Chapter 1 Introduction

It is the introduction of the dissertation. It describes the structure the whole dissertation. It states out the background, objectives, hypotheses, importance and the methodology of the research.

Part 2: Literature Review

Chapter 2: Culture and Organizational culture

The chapter reviews the literature about culture and organizational culture. There are different interpretations by different researchers about organizational culture. People are now paying more attention to organizational culture as it can influence everything even the survival of an organization.

Chapter 3: Conflict and Conflict management

No one will have the identical minds and opinions. Therefore, conflict is unavoidable when there are people. Conflict could be either constructive or destructive in an organization depending on the ways to manage it.

Chapter 4: Organizational commitment

Organizational commitment is gaining more and more attention as it could increase employee retention and performance of an organization. There are different antecedents for the commitment. It is advisable that the managers should put more effort in increasing the level of commitment.

Part 3: The Research

Chapter 5: Methodology

The details of the methodology of this study are stated in the chapter. Both qualitative and quantitative research methods via interview and questionnaire survey are used.

The method to analyze the result is also explained.

Chapter 6: Data analysis

The data collected from the questionnaire survey is analyzed statistically in this chapter. The relationship of organizational culture, conflict solving approach and organizational commitment is explained.

Chapter 7: Discussion

Discussion is made based on the data analysis in chapter six. The reasons of the results obtained are explained. The organizational culture profiles, the current practice of conflict management style and the level of the organizational commitment in the construction industry are stated. The relationships between them are also discussed.

Chapter 8: Conclusion

The overall conclusion is stated by summarizing the findings in this study. The

limitations and the recommendations of this study are also given hoping that improvement can be done in the future research.

Chapter 2 Culture and Organizational Culture

2.1 Introduction

Culture seems to be a very vague concept. It is very hard to explain as it is developed when we born. We follow it unconsciously. We will never question it as it becomes our 'daily practice' and we take it for granted.

Culture covers all areas of group life and takes time to evolve. Whenever there is a group, no matter it is big or small size, there will be culture. If there is a group of people which has no culture, they should not be called as a group but only an aggregate of people. Then, it can be explained why culture is ubiquitous. In your life, you will contact with different groups like your family, your class, your company, your team and etc. Different groups must have its own culture.

Although culture is hard to investigate, many researchers still try hard to do so as they discover that culture is crucial in a group. It could explain the behavior of the people and it also affects the internal issue within a group. Therefore, in this research, the organizational culture is being studied. It would be interesting and meaningful to study their relationship. To begin with, culture should be investigated deeply first.

2.2 Definition of Culture

To study the organizational culture, we should get the concept of culture first as organizational culture is only one type of cultures. There are numerous cultures in the world.

The origin of the word 'culture' comes from the Latin *cultura* which means 'to cultivate'. Culture broadly refers to the way of life of a group of people that are the patterns of behavior which is useful and valuable to the people concerned and worthy of being passed on from one generation to another generation

Tylors (1903) who introduced the earliest definition of culture as

“That complex whole which includes knowledge, belief, art, law, moral, custom, and any capabilities and habits acquired by man as a member of society.”

Terpstra and David (1985) defines

“Culture is a learned, shared, compelling, interrelated set of symbols whose meanings provide a set of orientations for members of the society.”

If these orientations are taken together, it could provide solutions to problems that all societies must solve if they are to remain viable. This definition combines both adaptationist and ideational position.

As culture is conceptual, numerous definitions are developed as different people have their own interpretations. There is no right or wrong, good or bad culture. It depends on the suitability of a specific culture in a group. If it is suitable in a group, it could facilitate and increase the efficiency of a group. If it is not suitable, it may then bring undesirable effect like the bad performance to a group. Therefore, we should carefully develop our own unique culture as developing or changing a culture usually needs couple of time.

2.3 Dimensions of culture

Between different groups of people, there may be cultural difference. Different dimensions of culture could result in different types of culture. According Hofstede (1991), culture is *“the collective mental programming of a group of people.”* We are all expected to think, feel and behave in particular ways as part of a community. However, what we share is from the same cultural community which differs from those of other communities. He has done a research on cultural difference in several countries and identified four dimensions of culture:

1. Large or small power distance

Power distance refers to the distribution of power between people within the society. Large power distance refers to an unequal distribution of power between

those with large power and those with little. It results in larger inequality while small power distance means that the power is evenly distributed and people within society are treated equally.

2. Masculinity versus femininity

In masculine societies, they are strict and sharp. Competitiveness, assertiveness, acquisitiveness, materialism, and achievement are of utmost importance while in feminine societies, they are more loose and blurred, they pay more attention on nurturance, relationship-orientation. Moreover, they focus more on the quality of life, modesty, and caring.

3. Individualism versus collectivism

This dimension is concerned with the form and manner of the relationship between an individual and other in the society. People concern more about his/her own interest and take care of his/her direct family only in the individualist countries. The relationship between people is loosed structured. On the other hand, people place more emphasis on the interest of the collective rather than individual in the collectivist countries. They usually have extended family. The relationship between people is tightly structured.

4. Strong or weak uncertainty avoidance

It reflects the degree that how people can tolerate the ambiguous situation and how they react to it. In some countries, people are socialized to accept the ambiguity and uncertainty and they are not easily threatened by the challenges.

In other countries, they may view uncertainty as disruptive and psychologically uncomfortable. Countries of high uncertainty avoidance always try to avoid the uncertainty by ordering and structuring things, imposing rules and systems.

Through the dimensions, we discovered that different groups of people could have different concepts in their own mind because they have different experience, background and etc. It may lead to cultural difference. Therefore, it can be explained that numerous cultures are existed in the world.

2.4 Definition of organizational culture

The concept of organizational culture is not introduced for a long time. The beginning of it is started by Pettigrew (1979). He introduced the anthropological concept of culture and showed how the related concepts like “symbolism”, “myth” and “ritual” can be used to analyze the organization. Then, in 1980, Dandridge showed how the study of these myths and symbols aid in revealing the “deep structure” of an organization. Nowadays, different definitions of organizational

cultures are introduced by different researchers like Dension and Mischra, Schein, Siehl and Martin, Wallach and etc.

“Organizational culture is the pattern of basic assumption that a given group has invented, discovered, or developed in learning to cope with its problems of external adaption and internal integration, and that have worked well enough to be considered valid and therefore, to be taught to new members as the correct way to perceive, think and feel in relation to those problems.” (Schein, 1984)

Kilmann *et al.* (1985) defines corporate culture as *“the shared philosophies, ideologies, values, assumptions, beliefs, expectations, attitudes and norms”* that link the organization together.

Deal (1986) defines it as *“the human invention that creates solidarity and meaning and inspires commitment and productivity.”*

Uttal (1983) defines it as *“a system of shared values and beliefs that interact with a company’s people, organizational structures, and control systems to produce behavioral.”*

Hofstede (1991) defines that organizational culture is *“the collective programming of the mind which distinguishes the members of one organization from*

another.”

Different definitions and types for the organizational culture could be found. In this research, Competing Value Framework is used which is discussed later.

Schein (1985) also separated culture in three levels. The first level would be the Artifacts and Creation which is the most visible level that outsiders can observe it easily like the written and spoken language, overt behavior of the member. Artifacts interrelate and reflect the deeper patterns. However, deeper patterns are difficult to figure out. The second level would be the values which are hard to observe. The subordinates often hold and use the value for the decision making and evaluate the outcome differed widely between the organization. The solution of a new task is always doubted by the employees as they have never tried it and just followed the instructions of the founder. If the solution works, then the values will change to the belief and eventually become the assumption. Espoused value means what the people say may not be the same as what they do. They focus on what the people say is the reason for their behavior, what they ideally would like the reason to be and what are often their rationalizations for their behavior. The third level is the basic underlying assumptions that are usually unconscious and take-for-granted as the solution works repeatedly and no one doubts about it. The assumptions determine perception, thought

processes, feelings and behaviors. Understanding the underlying assumption is more difficult than understanding the first two levels as it is taken for granted. They will not investigate deeply the underlying reason of their behavior because it just likes the “daily practice” and “habit” for them. An outsider is required for figuring out the assumptions. However, once we find out the assumptions, we can easily explain the meaning in various behaviors of the employee and artifacts. We can also better understand how culture can seem to be ambiguous or even self-contradictory (Martin & Meyerson 1988).

Understanding those three levels could be useful for managing people, formulating strategy and inducing organizational change.

2.5 Dimensions of organizational culture

Culture has different dimensions. A study shows that organizational culture has six different dimensions listed as follows which are produced by IRIC research.

1. Process oriented vs. results oriented

This dimension is about whether the company concerns the process or the result of a task. Members in process-oriented company always avoid risks and put little effort in the job. Their working styles are always the same. Members in results-oriented company are not anxious in facing new challenges and

unfamiliar situation. They put a lot of effort on achieving the goal. As all members in the company have the same goals, they usually have the stronger culture.

2. Employee oriented vs. job oriented

This dimension is about whether the company concerns the people or job completion. If it is in employee-oriented culture, people do not only concern their working process but also concern their personal problems. The decision is always made by groups or committee. If it is in the job-oriented culture, the organizations always urge employees to complete the job and ignore their personal problems. The decision are always made by the individuals.

3. Parochial vs. professional

This dimension is about whether the employees derive their identity from the organizations or they identify with their type of work. For members in parochial culture company, the organizations take care of them so they do not consider a lot for their future. They think the organizations are parts of their lives. The norm of the organization will affect their behavior at home or on the job. For the members in professional culture, they think the organizations hire them because of their job competence. If their capability becomes lower, the organizations will

not use them. Therefore, they always think of their future because no one will consider for them.

4. Open system vs. closed system

The open system unit members always welcome the newcomers and outsiders.

Therefore, they may only need a few days to become parts of the organizations.

While in the closed system units, it seems that the members are not willing to welcome the outsiders or the newcomers. They are closed and secretive.

Therefore, the newcomers are difficult to blend into the organizations.

5. Loose control vs. tight control

People in loose control unit may not take things seriously. For instance, they may not care about the cost. They may not be punctual. They might play jokes on the organization. While in tight control units, people may have dignified behaviors.

They take things very seriously.

6. Normative vs. pragmatic

For the normative units, members always follow the standardized procedures of the organizations. When they do their tasks, they try not to violate the rules.

When in pragmatic unit, they place the results in a more important position than

the regulation. The needs of the customer are of utmost importance.

2.6 Functions of organizational culture

Understanding the corporate culture is very important as culture could influence everything in the organization. The concept of organizational culture becomes more and more important because it may help the group to solve the problems which lead to the survival of a group.

Culture can solve the group's basic problems of

- a. Survival in and adaptation to the external environment and
- b. Integration of its internal processes to ensure the capacity to continue to survive and adapt (Parsons, 1951; Merton, 1957)

a) External Adaptation Problem

The external adaptation problems are always out of control from the people as the problems come from the external factors the physical, technological and cultural environment. Sentiments and norms will be generated when tackling them. In order to get survival, the members should have consensus in different aspects stated below.

i) Core Mission, Primary Task, Manifest and Latent Function

Having the consensus of the above elements is crucial and fundamental for the survival in its environment. Without a core mission, people do not know what their goals are so they cannot plan the strategy. Having the same core mission become the central elements for the culture of the group. Base on it, goals and means for achievement could be specified

ii) Goals

After having the shared concept of missions, goals should be also specified and agreed as one mission could generate different goals. Common goals which make the solutions work repeatedly are important as goals will then be considered as cultural elements. To have consensus about the goals, common language and shared assumptions would be needed.

iii) Means

Even though there is consensus about the goals, if the practical ways are not be agreed by the members, they cannot perform the primary task. If the means for goal accomplishment is not agreed, it may also affect the internal group issue.

iv) Criteria for Measuring Results

Owing to different ways for result measurement, there will be no coordinated remedial action. Hence, it may be difficult for the organization to improve the overall performance and level of employee satisfaction.

v) Remedial and Repair Strategies.

It is about what to do and how to do it when crisis occurs. When responding to the survival crisis, it often reflects the deep elements of the culture, particularly for those elements with internal integration and also provides opportunities for culture developing.

b) Internal Integration Problem

Culture can solve both external adaptation and internal integration problems.

Internal integration means the how to maintain and enhance the relationship in the groups as some tasks cannot be done by the individual and it needs the cooperation of a set of individuals. Some internal issue should be dealt with in order to integrate the people in the group.

i) Common Language and Conceptual Categories

A group should not only have a common basic language, they should also

develop their own ways to communicate. Having the same concept in their mind is important. For example, they should have consensus in what is “low cost” in their group. Without the common language, they could not compromise on other things as it is a fundamental element in a group

ii) Group Boundaries; Criteria for Inclusion

It is important as it could affect the consensus on the following items. If a group can compromise who will be in a group. The member could get special benefits while the outsiders could not. More importantly, the members could get a sense of identity

iii) Power and Status

Everyone in new situation would have needs to have influence. While a group finds their own way for power allocation, it should take the natural human feeling into consideration as human would have need of domination, aggression.

iv) Intimacy, Friendship, and Love

There is a lack of support for the idea that working in teams could be useful and productive compared to working individually. Therefore, the individuals

find that it is difficult to behave as a team unless there is a very clear requirement to do so in some projects or companies.

v) *Rewards and Punishments*

Every group should set their own system for rewards and punishment in order to function. The reward system usually comprises short and long term aspects. This system reflects some important rules and underlying assumptions in that culture.

vi) *Religion and Ideology*

Not everything in the organization could be explained. Religion could provide meaningful context to explain them. On the other hand, ideologies reflect the key values of the organizations. Members especially the newcomers could know them through stories, parables and history.

c) **Anxiety Reduction**

Besides, culture has another function that is to reduce the anxiety of organizational members when they faced the uncertainty and overload. It is because the cultural assumption can be thought of as a set of filters or lenses that could help to focus on the relevant portions of the environment only. Without

them, people need to consider a large portion of environment. They need to handle huge amount of things. Therefore, people would feel the uncertainty and overload. Then, it could explain why people are always reluctant to have culture change. Once their original culture that can stabilize their environment changes, they may feel some degree of overload and uncertainty and become anxious

2.7 Competing Value framework

The competing value framework was initially used for finding the major indicators for effectiveness of the organizations. There are two main dimensions that organized the indicators into four main clusters. The vertical axis represents the first dimension that ranges from flexibility, discretion, and dynamism to stability, order and control. The horizontal axis represents the other dimension that range from internal orientation, integration, and unity from external orientation, differentiation and rivalry.

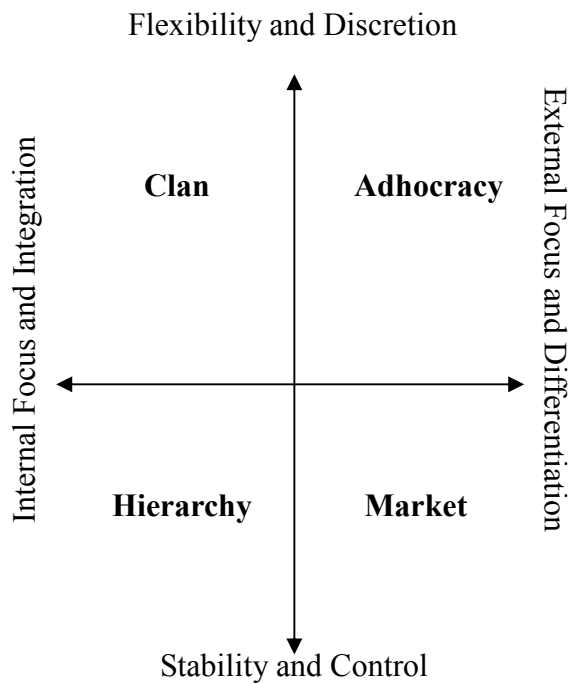


Figure (1)
The Competing Values Framework
Source: Adapted from Quinn (2006)

When the two dimensions consider together, they form four quadrants which provide four different core values. Later on, the four quadrants has been identified for four different cultures namely the clan, adhocracy, hierarchy and market culture.

2.7.1 Four types of culture in Competing Value Framework

Clan culture:

Members in organizations with clan culture like an extended family. They take care of each other as a family member. From Figure (1), it emphasizes flexibility and internal focus and integration. They focus on human relation. The core values are belonging, trust, participation and teamwork. The organizational members are motivated by

attachment, cohesiveness, and membership. The leadership style would be participative, considerate, and supportive. Effectiveness criteria of this kind of organization are development of human potential and member commitment

Adhocracy culture

Members in organizations with adhocracy culture always do the ad-hoc tasks. There are always uncertainties in the organization. From Figure (1), it focuses on flexibility and external environment. They also emphasize on individuality, risk taking, and anticipating the future. Members in the organizations do not have centralized power or authority. Power flows from individual to individual or from task team to task team. Members are motivated by growth, stimulation, creativity and variety. The effectiveness criteria are growth, the development of new markets, and resource acquisition.

Hierarchy Culture

Members in organizations with hierarchy culture follow the standardized rules, procedures and regulations when they are doing the task assigned. From Figure (1), it focuses on stability and control and internal environment. Decisions are always made by people with power while other members follow it blindly and do not challenge it. The effective criteria are control, stability and efficiency

Market Culture

Members in organization with market culture are goal-oriented. They may use an aggressive approach in order to achieve the objective such as increase the profitability and productivity. From Figure (1), it focuses on external environment and control.

The motivator is competition and they always want to win. Leaders of this culture should be directive, goal oriented, instrumental and functional. The effective criteria are productivity, planning and efficiency

Chapter 3 Conflict and Conflict Management

3.1 Introduction

Conflict is one of the major organizational phenomena. Conflict was the fifth most frequently mentioned among 65 topics in the content analysis of syllabi on organizational behavior coursed for master of business administration students. (Rahim, 1981) It indicates that conflict and conflict management are important towards an organization. Conflict is inevitable when different people involve as they must have different views and opinions.

In the early days, conflict is viewed as an evil. Classical organization theorists like Frederick Taylor, Henry Fayol and Max Weber think that conflict is hazardous to an organization. It could undermine the harmony and the cooperation among members. Some also think that conflict increases stress and decreases productivity. Conflict is so abnormal and dysfunction that it should be minimized. Rules, order, avoidance of conflicts are essential for the organizational efficiency.

On the other hand, some think that certain amount of conflict is essential to the proper functioning of the groups. It could facilitate the human development. Thinking and responses are needed during the conflict so the growth of human beings could be enhanced. In the modern view of organizational conflicts, it is viewed as an

instrument of social change and influence but not the breakdown in social relationship.

Opposite to the classical view of conflicts, conflict is now considered as a positive indicator for organizational efficiency.

Conflict has both productive and destructive potentials.

“Too little conflict may encourage stagnancy, mediocracy, and groupthink, but too much conflict may lead to organizational disintegration. A moderate amount of conflict, handle in constructive manner, is essential for attaining and maintaining an optimum level of organizational effectiveness.”

(Rahim & Bonoma, 1979)

As conflict cannot be avoided, ways to manage it is of utmost importance. In this research, conflict solving approaches are being investigated in order to find out the most appropriate approach for solving the conflict constructively.

3.2 Definition of Conflict

There is no clear definition for conflict. Different researchers have distinct definitions. Pondy (1967) defines conflict broadly as a dynamic process underlying organizational behaviors while March and Simon (1958) defines conflict narrowly as a breakdown in the standard mechanisms of decision making that an individual and

group experience difficulty in selecting an alternative. Some other researchers like Tedeschi *et al* (1973), Smith (1966), Litterer (1966) take a middle position and define conflict similarly. They all agree that that occurrence of conflict is due to incompatibility or opposition in goals, interests, activities or interactions among the social entity.

Conflict process should be understood first before conflict management is discussed. The beginning of conflict is undoubtedly due to some antecedents. It may be the opposition of some certain things like goals, interests or etc. However, the conflict is not triggered unless the threshold level of conflict awareness is reached. The parties involved make their own assumptions about the motive and position of other party which is considered as “perceived conflict”. They may also have their own level of awareness and emotion about the conflict which is viewed as “felt conflict”. The interaction of felt conflict and perceived conflict will influence the behavioral outcome while behavioral outcome also influences the perceptions and emotions. Conflict is then settled. Depending on how it is solved, it is possible to become the antecedents of the next conflict episode. The figure (2) shows the process of the conflict.

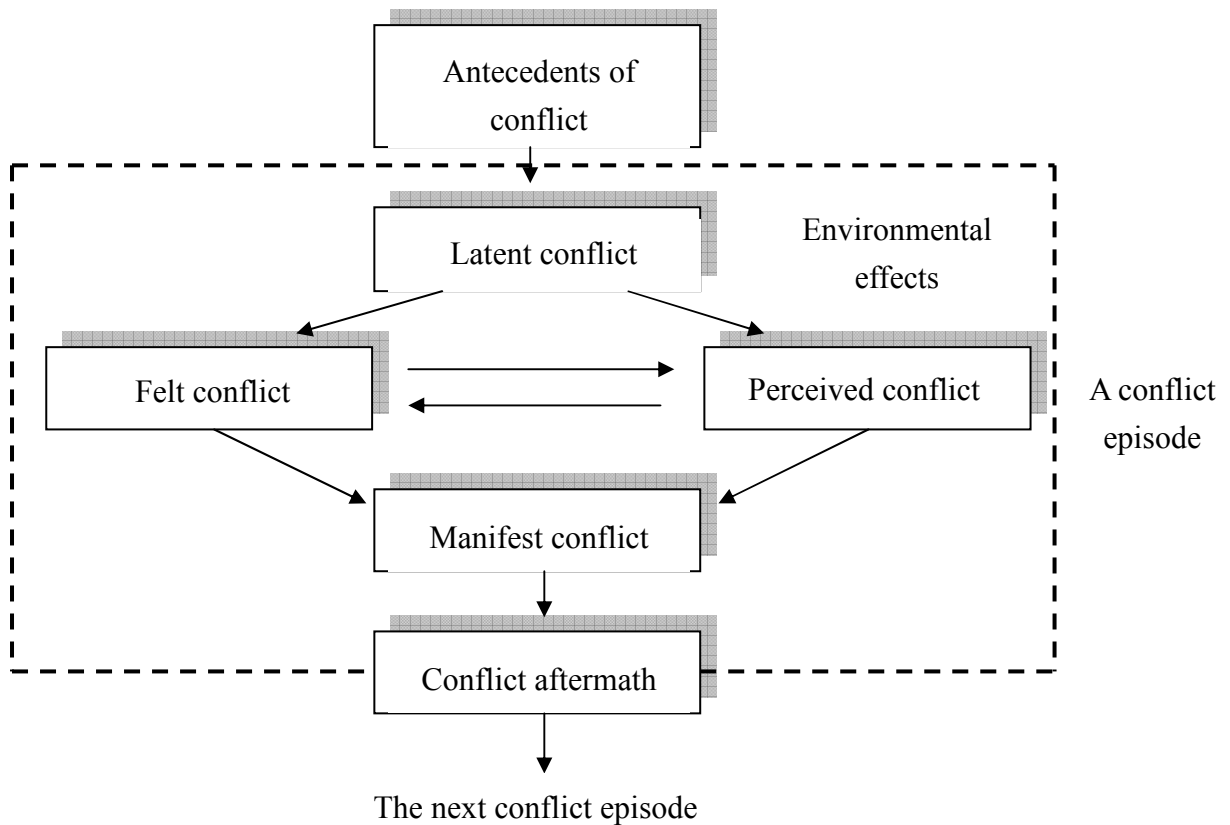


Figure (2)
The Conflict Process
Source: Adapted from Pondy (1967)

There are different levels and types of conflict. Four levels of conflict are analyzed within an organization. They are intrapersonal, interpersonal, intragroup and intergroup conflicts. Intrapersonal conflict may happen in an individual because of the mismatch between something, say the personality and the job task. Interpersonal conflicts occur between two or more members in the organization at the same or different hierarchical level. Intragroup conflicts occur among members in the same group or between two or more subgroups within a group. Intergroup conflicts happen between different groups. As told, the occurrence of conflict is due to the

incompatible of something which is important to them (antecedent of conflict) and it leads to different types of conflicts. Rahim (2001) identified ten types of conflict.

1. Affective conflict

It occurs when two interacting social entities become aware of their feelings and emotion regarding their incompatibility of issues while solving the problem together.

2. Substantive conflict

It occurs when there is disagreement on their tasks between two or more organizational members.

3. Conflict of interest

It occurs when two or more parties prefer a different but incompatible solution in the same situation.

4. Conflict of value

It occurs when two or more parties have different values on their mind.

5. Goal conflict

It occurs when the expected outcomes of two parties are not the same.

6. Realistic versus nonrealistic conflict

The former one occurs owing to the incompatibility of rational content while the latter one occurs due to expression of their emotion only

7. Institutional versus noninstitutional conflict

The former one occurs when the party needs to follow rules, perform predictable behavior and maintain their relationship in long term. Without those three conditions, the latter one occurs.

8. Retributive conflict

It happens when the involved parties want to punish the other parties by a drawn-out conflict.

9. Misattributed conflict

It happens when a party assigns the cause to conflict wrongly.

10. Displaced conflict

It happens when the conflicting party expresses their feelings and emotion to the party not involved.

As discussed, conflict is considered to be constructive in an organization. It is because conflict has its own functions which are beneficial towards an organization. First of all, it could help an organization change and response to its environment quickly. When an organization encounters conflicts, they need to find their own way to solve it. If the ways lead to an undesired outcome, the organization finds and changes its way which is suitable in its company. Besides, if there is disagreement in decision making process, it could enhance the quality of the solution. As different people have different viewpoints toward that decision, a more in-depth investigation and discussion would be made and an all-round solution will be developed. Furthermore, an optimum level of constructive conflicts could enhance the performance of the group or individual as conflicts among the members could increase the awareness of the members and generate the energy so that they will work better.

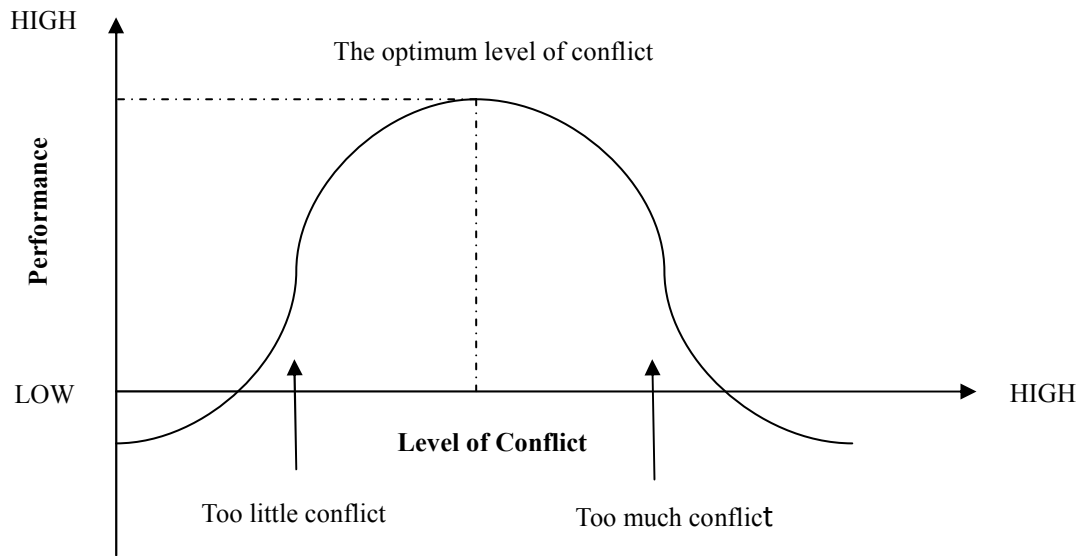


Figure (3)
The Optimum Level of Conflicts in an Organization
Sources: Adapted from Robbins (1984)

3.3 Conflict management

Conflict could be constructive and destructive. It depends on the ways to manage it. There is no definite best way to solve the conflict and it just depends on the nature of the conflict and the situation. Rahim and Thomas have identified five conflict solving approaches which are integrating, obliging, dominating, avoiding and compromising approaches. They are used in different situations. Rahim (1983) and Rahim and Bonoma (1979) identified the conflict solving approaches based on two dimensions which are concern for self and concern for others.

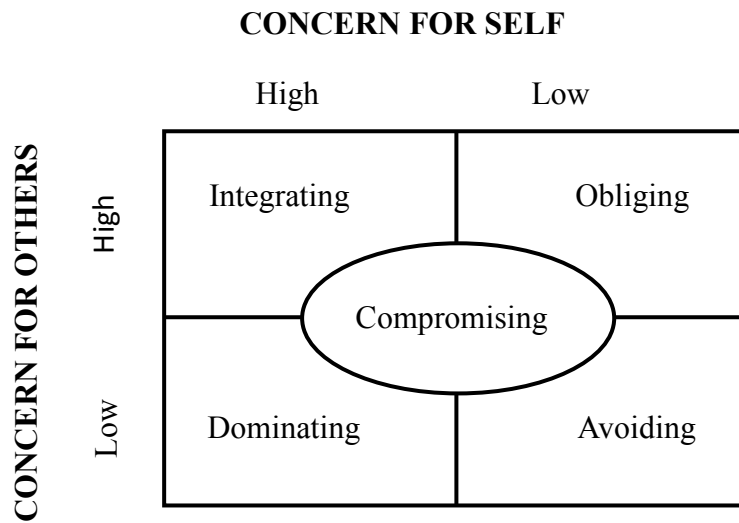


Figure (4)
A Two-Dimensional Model of the Styles of Handling Interpersonal Conflict
Source: Rahim, A., & Bonoma, T.V. (1979)

1. Integrating style

It is high concern for self and others. Using this style, it requires open communication of the conflicting groups. They need to discuss and analyze the problem together so that a compromise could be reached.

It is effective in a complex problem that two parties have their own evidence in their standpoint but they cannot solve the problem alone. Therefore, they could contribute their own idea so that the problem could be solved. Plenty of time is needed.

2. Obliging style

It is high concern for others but low concern for self. The obliging person will sacrifice himself (e.g. give up their ideas or happiness) in order to satisfy the other party.

It could be used when a party is not familiar with the issue or the issue is less important compared to the other party. It may also be use when one thinks that maintaining the relationship between them is more important.

3. Dominating style

It is high concern for self but low concern for others. A dominating person tries hard to satisfy himself even though the needs or expectations of the others will be ignored. It often creates a win-loss situation.

It could be used when the issue is important to the party or other parties' decision is harmful to them. It could also be used when the issue is routine and simple as this style could save time.

4. Avoiding style

It is low concern for self and others. Party involved tries to postpone an issue until a better time or even withdraw from the conflicting situation. It could trigger a

more serious conflict

It could be used when the dysfunctional effect of confronting other party is greater than the benefit from resolution of the conflict.

5. Compromising style

It is intermediate concern for self and other. Both of the parties give up something in order to have a mutually acceptable decision.

It could be used when the goals of the conflicting parties are mutually exclusive or they have the same power. It could also be used when an impasse have been reached in the negotiating process.

Choosing which style to deal with the conflict is very important because whether the conflict is positive or negative to the company depending on the style used. As told there are no good and bad styles and it depends on the situation. The style should be matched with the situation. In some conflict situations, more than one style will be used. Besides, using different styles could be beneficial to the company in long term or in short term.

3.3.1 Contingency approach

It indicates that there is no best approach toward the resolution of conflict. The contingency approach is developed. The theory considers two situations which are quality of the decision and acceptance of the decision. In different situations, different styles are effective. For instance, when both situations are low, dominating style is effective. Therefore, before a conflict solving approach is chosen, the situation should be understood first so that the best approach could be determined

Chapter 4 Organizational Commitment

4.1 Introduction

Commitment especially the commitment of employee toward the organizations is drawing more and more attention from the organization like the manager and organizational analyst as it is a very crucial factor in a company for increasing employee retention and performance. Commitment could provide motivation for the employee to work. They will also bring an energy, passion and excitement. If they are highly committed to an organization, they are even willing to sacrifice everything in order to achieve a goal for the organization. Commitment is one of the power tools that increase the performance of the company. Therefore, top level management team need to pay attention and effort to enhance the level of employee commitment. Otherwise, it leads to an undesirable outcome.

4.2 Definition of commitment

“Commitment implies a determination to try for a goal or to keep trying for a goal irrespective of whether the goal is assigned, anticipative or set by the participant(s).”

(Locke *et al.*, 1981)

Commitment can be classified into three types which are organizational

commitment, project/task commitment and personal goal commitment. Organizational commitment is defined as the relative strength of an individual's identification with and involvement in a particular organization. (Mowday *et al.*, 1979). Job/ project commitment is defined as "*a function of personal, role-related and structural characteristics as well as situational factors related to the job setting.*" (Randall and Cote, 1991) Personal goal commitment is a determination to try for goal even through difficulty (Locke *et al.*, 1981). In this research, organizational commitment is studied.

4.3 Organizational Commitment

Organizational commitment can be defined as

"a typically conceived of as an individual's psychological bond to an organization, including a sense of job involvement, loyalty, and a belief in the values of the organization." (O'Reilly, 1989)

Commitment needs the internalization of the organizational values, norms and goals to a point where there is strong correlation between them and individual's belief. Therefore if someone is committed strongly in an organizational, he/she can be characterized by at least three factors:

- 1.) A strong belief in and acceptance of the organization's goals and values
- 2.) A willingness to exert considerable effort on behalf of the organization

3.) A strong desire to maintain membership in the organization. (Porter *et al.*, 1974)

Organizational commitment could be expressed as two phenomena (Mowday *et al.*, 1979, 1982) which are attitudinal commitment and behavioral commitment.

Behavioral commitment needs time and effort to pursuit the goal and to implement the final products while attitudinal commitment refers to psychological states of affective (want to), and continuance (need to), normative (ought to) (Allen and Meyer, 1990, 1996). Attitudinal commitment is the focus in this research.

Affective commitment is a consideration of an affective or emotional attachment to the organization. It links with work experience, perceptions of the organization and personal characteristic. The employees with positive affective commitment stay in the organization as they want to do so. Some researchers find that it is positively related to performance and job satisfaction.

Continuance commitment is a consideration of perceived cost when they leave the organization. The cost is kind of an investment like the time, effort and cost. They are unwilling to leave the organization because they think that the cost of leaving is greater than the cost of staying or there are limited choices for them. It is nothing deals with the emotional attachment. It may provoke the intention to quit.

Normative commitment is a consideration of the obligation of the employee to the organization. It means that they choose to stay in the organization because they have their responsibility to do so.

“Normative commitment is the totality of internalized normative pressure to act in a way which meets organizational goal and values.” (Wiener, 1982)

The three different commitments are not needed to have relationship. However, from the result (Allen and Meyer, 1990), it is shown that affective commitment is associated with normative commitment positively. It means that the feeling of desire to stay links to the feeling of obligation to stay. It is because the moral obligations are internalized to form personal norms which influence the individual. Conversely, when the employee behaves in their desired way, they gradually think that what they do is an appropriate thing.

4.3.1 Antecedent of organizational commitment

Organizational commitment is crucial for an organization as it could affect the organizational effectiveness. Therefore, to develop the organizational commitment, the antecedent should be known first. Many researchers have done the related research and find the different antecedent of organizational commitment. It could be classified into three main categories: (a) internal influences: internalization, role

conflict/ambiguity, justice, goal acceptance and resistance to change; (b) external influences: job characteristic, authority, senior supportiveness and peer influence; and (c) interactive influence: effort and social interaction. (Locke *et al.*, 1988)

4.3.2 Outcome of organizational commitment

Commitment is an important attitudinal predictor of employee behavior intentions (Becker *et al.*, 1996). Researchers like Locke, Allen and Meyer, Steer, and Porter find that it could influence the performance, job satisfaction, intention to quit or stay and the turnover rate of the company.

If there is sufficient commitment toward the organization, it could lead to the better job performance. For instance, it could encourage creativity, reduce absenteeism and increase employee tenure. Affective commitment and normative commitment are hypothesized as the positive effect for the construction performance. For example, affective commitment improves task performance and enhances job satisfaction. On the other hand, continuance commitment is hypothesized as the negative effect for the construction performance. (Leung *et al.*, 2004)

However, if there is insufficient commitment, it may lead to an undesired outcome. As affective commitment and normative commitment provide positive effect

to the performance, if there is inadequacy of this commitment, they may not be motivated to work. Furthermore, it may also induce the intention to quit. As intention to quit is a direct predictor of actual turnover, they may be a high level of turnover rate that will seriously influence the performance of the company.

Chapter 5 Research Design

5.1 Introduction

The chapter is to discuss the research design for the study. In this chapter, the details of the methodology are explained. Both qualitative and quantitative method is used and the reasons are explained below. The method for analyzing the data in quantitative method is also stated in this chapter.

5.2 Methodology

The objective of this study is to understand the relationship between the organizational culture, conflict solving approach and organizational commitment. In order to establish a more comprehensive understanding, quantitative and qualitative research methods are used.

In this research, the investigating topics are conceptual and behavioral. Many researchers (e.g. Schein, 1985; Smircich, 1983) are advocates of qualitative methods to study the culture as culture may be a unique social construction of reality which may be unconscious to some of the culture's members. They think that qualitative method through interview and observation would be the best way to detect and describe the conceptual topics. Through interview, opinion and feeling from the

interviewees can be directly obtained which are unique and realistic information for the research. However, owing to time constraint in this research, it is impossible to conduct numerous interviews in this study. Therefore, quantitative method is also used.

Quantitative method is a scientific way to collect the information from the respondents and transfer the information into statistic. Comparing with the qualitative study, the advantages to use this method are time saving and involvement of large amount of sample which make the research more precise. Some researchers (e.g. Rousseau, 1990; Hofstede *et. al*, 1990) are advocates of the quantitative methods to study the culture. Culture can be separated in three levels and the deepest level is the basic underlying assumption which may not be easily accessible. Therefore, Rousseau (1990) asserted that certain dimensions of culture may be appropriately studied using quantitative method.

As these two methods have their own advantages, both questionnaire surveys and interviews are employed in this research in order to make the result valid and comprehensive. Details are discussed in the sections below.

5.3 Questionnaire Survey

Due to the advantages stated above, questionnaire survey is adopted in the study.

However, several problems would be arose if the questionnaire survey is not used carefully which may result in inaccuracy in the study. In the below section, design of the questionnaire is discussed. Then, the method of analysis is explained.

5.3.1 Data Collection

The questionnaire is sent to the different construction companies in order to understand the current practice of the conflict solving approach, level of the commitment and also the organizational culture profile. Four members are requested to complete the questionnaire in order to prevent bias and subjective views by the individuals in every company. By definition, organizational culture is values, beliefs and behaviors shared by members in the organization. Hofstede (1991) also defines that organizational culture is the collective programming of the mind which distinguishes the members of one organization from another. Therefore, more viewpoints from employees are required. Besides, employees from different levels and departments are targeted in the study. It is because people would have distinct opinions at different positions. A more comprehensive study could be obtained by collecting data from different people.

The major problem of using the questionnaire survey is the low response rate from the respondents. It may be due to several reasons. Working people are always

busy and they are reluctant to put much time and effort in the doing something irrelevant to their job duties. To prevent the low response rate, several precautions are taken. The design of the questionnaire should be kept as simple as possible. The questions should not be too wordy and should be the multiple choice questions so that the respondents can complete it in a short time. Brief instructions are also provided in each section to ensure the respondents to clearly understand what the questions asked in different sections. Besides, convenience is important for them. Therefore, online questionnaire survey is mainly used in this research. Once the respondents get the website, they can complete and deliver the questionnaire with the aid of technology. As it saves time and user-friendly, more respondents are willing to complete the questionnaire so a satisfactory response rate is ensured. Softcopy of the questionnaire is enclosed upon requested.

5.3.2 Target Group

In order to investigate the relationship between culture profile, conflict resolution and organizational commitment in construction industry, questionnaires are sent to the construction companies. Different categories could be found in the construction industry like developer, consultant and contractor and etc. In this research, both private firms and the government bodies are invited to participate in the study to find

the difference between two bodies. For the private firms, consultancy firms provided by the Hong Kong Institute of Surveyors (HKIS) are selected to be the target group in order to attain the consistency in the private companies.

10 construction-related government bodies and 40 consultancy companies provided in the company list by HKIS are randomly selected and invited to participate in the research. Emails with cover letter and questionnaires are sent to each company to invite them to complete the questionnaire (refer to appendix 2 and 3). Instructions, objectives and importance of the research are stated in the cover letter to arouse their interests in involving in the study. Four members in a company are invited to participate in the research. There is no restriction for the respondents. Different positions of the members can participate in the study to make the research more precise.

5.3.3 Questionnaire Layout

One set of questionnaire with a cover letter stating the objectives of research is sent to the target group. The questionnaire is divided into four sections. Section One is about the background of the company and the employee; Section Two is about the organizational culture in the construction industry; Section Three is about the conflict solving approach and Section Four is about level of organizational commitment.

The background information of Section One includes the name of the company, size of company, year establishment, annual turnover and the position of the employee. They are included in the analysis as they may influence the organizational culture. Including those elements in the analysis makes the study more accurate.

In order to find out the organizational culture profile in Hong Kong construction industry, the Organizational Culture Assessment Instrument (OCAI) introduced by Cameron and Quinn (2006) is used to identify the types of culture existing in the organization. It divides the culture into four types. Both actual and preferred types of culture are asked in the questionnaire.

To find out the current practice of conflict solving approach in the company, the Rahim Organizational Conflict Inventory-II introduced by Rahim (1979) is used. It divides conflict solving approaches into five types. Both actually and preferred conflict solving approach are asked in the questionnaire.

For the organizational commitment of employees, the measurement of organizational commitment developed by Allen and Meyer (1990) is used. It divides the organizational commitment into three types. Level of the organizational commitment in current situation is asked in the questionnaire.

5.4 Research instrument

In order to find out the culture profile, conflict solving approach and commitment in the organization through questionnaire survey, different research instruments are adopted. Details of them are discussed below.

5.4.1 Organizational Culture Assessment Instrument (OCAI)

Organizational Culture Assessment Instrument (OCAI) based on a theoretical model known as the Competing Values Framework (CVF) is employed to diagnose the dominant types of organizational culture in construction industry. CVF has been proven to be a helpful and useful framework to find out the dominant cultures of organization as it helps individuals to identify the underlying cultural dynamics that exist in their organization.

The OCAI divides the organizational cultures into four types namely clan, adhocracy, market and hierarchy. The OCAI, used to analyze the dominant type of organizational culture, is in form of a questionnaire. The purpose of the OCAI is to assess the six key dimensions of organizational culture which is discussed below.

Both actual and preferred organizational culture are assessed in the OCAI. It becomes more and more important to assess the organizational culture as culture is a powerful tool in the organizations. It can maintain the stability in the organization when facing

challenge. It is more meaningful to find out the preferred culture by the members.

Culture is the shared values, beliefs and assumptions shared by the members in organization. If the preferred culture of different members is found out and a culture change is made to suit the members, it can enhance the organizational effectiveness.

There are different instruments in assessing the organizational culture and the OCAI is used to diagnose the organizational culture in the study. It does not mean that this instrument is perfect but it could provide reliable and genuine results for the organizational culture defined in this research.

There are two main disciplinary foundations of organizational culture. Cameron and Ettington (1988) reviewed a long list of published definitions of organizational culture and find out that for the majority of the definition of organizational culture, culture is treated as an enduring set of values, beliefs and assumptions that characterize organizations and their members. It distinguishes the concept of organizational culture from organizational climate. Culture is the underlying values and assumptions while climate is the superficial attitudes or perceptions. The CVF focuses wholly on cultural attributes but not the climate attributes. As such, CVF uncovers the cultural pattern in the organization and reveals “how things are” in the organization. Many researchers have adopted this approach to assess the culture in

their studies. The reliability and validity of this instrument has also been tested and proven in their studies.

To analyze the organizational culture, there are six content dimensions in the OCAI namely dominant characteristics, organizational leadership, management of employees, organizational glue, strategic emphases and criteria of success. Using six dimensions to assess the culture may not be comprehensive as the definition of culture is very broad and different people would have different opinions about the culture. However, proven in the past research, it is adequate to diagnose the culture in the organizations. The organization can establish a pattern of culture using the OCAI as it can identify the cultural strength, congruence and type of the organization which are useful for the organization to improve the effectiveness.

24 questions in the instrument are divided into six dimensions. Respondents are required to rate their organization according to what is happening in the organization and what is preferred by them. They need to divide 100 points among the four alternatives in each dimension. The details the questionnaire can be referred to appendix 2.

5.4.2 Rahim Organizational Conflict Inventory-II (ROCI-II)

Rahim Organizational Conflict Inventory-II (ROCI-II) is used to find out the

styles used by the members to handle the interpersonal conflict in the organization. It contains three separate forms – A,B and C-differing only in reference to the conflict resolution with boss, subordinate and peer respectively. In this research, form A or C would be used. If the respondents are in upper level like the managers and directors in the organizations, they are requested to complete the form C. If the respondents are the other members in the organization, they are requested to complete the form A.

There are several reasons to use this approach to diagnose the conflict handling styles. Practically, three topics are covered in the research which means that the questionnaire is already not simple. If more questions are included in the research, the respondents may be reluctant to complete the questionnaire and a satisfactory response rate cannot be ensured. Therefore, conflict resolution with subordinates or bosses is chosen to be identified. It is undoubted that conflict handling styles with different categories people are different. Just like when someone argues with his/ her parents or siblings, he/ she will have a total different handling style. Conflict resolution with subordinates or bosses could reflect the culture easily. Managers in organization with different culture may treat their subordinates differently. By studying their behaviors, relationship between culture and conflict management can be found. On the other hand, their preferred conflict handling styles are asked in OCAI in order to know whether they are satisfied with the current practice or not.

Basically, there are several instruments available for measuring the styles of handling interpersonal conflict. The instruments are designed by Blake and Mouton (1964), Hall (1969), Lawrence and Lorsch (1967), and Thomas and Kilmann (1974). However, the reliability of the four instruments is not very high. The ROCI, developed by Rahim (1983) includes the work of Blake and Mouton (1964) and Thomas and Kilmann (1974). Both parties classify the conflict management style by considering two dimensions which are concern for self and concern for other. They classified the conflict handling styles into five types namely integrating, avoiding, obliging, dominating and compromising. The ROCI, a instrument to measure five styles of handling interpersonal conflict, was being tested in order to be validated. It is found that the test-retest and internal consistency reliability for the five scales are satisfactory and compare favorably with other existing instruments. Therefore, it is chosen to be used in this study.

The ROCI-II is made up of 28, 5-point Likert items that range from strongly agree to strongly disagree. There are seven items for measuring integrating styles; six items for measuring obliging and avoiding styles; five items for measuring dominating styles and four items for measuring compromising styles. The higher the score got in the items, the more likely the approaches would be used in the organization. The respondents are required rate their organization according to what is

happening in the organization and what is expected by them

5.4.3 Organizational Commitment Measurement

Meyer and Allen's (1991) Three-Component Model of Organizational Commitment is chosen to assess the organizational commitment in this research. More and more people like the practising managers and scientists are interested in organizational commitment as it may relate to productivity and turnover of the organization.

There are several instruments to assess the organizational commitment. Organizational Commitment Questionnaire (OCQ), developed by Mowday *et al.* (1982), is one of the instruments to measure it. It measures the affective commitment which is the emotional attachment to the organizations. Sidebet theory, evolved from the work of Becker (1960) measures the continuance commitment, a consideration of perceived cost when they leave the organization, with scales developed by Ritzer and Trice (1969), which were later modified by Hrebiniak and Alutto (1972). Three-Component Model of Organizational Commitment developed by Meyer and Allen (1991) measures not only the affective and continuance commitment but also the normative commitment which is the consideration of the obligation of the employee to the organization. The three types of commitment defined Meyer and

Allen (1991) may not be in the relationship with each other. It is chosen to assess the organizational commitment in this study as it can measure the commitment in a more comprehensive way. Commitment can be a constructive and destructive to the organization. For instance, affective commitment may relate positively to the performance (Meyer and Allen, 1996) while the members with continuance commitment may not be motivated to work.

Basically, there are totally 18 questions which are 7-point Likert items ranging from strongly agree to strongly disagree in the instrument (see appendix 2). The 18 questions are equally divided to measure each type of commitment. Among the 18 questions, the calculations to the score could be different. In questions 1, 2, 5 of section 4.1, all questions in section 4.2 and questions 2 to 6 of section 4.3, the stronger degree towards agree side, the higher is the score. In contrary, for the remaining questions in section 4, the stronger degree of disagreement result to a higher score to commitment.

5.5 Hypotheses of the study

The hypotheses of the research are set as follows:

1. Clan culture will not choose dominating conflict solving approach.
2. Clan culture will not choose avoiding conflict solving approach.
3. Clan culture will not choose obliging conflict solving approach.

4. Clan culture will choose integrating conflict solving approach.
5. Clan culture will choose compromising conflict solving approach.
6. Hierarchy culture will choose dominating conflict solving approach.
7. Hierarchy culture will choose avoiding conflict solving approach.
8. Hierarchy culture will choose obliging conflict solving approach.
9. Hierarchy culture will not choose integrating conflict solving approach.
10. Hierarchy culture will not choose compromising conflict solving approach.
11. Adhocracy culture will not choose dominating conflict solving approach.
12. Adhocracy culture will not choose avoiding conflict solving approach.
13. Adhocracy culture will not choose obliging conflict solving approach.
14. Adhocracy culture will choose integrating conflict solving approach.
15. Adhocracy culture will choose compromising conflict solving approach.
16. Market culture will choose dominating conflict solving approach.
17. Market culture will not choose avoiding conflict solving approach.
18. Market culture will not choose obliging conflict solving approach.
19. Market culture will not choose integrating conflict solving approach.
20. Market culture will not choose compromising conflict solving approach.
21. Company with small size will choose clan culture.
22. Company with small size will choose adhocracy culture.

23. Company with large size will choose hierarchy culture.
24. Company with large size will choose market culture.
25. Younger company will choose clan culture.
26. Younger company will choose adhocracy culture.
27. Older company will choose hierarchy culture.
28. Older company will choose market culture
29. Hypothesis 4, 5, 14 and 15 will lead to higher level of affective and normative commitment and lower level of continuance commitment.
30. Hypothesis 6, 7, 8 and 16 will lead to lower level of affective and normative commitment and higher level of continuance commitment.

5.6 Method of analysis

To find out the relationship between the organizational culture profile, current conflict handling styles and level of commitment, both qualitative method (interview) and quantitative method (questionnaire survey) are used to obtain the data in the construction industry. Using questionnaire survey, a general picture in the construction industry could be obtained. Using interview, the unique information from the practitioners could be found. By analyzing them, a full picture including the current practice and the underlying reasons could be obtained.

All data collected by the quantitative method is analyzed statistically using SPSS.

The main thing to concern in all tests performed in SPSS is the significance value which is the probability of the null hypothesis to be correct. Normally, only the results in SPSS with a significance value less than 0.05 is considered as a significance value of 0.05 means there is 95% certainty of getting the right answers and the null hypothesis is rejected in this case as it is unlikely to be true.

Before finding the relationship between them, confirmatory factor analysis (CFA) is carried out in order to testify the theoretical models that diagnose the culture profile, conflict management style and organizational commitment. It is used to find whether it is applicable in this research or not. Exploratory factor analysis is also used when the CFA fails to confirm the theoretical model.

Then, the culture profile, conflict handling style and level of commitment could be found easily by simple mathematics. As told, they are related to behavior of the people so that four members from each company are requested to prevent the subjective feeling. Therefore, when calculating the scores given by the members, it is important to take the average score from different members in every responded company so that a collective opinion can be obtained.

After summarizing the data and finding the mean of each culture profile, conflict

solving approach and organizational commitment, the relationships between them could be found by correlation test using SPSS.

Chapter 6 Data Analysis

6.1 Introduction

In this chapter, the data collected from the questionnaire survey and interview is analyzed by the methodology as stated in the previous chapter (chapter 5). The response rate is stated. And the data collected is analyzed. Confirmatory factor analysis is carried out to test whether the theoretical model fit in the research. If it passes, then the data is analyzed to find the relationship between them.

6.2. Response rate

Four same sets of questionnaire are sent to 50 companies in construction industry (40 companies in private sectors and 10 in public sectors. It is requested that four members in each company should complete the questionnaire. Among the 40 private companies, 12 companies completed the questionnaire. However, two of the companies did not complete all four same sets of the questionnaire. They are not treated as the valid respondents in this study. It is concluded that 10 respondents from private sector are qualified to involve in the study. The response rate in private sector is 25%.

On the other hand, 3 companies in public sector have responded to the

questionnaire survey. All of them are treated as the valid respondents as they have completed all four sets of questionnaire. The response rate in public sector is 30 %. For the overall response rate, 13 responses out of 50 invitations, it is 26%. The rate is not high due to several reasons which will discuss in the next chapter.

6.3 Result Analysis

After the data is collected from the different construction-related companies, they are analyzed in the way told in chapter 5. Organizational culture profile, conflict solving approach and organizational commitment are analyzed in the following sections and the relationships between them are found.

6.3.1 Confirmatory factor analysis

There are three models suggested by different researchers to diagnose the organizational culture, conflict handling style and organizational commitment. Those three models are chosen because many researchers have proven that they are validated models. Confirmatory factor analysis is carried out to testify the models in the study.

6.3.1.1 Confirmatory factor analysis in the OCAI

The confirmatory factor analysis cannot be carried out in the OCAI. To find out the underlying reasons, exploratory factor analysis is performed to find the variability

of the 24 questions in the OCAI. From the table below, it is found that for the observed variables for clan, adhocracy and market culture, they contribute to three different components while the observed variables for hierarchy culture, it spreads in all three components. It is concluded that the hierarchy culture is no longer an independent factor with the other three cultures. It is not regarded as the valid factor in the research.

Table (1) Rotated Component Matrix for the OCAI

Rotated Component Matrix^a

	Component		
	1	2	3
clan1			.841
clan2			.769
clan3			.833
clan4			.834
clan5			.783
clan6		-.318	.801
adhoc1	.863		
adhoc2	.859		
adhoc3	.865		
adhoc4	.797		
adhoc5	.789		
adhoc6	.723		
market1		.788	
market2		.657	-.303
market3	.358	.776	
market4		.792	
market5		.803	
market6	.313	.807	
hierarchy1	-.502	-.493	-.556
hierarchy2	-.537	-.601	
hierarchy3	-.570	-.539	-.527
hierarchy4	-.619	-.462	-.527
hierarchy5	-.670	-.594	-.302
hierarchy6	-.550	-.515	-.552

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

Confirmatory factor analysis (CFA) is carried out again without the hierarchy culture.. The CFA could be carried out this time. The chi-square is 292.975. The degree of freedom is 132 and the RMSEA is 0.148. The CFA is also performed in the preferred culture types (without variables in hierarchy). The chi-square is 266.744. The degree of freedom is 132 and the RMSEA is 0.135. It is suggested that the model is acceptable and passes the analysis. The details of the CFA in the OCAI could be referred to appendix 9. It is found that the OCAI cannot be fully applied in the study. The reason would be explained later.

6.3.1.2 Confirmatory factor analysis in the ROCI-II

The confirmatory factor analysis is performed in ROCI-II for both the actual and the preferred conflict solving approaches. The model is acceptable in the study. For the analysis in actual conflict solving approach, the chi-square is 829.784. The degree of freedom is 340 and the RMSEA is 0.160. For the analysis in preferred conflict solving approach, the chi-square is 760.689. The degree of freedom is 340 and the RMSEA is 0.149. The model passes the analysis which means it fits in the study. The details of the CFA in the ROCI-II could be referred to appendix 9.

6.3.1.3 Confirmatory factor analysis in the Three-Component Model of

Organizational Commitment by Meyer and Allen's (1991)

The confirmatory factor analysis is also performed in Three-Component Model of Organizational Commitment. It has the best performance among all three models.

The chi-square is 223.783. The degree of freedom is 132 and the RMSEA is 0.110.

The value of the RMSEA is the lowest which means that it fits in the study the most.

For the details of the CFA in Three-Component Model of Organizational Commitment, it could be referred to appendix 9.

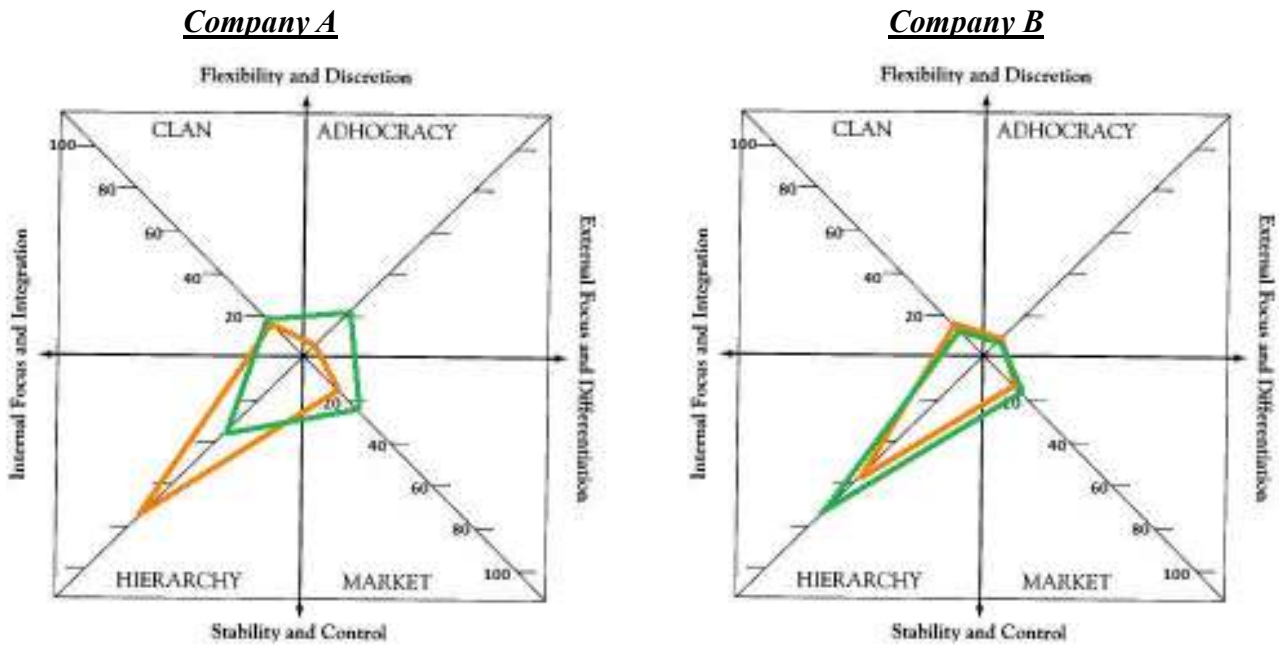
6.3.2 Analysis of organizational culture profile

The organizational culture profile is analyzed by using the OCAI to calculate the scores of the six key dimensions of the culture type in company. The culture type with the higher score is regarded as the dominant culture type. As four members completed the questionnaires in order to prevent the subjective opinions and bias towards the company, the overall culture profile in each company is determined by taking the average scores from the four different members in each company. In the OCAI, the actual and the preferred culture type are determined. It should be noticed that it is in public sector for company A-C while the remaining companies are in the private sector.

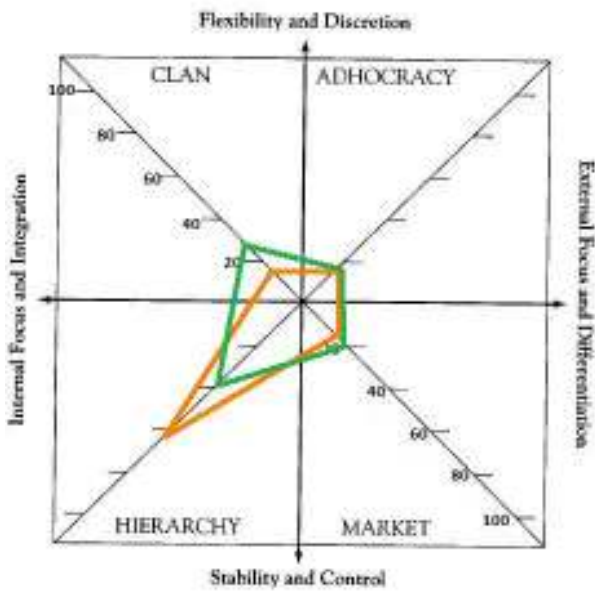
6.3.2.1 Overall culture profile

Normally, all of the culture types exist in the organizations. One or two of the culture types comprise the largest portions and therefore they are treated as the dominant types in the organizations. The overall culture profile of both the actual one and the preferred one for each company is drawn out in the following figures

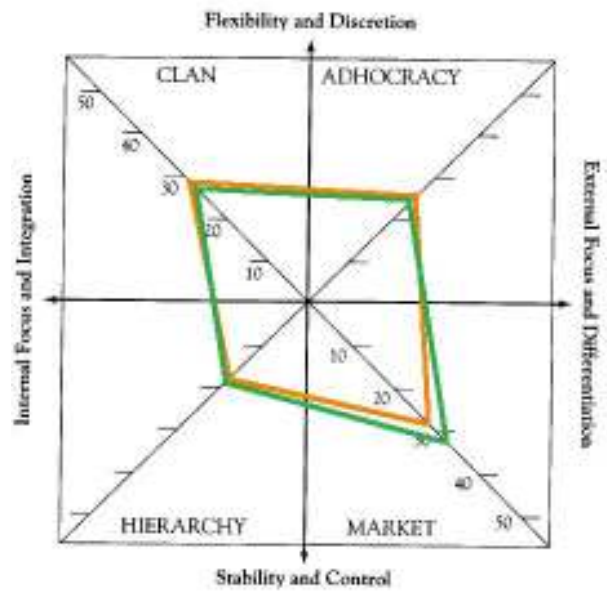
Figure (5) Organizational culture profiles for the 13 responded companies (A-M)



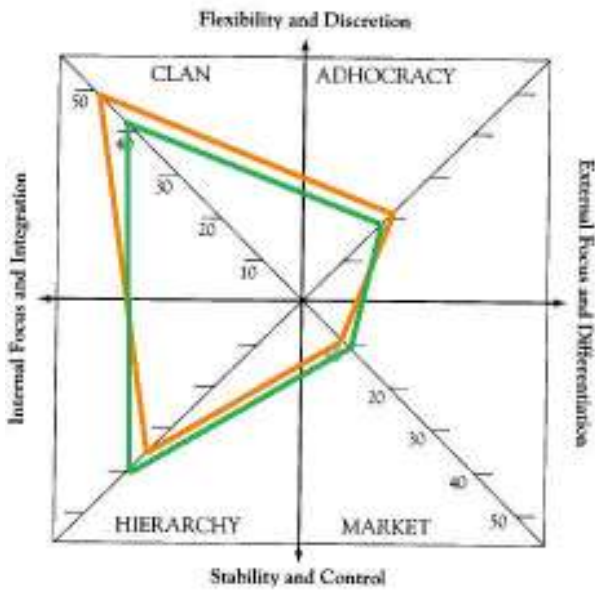
Company C



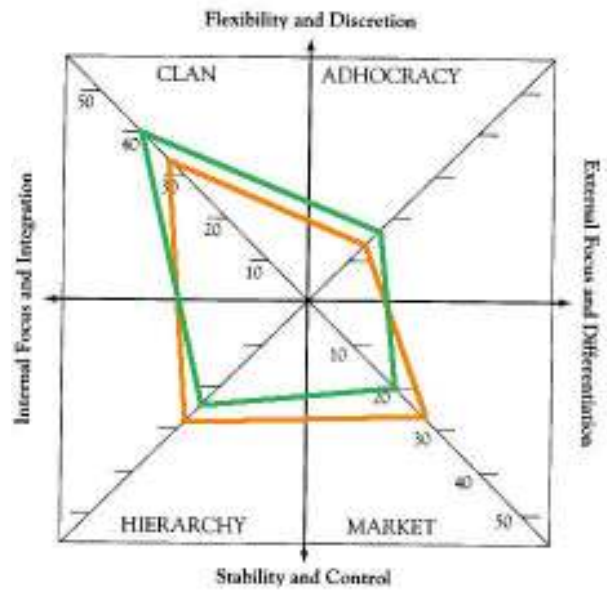
Company D



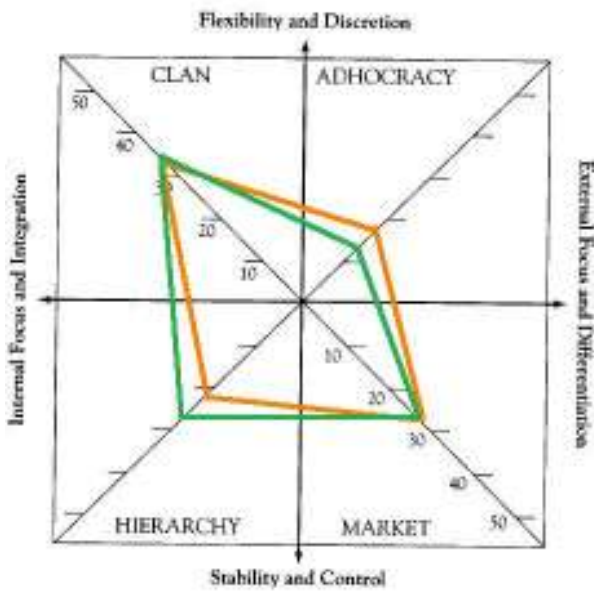
Company E



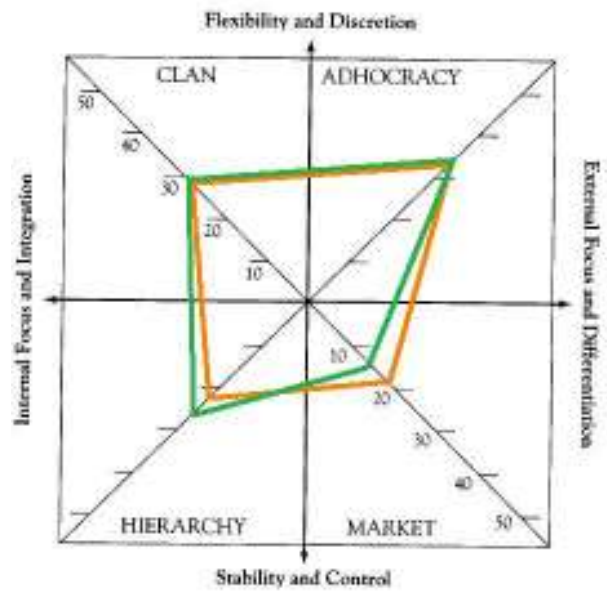
Company F



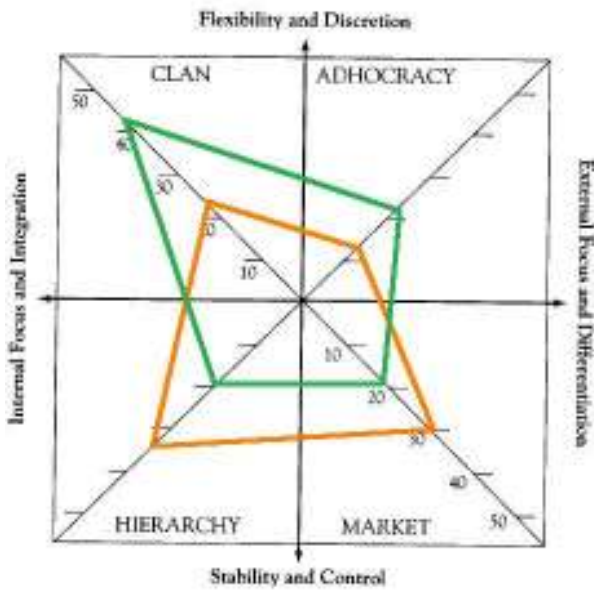
Company G



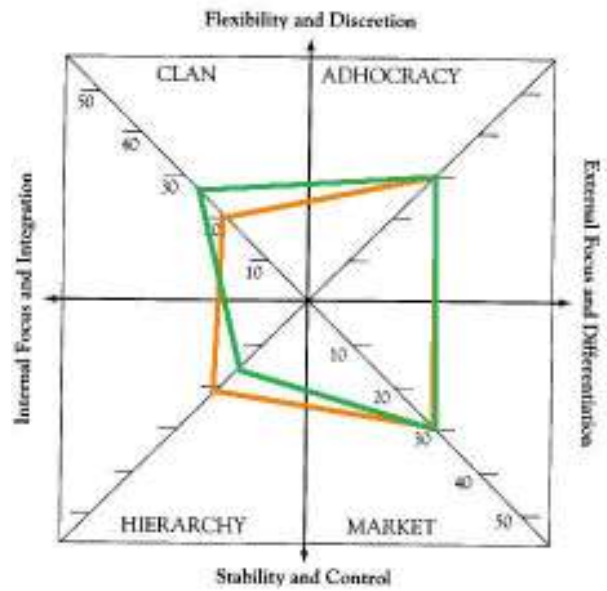
Company H



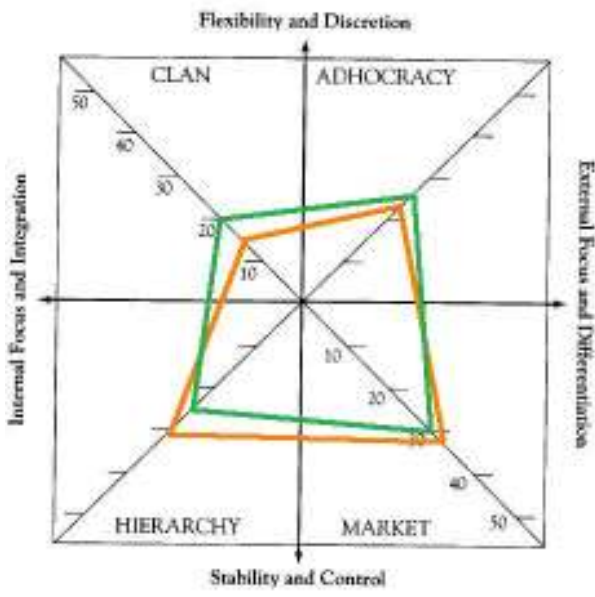
Company I



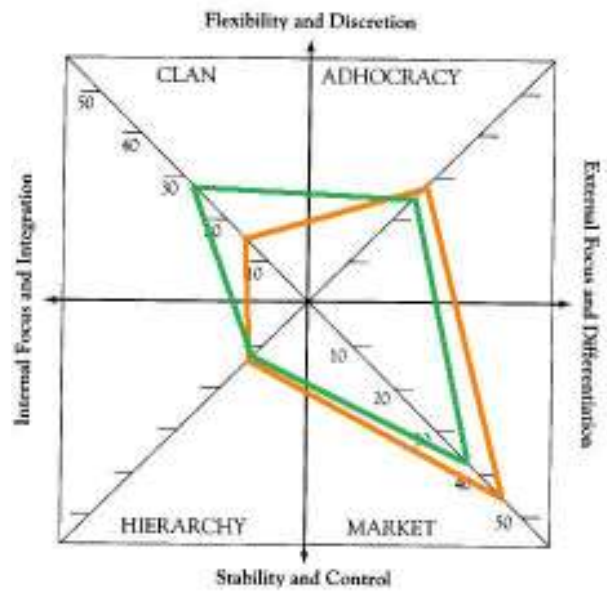
Company J



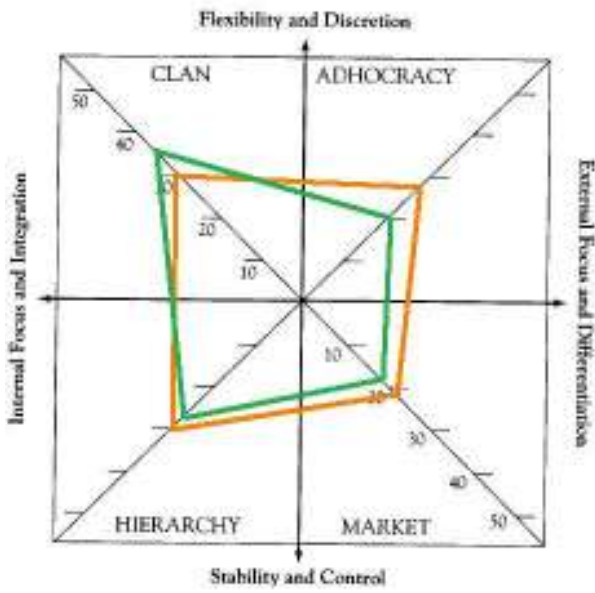
Company K



Company L



Company M



In each figure above, the upper left quadrant represents clan culture; the upper right quadrant represents adhocracy culture; the lower right quadrant represents market culture; the lower left quadrant represents hierarchy culture. The orange color lines represent the actual culture profile for the organizations while the green color lines represent preferred culture profile for the organizations. It is noticed that the scale of the organizational culture profiles for Company A to C are not the same as the scales for the remaining companies due to the strong domination of hierarchy culture in Company A to C. From the figures above, different shapes of sheared rectangle are presented due to different portions of the culture types in each company.

For the actual culture type, Company E, F, G, M have the dominant clan culture, Company A, B, C, I have the dominant hierarchy culture, Company D, K, L have the dominant market culture and Company H, J have the dominant adhocracy culture. It is observed that although these companies are in the construction industry, they have the different cultures. Besides, there are only 13 respondents in the study. Compared to the whole construction industry, it is just a small portion that cannot represent the whole industry. Therefore, it is hard to determine the dominant culture in the industry.

For the preferred culture type, Company D, K, L prefer the market culture, Company A, B, C preferred hierarchy culture, Company E, F, G, I, M prefer clan

culture and Company H,J prefer adhocracy culture. The following table summarizes the actual and preferred culture types of the 13 companies.

Table (2) A summary for the actual and preferred culture types in Company A-M

Company	Actual Culture	Preferred Culture
Company A	Hierarchy	Hierarchy
Company B	Hierarchy	Hierarchy
Company C	Hierarchy	Hierarchy
Company D	Market	Market
Company E	Clan	Clan
Company F	Clan	Clan
Company G	Clan	Clan
Company H	Adhocracy	Adhocracy
Company I	Hierarchy	Clan
Company J	Adhocracy	Adhocracy
Company K	Market	Market
Company L	Market	Market
Company M	Clan	Clan

From the table (2), it is observed that most of the companies have the same actual and the preferred culture. However, for the hypotheses in this study, it is expected that actual culture types should be different from the preferred culture types as the performance of the company is never the best and needs improvement to suit the ever changing world. From literature, it is told that whenever an organization would like to change the policy, strategy or etc, the culture should be changed first. The paired sample T test is a test that compares the mean of the two variables (the actual and preferred culture profile). The table below shows the paired sample T test

of the actual and preferred culture profile.

Table (3) Paired Sample T-Test for actual and preferred culture types

	t	df	Sig. (2-tailed)
Pair 1 Clan - P_clan	-2.505	12	.028
Pair 2 Adhocracy - P_adhocracy	-1.262	12	.231
Pair 3 Market - P_market	.622	12	.545
Pair 4 Hierarchy - P_hierarchy	1.748	12	.106

For the null hypothesis in this test, there is no significant different between the means of the actual and preferred culture profile. The result shows that there is only a significant result in the pairs of actual and preferred clan culture and the results for the remaining 3 pairs are insignificant. Therefore, only the null hypothesis in the pairs of actual and preferred clan culture is rejected. The reason for result is discussed in Chapter 7.

6.3.2.2 Relationship between duration and size of company

From literature, the duration and the size of the company are taken into account in this study as they would be the factors of organizational culture. A test is carried out to find out the relationship between the two factors first. The results found are

significant. A smaller company is positively related to a younger company while a larger company is positively related to an older company.

From the table below, all the companies with shorter existence duration contain less than 500 employees. The majority of the older companies contain more than 500 employees except company F and K.

Table (4) Relationship between the duration and the size of the company

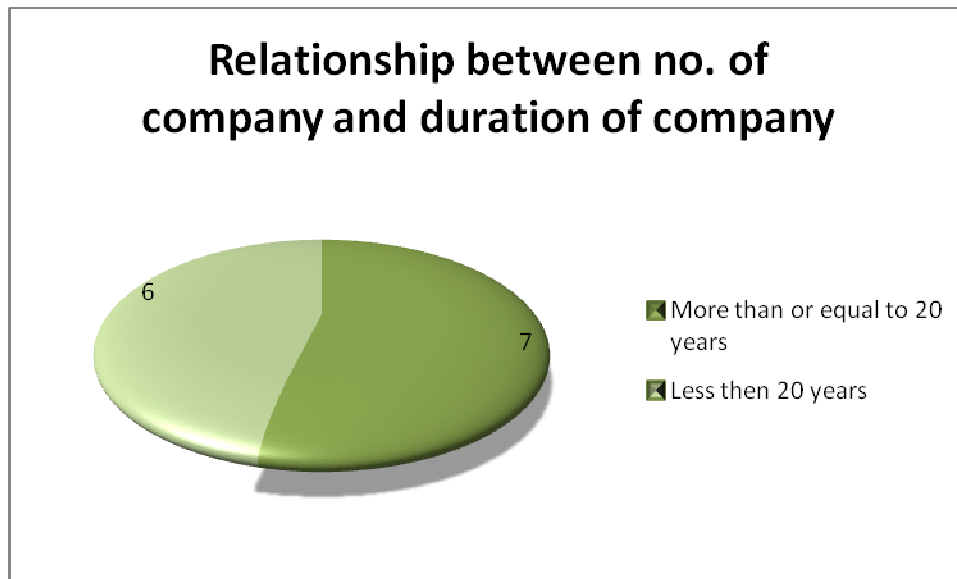
Duration of the company	Company	Size of the company
Less than 20 years	Company D	Less than 500 employees
	Company E	Less than 500 employees
	Company H	Less than 500 employees
	Company J	Less than 500 employees
	Company L	Less than 500 employees
	Company M	Less than 500 employees
More than or equal to 20 years	Company A	More than 500 employees
	Company B	More than 500 employees
	Company C	More than 500 employees
	Company F	Less than 500 employees
	Company G	More than 500 employees
	Company I	More than 500 employees
	Company K	Less than 500 employees

6.3.2.3 Relationship between culture type and duration of company

In the questionnaire survey, the existence duration of the organization is asked to see if it will affect the culture or not. The duration is classified into less than 20 years

and more than or equal to 20 years. The relationship between numbers and duration of company is shown in the figure below. Among the 13 companies, 6 companies are less than 20 years and 7 companies are more than or equal to 20 years.

Figure (6) Relationship between numbers of company and duration of company



For the relationship between culture type and the duration of the company, it is indicated in the Table (5)

Table (5) Duration existence of the company and the organizational culture profiles for the responded Companies

Duration of the company	Company	Actual culture type	Preferred culture type
Less than 20 years	Company D	Market	Market
	Company E	Clan	Clan
	Company H	Adhocracy	Adhocracy
	Company J	Adhocracy	Adhocracy
	Company L	Market	Market
	Company M	Clan	Clan
More than or equal to 20 years	Company A	Hierarchy	Hierarchy
	Company B	Hierarchy	Hierarchy
	Company C	Hierarchy	Hierarchy
	Company F	Clan	Clan
	Company G	Clan	Clan
	Company I	Hierarchy	Clan
	Company K	Market	Market

Company D, E, H, J, L, M exist less than 20 years. Two of them have dominant market culture, two of them have dominant clan culture and two of them have dominant adhocracy culture. Company A, B, C, F, G, I, K exist more than or equal to 20 years. Four of them have dominant hierarchy culture; two of them have dominant clan culture and one of them have dominant market culture. For the companies more than or equal to 20 years, most of them have dominant hierarchy culture while there is no dominant culture types for the companies less than 20 years. A correlation test is carried out to test if there is relationship between culture profile and existing duration. (The details of the test could be referred to appendix 11) The result shows that for the young companies, adhocracy culture is dominant while the hierarchy culture is

dominant in the older companies. For the market and clan culture, there is insignificant relationship with the year of establishment.

The hypotheses are set in this test:

- 1) Younger company will choose clan culture.
- 2) Younger company will choose adhocracy culture.
- 3) Older company will choose hierarchy culture.
- 4) Older company will choose market culture

Statistically, it is proven that hypothesis 2 and 3 is true while hypothesis 1 and 4 is false. Discussion is made in chapter 7.

For the relationship between the preferred culture profile and duration of company, there is no significant relationship between them. The test could be referred to appendix 11.

6.3.2.4 Relationship between culture type and size of company

From literature, size of the company is one of the factors that affect the choice of the culture. It is therefore asked in the questionnaire. The size of the company is defined as large when the numbers of employee are larger than or equal to 500 while it is small when the company has less than 500 employees. The figure (7) shown below is the relationship between number and size of company. Eight of them are

small while five of them are large.

Figure (7) Relationship between numbers of company and size of company

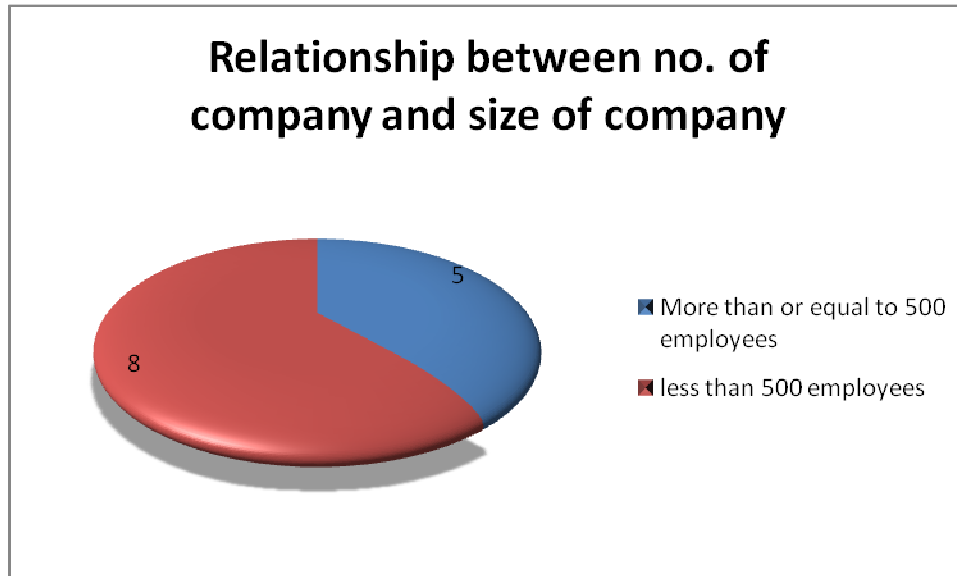


Table (6) Size of the company and the organizational culture profiles for the responded Companies

Size of company	Company	Actual culture type	Preferred culture type
Less than 500 employees	Company D	Market	Market
	Company E	Clan	Clan
	Company F	Clan	Clan
	Company H	Adhocracy	Adhocracy
	Company J	Adhocracy	Adhocracy
	Company K	Market	Market
	Company L	Market	Market
	Company M	Clan	Clan
More than or equal to 500 employees	Company A	Hierarchy	Hierarchy
	Company B	Hierarchy	Hierarchy
	Company C	Hierarchy	Hierarchy
	Company G	Clan	Clan
	Company I	Hierarchy	Clan

The table above shows the relationship between the culture type and size of company. Company D, E, F, H, J, K, L, M are smaller in size. Three of them have dominant market culture, three of them have dominant clan culture and two of them have dominant adhocracy culture. For the smaller company, they are dominant in clan or market culture. Company A, B, C, G, I are larger in size. Four of them have dominant hierarchy culture and one of them have dominant clan culture. For the larger company, they are dominant in hierarchy culture. A correlation test is performed to test the relationship between the size of company and the culture type.

The hypotheses are set in this test:

31. Small size company will choose clan culture.
32. Small size company will choose adhocracy culture.
33. Large size company will choose hierarchy culture.
34. Large size company will choose market culture.

The result shows that the small size company has the dominant adhocracy culture and larger size company has the dominant hierarchy culture. The relationship between size of company and market and clan culture is insignificant. Thus, hypothesis 1 and 4 is rejected while hypothesis 2 and 3 is valid.

The relationship between the preferred culture types and the size of company (refer to appendix 11) is insignificant.

6.3.2.5 Relationship between culture type and annual turnover of company

Annual turnover could be one of the variables for organizational culture.

Therefore, it is analyzed in the study to test whether they have relationship. For the annual turnover, they are separated into two groups which are 'more than or equal to 300M' and 'less than 300M'. Six of the responded companies have the annual turnover for more than or equal to 300M while seven of them are less than 300M

Figure (8) Relationship between numbers of company and annual turnover

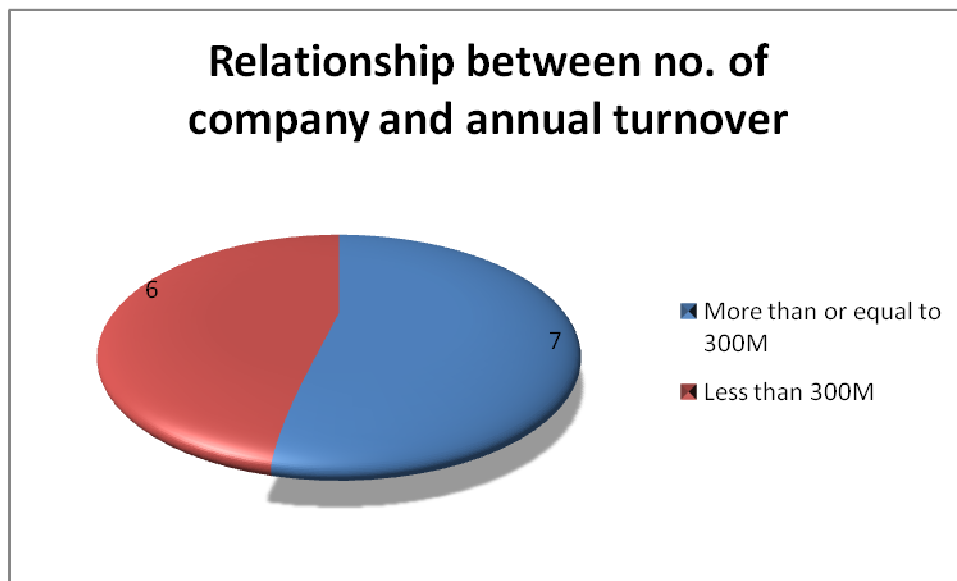


Table (7) Annual turnover of the company and the organizational culture profiles for the responded Companies

Annual Turnover	Company	Actual culture type	Preferred culture type
More than or equal to 300M	Company A	Hierarchy	Hierarchy
	Company B	Hierarchy	Hierarchy
	Company D	Market	Market
	Company G	Clan	Clan
	Company H	Adhocracy	Adhocracy
	Company K	Market	Market
	Company L	Market	Market
Less than 300M	Company C	Hierarchy	Hierarchy
	Company E	Clan	Clan
	Company F	Clan	Clan
	Company I	Hierarchy	Clan
	Company J	Adhocracy	Adhocracy
	Company M	Clan	Clan

Company A, B, D, G, H, K, L have the annual turnover more than or equal to 300M while Company C, E, F, I, J, M have the annual turnover less than 300M. There is no dominant culture types in the companies with neither more than nor less than 300M. Details are discussed in chapter 7.

6.3.3 Analysis of conflict solving approach

To determine the conflict handling style in the construction industry, ROCI-II is used. It is tested in the CFA and it is considered as the model that is fitted in the study. It contains 28 5-point Likert items that range from strongly agree to strongly disagree. As four members are asked to complete the questionnaire, the scores given by each

member is taken average in order to produce the collective views in the company. The figures below show the actual and preferred conflict handling styles in the 13 companies.

Figure (9) The actual conflict solving approach in the construction industry

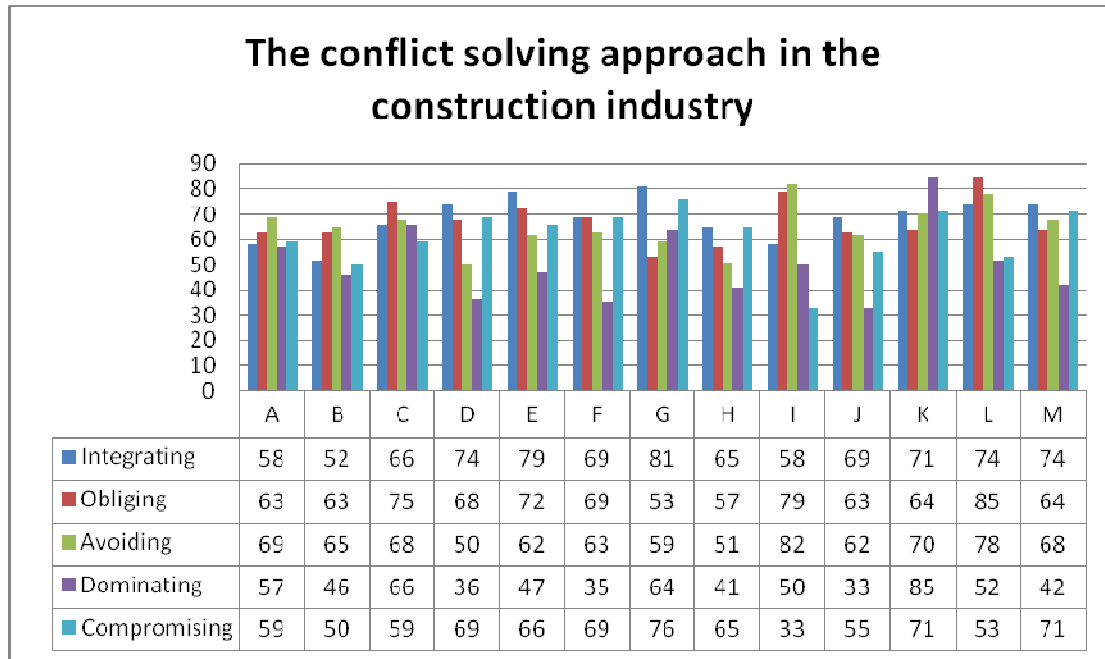
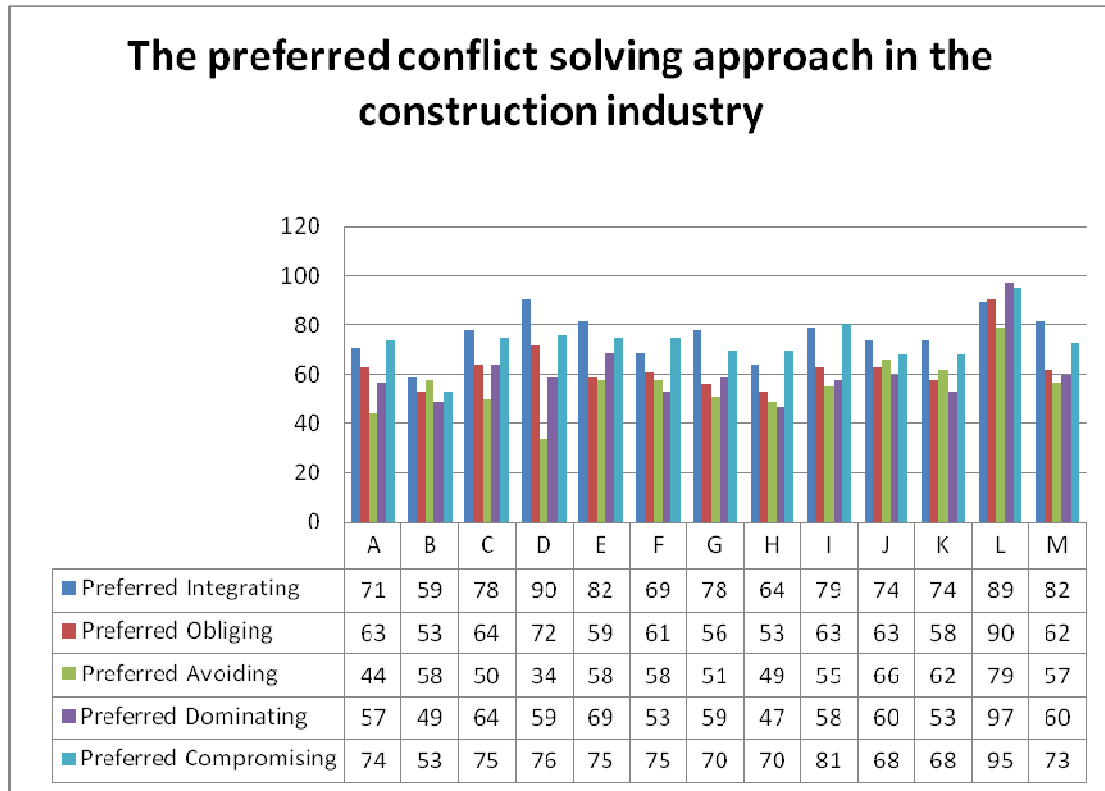


Figure (10) The preferred conflict solving approach in the construction industry



From the figures, each company uses all five conflict solving approaches. Some are used more while some are used less. The table below summarizes the majority use of the actual and preferred conflict handling styles.

Table (8) The actual and preferred conflict solving approach in Company A-M

Company	Actual conflict solving approach	Preferred conflict solving approach
Company A	Avoiding	Compromising
Company B	Avoiding	Integrating
Company C	Obliging	Integrating
Company D	Integrating	Integrating
Company E	Integrating	Integrating
Company F	Integrating, Compromising, Obliging	Compromising
Company G	Integrating	Integrating
Company H	Integrating, Compromising	Compromising
Company I	Avoiding	Compromising
Company J	Integrating	Integrating
Company K	Dominating	Integrating
Company L	Obliging	Dominating
Company M	Integrating	Integrating

Company D, E, F, G, H, J, M mainly use the integrating approach, Company A, B, I mainly use the avoiding approach and Company C, L mainly use the obliging approach and Company K mainly use the dominating approach. It can be concluded that integrating approach is mainly used in the construction industry. For the preferred culture type, most of them prefer the integrating and compromising conflict handling styles

. Paired sample T test is carried out to test the differences between the actual and preferred conflict solving approach. The null hypothesis is that there is no difference between actual and preferred conflict solving approach. The test is shown below.

Table (9) Paired Sample T-test for actual and preferred conflict solving approach

		t	df	Sig. (2-tailed)
Pair 1	Integrating - P_integrating	-3.739	12	.003
Pair 2	Obliging - P_obliging	2.361	12	.036
Pair 3	Avoiding - P_avoiding	3.696	12	.003
Pair 4	Dominating - P_dominating	-1.929	12	.078
Pair 5	Compromising - P_compromising	-2.722	12	.019

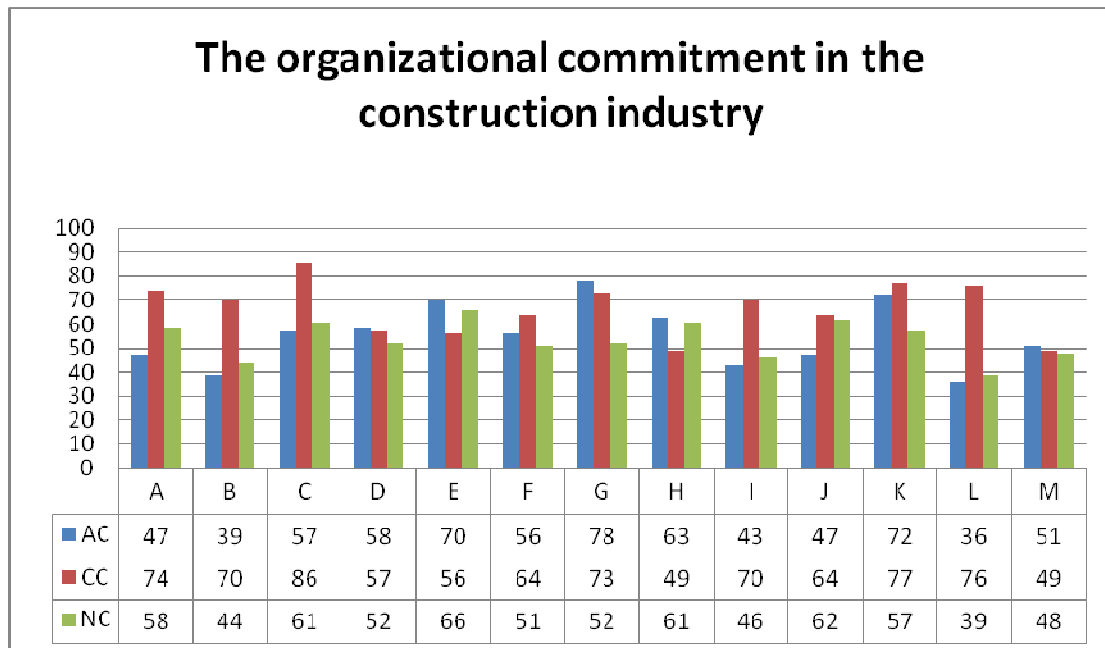
All the pairs of actual and preferred conflict solving approach except the pair of dominating conflict solving approach show the significant results. Therefore, the four null hypotheses in the pairs of actual and preferred conflict solving approach are rejected. The reasons for the result are discussed in Chapter 7.

6.3.3 Analysis of organizational commitment

The organizational commitment is measured by the three-component model developed by Meyer and Allen (1991). There are three types of commitment. Each of them is scored in six questions. And the average score is used for the analysis.

The figure below shows portion of commitment in the company.

Figure (11) The organizational commitment in the construction industry



It is found that all three types of the commitment exist in the company as they refer different types of commitment. The table below shows the commitment that exists in higher level in the company.

Table (10) Type of commitment that exists in higher level in Company A-M

Company	Type of commitment that exists in higher level
Company A	Continuance commitment
Company B	Continuance commitment
Company C	Continuance commitment
Company D	Affective commitment
Company E	Affective commitment
Company F	Continuance commitment
Company G	Affective commitment
Company H	Affective commitment
Company I	Continuance commitment
Company J	Continuance commitment
Company K	Continuance commitment
Company L	Continuance commitment
Company M	Affective commitment

It is found that five respondents (Company D, E, G, H, M) have the higher level of affective commitment compared with the continuance and normative commitment. On the other hand, the remaining eight respondents (Company A, B, C, F, I, J, K, L) have the higher level of continuance commitment compared with the affective and normative commitment.

On the other hand, the organizational commitment of all 53 respondents from 13 companies are analyzed. It is discovered that 31% of the respondents have a higher level of affective commitment; 58% of the respondents have a higher level of continuance commitment; 10% of the respondents have a higher level of normative commitment. It can be concluded that people in Hong Kong construction industry

have a higher level of continuance commitment compared with the affective commitment and normative commitment. It is further discussed in Chapter 7

There is an interesting finding in the three types of commitment. From the table (11), it is discovered that the affective commitment is positively related to normative commitment.

Table (11) The correlation between affective commitment and normative commitment

Correlations			AC	NC
Spearman's rho	AC	Correlation Coefficient	1.000	.547*
		Sig. (2-tailed)	.	.043
		N	14	14
	NC	Correlation Coefficient	.547*	1.000
		Sig. (2-tailed)	.043	.
		N	14	14

*. Correlation is significant at the 0.05 level (2-tailed).

6.3.5 Analysis of organizational culture profile, conflict solving approach and level of organizational commitment

The relationship between culture profile, conflict solving approach and level of organizational commitment is analyzed one by one statistically in order to find out whether they are related or not. Relationship between organizational culture profile and conflict solving approach is analyzed first. Then the relationship between

organizational culture profile and level of organizational commitment is analyzed.

Finally, the relationship between conflict solving approach and level of organizational commitment is analyzed. The table below shows the whole picture in all 13 companies.

Table (12) Relationship between organizational culture, conflict solving approach and organizational commitment

	Actual culture type	Preferred culture type	Actual conflict solving approach	Preferred conflict solving approach	Commitment
Company A	Hierarchy	Hierarchy	Avoiding	Compromising	Continuance
Company B	Hierarchy	Hierarchy	Avoiding	Integrating	Continuance
Company C	Hierarchy	Hierarchy	Obliging	Integrating	Continuance
Company D	Market	Market	Integrating	Integrating	Affective
Company E	Clan	Clan	Integrating	Integrating	Affective
Company F	Clan	Clan	Integrating Compromising Obliging	Compromising	Continuance
Company G	Clan	Clan	Integrating	Integrating	Affective
Company H	Adhocracy	Adhocracy	Integrating, Compromising	Compromising	Affective
Company I	Hierarchy	Clan	Avoiding	Compromising	Continuance
Company J	Adhocracy	Adhocracy	Integrating	Integrating	Continuance
Company K	Market	Market	Dominating	Integrating	Continuance
Company L	Market	Market	Obliging	Dominating	Continuance
Company M	Clan	Clan	Integrating	Integrating	Affective

6.3.5.1 Relationship between organizational culture profile and conflict solving approach

When focusing on the culture type and conflict solving approach in the above

table, it is discovered that the companies with hierarchy culture use the avoiding or obliging styles as the main approaches to solve the conflicts. The companies with clan and adhocracy culture use integrating and compromising styles as the main approaches to solve the conflicts. For the companies with market culture, there are no specific styles for conflict handling.

A correlation test is performed to find out the relationship between them which could be referred to appendix 11. The hypotheses for this test are set as follows:

1. Clan culture will not choose dominating conflict solving approach.
2. Clan culture will not choose avoiding conflict solving approach.
3. Clan culture will not choose obliging conflict solving approach.
4. Clan culture will choose integrating conflict solving approach.
5. Clan culture will choose compromising conflict solving approach.
6. Hierarchy culture will choose dominating conflict solving approach.
7. Hierarchy culture will choose avoiding conflict solving approach.
8. Hierarchy culture will choose obliging conflict solving approach.
9. Hierarchy culture will not choose integrating conflict solving approach.
10. Hierarchy culture will not choose compromising conflict solving approach.
11. Adhocracy culture will not choose dominating conflict solving approach.
12. Adhocracy culture will not choose avoiding conflict solving approach.
13. Adhocracy culture will not choose obliging conflict solving approach.

14. Adhocracy culture will choose integrating conflict solving approach.
15. Adhocracy culture will choose compromising conflict solving approach.
16. Market culture will choose dominating conflict solving approach.
17. Market culture will not choose avoiding conflict solving approach.
18. Market culture will not choose obliging conflict solving approach.
19. Market culture will not choose integrating conflict solving approach.
20. Market culture will not choose compromising conflict solving approach.

From the result, it is found there is significant and positive relationship between clan culture and integrating conflict handling styles. Clan culture has the insignificant relationship with the remaining styles for conflict solving. Hypotheses 1, 2, 3 and 4 are proven to be valid while hypothesis 5 is invalid. For the hierarchy culture, it records a significant and negative relationship with the integrating approach while it finds insignificant relationship with the remaining styles. Hypotheses 6 to 8 are not proven to be true while hypotheses 9 and 10 are valid. Besides, the result shows insignificant relationship between the market culture and the five conflict handling style. It is the same case in the adhocracy culture. Therefore, hypotheses 11 to 13 and 17-20 are valid while hypotheses 14 to 16 are not proven.

6.3.5.2 Relationship between organizational culture profile and level of organizational commitment

For the organizational culture profile and level of organizational commitment, from the table (12) above, it is discovered that most of the companies in this study record a higher level of continuance commitment even though they have different dominant culture types. A correlation test (refer to appendix 11) is carried out in order to verify the observations. It is found that the clan culture is negatively related to the continuance commitment. Although the relationship is insignificant in the test, the clan culture is positively related to the affective commitment and the hierarchy culture is positively related to the continuance commitment.

6.3.5.3 Relationship between conflict solving approach and level of organizational commitment

From table (12), it is found that the integrating or compromising approach may lead to affective commitment. With the avoiding, obliging or dominating approach, it would lead to continuance commitment. Statistically, it is recorded that the compromising approach relates to the affective commitment significantly and positively. For the dominating and avoiding approaches, they are positively related to the continuance commitment.

6.3.5.4 Relationship between organizational culture, conflict solving approach and organizational commitment

From the table (12), almost all companies with integrating conflict solving approach have a higher level affective commitment while all companies with dominating, obliging and avoiding conflict solving approaches have a higher level of continuance commitment. Apparently, the relationship between conflict solving approach and the organizational commitment is stronger than the relationship between the organizational culture and the organizational commitment. Looking at the analysis, the observation is true. The result of the relationship between organizational culture and organizational commitment are comparatively more significant. The compromising conflict solving approach is strongly associated with affective commitment; the avoiding and dominating conflict solving approaches is strongly associated to continuance commitment. For the relationship between organizational culture and organizational commitment, the clan culture is negative related to continuance commitment strongly. The reasons behind are discussed in Chapter 7.

Chapter 7 Discussion

7.1 Introduction

After analyzing the data, discussion is made on the result in this chapter. The results of confirmatory factor analysis of different theoretical models are discussed first. Then, the results of the organizational culture profile, conflict solving approach and organizational commitment are discussed individually. Finally, the relationship between organizational culture profile, conflict solving approach and organizational commitment, the most important section in the research, is explained.

7.2 Discussion on confirmatory factor analysis

Confirmatory factor analysis (CFA) is performed in AMOS 17 in this research as the researcher would like to know if the models (the OCAI, the ROCI-II and Three-Component Model of Organizational Commitment) are fit in the study. It is found that the original OCAI cannot pass the CFA while the other two are acceptable in the research.

7.2.1 Confirmatory factor analysis on the OCAI

CFA cannot be done on the OCAI and thus exploratory factor analysis is done to find out the underlying reasons. It is found that while the observed variables

(questions asked in the OCAI) of clan, adhocracy and market contribute to three different factors, the observed variables of hierarchy culture spread into that three factors but it does not develop its own factor. Therefore, it can be said that the hierarchy culture is not an independent factor and it is inconsistent with the other three cultures. Thus, it is not regarded as the valid factor in this research. From the statistic (refer to appendix 9), it is seen that almost all the observed variables of hierarchy culture is negatively related the other three cultures. It means that the opposite of the clan, adhocracy and market culture is the hierarchy culture. It is not the original meaning of the hierarchy culture. The four cultures types should be interrelated but they are not the opposite of each other.

There may not several reasons for this result. First, it is important to notice that the sample size in this research is small which has only 52 samples. The CFA is usually carried out with at least 100 samples. The sample-size effect in the CFA is unpredictable as it varies with the index, the data set and the sample size.

On the other hand, the result obtained would be due to the confusion of the concept of hierarchy culture in the instrument. The questions asked in the instrument are not a well description of the hierarchy culture in Hong Kong construction industry. The hierarchy culture in Hong Kong is not the same as the definition of the hierarchy

culture in the OCAI. It is no doubt that the OCAI is a well-known instrument for diagnosing the organizational culture and a lot of researches have been done on proving the validity and reliability on the instrument in the western countries.

However, few researches are done on the Hong Kong construction industry. From the exploratory factor analysis, it is seen that all the six questions in hierarchy culture in the OCAI are negatively related to the remaining culture. Hierarchy culture is not an independent factor. It depends on the other three cultures negatively. The opposite meaning of all three cultures is the composition of the hierarchy culture. It may be due to the different national cultures for Chinese and Western people. By the dimensions of the culture found by Hofstede (1991), the Chinese countries have large power distance, strong uncertainty avoidance and are collectivism while the western countries are opposite to it. The OCAI is developed in the Western countries having a different culture with the Chinese countries. Their minds would be different from each other. Therefore, it is reasonable for the Chinese and western people to have different definition towards the hierarchy culture. On the other hand, Hong Kong is a multi cultural city since it was a colonial of British before 1997 and the sovereignty is transferred to China now. The mixes of the two different national cultures lead to confusion. It is discovered that the properties hierarchy culture is quite similar to the Chinese national culture. It could be a reason for the hierarchy culture to be the

invalid factor in the study as the respondents confused with the concept of organizational culture and the national culture. Therefore, this instrument may not be applicable in Hong Kong construction industry.

The confirmatory factor analysis is performed again without the hierarchy culture. The result shown is acceptable in the research which means that the other three culture types are independent factors and it can be fitted in the models. They are then used in the analysis of the research. For the hierarchy culture, although it is an invalid factor, the analysis about the hierarchy culture is still included in the study. It is because the genuine reason cannot be found. If it is solely due to the small sample size, then the results found in the hierarchy culture are still valid. Therefore, it is treated as the additional information in the study.

7.2.2 Confirmatory factor analysis on the RCOI-II and Three-Component Model of Organizational Commitment

For the RCOI-II and Three-Component Model of Organizational Commitment, both two models show the acceptable result in the CFA. It is advised that RMSEA should be smaller than 0.1 which means the fitness of the model is acceptable. The RMSEA of RCOI-II and Three-Component Model of Organizational Commitment are 0.16 and 0.11 respectively. Although they are not smaller than 0.1, they are accepted

in the study as the sample size in the research is limited but it can also give out the results which are closed to the expected value. Besides, the results given in the CFA are expected. In the confirmatory factor analysis on the RCOI-II, the relationship between integrating and compromising conflict solving approaches and the relationship between obliging and avoiding conflict solving approaches are strongly related. It can be explained by the similar nature of them. Either integrating or compromising conflict solving approach concerns both self and others. Neither obliging nor avoiding conflict solving approach concerns for self. Avoiding and compromising conflict solving approach are related negatively which is because the avoiding style concern neither self nor others which the compromising styles concern both self and others. They are opposite to each other. On the other hand, in the confirmatory factor analysis on the RCOI-II, the affective and normative commitment is positively related. It matches with the research by Allen and Meyer (1990). For the relationships between the latent variables and the observed variables in both analyses, they are usually correlated strongly.

7.3 Discussion on Organizational Culture Profile for the responded companies

Organizational culture is an important element that an organization should be aware of. It could explain all things in the organization and help an organization to

survive. Organizational culture profile in the construction industry is discussed below.

7.3.1 Overall culture profile for the responded companies

From the analysis, it is found that all companies (company A to C) in the public sector are dominated by the hierarchy culture. While in the private sector (company D to M), most of them are dominated by the clan culture. Market culture is the second popular culture types in the companies. It is followed by the adhocracy and hierarchy culture.

An organization usually contains all four types that comprise different portions. For the culture type that has the largest portion, it is treated as the dominant culture. In public sector, they have dominant hierarchy culture which contributes to at least 60 % which means that the companies in private sector are almost dominated by the hierarchy culture only. The other three culture types can be ignored in public sectors. It means that the public sectors operate according to the instructions or the regulations only. The structure is rigid in the public sector. There are a lot of divisions and the members in each division are responsible to the certain things. There are no ad-hoc tasks for the members and they strictly follow the procedures and repeat the same tasks every day. Their job tasks are not diversified. No big challenge and uncertainty could be faced by the members. Besides, the members are not willing to do extra

things except the assigned job tasks. As they think if they do more, there is higher possibility to get wrong. Therefore, they will do the minimum tasks.

For the private sectors, the companies usually appear in a mix of the different cultures. Two cultures can co-exist. The companies with dominant clan culture usually mix with the hierarchy or market culture. The companies with dominant adhocracy culture mixes with the clan culture or market culture. The companies with dominant market culture mix with the hierarchy or adhocracy culture. The companies with dominant hierarchy culture mix with the market culture.

In the OCAI, different dimensions are identified to diagnose the organizational culture. The reason for a mix of cultures is the different cultural practice in different dimensions. The ultimate aim of the private companies is to earn as much as the profit. For the companies with the clan and adhocracy culture, they focus on internally and externally. Internally, the members are treated as an extended family. There is no ranking in organization. They emphasize the relationship among the members. Externally, for their job tasks, flexibility is provided to the members in the organization. They have opportunities to meet new things and do the ad-hoc tasks. It is full of uncertainty. Therefore, there are no guidelines to follow.

For the companies with clan and market culture, it is relationship oriented internally. However, concerning the job task, they are result oriented. They use different methods to achieve their goals.

It is imagined that clan and hierarchy culture should not co-exist as their natures are totally different. However, the questionnaire survey found that it happens in the reality. It may be because the respondents in this company do not work for a long time. The members in the company welcome and care them very much. However, they are fresh and they do not know much about the company and their job tasks. There are a lot of guidelines in order to make them familiar with the job quickly.

It is not surprised that hierarchy culture mixes with the market culture as both culture concern stability and control. Internally, the companies would like to control the organizational members using hierarchy structure. The members in lower class need to follow the instructions of the top level management team. Externally, they would like to attain the stability by achieving their expected results. Therefore, they try hard to achieve the objectives using different methods even though it is aggressive or not good for the others.

It is expected that the preferred culture types would not be the same with the actual one as the one existing in the reality may not be the one the respondents want.

However, from the paired sample T-test, no significant relationship between the actual and preferred culture types, except the pair of the actual clan culture and the preferred clan culture, is recorded. Culture is a vague concept which integrates into the daily practice or habit of people's lives. Usually, no one will pay attention to it. They may not have any idea to change the culture because it is part of the life. Besides, one of the functions of the culture is to reduce the anxiety of people as it narrows their focus so that people do not need to consider too much. When changing the culture, their original focus will change which make them feel uncertain. Therefore, they are not willing to change their culture. Besides, changing a deep-rooted culture needs plenty of time says three to five years. Therefore, it is not easy to notice a sudden change of it.

On the other hand, it can be seen that each companies has different percentages in four culture types. Each company has unique culture. It is plausible as the companies have different challenges, experience and history. Besides, they have different structures, aims and objectives in the companies which make the companies have distinct cultures.

On the other hand, four members are invited to participate in the study in order to get the collective view for the company. However, it is found that different members

in the same company have a very distinct scoring in the questionnaire survey in some companies. It is because the company is large and consists of different departments. In different departments, they will have different subcultures due to different experience. With the different subcultures in the different subgroups, it makes the investigation of the organizational culture become difficult. It is because the members experience more on the subcultures rather than the organizational culture. The one measuring is only the subculture but not the one single corporate culture. Therefore, to have a homogenous corporate culture, the organization should let the different departments have the common organizational experience.

7.3.2 Relationship between the size and the existence duration of the company

It is found that the smaller companies associate with the younger companies while the larger companies relate to the older companies. It is reasonable to obtain such a result. No company will start with a large company which contains several hundreds of people. Therefore, for a newly established company, it is usually in a smaller size. The business may undergo expansion if it operates smoothly and successfully. Eventually, it may become bigger in size.

7.3.3 Relationship between culture type and size and existence duration of company

From literature, both the size and existence duration of company would affect the culture types in the company. Therefore, they are tested in study. The existence duration of company separates into 'larger than or equal to 20 years' and 'smaller than 20 years'. The size of company is separated into two groups which are 'larger than or equal to 500 employees' and 'smaller than 500 employees'. From the test, it is found that the younger companies are smaller in size and the older companies are larger in size. Therefore, the relationships between culture type and size and existence duration of company are discussed together to prevent duplication.

From the tests, both hierarchy and adhocracy cultures show a significant relationship with the existence durations and the sizes of the companies while the remaining two culture types do not. The reason behind is the limited sample size in the study. From the questionnaire survey, it is found that the younger and smaller companies do not have the specific dominant culture types. However, hierarchy culture does not appear in the younger and smaller companies. Older and larger companies are dominant in hierarchy culture.

As young company does not exist for a long time, structures and the systems in

the organization are not well-established. Besides, compared with the older companies, they face more difficulties and challenges as they have not tried before in such a short establishment. They do not have the common or unique solution towards the problem and they may need to handle it with their own experience only. Therefore, they are always needed to do the ad-hoc tasks that are without the related experience. It provides flexibility and freedom for them. They are more willing to take risks and face the challenges. Internally, their size is small so it is comparatively easy to manage. The leaders manage the companies in a more personal and entrepreneurial way. It means that the members could get more freedom to work as they are easily to be monitored due to small numbers of members. They pay attention to internal relationship and they treat everyone as the family members in the company no matter they have higher or lower position. This kind of relationship contributes to a better integration of members in the organization. On the other hand, for the newly established companies, they always aim higher hoping to expand their scale. They are more aggressive and result-oriented. Besides, they do not have a very stable foundation due to short period of existence. In order to outperform the other companies, they face more competitions and need to win the other. Therefore, they sometimes use the aggressive approach to achieve the objectives.

Additional Information

As hierarchy culture is considered as an invalid factor in the study, it is treated as additional information in the research. It is found that the older and larger companies are dominated by the hierarchy culture due to long period of establishment. During the duration of existence, it faced numerous challenges which make it become resistance to the uncertainty as they have common solution to solve it that may finally become a practice in the company. Everything in the organization runs in a systematic way. To stabilize the company, members are asked to follow the instruction or procedures which minimize the uncertainty. It ignores the viewpoints of the members. The members simply like a machine that complies with the decisions and instructions from the top level management teams only. The members will lose their common goals with the other members in the company which may lead to undesirable effect to the company. On the other hand, as they are organized in a systematic way, their objectives may not be same as the young company. Addition to the profitability, they would also want to maintain a good relationship with the clients or partners in order to attract more clients. To attract them, the companies should not only reach the higher profitability but also ensure a smooth operation. With the experienced leaders who are good at coordinating, organizing or smooth-running efficiency, a smooth operation can be easily achieved by following their experienced advice.

7.3.4 Relationship between culture type and annual turnover of company

Annual turnover of the company could be one of the factors for organizational culture. Therefore, it is analyzed in the study. The annual turnover separates in 'more than or equal to 300M' and 'less than 300M'.

From table (13), either the annual turnover is higher than or less than 300M, there is no dominated culture types in the companies. Besides, from the test, no significant relationship between culture types and annual turnover is recorded. It is due to several reasons. Being the consultancy companies, they are employed by clients. It includes the government institutions, developers. No one knows the benefits the companies get until the clients approach the companies. Depending on the size of the projects, the companies can get different benefits. For the clients to choose their consultants, they may concern the relationship between them, the suitability for the projects, the reputations of the companies and etc. However, the organizational culture is not their main concern. They may not even know the culture inside the companies. Therefore, the annual turnover may not affect the organizational culture profiles in the companies.

7.4 Discussion on conflict solving approach

As conflict is inevitable in the organization, the ways to handle it become crucial because the handling method could be constructive or destructive in the organization. The common practice for the conflict handling styles is investigated in this research and the result is shown as follow.

7.4.1 Use of conflict solving approach

It is found that 53.8% of the respondents commonly use the integrating conflict handling approach. 23.1% of the respondents use avoiding conflict solving approach while 15.4% of the respondents use the obliging conflict solving approach. For the preferred conflict solving approach, 92.3% of the respondents prefer either integrating or compromising conflict handling styles while the remaining respondents prefer dominating one.

The organizations in the construction industry commonly use the integrating styles to solve the conflict with the other members in the organization. When there are interpersonal conflicts among members, most of them are willing to communicate and get a compromise with each other which generate a win-win situation. It is constructive towards the organization. As this research focus on the interpersonal conflicts in the company, most of the issues should be related to the company.

Imagine that when two people are in conflict and they concern themselves only, then both of them want to be the winner only in the conflict and ignore the ideas from others. This could not help the problem to be solved but make the problem worse. However, they are now using the integrating styles. They do not really want to win but want to make the issue better. They are willing to listen to the opinions from others so that the problems can be solved in a better way. Therefore, the way to solve the conflict is not for their own good but for the issue good which is good for the company.

The integrating approach is used more frequently. However, the other four approaches are also used in the organizations with lower percentage. It is not surprised to have such a result. Even though the interpersonal conflict is investigated in this study only, there are different types of the conflict (refer to chapter 3) leading to different handling approaches. Even with the same types of conflicts, different resolutions could be reached. As told, there is no best conflict solving approaches. Considering the different situations of the conflicts, different handling styles could be more effective. It is called as the contingency approaches.

It is not surprised to see most of the respondents prefer the integrating or compromising approach while the actual conflict solving approach is avoiding and

obliging. From the different previous researches, it is described that the avoiding approach is not the best approach for conflict resolution as it leads to the undesirable effect as it may damage the relationship and performance. Besides, the avoiding conflict solving approach does not really solve the conflict but only avoid it. The underlying problem is not solved as no one confronts it. Consequently, it becomes an antecedent for another conflict. Therefore, it is plausible that the members do not like this approach and prefer the other types which are thorough conflict resolution.

7.4.2 Relationship between actual conflict solving approach and preferred conflict solving approach

For the relationship between actual and preferred conflict solving approaches, it is suggested that there should be a significant relationship because the one used by the members may not be the one preferred by the members. From the T-test analysis, it is found that four pairs of actual and preferred conflict solving approaches have a significant relationship except the pair of actual and preferred dominating conflict solving approaches. It is not surprised to get this result. Conflict management is a kind of behaviors. It is not the same nature as the culture. It could be explainable and observable. If one thinks that this behavior is not good for the situation, one may want to change it. It is why there is the contingency approach. There is no one best solution

for different kinds of conflict. For handling the conflict in a constructive way, the situation is needed to know. Then, the most suitable style is chosen depending on the situations. If one thinks that the style is no good, one would prefer the other one.

Therefore, the reason for the significant difference for the different pairs of actual and preferred conflict solving approaches is explained. For the pairs of integrating and compromising conflict solving approach, the results show that the preference for both styles is high compared with the current practice in construction industry. Using both approaches could lead to several benefits. Members could contribute themselves towards the problem and a all-round solution can be attained. On the other hand, the respondents do not prefer obliging and avoiding conflict solving styles. Domination is a natural human feeling. No one always wants to make the concession. It is plausible for obtaining such a result. There is no significant different in the dominating pair. It may be because of the limited sample size. On the other hand, as there is natural human feeling to dominate the other, some respondents would prefer this style while some may not. Therefore, such a result is obtained.

7.5 Discussion on organizational commitment

Organizational commitment becomes more and more important as it is one of the key issues of organizational effectiveness. Without the members in the company, it

cannot succeed. Therefore, holding them into the organization is important. The organizational commitment investigated in the research is divided into affective, normative and continuance commitment that measure different types of commitment.

7.5.1 Level of organizational commitment

58% of the respondents have the higher level of continuance commitment while 31% of the respondents have the higher level of affective commitment compared with the other two types of commitment. In general, the companies in the construction industry have the highest level of continuance commitment. It could be due to several reasons. There are different antecedents for the commitment which can be generally classified into three main categories namely internal influences, external influences and interactive influence: effort and social interaction (Locke et al., 1988). The members are not emotionally attached due to the tradition in the construction industry. According to Leung and Chan (2005), project assignment and acceptance is one of the antecedents of the affective commitment. In a construction project, the clients only concern the project details like time, cost and quality of the building but they ignore whether the construction professional like the contractors or consultants accept the project goals and construction methods. The clients seldom communicate with the project participants about the goals. Therefore, the professional does not have a clear

goal in the project. They just follow what the clients' instruction to do the job task.

Due to the implicit goals of the construction project, the level of affective commitment is not high.

A comparatively high level of continuance commitment is existed in the construction industry that means the members decide to stay in the industry as the cost of leaving is higher than cost of staying or there is a lack of alternatives for them.

Frankly speaking, when the people become a professional in an industry, it is hard for them to leave the industry as they have a lot of knowledge and experience about this professional while they do not have much knowledge in other aspects. Therefore, even if they do not like this job, due to the limited knowledge, they will hardly leave.

Another antecedent for the continuance commitment is internalization (Leung and Chan, 2005). As the professionals have their own professional values. If the project values are not matched with their value, it may trigger the leave of the professional.

However, they may choose to stay due to the benefit they can get. In this case, it can be seen that the professionals do not want to participate in the project. They do so because of the benefit only.

There is an interesting result in this study. As the three different types of commitments describe three different things, they are not necessary to be related.

However, from the result, it is found that there is a significant positive relationship between affective commitment and normative commitment. A research from Meyer and Allen (1990) has stated this relationship and also the reason behind. As they are doing the job task they desire, they gradually may think that they are doing the right thing. Alternatively, when they are doing some appropriate things, it become their personal norms. They may then like what they are doing.

7.6 Discussion on the relationship between organizational culture profile, conflict solving approach and level of organizational commitment

It is the most important part in the study as the objectives of this study is to establish an understanding between organizational culture profile, conflict solving approach and the level of organizational commitment. The discussion below includes the relationship between organizational culture profile and conflict solving approach and the relationship of all three aspects. The results on organizational culture profile, conflict solving approach and level of organizational commitment are summarized in the table.

Table (13) Summary of organizational culture profile, conflict solving approach and commitment in Company A-M

	Actual culture type	Preferred culture type	Actual conflict solving approach	Preferred conflict solving approach	Commitment
Company A	Hierarchy	Hierarchy	Avoiding	Compromising	Continuance
Company B	Hierarchy	Hierarchy	Avoiding	Integrating	Continuance
Company C	Hierarchy	Hierarchy	Obliging	Integrating	Continuance
Company D	Market	Market	Integrating	Integrating	Affective
Company E	Clan	Clan	Integrating	Integrating	Affective
Company F	Clan	Clan	Integrating Compromising Obliging	Compromising	Continuance
Company G	Clan	Clan	Integrating	Integrating	Affective
Company H	Adhocracy	Adhocracy	Integrating, Compromising	Compromising	Affective
Company I	Hierarchy	Clan	Avoiding	Compromising	Continuance
Company J	Adhocracy	Adhocracy	Integrating	Integrating	Continuance
Company K	Market	Market	Dominating	Integrating	Continuance
Company L	Market	Market	Obliging	Dominating	Continuance
Company M	Clan	Clan	Integrating	Integrating	Affective

7.6.1 Relationship between organizational profile and conflict solving approach

Culture is a very vague concept that cannot easily be investigated and explained.

The deepest level is basic underlying assumption. The assumptions will determine the perception, though, feelings, processes and behaviors of the people. Conflict handling could be regarded as the behaviors of the members. It could reflect the cultural value of an organization.

From the table, it can be seen that the companies with the companies with clan culture usually choose integrating and compromising styles for conflict management. It is not surprised to see this result as clan culture is employee oriented. The companies with clan culture do not only concern the working process but also the personal problems of the members. They usually solve the problem through communication since the members are treated as a family member in the organization. They are not afraid to speak out and solve the problem together. Therefore, it is common for them to choose integrating and compromising conflict solving approach. Using these two approaches to solve the conflict, it results in a win-win situation as decision made usually caters for both of the parties as it involves the opinions and the ideas of the two parties. Both approaches need open communication and negotiation to reach the compromise which match with the clan culture.

For the companies with adhocracy culture, they also use either integrating or compromising conflict handling style. Dominated by the adhocracy culture, members always face uncertainty. They are willing to take risks and always do ad-hoc jobs without any relevant experience. Besides, the members do not have centralized power that means no one will override the others. Therefore, they do not avoid the conflicts to prevent the risk to offend the other members. It is the same case for the obliging conflict solving approach. On the other hand, they are motivated by growth,

stimulation, creativity and etc. They do not aim at being the winner. They would like to be stimulated so that their creativity can be enhanced. Using integrating or compromising approaches that can listen to the opinions from the other members, they may be stimulated by the others.

Additional information

With the hierarchy culture, the companies choose either avoiding or obliging conflict solving approaches from the results. The approaches the company using truly reflect the culture. The structure in the companies with this culture type is very rigid. Everyone does the things in accordance with the regulations or instructions. The decisions are only made by the top level management teams without the opinions from subordinates. The members do the tasks even they are not accepted. As the top level management teams are powerful in the companies, the other members do not express their own ideas as they are frightened that they offend their bosses and they will be punished. Rather, they try hard to minimize the opportunity to confront their boss or try to satisfy their expectation by giving up their opinions. It is what exactly the avoiding and obliging conflict management styles are. The dominating conflict management approach is expected to be used in the companies dominated by the hierarchy culture. However, it hardly exists in the study. It may be due to the positions

of the respondents as most of the respondents are not in the top level management teams.

7.6.2 Relationship between organizational culture profile, conflict solving approach and level of organizational commitment

By studying the conflict management style in the company, it could reflect the organizational culture. The results found are not surprised and unpredictable. Most of the companies with clan culture practise the integrating and compromising conflict solving approaches and most of the companies with the hierarchy culture practise the avoiding and obliging conflict solving approaches. Companies with adhocracy culture usually choose the integrating and compromising conflict solving approach while companies with market culture do not have any style. After finding the relationship between them, they are then investigated to find their influence towards the organizations. From literature, both of them contribute to the organizational effectiveness. The relationship between them and organizational commitment is analyzed.

It is found that the relationship between the conflict solving approach and organizational commitment are stronger than the relationship between the organizational culture and organizational commitment. It may be due to several

reasons. Culture is hard to detect by the members while conflict management can give the instant response and feeling to the members. If the conflict is not managed well, it could trigger another conflict. The members are not satisfied with the conflict resolution. This kind of feeling could lower the level of affective commitment because such a feeling could make the members think that they are not importance to the company, they are not treated fairly and their suggestions are not accepted by the organization. All of them could directly lower the level of affective commitment. For the organizational culture, it is no doubt that it influences the organizational commitment too. However, it will not make the members have the instant feeling that they do not like the culture because they do not even discover the existence of the culture. It is what the culture brought to the companies have a greater influence. The specific culture types could lead to specific conflict solving approach. As the conflict management is a behavior which is easily observable, it could influence the feeling of the people more easily and directly.

From the table (13), it is found that for the organizations with clan culture and integrating and compromising approaches are generally dominated by affective commitment. It is not surprised to obtain such as a result. Working in a friendly and relationship oriented environment, it concern the development of human resources. Whenever there are problems, they will work as a team to discuss and solve the

problems. They are all allowed to give their opinions for the solution which therefore can enhance the quality of the solutions. As the ideas contributed by every member are treasured, members no matter they are top level management teams or the bottom level management teams are important and valued. The members can find their identity easily in the organization. They treat the company as if an extended family. Therefore, no one is resistant to work in such a friendly environment as they will be finally emotional attached to the company. However, from the result, it is found that the positive relationship between clan culture and affective commitment is insignificant while the negative relationship between the clan culture and continuance commitment is significant. There are several explanations. One of the reasons would be the limited sample size in the study which may result in an inaccurate analysis. The other reason is the analysis in the study is very general. Clan culture could affect the organizational commitment. However, it is one of the factors affecting the level of commitment. There are several antecedents other than the culture like job challenge, role clarity, goal clarity and etc. If the members find difficulties in it, the level in affective commitment is lowered. For negative relationship between the clan culture and continuance commitment, it can be explained by the value of the members. As clan culture provides a comfortable environment for the members, the members do not only focus on the cost they have spent. Rather, they may value more on the

relationship between members. Therefore, if members are in clan culture, they may have lower level of continuance commitment.

For the companies with the adhocracy culture and integrating or compromising conflict management approach, there is no significant relationship with the level of organizational commitment from the result. For an adhocracy culture, the companies always take risk and do ad-hoc task. As there is no standard procedure for the tasks, the members try to complete the task by their personal experience only. They do the tasks by trial and error. They may encounter numerous failures. It can be imagined that how much effort they have spent on the tasks. However, the glue that holds them into the organization is not the effort (the cost) they have put. It is the job satisfaction they have got when they can create a new thing after trial and error. Job satisfaction could in turn affect the affective commitment. Therefore, companies with adhocracy culture should have higher level of affective commitment and lower level of continuance commitment.

For the companies with the market culture and without specified conflict management styles, there is no significant relationship with the level of organizational commitment from the result. For the market culture, they focus on the achievement and the productivity. They do not concern the process but the result. It could result in

either affective commitment or continuance commitment in different situations. If all the members know the well-defined objective and they are willing to strive for it together with the other members, it could lead to the affective commitment because they have a clarified goal which is one of the antecedents of affective commitment. However, as it is result-oriented and job oriented, it only concerns whether the members can complete the tasks only while ignoring the personal problems of the members. It will lower the level of affective commitment. Besides, if the members finish the tasks without a well-defined objective, what makes the members complete the tasks is the benefit they can get which results in a higher level of continuance commitment.

Additional Information

For the companies with hierarchy culture and avoiding and obliging conflict management styles, it would result in a higher level of continuance commitment. Although there is no good or bad culture, hierarchy culture may somewhat damage the relationship between the bosses and the subordinates. In the hierarchy culture, the subordinates should strictly listen to and follow the instructions by their boss even they do not agree with it. When they express their opinion that the boss may be dissatisfied, they may be ignored or punished. The subordinates do not have much

power in the organizations. When decisions are needed to be made, they are usually not involved in the decision process and they will only be noticed after the decision is made. The power distance is large between them and it results in large inequality. Besides, the subordinates could not express their ideas and viewpoints towards a conflict in obliging and avoiding conflict solving approaches. It damages the relationship between them. The subordinates are not willing to speak to their boss genuinely. A barrier is made between them. The members are not treated equally and some of them may think that they are not important as they cannot participate actively in the organization even if they want to. It could result in the lower level of affective commitment. On the other hand, the members in the hierarchy culture are controlled and monitored, so they could not do what they want. What makes them remain is not the emotional attachment but the perceived cost. Therefore, it could result in a higher level of continuance commitment.

Chapter 8 Conclusion

8.1 Overall Conclusion

It is no doubt that most of the profit-making companies including those in the construction industry would like to have the outstanding performance which make them concern the productivity or profitability only. There are some intangible things which significantly affect the performance but the organization does not notice them. From literature, the organizational culture, conflict handling style and organizational commitment would affect the organizational effectiveness. There are also some real life examples showing that companies concerning more on the culture result in a better performance compared with companies that solely concern the profit. However, culture is not easy to access. It can be reflected by observing the behavior in the organization. Conflict management is one kinds of behavior. Therefore, linkage between them is to be studied in this research. Then, relationship between the culture with different conflict solving approaches and organizational commitment is to be studied. Finally, recommendations could be given to enhance the organizational effectiveness.

The objectives in this study are as follow:

1. To examine organizational culture in construction industry
2. To identify the current practice of different conflict solving approaches used in construction industry
3. To study the relationship between organizational culture in construction industry and conflict-solving approaches
4. To find out the pros and cons in different companies using different approaches
5. To investigate the level of organizational commitment
6. To study the relationship between organizational culture, conflict solving approach and organizational commitment
7. To make recommendations for the change of organizational culture and the use of the conflict solving approaches as it will affect the organizational commitment

Objective 1 is achieved by two ways. The concept of organizational culture should be understood first by reviewing the literature. Then, to get the profile of organizational culture in construction industry, the OCAI is used. It is shown that clan culture exists more in private sector whiles hierarchy culture exists more in private sectors in construction industry. A test has been performed to compare the actual organizational culture with the preferred one. It is shown that the actual and the

preferred culture are generally the same. There is only a significant difference in the pair of the actual and preferred clan culture. Besides, several tests are taken for finding the relationship between the organizational culture and other factors like the duration, the size and the annual turnover of the company. The result shows that hierarchy culture exists when the company is large in scale and has a long duration. It is a different story when the company is a small scaled and young one. It shows that adhocracy culture exists in such kind of company. The tests do not tell the result for the market and clan culture due to the small sample size in the study.

Objective 2 is achieved by reviewing the literature to know the concept of conflict and style for conflict management. Then ROCI-II is used to identify the different conflict solving approaches in the companies. It is found that most of the companies use integrating approach to solve the conflict. A test is also taken to compare the actual and the preferred conflict handling styles. All pairs of actual and preferred conflict solving approaches except the dominating one show the significant relationship between them.

Objective 3 is reached by using the correlation test called Spearman's rank correlation coefficient. It is found that clan culture is always linked to integrating conflict solving approach while hierarchy culture is always linked to avoiding and

obliging approaches to handle conflict. The result is not significant due to the small sample size.

Objective 4 is attained by studying the culture and conflict management deeply through literature review and interview. As there are only a few of interviews, literature is heavily relied. There is no right or wrong culture and conflict management. Existence of them depends on the situation and the experience of the organization. Therefore, each types of culture and conflict management should have their own pros and cons. Companies should find the most suitable one.

Objective 5 is reached by understanding the concept of organizational commitment and obtaining the level of employee commitment by using Meyer and Allen's (1991) Three-Component Model of Organizational Commitment. It is recorded that level of continuance commitment is higher than the affective and normative commitment in Hong Kong construction industry generally. A test is carried out to found out the relationship between three types of commitment. It is found that affective and normative commitment are related positively.

Objective 6 is achieved by testing their relationships. The result shows that clan culture generates a higher affective commitment and negatively related to continuance commitment while hierarchy culture and continuance commitment are positively

linked. The result also shows that integrating and compromising conflict management style bring affective commitment while dominating conflict handling styles results in continuance commitment.

Objective 7 is reached by analyzing the relationship between them. For the clan culture with integrating and compromising conflict management styles, it brings to affective commitment. For the hierarchy culture with avoiding and obliging conflict management styles, it brings to continuance commitment. Affective commitment can retain the members while continuance commitment make the members intend to quit. It is recommended that level of affective commitment should be as high as possible while the continuance one should be as low as possible.

8.2 Implication of the study

After the study, it is found that the organizational culture, conflict solving approach and organizational commitment are generally correlated. For the clan culture, the integrating and compromising conflict management styles are commonly used. These result in a higher level of affective commitment. For the hierarchy culture, the avoiding and obliging conflict management styles are commonly used. These result in a higher level of continuance commitment which is undesirable. The power of the organizational culture could be seen. It can affect everything in the organization.

Firstly, it can affect the conflict management in an organization. Besides, it influences the organizational commitment. It is the reason why the organizational culture become more and more important and cannot be ignored. Otherwise, the organizations may fail without knowing any reason.

8.3 Limitation of the study

There are several limitations in the study. Small sample size is regarded as one of the limitation. Even though the results are significant, it does not represent the whole construction industry due to insufficient sample size. It limits the generalizability of the result and affects the accuracy and validity of the results. It can be attributed to the insufficient time. If more time is allowed to do the research, it is possible to ask more practitioners in different construction-related companies to participate in the study.

Low response rate which is not more than 30% in the study is another limitation. It results in difficult analysis and inaccurate result. It is known that the design of questionnaire should be as simple as possible to attract the respondents to complete it as the practitioners are always busy. However, it cannot be done practically as the study covers three topics. A lengthy and wordy questionnaire is made so not many practitioners are willing to participate in the research.

Quality of the data cannot be ensured. Questionnaires are sent to different

companies and the practitioners are invited to complete the questionnaire. However, no one knows if the respondents were completing the questionnaire based on the company and giving the real answers. It is assumed that all the data collected are real.

The relationship between organizational culture, conflict solving approach and organizational commitment found in the research is general and may not be applied in the specific cases.

As the hierarchy culture is an invalid factor, the additional information in the study may not be useful. The relationship between the hierarchy culture, conflict solving approach and organizational commitment may not be valid too.

8.4 Suggestions of the study

This research could lead to a further exploration on the organizational culture, conflict management and commitment. It is found that certain kind of the culture could result in the majority use of specific conflict handling style. With the match of the culture and conflict management style, organizational effectiveness could be enhanced. Due to the time constraint, only the interpersonal conflict management is studied. However, different levels and types of the conflict have not been studied. The amount of the conflict that may affect the performance of the organization is not known too. It is advised that a more in-depth investigation should be carried out to

validate the relationship between the organizational culture and conflict management.

Apart from the relationship between organizational culture and conflict management, the organizational commitment should also be explored in the construction industry. The turnover rate in the construction industry is high compared with the other sectors in recent years. The leave of the employee is big loss to the organization as it will make the company unhealthy and contribute to the wastage of the resource for the training of the new members. More attention should be paid on it. In recent news, the government starts to concern the high turnover rate in construction industry and would like to attract the labor in the field by subsidizing them. However, it is suggested the roots of the problem should be found. Therefore, a more in-depth investigation should be carried out in the organizational commitment in this industry. It is advised to find out the antecedents of the low commitment in the industry and deal with it one by one.

Besides, it is found that the OCAI is not applicable in the study. One of the reasons is the confusion of the concept of the hierarchy culture. Although the OCAI is a commonly used instrument in western countries, the hierarchy culture may be defined differently in Asia countries. It is strongly recommended that more research should be done in defining the hierarchy culture. If the hierarchy culture is undefined,

all the studies in the organizational culture become worthless in Hong Kong
construction industry.

Reference

- Allen, N.J. and Meyer, J.P. (1996) Affective, continuance and normative commitment to the organization: an examination of construct validity. *Journal of Vocational Behavior*, 49, pp 252-276
- Allen, N. J. and Meyer, J. P. (1990) The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63, pp 1-18
- Becker, H. S. (1960) Notes on the concept of commitment. *American Journal of Sociology*, 66, pp 32-42
- Blake, R. R., & Mouton, J. S. (1964) *The managerial grid*. Houston, TX: Gulf
- Buch, K., & Wetzel D. K. (2001) Analyzing and realigning organizational culture. *Leadership and Organizational Journal*, 22(1), pp 40-43
- Burgess, R., & Turner, S. (2000) Seven key features for creating and sustaining commitment. *International Journal of Project Management*, 18, pp 225-233
- Cameron, K. S., & Quinn, R. E. (2006) *Diagnosing and changing organizational culture: Based on the competing values framework*. The Jossey-Bass business & management series. San Francisco: Jossey-Bass
- Chen, G., & Tjosvold, D. (2002) Conflict management and team effectiveness in China: The mediating rule of justice. *Asia Pacific Journal of Management*, 19, pp 557-572
- Child, J., Markoczy, L., & Cheung, T. (1992) *Managerial adaptation in Chinese and Hungarian strategic alliances with culturally distinct foreign partners*. Working paper, Cambridge University.
- Dandridge, T. C., Mitroff, I., & Joyce W. F. (1980) Organizational Symbolism: A Topic to Expand Organizational Analysis, *The Academy of Management Review*, 5(1), pp. 77-82

- Deal, T. E. (1986) Cultural change: opportunity, silent killer or metamorphosis, in Kilmann, R. H., Saxon, M. J., Serpa, R., & associates (Eds). *Gaining Control of the Corporate Culture*, Jossey-Bass, San Francisco, CA
- De Dreu, C. K. W., (1997) Productive Conflict: The Importance of Conflict Management and Conflict Issue. *Using Conflict in Organizations*, pp 9-21
- Elizur, D., & Koslowsky, M. (2001) Values and organizational commitment. *International Journal of Manpower*, 22(7), pp 593-599
- Hackett, R. D., Bycio, P., & Hausdorf, P. A. (1994) Further Assessments of Meyer and Allen's (1991) Three-Component Model of Organizational Commitment. *Journal of Applied Psychology*, 79(1), pp 15-23
- Hall, J (1969) *Conflict management survey: A survey on one's characteristic reaction to and handling conflicts between himself and others*. Canoe, Texas: Teleometrics International
- Hemmelgarn, A.L., Glisson, C., & James, L.R. (2006) Organizational Culture and Climate: Implication for Services and Intervention Research, *Clinical Psychology: Science and Practice*, 13(1), pp 73-89
- Hofstede, G., & Hofstede, G. J. (1991) *Cultures and Organizations*. New York: McGraw Hill
- Hofstede, G. H., & Hofstede, G. J. (2005). *Cultures and organizations: Software of the mind*. The successful strategist series. New York: McGraw-Hill
- Hollenbeck, J. R., Klein, H. J., O'Leary, A. M., & Wright, P. M. (1989) Investigation of the construct validity of a self-report measure of goal commitment. *Journal of Applied Psychology*, 74(6), pp 951-956
- Hrebiniak, L. G., & Alutto, J. A. (1972). Personal and role-related factors in the development of organizational commitment. *Administrative Science Quarterly*, 17, pp 555-573

- Kilmann, R., Saxton, M. J., & Serpa, R. (1985) Introduction: five key issues in understanding and changing culture, in Kilmann, R. H., Saxon, M. J., Serpa, R., & associates (Eds). *Gaining Control of the Corporate Culture*, Jossey-Bass, San Francisco, CA
- Lawrence, P. R., & Lorsch, J. W. (1967) *Organization and environment*. Homewood, Ill.: Irwin-Dorsey
- Leung, M. Y., & Chan, H. K. L. (2007) Antecedents of commitment in construction management. *Construction Management and Economics*, 25(2), pp 113-127
- Leung, M. Y., Chong, A., Ng, T., & Cheung, M. C. K., (2004) Demystifying stakeholders' commitment and its impacts on construction projects. *Construction Management and Economics*, 22, pp 701-15
- Litterer, J. A. (1966) Conflict in organization: A re-examination. *Academy of Management Journal*, 9, pp 178-186
- Locke, E. A., Shaw, K. N., Saari, L. W., & Latham, G. P. (1981) Goal Setting and task performance: 1969-1980. *Psychological Bulletin*, 90(1), pp 125-152
- Loosemore, M., Nguyen, B. T., & Denis, N. (2000) An investigation into the merits of encouraging conflict in the construction industry. *Construction Management and Economics*, 18(4), pp 447-555
- Lund, D. B. (2003) Organizational culture and job satisfaction. *Journal of Business & Industrial Marketing*, 18(3), pp 219-236
- March, J. G., & Simon, H. A. (1958) *Organization*, New York: Wiley
- Martin, J., & Meyerson, D. (1988) *Organizational cultures and the denial, channeling and acknowledgment of ambiguity*. New York: John Wiley
- Merton, R. K. (1957) *Social Theory and Social Structure*. (Rev ed.) New York: Free Press
- Mowday, R. T., Porter, L. W., & Steers, R. M. (1982) *Employee-Organizational Linkages: The Psychology of Commitment, Absenteeism, and Turnover*. New York: Academic Press

- Mowday, R. T., Steers, R. M. and Porter, L. W., (1979) The measurement of organizational commitment. *Journal of Vocational Behaviors*, 14, pp 224-247
- Mueller, C. W., Wallace, J. E., & Price, J. L. (1992) Employee Commitment: Resolving some Issues, *Work and Occupations*, 19, p221 - 236
- O'Reilly, C. (1989) Corporations, Culture, and Commitment: Motivation and Social Control in Organization. *California Management Review*, pp 9-25
- O'Reilly III, C. A., Chatman, J., & Caldwell, D. F. (1991) People and Organizational Culture: A Profile Comparison Approach to Assessing Person- Organization Fit. *The Academy of Management Journal*, 34(3), pp. 487-516
- Park S. H. & Ungson G. R. (1997) The Effect of National Culture, Organizational Complementarity, and Economic Motivation on Joint Venture Dissolution, *The Academy of Management Journal*, 40(2), pp 279-307
- Parsons, T. (1951) *The Social System*. New York: Free Press
- Pettigrew, A. M. (1979) On studying organizational cultures. *Administrative Science Quarterly*, pp 570-581
- Pondy, L. R. (1967) Organizational Conflict: Concepts and Models. *Administrative Science Quarterly*, 12(2), pp 296-320
- Porter, L. W., Steer, R. M., Mowday, R. T., & Boulian, P. V. (1974) Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of Applied Psychology*, 59, pp 603-609
- Price, J. L. (1989) The Impact of Turnover on the Organization. *Journal of Work and Occupations*, 16(4), pp 461-473
- Rahim, M. A. (1983) A measure of styles of handling interpersonal conflict. *Academy of Management Journal*, 26, pp 368-376
- Rahim, M. A., & Bonoma, T. V. (1979) Managing organizational conflict: A model for diagnosis and intervention. *Psychological Reports*, 44, pp 1323-1344

- Rahim, M. A. (2001) *Managing conflict in organizations*. Westport, Conn: Quorum Books
- Rahim M. A., (1981) Organizational behavior courses for graduate students in business administration: Views from tower and battlefield. *Psychological Reports*, 49, pp 583-592
- Randall, D. M., & Cote, J. A. (1991) Interrelationship of work commitment constructs. *Work Occupation*, 18(2), pp 194-211
- Ritzer, G., & Trice, H. M. (1969). An empirical study of Howard Becker's side-bet theory. *Social Forces*, 47, pp 475-479
- Robbins, S. P. (1984) *Essentials of Organizational Behavior* (Englewood Cliffs, NJ: Prentice-Hall)
- Rousseau, D. (1990) Quantitative assessment of organizational culture: The case for multiple measures. *Frontiers in industrial and organizational psychology*, 3, pp 153-192
- Schein, E. H. (1984) Coming to a new awareness of organizational culture. *Sloan Management Review*, 25(2), pp 3-16
- Schein, E. H. (1985). *Organizational culture and leadership*. San Francisco: Jossey-Bass.
- Siders, M. A., George, G. & Dharwadkar, R. (2001) The relationship of internal and external commitment foci to objective job performance measure. *Academy of Management Journal*, 44(3), pp 570-579
- Smircich, L. (1983) Concepts of Culture and Organizational Analysis. *Administrative Science Quarterly*, 28(3), pp 339-358
- Smith, C. G. (1966) A comparative analysis of some conditions and consequences of interorganizational conflict. *Administrative Science Quarterly*, 10, pp 504-529
- Steer, R. M. (1977) Antecedents and Outcomes of Organizational Commitment. *Administrative Science Quarterly*, 22(1), pp 46-56

- Tedeschi, J. T., Schlenker, B. R., & Bonoma, T. V. (1973) *Conflicts, power and games: The experimental study of interpersonal relations*. Chicago: Aldine.
- Terpstra, V., & David, K. (1985) *The Cultural Environment of International Business*. Cincinnati, Oh: South-Western Publishing Co.
- Thomas, K. W. (1992) Conflict and Conflict Management: Reflections and Update. *Journal of Organizational Behavior*, 13(3), pp 265-274
- Thomas, K. W., & Kilmann, R. H. (1974) Thomas-Kilmann conflict mode instrument. New York: XICOM, Tuxedo
- Tjosvold, D., Cho, Y. H., Park, H. H., & Liu, C. M., Liu, W. C., & Sasaki, S. (2001) Interdependence and Managing Conflict with Sub-Contractors in the Construction Industry in East Asia. *Asia Pacific Journal of Management*, 18(3), pp 295-313
- Tjosvold, D. (2008) The conflict-positive organization: it depends upon us. *Journal of Organizational Behavior*, 29, pp 19-28
- Tubbs, M. E. (1993) Commitment as a moderator of the goal-performance relation: a case for clearer construct definition. *Journal of Applied Psychology*, 78(1), pp 86-97
- Tylors, E. B. (1903) *Primitive Culture: Researches into the Development of Mythology, Philosophy, Religion, Language, Art and Custom*: Vol 1-2. London: John Murray
- Uttal, B. (1983) The corporate culture vultures. *Fortune*, 108(18), pp 66
- Walker, D. H. T., & Rowlinson, S. M. (2008). *Procurement systems: A cross-industry project management perspective*. London: Taylor & Francis
- Weider-Hatfield, D. (1988) Assessing the Rahim Organizational Conflict Inventory-II (ROCI-II). *Management Communication Quarterly*, 1(3), pp 350-366
- Westwood, R. I. (1992). *Organisational behaviour: Southeast Asian perspectives*. Hong Kong: Longman Group (Far East) Ltd

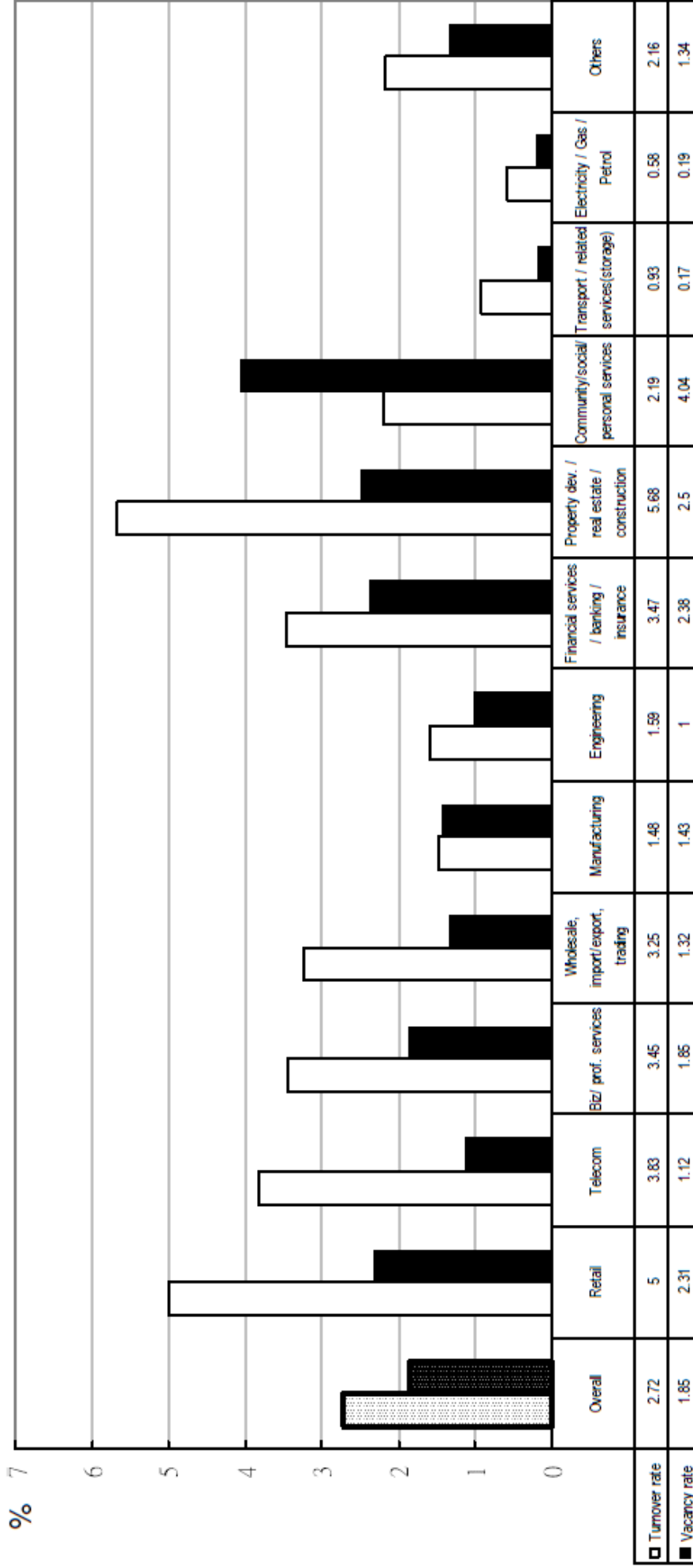
Wiener, Y. (1982) Commitment in organizations: a normative view. *Academy of Management Review*, 7, pp 418-428

Wong, A., Tjosvold, D., Wong, W., & Liu, C. K. (1999) Cooperative and competitive conflict for quality supply partnership between China and Hong Kong. *International Journal of Physical Distribution and Logistics Management*, 29, pp 7-21

Third Quarter 2009 survey of Manpower Statistic conducted by the Hong Kong Institute of Human Resource Management, available at http://www.hkihrm.org/ihrm_eng/index.asp

Appendices

Appendix 1: Turnover Rates and Vacancy Rates In the Third Quarter of 2009 (by Business Sector)



Sources: http://www.hkithrm.org/ihrm_eng/index.asp

Appendix 2 Cover Letter

Dear Sir/ Madam,

Questionnaire and Interview for Research Project

I am a final year student studying in Department of Real Estate and Construction in the University of Hong Kong. I am conducting a research, titled 'Organizational culture, conflict management and organizational commitment in Hong Kong construction industry' under the supervision of Professor Steve Rowlinson. In this research, relationship between those three aspects will be studied.

In order to understand the culture profile and current practice about conflict management and employee's commitment in the construction industry, I would like to invite four members in your company to complete the questionnaire that consists of four sections. The four sections are backgrounds of the company and employee, analysis of organizational culture, conflict management approaches and commitment of employee. Your kindly participation will contribute a lot to the research. For your convenience, you and your colleagues could refer to <http://blog.ad.arch.hku.hk/Survey/index.php?sid=99694&lang=en> to fill in the online questionnaire. Alternatively, you could forward the attached questionnaire to your colleagues and email a total of four sets of completed questionnaires to tmmak504@hku.hk before **20th January, 2010**. The completion of questionnaire might take you around twenty minutes. All the data connected will be kept confidentially and will be used for the academic purposes only.

On the other hand, I would like to invite you or your colleagues to the interview in order to have a more in-depth investigation after analyzing the data in the questionnaires. The interview would not take you a long time and it may take around fifteen to twenty minutes. The period of the interview will be at the end of January or at the beginning of February in 2010. If you are interested, please let me know by replying this email and providing your available time.

If you have any inquiries, please feel free to contact me through tmmak504@hku.hk or via phone (6709 1816).

I am looking forward to your reply. Wish you every success with your company.

Yours faithfully,

Carol Mak Tsz Mei

Year 3, Bachelor of Science in Surveying

University of Hong Kong

Appendix 3: Questionnaire

Questionnaire

Section 1: Company Portfolio

In this section, basic information is asked which is useful for the research.

1. Name of company

2. Total Number of employee

1-250 250-500 >500

3. Year of establishment

4. Annual Turnover

5. Your position in the company

End of Section One

Section 2: Organizational Culture

In this section, organizational culture is to be diagnosed. You are required to rate your organization. Six items are listed below and each item consists of four alternatives. According to what is similar or happening in the organization, please divide 100 points among the four alternatives. You are required to rate the organization at the present and give opinion in what you prefer.

1. Dominant Characteristics	Now	Preferred
A. The organization is a very personal place. It is like an extended family. People seem to share a lot of themselves.		
B. The organization is a very dynamic and entrepreneurial place. People are willing to stick their necks out and take risks.		
C. The organization is very results-oriented. A major concern is with getting the job done. People are very competitive and achievement-oriented.		
D. The organization is a very controlled and structured place. Formal procedures generally govern what people do.		
Total	100	100

2. Organizational Leadership	Now	Preferred
A. The leadership in the organization is generally considered to exemplify mentoring, facilitating, or nurturing.		
B. The leadership in the organization is generally considered to exemplify entrepreneurship, innovation, or risk taking.		
C. The leadership in the organization is generally considered to exemplify a no-nonsense, aggressive, results-oriented focus.		
D. The leadership in the organization is generally considered to exemplify coordinating, organizing or smooth-running efficiency.		
Total	100	100

3. Management of Employees	Now	Preferred
A. The management style in the organization is characterized by teamwork, consensus, and participation.		
B. The management style in the organization is characterized by individual risk taking, innovation, freedom, and uniqueness.		
C. The management style in the organization is characterized by hard-driving competitiveness, high demands, and achievement.		
D. The management style in the organization is characterized by security of employment, conformity, predictability, and stability in relationships.		
Total	100	100

4. Organization Glue	Now	Preferred
A. The glue that holds the organization together is loyalty and mutual trust. Commitment to this organization runs high.		
B. The glue that holds the organization together is commitment to innovation and development. There is an emphasis on being on the cutting edge.		
C. The glue that holds the organization together is the emphasis on achievement and goal accomplishment.		
D. The glue that holds the organization together is formal rules and policies. Maintaining a smooth-running organization is important.		
Total	100	100

5. Strategic Emphases	Now	Preferred
A. The organization emphasizes human development. High trust, openness, and participation persist.		
B. The organization emphasizes acquiring new resources and creating new challenges. Trying new things and prospecting for opportunities are valued.		
C. The organization emphasizes competitive actions and achievement. Hitting stretch targets and winning in the marketplace are dominant.		
D. The organization emphasizes permanence and stability. Efficiency, control, and smooth operations are important.		
Total	100	100

6. Criteria of Success	Now	Preferred
A. The organization defines success on the basis of the development of human resources, teamwork, employee commitment, and concern for people.		
B. The organization defines success on the basis of having the most unique or newest products. It is a product leader and innovator.		
C. The organization defines success on the basis of winning in the marketplace and outpacing the competition. Competitive market leadership is key.		
D. The organization defines success on the basis of efficiency. Dependable delivery, smooth scheduling, and low-cost production are critical.		
Total	100	100

End of Section Two

Section 3: Conflict Management Styles

Please answer the following questions by highlighting your answers in red color

In this section, conflict management styles are being analyzed. This section contains 28 items. Please rate them according to the current situation and your preference in your organization.

For the manager/director in the organization, please consider the conflicts management with the subordinates.

For the other members in the organization, please consider the conflicts management with the boss. i.e. the manager or director.

When you rate the items according to current practice, please use the scaling below.

- 1 – Strongly disagree**
- 2 – Disagree**
- 3 – Neutral**
- 4– Agree**
- 5– Strongly agree**

When you rate the items according your preference, please use the scaling below.

- 1 – Strongly Not Prefer**
- 2 – Not Prefer**
- 3 – Neutral**
- 4– Prefer**
- 5– Strongly Prefer**

1. I try to investigate an issue with my boss/subordinates to find a solution acceptable to us	Present situation	5	4	3	2	1
	Preferred style	5	4	3	2	1
2. I generally try to satisfy the needs of my boss/subordinates	Present situation	5	4	3	2	1
	Preferred style	5	4	3	2	1
3. I attempt to avoid being “put on the spot” and try to keep my conflict with my boss/subordinates to myself	Present situation	5	4	3	2	1
	Preferred style	5	4	3	2	1
4. I try to integrate my ideas with those of my boss/subordinates to come up with a decision jointly	Present situation	5	4	3	2	1
	Preferred style	5	4	3	2	1
5. I try to work with my boss/subordinates to find solutions to a problem which satisfy our expectations	Present situation	5	4	3	2	1
	Preferred style	5	4	3	2	1
6. I usually avoid open discussion of my differences with my boss/subordinates	Present situation	5	4	3	2	1
	Preferred style	5	4	3	2	1
7. I try to find a middle course to resolve an impasse	Present situation	5	4	3	2	1
	Preferred style	5	4	3	2	1

8. I use my influence to get my ideas accepted	Present situation	5	4	3	2	1
	Preferred style	5	4	3	2	1
9. I use my authority to make a decision in my favor	Present situation	5	4	3	2	1
	Preferred style	5	4	3	2	1
10. I usually accommodate the wishes of my boss/subordinates	Present situation	5	4	3	2	1
	Preferred style	5	4	3	2	1
11. I give in to the wishes of my boss/subordinates	Present situation	5	4	3	2	1
	Preferred style	5	4	3	2	1
12. I exchange accurate information with my boss/subordinates to solve a problem together	Present situation	5	4	3	2	1
	Preferred style	5	4	3	2	1
13. I usually allow concessions to my boss/subordinates	Present situation	5	4	3	2	1
	Preferred style	5	4	3	2	1
14. I usually propose a middle ground for breaking dead-locks	Present situation	5	4	3	2	1
	Preferred style	5	4	3	2	1

15. I negotiate with my boss/subordinates so that a compromise can be reached	Present situation	5	4	3	2	1
	Preferred style	5	4	3	2	1
16. I try to stay away from disagreement with my boss/subordinates	Present situation	5	4	3	2	1
	Preferred style	5	4	3	2	1
17. I avoid an encounter with my boss/subordinates	Present situation	5	4	3	2	1
	Preferred style	5	4	3	2	1
18. I use my expertise to make a decision in my favor	Present situation	5	4	3	2	1
	Preferred style	5	4	3	2	1
19. I often go along with my suggestions of my boss/subordinates	Present situation	5	4	3	2	1
	Preferred style	5	4	3	2	1
20. I use “give and take” so that a compromise can be made	Present situation	5	4	3	2	1
	Preferred style	5	4	3	2	1
21. I am generally firm in pursuing my side of the issue	Present situation	5	4	3	2	1
	Preferred style	5	4	3	2	1

22. I try to bring all our concerns out in the open so that the issues can be resolved in the best possible way	Present situation	5	4	3	2	1
	Preferred style	5	4	3	2	1
23. I collaborate with my boss/subordinates to come up with decisions acceptable to us	Present situation	5	4	3	2	1
	Preferred style	5	4	3	2	1
24. I try to satisfy the expectations of my boss/subordinates	Present situation	5	4	3	2	1
	Preferred style	5	4	3	2	1
25. I sometimes use my power to win a competitive situation	Present situation	5	4	3	2	1
	Preferred style	5	4	3	2	1
26. I try to keep my disagreement with my boss/subordinates to myself in order to avoid hard feelings	Present situation	5	4	3	2	1
	Preferred style	5	4	3	2	1
27. I try to avoid unpleasant exchanges with my boss/subordinates	Present situation	5	4	3	2	1
	Preferred style	5	4	3	2	1
28. I try to work with my boss/subordinates for a proper understanding of a problem	Present situation	5	4	3	2	1
	Preferred style	5	4	3	2	1

End of Section Three

Section 4: Commitment

Please answer the following questions by highlighting your answers in red color

*In this section, commitment to the organization is going to be studied. Commitment classified as **affective, continuance and normative commitment**.*

Allen and Meyer define these three “types” of commitment:

- Affective commitment is an emotional attachment to the organization*
- Normative commitment is based on acceptance of the organization’s set of values*
- Continuance commitment dimension is based on the idea that the costs of leaving the organization outweigh the opportunity costs of staying*

In the following sections, please use the scaling below to rate the following items.

1 – Strongly disagree

2 – Moderately disagree

3 – Slightly disagree

4 – Neither agree nor disagree

5 – Slightly agree

6 – Moderately agree

7 – Strongly agree

Section 4.1 Affective Commitment Scale

- | | | | | | | | |
|--|---|---|---|---|---|---|---|
| 1. I would be very happy to spend the rest of my career in this organization | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. I really feel as if this organization’s problems are my own. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. I do not feel like “part of the family” at my organization. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. I do not feel “emotionally attached” to this organization. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. This organization has a great deal of personal meaning for me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. I do not feel a strong sense of belonging to my organization. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Section 4.2 Continuance Commitment Scale

1. It would be very hard for me to leave my organization right now, even if I wanted to. 1 2 3 4 5 6 7
2. Too much of my life would be disrupted if I decided I wanted to leave my organization right now. 1 2 3 4 5 6 7
3. Right now, staying with my organization is a matter of necessity as much as desire. 1 2 3 4 5 6 7
4. I believe that I have too few options to consider leaving this organization. 1 2 3 4 5 6 7
5. One of the few negative consequences of leaving this organization would be the scarcity of available alternative. 1 2 3 4 5 6 7
6. If I had not already put so much of myself into this organization, I might consider working elsewhere. 1 2 3 4 5 6 7

Section 4.3 Normative Commitment Scale

- 1 I do not feel any obligation to remain with my current employer. 1 2 3 4 5 6 7
- 2 Even if it were to my advantage, I do not feel it would be right to leave my organization now. 1 2 3 4 5 6 7
- 3 I would feel guilty if I left my organization now. 1 2 3 4 5 6 7
- 4 This organization deserves my loyalty. 1 2 3 4 5 6 7
- 5 I would not leave my organization right now because I have a sense of obligation to the people in it. 1 2 3 4 5 6 7
- 6 I owe a great deal to my organization. 1 2 3 4 5 6 7

End of Questionnaire

Thanks for your help. Wish you every success with your company.

Appendix 4: Average score of actual organizational culture profile in all six dimensions of each company

	Average score in company A			
6 elements of OC	Clan	Adhocracy	Market	Hierarchy
Dominant characteristic	10	4	14	72
Organizational leadership	10	8	32	50
Management of employee	13	5	7	75
Organizational glue	5	3	12	80
Strategic emphases	7	3	10	80
Criteria of success	13	5	5	77
<i>Overall OC Profile</i>	10	4	14	72

	Average score in company B			
6 elements of OC	Clan	Adhocracy	Market	Hierarchy
Dominant characteristic	12	8	20	60
Organizational leadership	15	5	22	58
Management of employee	20	5	10	65
Organizational glue	10	5	8	77
Strategic emphases	15	5	5	75
Criteria of success	18	10	5	67
<i>Overall OC Profile</i>	15	6	12	67

	Average score in company C			
6 elements of OC	Clan	Adhocracy	Market	Hierarchy
Dominant characteristic	10	10	10	70
Organizational leadership	10	18	20	52
Management of employee	15	10	10	65
Organizational glue	8	9	11	72
Strategic emphases	13	20	12	55
Criteria of success	23	10	12	55
<i>Overall OC Profile</i>	13	13	13	61

	Average score in company D			
6 elements of OC	Clan	Adhocracy	Market	Hierarchy
Dominant characteristic	30	30	27	13
Organizational leadership	26	19	25	30
Management of employee	34	25	26	15
Organizational glue	25	28	27	20
Strategic emphases	26	31	33	10
Criteria of success	28	20	31	21
<i>Overall OC Profile</i>	29	25	28	18

	Average score in company E			
6 elements of OC	Clan	Adhocracy	Market	Hierarchy
Dominant characteristic	65	8	7	20
Organizational leadership	38	10	10	42
Management of employee	50	10	10	30
Organizational glue	37	20	8	35
Strategic emphases	35	5	5	55
Criteria of success	57	13	5	25
<i>Overall OC Profile</i>	47	11	8	34

	Average score in company F			
6 elements of OC	Clan	Adhocracy	Market	Hierarchy
Dominant characteristic	30	11	26	33
Organizational leadership	30	18	27	25
Management of employee	45	6	19	30
Organizational glue	32	9	30	29
Strategic emphases	30	12	30	28
Criteria of success	29	20	30	21
<i>Overall OC Profile</i>	33	13	27	27

	Average score in company G			
6 elements of OC	Clan	Adhocracy	Market	Hierarchy
Dominant characteristic	30	20	33	17
Organizational leadership	32	18	30	20
Management of employee	32	15	28	25
Organizational glue	27	20	25	28
Strategic emphases	32	20	25	23
Criteria of success	35	18	30	17
<i>Overall OC Profile</i>	32	18	28	22

	Average score in company H			
6 elements of OC	Clan	Adhocracy	Market	Hierarchy
Dominant characteristic	28	35	15	22
Organizational leadership	25	35	17	23
Management of employee	23	32	23	22
Organizational glue	27	33	20	20
Strategic emphases	30	32	18	20
Criteria of success	28	32	18	23
<i>Overall OC Profile</i>	27	33	18	22

	Average score in company I			
6 elements of OC	Clan	Adhocracy	Market	Hierarchy
Dominant characteristic	25	14	28	35
Organizational leadership	27	12	23	38
Management of employee	23	10	33	34
Organizational glue	25	16	33	26
Strategic emphases	19	13	35	33
Criteria of success	20	10	32	38
<i>Overall OC Profile</i>	23	13	30	34

	Average score in company J			
6 elements of OC	Clan	Adhocracy	Market	Hierarchy
Dominant characteristic	18	27	32	23
Organizational leadership	20	32	28	20
Management of employee	20	35	26	19
Organizational glue	17	30	34	19
Strategic emphases	23	28	29	20
Criteria of success	22	28	26	24
<i>Overall OC Profile</i>	20	30	29	21

	Average score in company K			
6 elements of OC	Clan	Adhocracy	Market	Hierarchy
Dominant characteristic	15	21	35	29
Organizational leadership	16	21	30	33
Management of employee	15	25	25	35
Organizational glue	13	25	30	32
Strategic emphases	13	24	33	30
Criteria of success	13	22	40	25
<i>Overall OC Profile</i>	14	23	32	31

	Average score in company L			
6 elements of OC	Clan	Adhocracy	Market	Hierarchy
Dominant characteristic	18	30	44	8
Organizational leadership	16	27	43	14
Management of employee	10	30	43	17
Organizational glue	17	23	43	17
Strategic emphases	15	28	47	10
Criteria of success	10	30	50	10
<i>Overall OC Profile</i>	14	28	45	13

	Average score in company M			
6 elements of OC	Clan	Adhocracy	Market	Hierarchy
Dominant characteristic	25	19	30	26
Organizational leadership	31	18	17	34
Management of employee	34	15	16	35
Organizational glue	33	21	24	22
Strategic emphases	29	19	21	31
Criteria of success	31	19	17	33
<i>Overall OC Profile</i>	31	18	21	30

Appendix 5: Average score of preferred organizational culture profile in all six dimensions of each company

	Average score in company A			
6 elements of OC	Clan	Adhocracy	Market	Hierarchy
Dominant characteristic	25	12	33	30
Organizational leadership	13	21	33	33
Management of employee	20	22	23	35
Organizational glue	20	22	30	28
Strategic emphases	15	20	20	45
Criteria of success	15	27	18	40
<i>Overall OC Profile</i>	18	21	26	35

	Average score in company B			
6 elements of OC	Clan	Adhocracy	Market	Hierarchy
Dominant characteristic	8	5	25	62
Organizational leadership	8	5	10	77
Management of employee	20	5	5	70
Organizational glue	7	8	5	80
Strategic emphases	5	5	27	62
Criteria of success	13	5	12	70
<i>Overall OC Profile</i>	11	5	14	70

	Average score in company C			
6 elements of OC	Clan	Adhocracy	Market	Hierarchy
Dominant characteristic	20	20	15	45
Organizational leadership	30	14	16	40
Management of employee	31	14	16	39
Organizational glue	28	20	13	40
Strategic emphases	24	23	24	29
Criteria of success	24	11	21	44
<i>Overall OC Profile</i>	26	17	18	39

	Average score in company D			
6 elements of OC	Clan	Adhocracy	Market	Hierarchy
Dominant characteristic	28	27	25	20
Organizational leadership	20	20	30	30
Management of employee	30	27	34	9
Organizational glue	24	29	28	19
Strategic emphases	25	24	31	20
Criteria of success	26	20	38	16
<i>Overall OC Profile</i>	26	24	31	19

	Average score in company E			
6 elements of OC	Clan	Adhocracy	Market	Hierarchy
Dominant characteristic	45	9	9	38
Organizational leadership	50	9	9	33
Management of employee	39	10	10	41
Organizational glue	35	9	9	48
Strategic emphases	38	6	6	50
Criteria of success	43	10	15	33
<i>Overall OC Profile</i>	41	9	10	40

	Average score in company F			
6 elements of OC	Clan	Adhocracy	Market	Hierarchy
Dominant characteristic	43	15	20	22
Organizational leadership	42	13	23	22
Management of employee	35	21	20	24
Organizational glue	38	20	21	21
Strategic emphases	40	15	21	24
Criteria of success	43	13	17	27
<i>Overall OC Profile</i>	40	16	20	24

	Average score in company G			
6 elements of OC	Clan	Adhocracy	Market	Hierarchy
Dominant characteristic	40	10	20	30
Organizational leadership	32	18	28	22
Management of employee	38	12	23	27
Organizational glue	33	17	28	23
Strategic emphases	22	12	38	28
Criteria of success	35	10	25	30
<i>Overall OC Profile</i>	33	13	27	27

	Average score in company H			
6 elements of OC	Clan	Adhocracy	Market	Hierarchy
Dominant characteristic	25	35	13	27
Organizational leadership	32	33	13	22
Management of employee	27	28	15	30
Organizational glue	25	35	15	25
Strategic emphases	30	40	13	17
Criteria of success	25	35	13	27
<i>Overall OC Profile</i>	28	34	13	25

	Average score in company I			
6 elements of OC	Clan	Adhocracy	Market	Hierarchy
Dominant characteristic	45	25	15	15
Organizational leadership	45	19	15	21
Management of employee	52	20	13	15
Organizational glue	35	30	20	15
Strategic emphases	35	25	15	25
Criteria of success	37	13	28	22
<i>Overall OC Profile</i>	41	22	18	19

	Average score in company J			
6 elements of OC	Clan	Adhocracy	Market	Hierarchy
Dominant characteristic	26	28	34	12
Organizational leadership	28	32	25	15
Management of employee	25	35	23	17
Organizational glue	24	30	31	15
Strategic emphases	26	27	31	15
Criteria of success	26	28	31	15
<i>Overall OC Profile</i>	26	30	29	15

	Average score in company K			
6 elements of OC	Clan	Adhocracy	Market	Hierarchy
Dominant characteristic	23	22	30	25
Organizational leadership	25	25	28	22
Management of employee	20	28	30	22
Organizational glue	15	25	33	27
Strategic emphases	18	25	30	27
Criteria of success	20	25	30	25
<i>Overall OC Profile</i>	20	25	30	25

	Average score in company L			
6 elements of OC	Clan	Adhocracy	Market	Hierarchy
Dominant characteristic	25	25	40	10
Organizational leadership	27	23	35	15
Management of employee	27	25	33	15
Organizational glue	27	25	35	13
Strategic emphases	27	25	38	10
Criteria of success	25	27	40	8
<i>Overall OC Profile</i>	27	25	36	12

6 elements of OC	Average score in company M			
	Clan	Adhocracy	Market	Hierarchy
Dominant characteristic	35	24	20	21
Organizational leadership	34	19	18	29
Management of employee	41	15	15	29
Organizational glue	34	21	19	26
Strategic emphases	33	24	18	25
Criteria of success	35	18	16	31
<i>Overall OC Profile</i>	35	20	18	27

**Appendix 6: Overall average score in actual conflict solving approaches in
responded Companies A-M**

	Company A				
Conflict solving approach	Integrating	Obliging	Avoiding	Dominating	Compromising
Overall average score	2.89	3.17	3.46	2.85	2.94
Percentage	58%	63%	69%	57%	59%

	Company B				
Conflict solving approach	Integrating	Obliging	Avoiding	Dominating	Compromising
Overall average score	2.61	3.13	3.25	2.30	2.50
Percentage	52%	63%	65%	46%	50%

	Company C				
Conflict solving approach	Integrating	Obliging	Avoiding	Dominating	Compromising
Overall average score	3.29	3.75	3.38	3.30	2.94
Percentage	66%	75%	68%	66%	59%

	Company D				
Conflict solving approach	Integrating	Obliging	Avoiding	Dominating	Compromising
Overall average score	3.71	3.38	2.50	1.80	3.44
Percentage	74%	68%	50%	36%	69%

	Company E				
Conflict solving approach	Integrating	Obliging	Avoiding	Dominating	Compromising
Overall average score	3.93	3.58	3.08	2.35	3.31
Percentage	79%	72%	62%	47%	66%

	Company F				
Conflict solving approach	Integrating	Obliging	Avoiding	Dominating	Compromising
Overall average score	3.46	3.46	3.17	1.75	3.44
Percentage	69%	69%	63%	35%	69%

	Company G				
Conflict solving approach	Integrating	Obliging	Avoiding	Dominating	Compromising
Overall average score	4.04	2.67	2.96	3.20	3.81
Percentage	81%	53%	59%	64%	76%

	Company H				
Conflict solving approach	Integrating	Obliging	Avoiding	Dominating	Compromising
Overall average score	3.25	2.83	2.54	2.05	3.25
Percentage	65%	57%	51%	41%	65%

	Company I				
Conflict solving approach	Integrating	Obliging	Avoiding	Dominating	Compromising
Overall average score	2.89	3.96	4.08	2.50	1.63
Percentage	58%	79%	82%	50%	33%

	Company J				
Conflict solving approach	Integrating	Obliging	Avoiding	Dominating	Compromising
Overall average score	3.46	3.17	3.08	1.65	2.75
Percentage	69%	63%	62%	33%	55%

	Company K				
Conflict solving approach	Integrating	Obliging	Avoiding	Dominating	Compromising
Overall average score	3.57	3.20	3.50	4.25	3.56
Percentage	71%	64%	70%	85%	71%

	Company L				
Conflict solving approach	Integrating	Obliging	Avoiding	Dominating	Compromising
Overall average score	3.71	4.25	3.92	2.60	2.63
Percentage	74%	85%	78%	52%	53%

	Company M				
Conflict solving approach	Integrating	Obliging	Avoiding	Dominating	Compromising
Overall average score	3.71	3.21	3.38	2.10	3.56
Percentage	74%	64%	68%	42%	71%

Appendix 7: Overall average score in preferred conflict solving approaches in responded Companies A-M

	Company A				
Conflict solving approach	Integrating	Obliging	Avoiding	Dominating	Compromising
Overall average score	3.57	3.13	2.21	2.85	3.69
Percentage	71%	63%	44%	57%	74%

	Company B				
Conflict solving approach	Integrating	Obliging	Avoiding	Dominating	Compromising
Overall average score	2.93	2.67	2.88	2.45	2.63
Percentage	59%	53%	58%	49%	53%

	Company C				
Conflict solving approach	Integrating	Obliging	Avoiding	Dominating	Compromising
Overall average score	3.89	3.21	2.50	3.20	3.75
Percentage	78%	64%	50%	64%	75%

	Company D				
Conflict solving approach	Integrating	Obliging	Avoiding	Dominating	Compromising
Overall average score	4.50	3.58	1.71	2.95	3.81
Percentage	90%	72%	34%	59%	76%

	Company E				
Conflict solving approach	Integrating	Obliging	Avoiding	Dominating	Compromising
Overall average score	4.11	2.96	2.92	3.45	3.75
Percentage	82%	59%	58%	69%	75%

	Company F				
Conflict solving approach	Integrating	Obliging	Avoiding	Dominating	Compromising
Overall average score	3.43	3.04	2.65	3.45	3.75
Percentage	69%	61%	58%	53%	75%

	Company G				
Conflict solving approach	Integrating	Obliging	Avoiding	Dominating	Compromising
Overall average score	3.89	2.79	2.54	2.95	3.50
Percentage	78%	56%	51%	59%	70%

	Company H				
Conflict solving approach	Integrating	Obliging	Avoiding	Dominating	Compromising
Overall average score	3.21	2.67	2.46	2.35	3.50
Percentage	64%	53%	49%	47%	70%

	Company I				
Conflict solving approach	Integrating	Obliging	Avoiding	Dominating	Compromising
Overall average score	3.93	3.17	2.75	2.90	4.06
Percentage	79%	63%	55%	58%	81%

	Company J				
Conflict solving approach	Integrating	Obliging	Avoiding	Dominating	Compromising
Overall average score	3.71	3.17	3.29	3.00	3.38
Percentage	74%	63%	66%	60%	68%

	Company K				
Conflict solving approach	Integrating	Obliging	Avoiding	Dominating	Compromising
Overall average score	3.71	2.92	3.08	2.65	3.38
Percentage	74%	58%	62%	53%	68%

	Company L				
Conflict solving approach	Integrating	Obliging	Avoiding	Dominating	Compromising
Overall average score	4.46	4.50	3.96	4.85	4.75
Percentage	89%	90%	79%	97%	95%

	Company M				
Conflict solving approach	Integrating	Obliging	Avoiding	Dominating	Compromising
Overall average score	4.11	3.08	2.83	3.00	3.63
Percentage	82%	62%	57%	60%	73%

Appendix 8: Overall average score in organizational commitment in responded Companies A-M

	Company A		
Organizational Commitment	Affective commitment	Continuance commitment	Normative commitment
Overall average Score	4.04	4.00	3.63
Percentage	47%	74%	58%

	Company B		
Organizational Commitment	Affective commitment	Continuance commitment	Normative commitment
Overall average Score	2.71	4.92	3.08
Percentage	39%	70%	44%

	Company C		
Organizational Commitment	Affective commitment	Continuance commitment	Normative commitment
Overall average Score	3.96	6.04	4.29
Percentage	57%	86%	61%

	Company D		
Organizational Commitment	Affective commitment	Continuance commitment	Normative commitment
Overall average Score	4.04	4.00	3.63
Percentage	58%	57%	52%

	Company E		
Organizational Commitment	Affective commitment	Continuance commitment	Normative commitment
Overall average Score	4.92	3.92	4.63
Percentage	70%	56%	66%

	Company F		
Organizational Commitment	Affective commitment	Continuance commitment	Normative commitment
Overall average Score	3.92	4.50	3.54
Percentage	56%	64%	51%

	Company G		
Organizational Commitment	Affective commitment	Continuance commitment	Normative commitment
Overall average Score	5.46	5.08	3.67
Percentage	78%	73%	52%

	Company H		
Organizational Commitment	Affective commitment	Continuance commitment	Normative commitment
Overall average Score	4.42	3.46	4.29
Percentage	63%	49%	61%

	Company I		
Organizational Commitment	Affective commitment	Continuance commitment	Normative commitment
Overall average Score	3.04	4.88	3.25
Percentage	43%	70%	46%

	Company J		
Organizational Commitment	Affective commitment	Continuance commitment	Normative commitment
Overall average Score	3.29	4.50	4.33
Percentage	47%	64%	62%

	Company K		
Organizational Commitment	Affective commitment	Continuance commitment	Normative commitment
Overall average Score	5.04	5.38	4.00
Percentage	72%	77%	57%

	Company L		
Organizational Commitment	Affective commitment	Continuance commitment	Normative commitment
Overall average Score	2.50	5.33	2.75
Percentage	36%	76%	39%

	Company M		
Organizational Commitment	Affective commitment	Continuance commitment	Normative commitment
Overall average Score	3.54	3.46	3.38
Percentage	51%	49%	48%

Appendix 9: SPSS output on the exploratory factor analysis and confirmatory factor analysis

Appendix 9(a) Exploratory factor analysis in the OCAI

Total Variance Explained

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	10.861	45.254	45.254	6.571	27.380	27.380
2	5.146	21.441	66.696	5.777	24.071	51.451
3	1.853	7.722	74.417	5.512	22.966	74.417
4	.963	4.014	78.431			
5	.865	3.602	82.034			
6	.771	3.212	85.245			
7	.630	2.625	87.870			
8	.562	2.341	90.212			
9	.446	1.858	92.069			
10	.344	1.435	93.505			
11	.330	1.375	94.880			
12	.286	1.190	96.069			
13	.246	1.026	97.096			
14	.216	.900	97.996			
15	.201	.837	98.832			
16	.146	.609	99.441			
17	.081	.339	99.780			
18	.053	.220	100.000			
19	4.545E-16	1.894E-15	100.000			
20	3.726E-16	1.552E-15	100.000			
21	2.503E-16	1.043E-15	100.000			
22	-1.415E-16	-5.897E-16	100.000			
23	-3.516E-16	-1.465E-15	100.000			
24	-1.231E-15	-5.130E-15	100.000			

Extraction Method: Principal Component Analysis.

Rotated Component Matrix^a

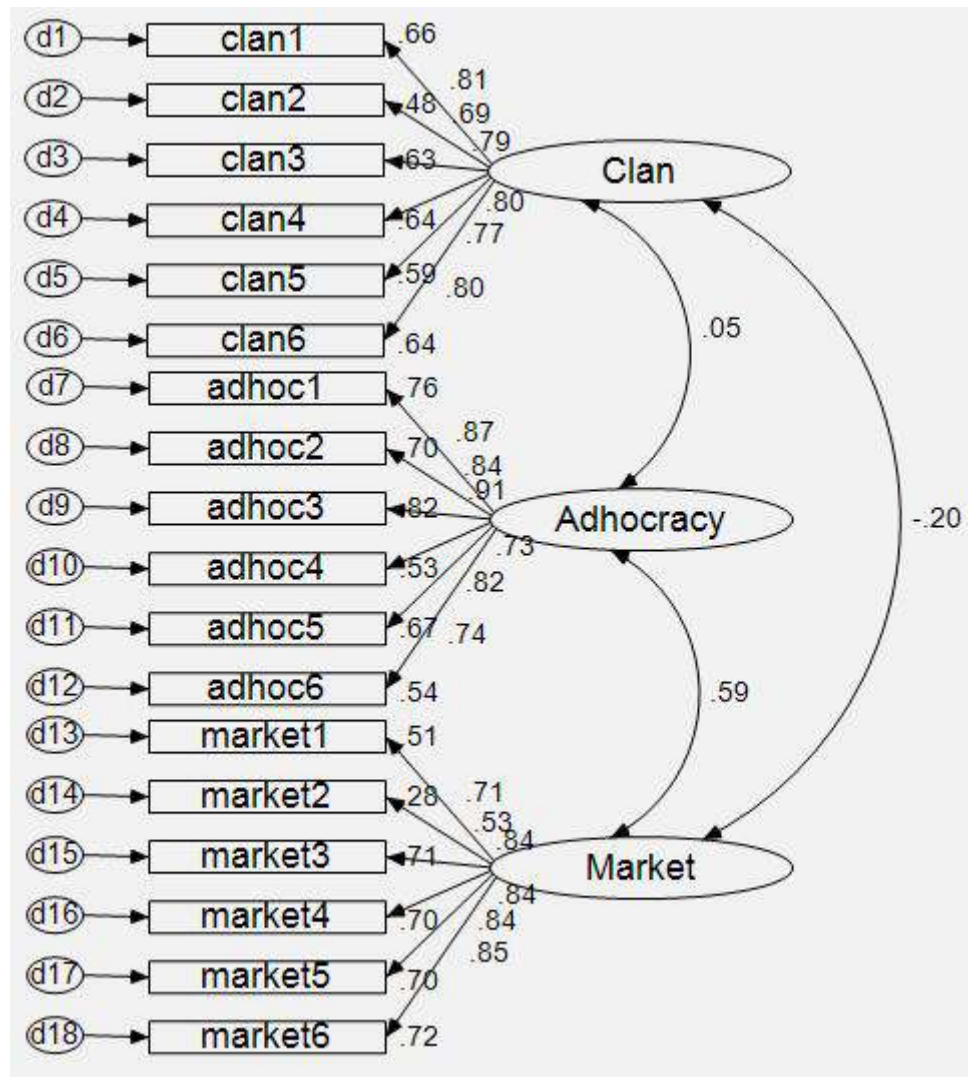
	Component		
	1	2	3
clan1			.841
clan2			.769
clan3			.833
clan4			.834
clan5			.783
clan6		-.318	.801
adhoc1	.863		
adhoc2	.859		
adhoc3	.865		
adhoc4	.797		
adhoc5	.789		
adhoc6	.723		
market1		.788	
market2		.657	-.303
market3	.358	.776	
market4		.792	
market5		.803	
market6	.313	.807	
hierarchy1	-.502	-.493	-.556
hierarchy2	-.537	-.601	
hierarchy3	-.570	-.539	-.527
hierarchy4	-.619	-.462	-.527
hierarchy5	-.670	-.594	-.302
hierarchy6	-.550	-.515	-.552

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

Appendix 9(b) Confirmatory factor analysis in the OCAI (actual organizational culture profile)



Notes for Model (Default model)

Computation of degrees of freedom (Default model)

Number of distinct sample moments: 189
Number of distinct parameters to be estimated: 57
Degrees of freedom (189 - 57): 132

Result (Default model)

Minimum was achieved
Chi-square = 292.975
Degrees of freedom = 132
Probability level = .000

Estimates (Group number 1 - Default model)

Scalar Estimates (Group number 1 - Default model)

Maximum Likelihood Estimates

Regression Weights: (Group number 1 - Default model)

		Estimate	S.E.	C.R.	P Label
clan1	<--- Clan	1.000			
clan2	<--- Clan	.641	.121	5.281	***
clan3	<--- Clan	.892	.142	6.269	***
clan4	<--- Clan	.789	.124	6.355	***
clan5	<--- Clan	.740	.122	6.043	***
clan6	<--- Clan	.898	.142	6.323	***
adhoc1	<--- Adhocracy	1.000			
adhoc2	<--- Adhocracy	.853	.109	7.858	***
adhoc3	<--- Adhocracy	1.067	.116	9.178	***
adhoc4	<--- Adhocracy	.822	.132	6.247	***
adhoc5	<--- Adhocracy	.942	.125	7.545	***

	Estimate	S.E.	C.R.	P Label
adhoc6 <--- Adhocracy	.769	.121	6.347	***
market1 <--- Market	1.000			
market2 <--- Market	.661	.182	3.630	***
market3 <--- Market	1.088	.188	5.794	***
market4 <--- Market	1.127	.196	5.764	***
market5 <--- Market	1.300	.226	5.748	***
market6 <--- Market	1.368	.234	5.838	***

Covariances: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P Label
Clan <--> Adhocracy	7.167	20.521	.349	.727
Market <--> Adhocracy	61.913	20.375	3.039	.002
Market <--> Clan	-27.490	21.587	-1.273	.203

Correlations: (Group number 1 - Default model)

	Estimate
Clan <--> Adhocracy	.053
Market <--> Adhocracy	.595
Market <--> Clan	-.204

Model Fit Summary

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	57	292.975	132	.000	2.220
Saturated model	189	.000	0		
Independence model	18	879.377	171	.000	5.143

Baseline Comparisons

Model	NFI	RFI	IFI	TLI	CFI
	Delta1	rho1	Delta2	rho2	
Default model	.667	.568	.785	.706	.773
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.772	.515	.597
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

NCP

Model	NCP	LO 90	HI 90
Default model	160.975	115.235	214.452
Saturated model	.000	.000	.000
Independence model	708.377	619.404	804.859

FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	5.232	2.875	2.058	3.829
Saturated model	.000	.000	.000	.000
Independence model	15.703	12.650	11.061	14.372

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.148	.125	.170	.000
Independence model	.272	.254	.290	.000

AIC

Model	AIC	BCC	BIC	CAIC
Default model	406.975	465.516		
Saturated model	378.000	572.108		
Independence model	915.377	933.863		

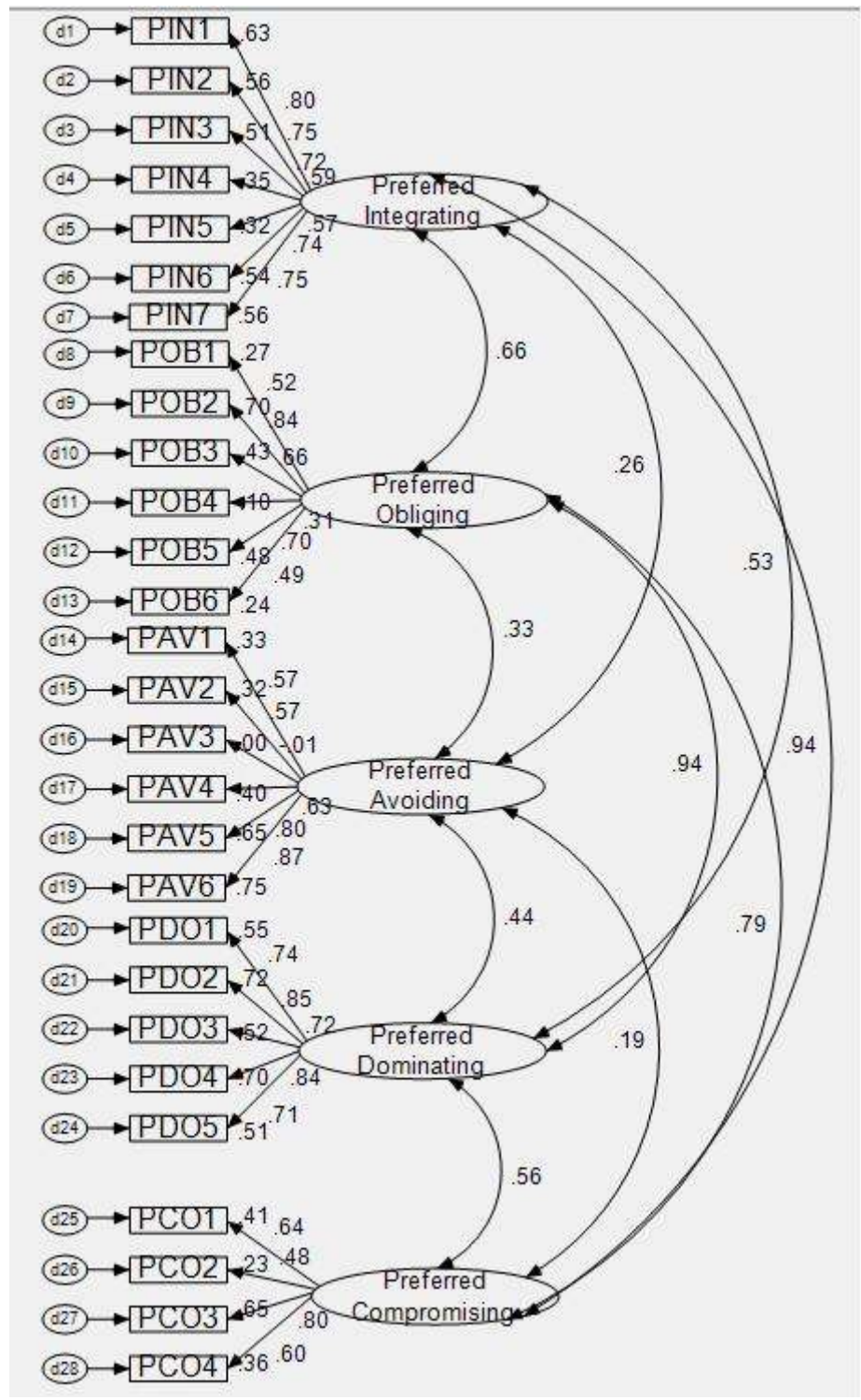
ECVI

Model	ECVI	LO 90	HI 90	MECVI
Default model	7.267	6.451	8.222	8.313
Saturated model	6.750	6.750	6.750	10.216
Independence model	16.346	14.757	18.069	16.676

HOELTER

Model	HOELTER	HOELTER
	.05	.01
Default model	31	34
Independence model	13	14

Appendix 9(c) Confirmatory factor analysis in the OCAI (preferred organizational culture profile)



Notes for Model (Default model)

Computation of degrees of freedom (Default model)

Number of distinct sample moments: 189
Number of distinct parameters to be estimated: 57
Degrees of freedom (189 - 57): 132

Result (Default model)

Minimum was achieved
Chi-square = 266.744
Degrees of freedom = 132
Probability level = .000

Estimates (Group number 1 - Default model)

Scalar Estimates (Group number 1 - Default model)

Maximum Likelihood Estimates

Regression Weights: (Group number 1 - Default model)

		Estimate	S.E.	C.R.	P Label
pclan1	<--- Preferred Clan_Culture	1.000			
pclan2	<--- Preferred Clan_Culture	.956	.137	6.981	***
pclan3	<--- Preferred Clan_Culture	.845	.139	6.090	***
pclan4	<--- Preferred Clan_Culture	.843	.122	6.930	***
pclan5	<--- Preferred Clan_Culture	.867	.119	7.272	***
pclan6	<--- Preferred Clan_Culture	.836	.132	6.342	***
padhoc1	<--- Preferred Adhocracy_Culture	1.000			
padhoc2	<--- Preferred Adhocracy_Culture	1.025	.175	5.862	***
padhoc3	<--- Preferred Adhocracy_Culture	1.030	.177	5.831	***
padhoc4	<--- Preferred Adhocracy_Culture	1.036	.177	5.862	***
padhoc5	<--- Preferred Adhocracy_Culture	1.143	.179	6.392	***

	Estimate	S.E.	C.R.	P Label
padhoc6 <--- Preferred Adhocracy_Culture	1.084	.188	5.778	***
pmarket1 <--- Preferred Market_Culture	1.000			
pmarket2 <--- Preferred Market_Culture	1.244	.215	5.773	***
pmarket3 <--- Preferred Market_Culture	1.253	.222	5.636	***
pmarket4 <--- Preferred Market_Culture	1.213	.225	5.391	***
pmarket5 <--- Preferred Market_Culture	.863	.230	3.745	***
pmarket6 <--- Preferred Market_Culture	1.095	.235	4.660	***

Covariances: (Group number 1 - Default model)

		Estimate	S.E.	C.R.	P Label
Preferred Clan_Culture	<--> Preferred Adhocracy_Culture	20.518	16.208	1.266	.206
Preferred Market_Culture	<--> Preferred Adhocracy_Culture	22.015	12.702	1.733	.083
Preferred Market_Culture	<--> Preferred Clan_Culture	-37.711	18.487	-2.040	.041

Correlations: (Group number 1 - Default model)

	Estimate
Preferred Clan_Culture <--> Preferred Adhocracy_Culture	.200
Preferred Market_Culture <--> Preferred Adhocracy_Culture	.289
Preferred Market_Culture <--> Preferred Clan_Culture	-.348

Model Fit Summary

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	57	266.744	132	.000	2.021
Saturated model	189	.000	0		
Independence model	18	837.439	171	.000	4.897

Baseline Comparisons

Model	NFI	RFI	IFI	TLI	CFI
	Delta1	rho1	Delta2	rho2	
Default model	.681	.587	.809	.738	.798
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.772	.526	.616
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

NCP

Model	NCP	LO 90	HI 90
Default model	134.744	91.976	185.292
Saturated model	.000	.000	.000
Independence model	666.439	579.953	760.444

FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	4.763	2.406	1.642	3.309
Saturated model	.000	.000	.000	.000
Independence model	14.954	11.901	10.356	13.579

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.135	.112	.158	.000
Independence model	.264	.246	.282	.000

AIC

Model	AIC	BCC	BIC	CAIC
Default model	380.744	439.284		
Saturated model	378.000	572.108		
Independence model	873.439	891.925		

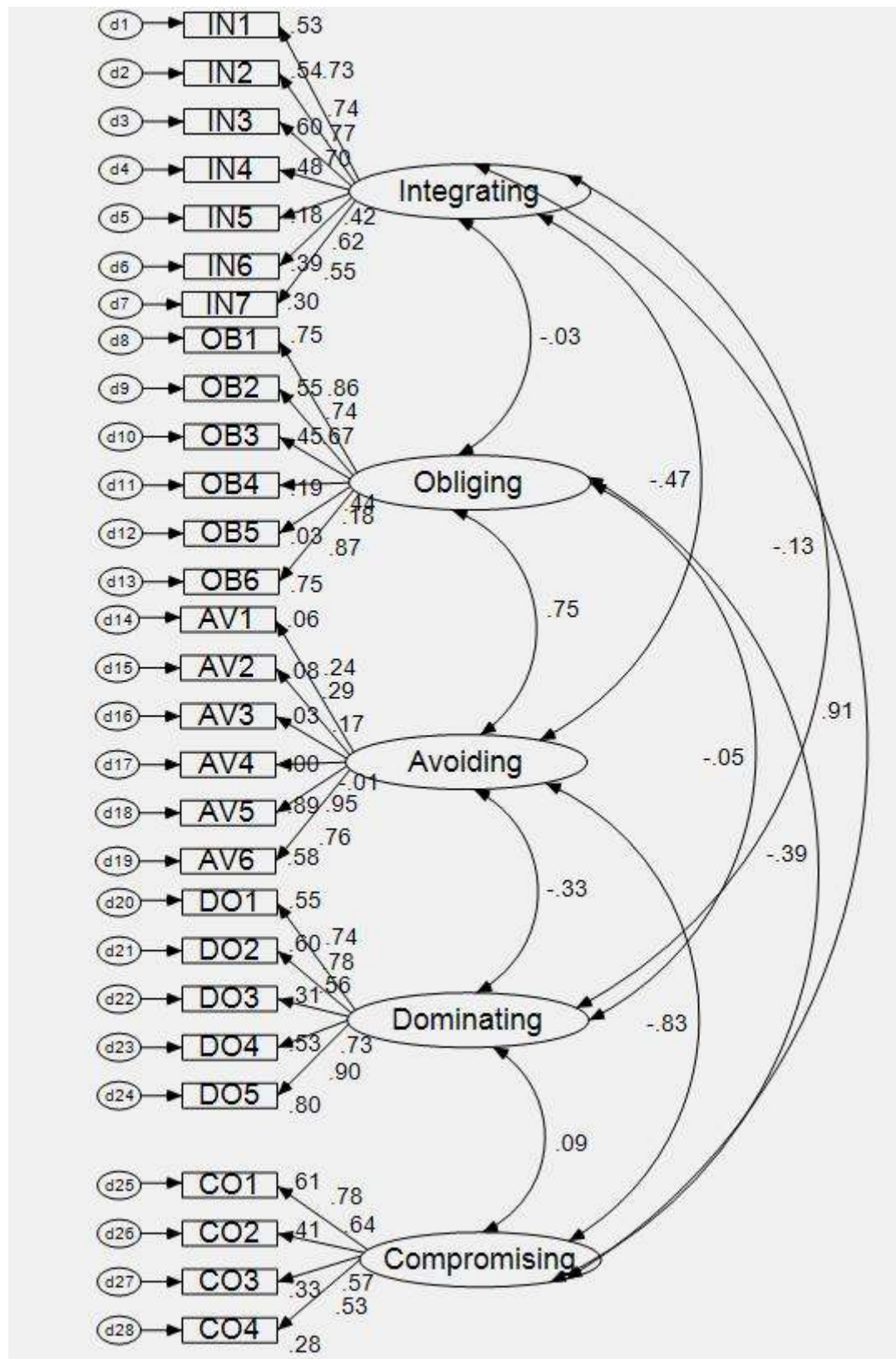
ECVI

Model	ECVI	LO 90	HI 90	MECVI
Default model	6.799	6.035	7.702	7.844
Saturated model	6.750	6.750	6.750	10.216
Independence model	15.597	14.053	17.276	15.927

HOELTER

Model	HOELTER	HOELTER
	.05	.01
Default model	34	37
Independence model	14	15

Appendix 9(d) Confirmatory factor analysis in the RCOI-II (actual conflict solving approach)



Notes for Model (Default model)

Computation of degrees of freedom (Default model)

Number of distinct sample moments: 434
Number of distinct parameters to be estimated: 94
Degrees of freedom (434 - 94): 340

Result (Default model)

Minimum was achieved
Chi-square = 829.784
Degrees of freedom = 340
Probability level = .000

Estimates (Group number 1 - Default model)

Scalar Estimates (Group number 1 - Default model)

Maximum Likelihood Estimates

Regression Weights: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P Label
IN1 <--- Integrating	1.000			
IN2 <--- Integrating	1.127	.223	5.046	***
IN3 <--- Integrating	1.161	.220	5.280	***
IN4 <--- Integrating	.907	.191	4.753	***
IN5 <--- Integrating	.625	.218	2.864	.004
IN6 <--- Integrating	.926	.219	4.235	***
OB1 <--- Obliging	1.000			
OB2 <--- Obliging	.810	.131	6.209	***
OB3 <--- Obliging	.739	.138	5.337	***
OB4 <--- Obliging	.267	.083	3.199	.001
OB5 <--- Obliging	.191	.155	1.232	.218

	Estimate	S.E.	C.R.	P Label
OB6 <--- Obliging	1.138	.145	7.837	***
AV1 <--- Avoiding	1.000			
AV2 <--- Avoiding	1.302	.986	1.321	.187
AV3 <--- Avoiding	.647	.656	.988	.323
AV4 <--- Avoiding	-.059	.575	-.103	.918
AV5 <--- Avoiding	4.427	2.619	1.690	.091
AV6 <--- Avoiding	3.070	1.846	1.663	.096
DO1 <--- Dominating	1.000			
DO2 <--- Dominating	1.082	.198	5.468	***
DO3 <--- Dominating	.709	.185	3.840	***
DO4 <--- Dominating	.774	.152	5.084	***
DO5 <--- Dominating	1.317	.212	6.213	***
CO1 <--- Compromising	1.000			
CO2 <--- Compromising	.842	.176	4.789	***
CO3 <--- Compromising	.788	.186	4.238	***
CO4 <--- Compromising	.625	.160	3.900	***
IN7 <--- Integrating	.749	.200	3.745	***

Covariances: (Group number 1 - Default model)

		Estimate	S.E.	C.R.	P Label
Integrating	<--> Obliging	-.017	.080	-.210	.834
Obliging	<--> Avoiding	.146	.094	1.556	.120
Avoiding	<--> Dominating	-.061	.047	-1.289	.197
Compromising	<--> Dominating	.054	.098	.552	.581
Integrating	<--> Avoiding	-.065	.046	-1.420	.156
Compromising	<--> Avoiding	-.141	.091	-1.557	.119
Compromising	<--> Integrating	.392	.111	3.545	***
Obliging	<--> Dominating	-.034	.103	-.330	.741
Integrating	<--> Dominating	-.062	.076	-.813	.416
Compromising	<--> Obliging	-.238	.112	-2.136	.033

Correlations: (Group number 1 - Default model)

		Estimate
Integrating	<--> Obliging	-.034
Obliging	<--> Avoiding	.748
Avoiding	<--> Dominating	-.330
Compromising	<--> Dominating	.095
Integrating	<--> Avoiding	-.467
Compromising	<--> Avoiding	-.830
Compromising	<--> Integrating	.905
Obliging	<--> Dominating	-.052
Integrating	<--> Dominating	-.132
Compromising	<--> Obliging	-.393

Model Fit Summary

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	94	829.784	340	.000	2.441
Saturated model	434	.000	0		
Independence model	28	1379.592	406	.000	3.398

Baseline Comparisons

Model	NFI	RFI	IFI	TLI	CFI
	Delta1	rho1	Delta2	rho2	
Default model	.399	.282	.529	.399	.497
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.837	.334	.416
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

NCP

Model	NCP	LO 90	HI 90
Default model	489.784	409.093	578.162
Saturated model	.000	.000	.000
Independence model	973.592	864.500	1090.257

FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	14.818	8.746	7.305	10.324
Saturated model	.000	.000	.000	.000
Independence model	24.636	17.386	15.438	19.469

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.160	.147	.174	.000
Independence model	.207	.195	.219	.000

AIC

Model	AIC	BCC	BIC	CAIC
Default model	1017.784	1219.710		
Saturated model	868.000	1800.296		
Independence model	1435.592	1495.741		

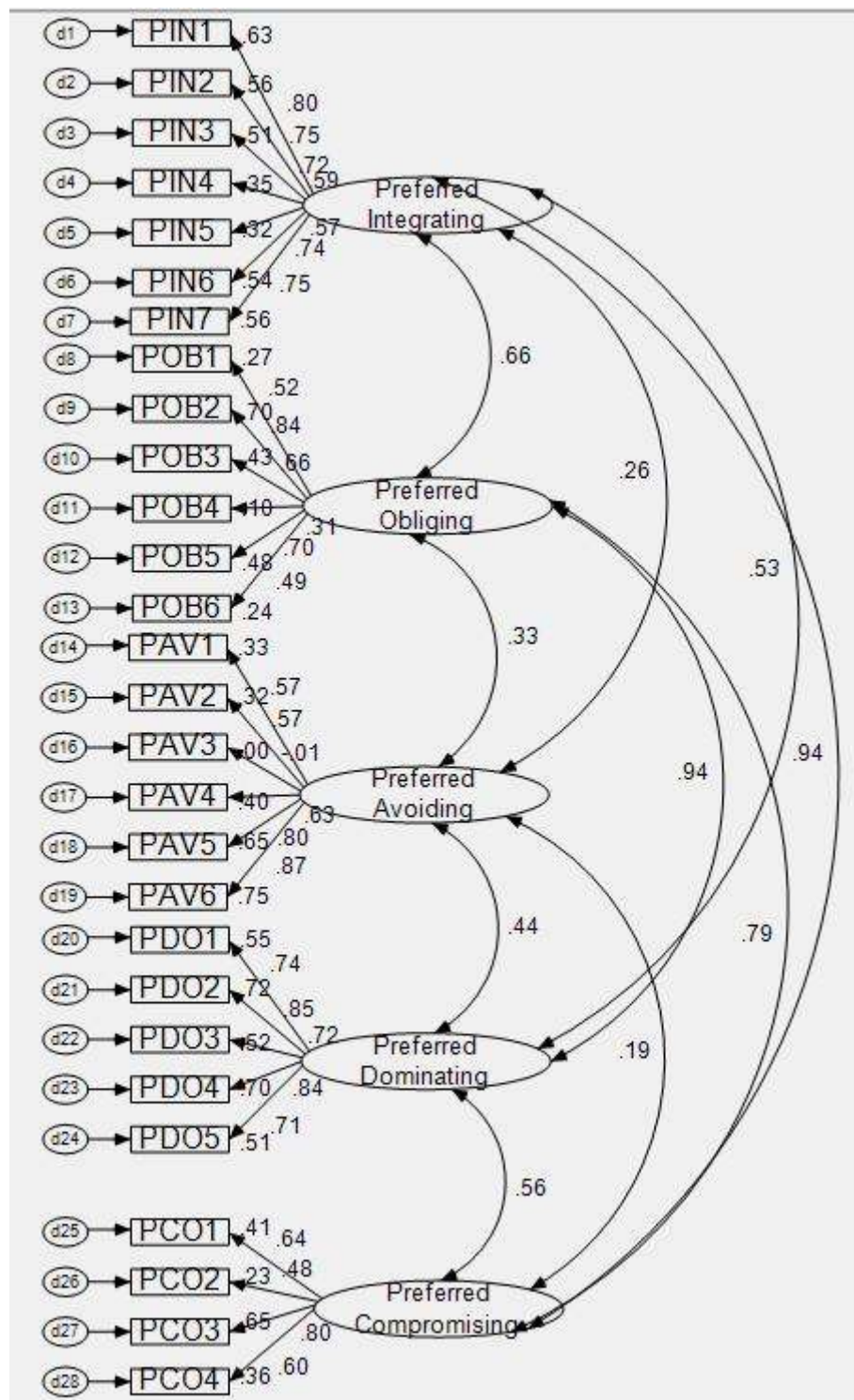
ECVI

Model	ECVI	LO 90	HI 90	MECVI
Default model	18.175	16.734	19.753	21.781
Saturated model	15.500	15.500	15.500	32.148
Independence model	25.636	23.688	27.719	26.710

HOELTER

Model	HOELTER	HOELTER
	.05	.01
Default model	26	28
Independence model	19	20

Appendix 9(e) Confirmatory factor analysis in the RCOI-II (preferred conflict solving approach)



Computation of degrees of freedom (Default model)

Number of distinct sample moments: 434
Number of distinct parameters to be estimated: 94
Degrees of freedom (434 - 94): 340

Result (Default model)

Minimum was achieved
Chi-square = 760.689
Degrees of freedom = 340
Probability level = .000

Estimates (Group number 1 - Default model)

Scalar Estimates (Group number 1 - Default model)

Maximum Likelihood Estimates

Regression Weights: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P Label
PIN1 <--- Preferred_Integrating	1.000			
PIN2 <--- Preferred_Integrating	.971	.170	5.704	***
PIN3 <--- Preferred_Integrating	.923	.170	5.423	***
PIN4 <--- Preferred_Integrating	.773	.180	4.286	***
PIN5 <--- Preferred_Integrating	.712	.172	4.137	***
PIN6 <--- Preferred_Integrating	.721	.128	5.619	***
POB1 <--- Preferred_Obliging	1.000			
POB2 <--- Preferred_Obliging	1.330	.343	3.879	***
POB3 <--- Preferred_Obliging	1.025	.300	3.421	***
POB4 <--- Preferred_Obliging	.382	.191	2.002	.045
POB5 <--- Preferred_Obliging	1.399	.396	3.538	***

	Estimate	S.E.	C.R.	P Label
POB6 <--- Preferred_Obliging	1.036	.365	2.840	.005
PAV1 <--- Preferred_Avoiding	1.000			
PAV2 <--- Preferred_Avoiding	1.012	.312	3.238	.001
PAV3 <--- Preferred_Avoiding	-.025	.254	-.100	.920
PAV4 <--- Preferred_Avoiding	1.123	.324	3.470	***
PAV5 <--- Preferred_Avoiding	1.302	.323	4.027	***
PAV6 <--- Preferred_Avoiding	1.496	.362	4.138	***
PDO1 <--- Preferred_Dominating	1.000			
PDO2 <--- Preferred_Dominating	1.218	.199	6.134	***
PDO3 <--- Preferred_Dominating	1.029	.201	5.118	***
PDO4 <--- Preferred_Dominating	.992	.165	6.011	***
PDO5 <--- Preferred_Dominating	.959	.189	5.077	***
PCO1 <--- Preferred_Compromising	1.000			
PCO2 <--- Preferred_Compromising	.635	.205	3.095	.002
PCO3 <--- Preferred_Compromising	1.254	.264	4.746	***
PCO4 <--- Preferred_Compromising	1.005	.266	3.771	***
PIN7 <--- Preferred_Integrating	.835	.146	5.706	***

Covariances: (Group number 1 - Default model)

		Estimate	S.E.	C.R.	P Label
Preferred_Integrating	<--> Preferred_Obliging	.248	.094	2.637	.008
Preferred_Obliging	<--> Preferred_Avoiding	.091	.055	1.658	.097
Preferred_Avoiding	<--> Preferred_Dominating	.163	.075	2.173	.030
Preferred_Compromising	<--> Preferred_Dominating	.216	.084	2.564	.010
Preferred_Integrating	<--> Preferred_Avoiding	.102	.069	1.476	.140
Preferred_Compromising	<--> Preferred_Avoiding	.058	.054	1.066	.286
Preferred_Compromising	<--> Preferred_Integrating	.386	.114	3.376	***
Preferred_Obliging	<--> Preferred_Dominating	.331	.114	2.911	.004
Preferred_Integrating	<--> Preferred_Dominating	.274	.099	2.754	.006
Preferred_Compromising	<--> Preferred_Obliging	.225	.086	2.610	.009

Correlations: (Group number 1 - Default model)

		Estimate
Preferred_Integrating	<--> Preferred_Obliging	.660
Preferred_Obliging	<--> Preferred_Avoiding	.332
Preferred_Avoiding	<--> Preferred_Dominating	.438
Preferred_Compromising	<--> Preferred_Dominating	.558
Preferred_Integrating	<--> Preferred_Avoiding	.258
Preferred_Compromising	<--> Preferred_Avoiding	.192
Preferred_Compromising	<--> Preferred_Integrating	.941
Preferred_Obliging	<--> Preferred_Dominating	.936
Preferred_Integrating	<--> Preferred_Dominating	.535
Preferred_Compromising	<--> Preferred_Obliging	.792

Model Fit Summary

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	94	760.689	340	.000	2.237
Saturated model	434	.000	0		
Independence model	28	1367.407	406	.000	3.368

Baseline Comparisons

Model	NFI	RFI	IFI	TLI	CFI
	Delta1	rho1	Delta2	rho2	
Default model	.444	.336	.591	.477	.562
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.837	.372	.471
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

NCP

Model	NCP	LO 90	HI 90
Default model	420.689	344.565	504.539
Saturated model	.000	.000	.000
Independence model	961.407	852.903	1077.487

FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	13.584	7.512	6.153	9.010
Saturated model	.000	.000	.000	.000
Independence model	24.418	17.168	15.230	19.241

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.149	.135	.163	.000
Independence model	.206	.194	.218	.000

AIC

Model	AIC	BCC	BIC	CAIC
Default model	948.689	1150.615		
Saturated model	868.000	1800.296		
Independence model	1423.407	1483.555		

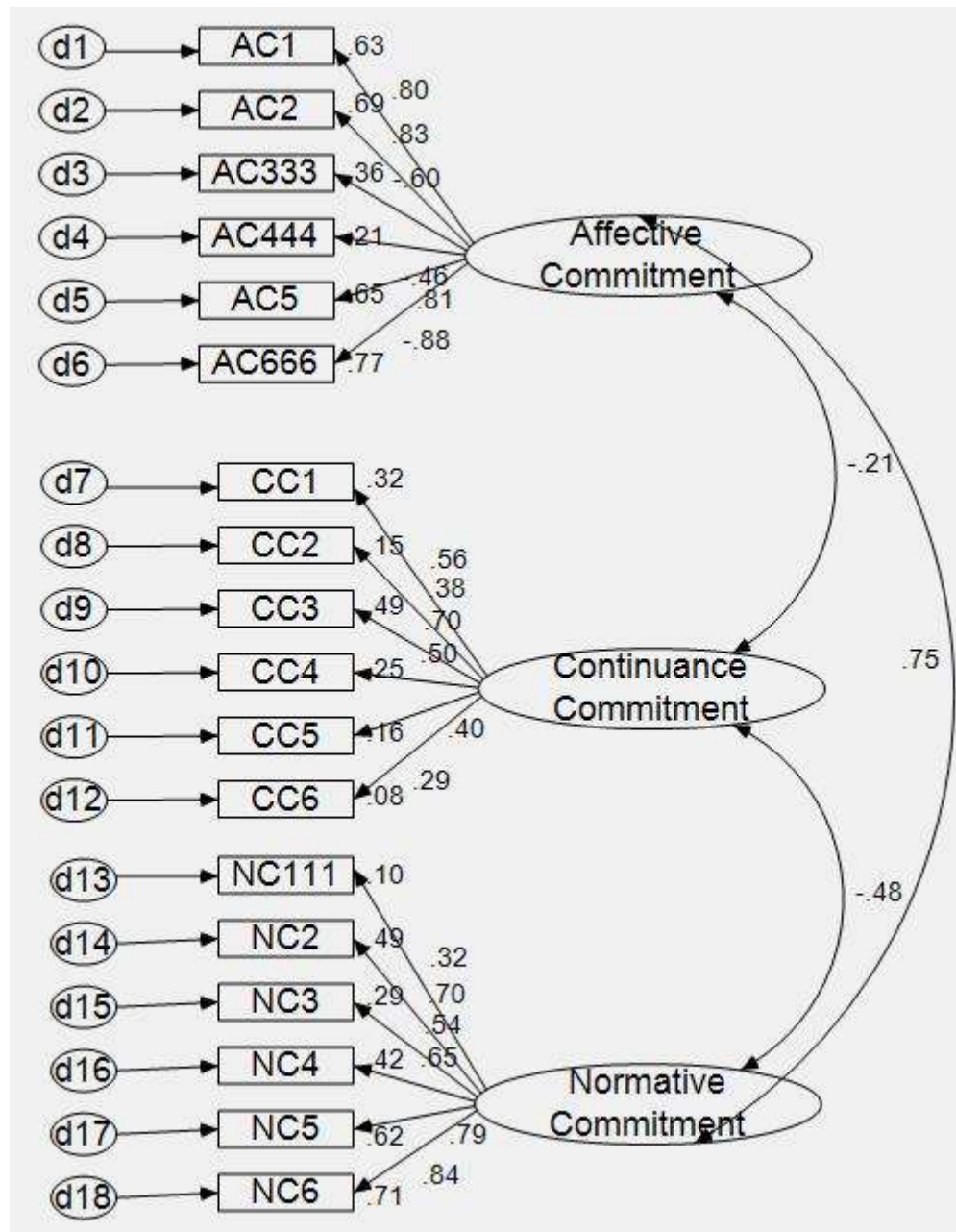
ECVI

Model	ECVI	LO 90	HI 90	MECVI
Default model	16.941	15.582	18.438	20.547
Saturated model	15.500	15.500	15.500	32.148
Independence model	25.418	23.480	27.491	26.492

HOELTER

Model	HOELTER	HOELTER
	.05	.01
Default model	29	30
Independence model	19	20

Appendix 9(f) Confirmatory factor analysis in the Three-Component Model of Organizational Commitment



Notes for Model (Default model)

Computation of degrees of freedom (Default model)

Number of distinct sample moments: 189
Number of distinct parameters to be estimated: 57
Degrees of freedom (189 - 57): 132

Result (Default model)

Minimum was achieved
Chi-square = 217.378
Degrees of freedom = 132
Probability level = .000

Estimates (Group number 1 - Default model)

Scalar Estimates (Group number 1 - Default model)

Maximum Likelihood Estimates

Regression Weights: (Group number 1 - Default model)

		Estimate	S.E.	C.R.	P Label
AC1	<--- Affective_Commitment	1.000			
AC2	<--- Affective_Commitment	.933	.161	5.788	***
AC333	<--- Affective_Commitment	-.530	.137	-3.879	***
AC444	<--- Affective_Commitment	-.403	.139	-2.893	.004
AC5	<--- Affective_Commitment	.761	.136	5.581	***
AC666	<--- Affective_Commitment	-.935	.151	-6.209	***
CC1	<--- Continuance_Commitment	1.000			
CC2	<--- Continuance_Commitment	.712	.396	1.798	.072
CC3	<--- Continuance_Commitment	1.166	.461	2.531	.011
CC4	<--- Continuance_Commitment	.871	.399	2.185	.029
CC5	<--- Continuance_Commitment	.642	.346	1.856	.063
CC6	<--- Continuance_Commitment	.467	.332	1.408	.159

	Estimate	S.E.	C.R.	P Label
NC111 <--- Normative_Commitment	1.000			
NC2 <--- Normative_Commitment	2.109	1.139	1.852	.064
NC3 <--- Normative_Commitment	1.826	1.052	1.736	.083
NC4 <--- Normative_Commitment	1.989	1.092	1.822	.068
NC5 <--- Normative_Commitment	2.433	1.287	1.890	.059
NC6 <--- Normative_Commitment	2.629	1.377	1.910	.056

Covariances: (Group number 1 - Default model)

		Estimate	S.E.	C.R.	P Label
Affective_Commitment <-- Continuan	ce_Commitment	-.224	.224	-.998	.318
Normative_Commitment <-- Continuan	ce_Commitment	-.156	.115	-1.355	.175
Normative_Commitment <-- Affective	_Commitment	.364	.217	1.680	.093

Correlations: (Group number 1 - Default model)

	Estimate	
Affective_Commitment <--> Continuan	ce_Commitment	-.214
Normative_Commitment <--> Continuan	ce_Commitment	-.480
Normative_Commitment <--> Affective	_Commitment	.746

Model Fit Summary

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	57	217.378	132	.000	1.647
Saturated model	189	.000	0		
Independence model	18	460.654	171	.000	2.694

Baseline Comparisons

Model	NFI	RFI	IFI	TLI	CFI
	Delta1	rho1	Delta2	rho2	
Default model	.528	.389	.740	.618	.705
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.772	.408	.544
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

NCP

Model	NCP	LO 90	HI 90
Default model	85.378	48.803	129.854
Saturated model	.000	.000	.000
Independence model	289.654	229.727	357.242

FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	4.940	1.940	1.109	2.951
Saturated model	.000	.000	.000	.000
Independence model	10.469	6.583	5.221	8.119

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.121	.092	.150	.000
Independence model	.196	.175	.218	.000

AIC

Model	AIC	BCC	BIC	CAIC
Default model	331.378	418.018		
Saturated model	378.000	665.280		
Independence model	496.654	524.014		

ECVI

Model	ECVI	LO 90	HI 90	MECVI
Default model	7.531	6.700	8.542	9.500
Saturated model	8.591	8.591	8.591	15.120
Independence model	11.288	9.926	12.824	11.909

HOELTER

Model	HOELTER	HOELTER
	.05	.01
Default model	33	35
Independence model	20	21

Appendix 10: SPSS output on the Paired sample T-test

Appendix 10(a): Paired Sample T test between the actual and the preferred culture types:

Paired Samples Statistics					
	Mean	N	Std. Deviation	Std. Error Mean	
Pair 1	23.5385	13	10.59572	2.93872	
Clan					
P_clan	28.6154	13	9.48278	2.63005	
Pair 2	18.0769	13	9.16025	2.54060	
Adhocracy					
P_adhocracy	20.0769	13	8.09796	2.24597	
Pair 3	23.4615	13	10.28442	2.85238	
Market					
P_market	22.3846	13	8.16025	2.26325	
Pair 4	35.0769	13	19.56809	5.42721	
Hierarchy					
P_hierarchy	29.0000	13	14.96663	4.15100	

Paired Samples Correlations

	N	Correlation	Sig.
Pair 1 Clan & P_clan	13	.740	.004
Pair 2 Adhocracy & P_adhocracy	13	.787	.001
Pair 3 Market & P_market	13	.795	.001
Pair 4 Hierarchy & P_hierarchy	13	.768	.002

Paired Samples Test

	Paired Differences						t	df	Sig. (2-tailed)
	95% Confidence Interval of the Difference								
	Mean	Std. Deviation	Std. Error Mean	Lower	Upper				
Pair 1 Clan - P_clan	-5.07692	7.30823	2.02694	-9.49324	-.66060	-2.505	12	.028	
Pair 2 Adhocracy - P_adhocracy	-2.00000	5.71548	1.58519	-5.45383	1.45383	-1.262	12	.231	
Pair 3 Market - P_market	1.07692	6.23781	1.73006	-2.69255	4.84639	.622	12	.545	
Pair 4 Hierarchy - P_hierarchy	6.07692	12.53303	3.47604	-1.49671	13.65056	1.748	12	.106	

Appendix 10(b): Paired Sample T test between the actual and the preferred conflict solving approaches

Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 Integrating	68.4615	13	8.54025	2.36864
P_integrating	76.0769	13	8.98574	2.49220
Pair 2 Obliging	67.3077	13	8.76912	2.43212
P_obliging	62.8462	13	9.59901	2.66229
Pair 3 Avoiding	65.1538	13	9.10903	2.52639
P_avoiding	55.4615	13	10.85215	3.00985
Pair 4 Dominating	50.3077	13	14.74440	4.08936
P_dominating	60.3846	13	12.47356	3.45954
Pair 5 Compromising	61.2308	13	11.56974	3.20887
P_compromising	73.3077	13	9.29502	2.57798

Paired Samples Correlations

	N	Correlation	Sig.
Pair 1 Integrating & P_integrating	13	.650	.016
Pair 2 Obliging & P_obliging	13	.728	.005
Pair 3 Avoiding & P_avoiding	13	.563	.045
Pair 4 Dominating & P_dominating	13	.050	.872
Pair 5 Compromising & P_compromising	13	-.166	.588

Paired Samples Test

	Paired Differences						t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		Upper			
				Lower	Upper				
Pair 1 Integrating - P_integrating	-7.61538	7.34323	2.03665	-12.05286	-3.17791	-3.739	12	.003	
Pair 2 Obliging - P_obliging	4.46154	6.81439	1.88997	.34364	8.57943	2.361	12	.036	
Pair 3 Avoiding - P_avoiding	9.69231	9.45502	2.62235	3.97870	15.40592	3.696	12	.003	
Pair 4 Dominating - P_dominating	-10.07692	18.83464	5.22379	-21.45858	1.30473	-1.929	12	.078	
Pair 5 Compromising - P_compromising	-12.07692	15.99720	4.43682	-21.74393	-2.40991	-2.722	12	.019	

Appendix 11: SPSS output on the correlation tests

Appendix 11(a) Non-parametric correlation between size and the existence duration of the company

Correlations

	more_than_500	Less_than_500	more_than_20	less_than_20
Spearman's rho				
more_than_500	1.000	-1.000**	.732**	-.732**
Correlation Coefficient				
Sig. (2-tailed)			.004	.004
N	13	13	13	13
Less_than_500	-1.000**	1.000	-.732**	.732**
Correlation Coefficient				
Sig. (2-tailed)			.004	.004
N	13	13	13	13
more_than_20	.732**	-.732**	1.000	-1.000**
Correlation Coefficient				
Sig. (2-tailed)	.004	.004		
N	13	13	13	13
less_than_20	-.732**	.732**	-1.000**	1.000
Correlation Coefficient				
Sig. (2-tailed)	.004	.004		
N	13	13	13	13

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

Appendix 11(b): Non-parametric correlation between actual organizational culture profile and existence duration of companies

Correlations

	N=13		more_than_20	less_than_20	Clan	Adhocracy	Market	Hierarchy
Spearman's rho	more_than_20	Correlation Coefficient Sig. (2-tailed)	1.000	-1.000**	-.310	-.602*	-.062	.599*
	less_than_20	Correlation Coefficient Sig. (2-tailed)	-1.000**	1.000	.310	.602*	.062	-.599*
Clan	Clan	Correlation Coefficient Sig. (2-tailed)	-.310	.310	1.000	.064	-.140	-.298
	Adhocracy	Correlation Coefficient Sig. (2-tailed)	.303	.303	.	.836	.647	.324
Adhocracy	Adhocracy	Correlation Coefficient Sig. (2-tailed)	-.602*	.602*	.064	1.000	.603*	-.866**
	Market	Correlation Coefficient Sig. (2-tailed)	.029	.029	.836	.	.029	.000
Market	Market	Correlation Coefficient Sig. (2-tailed)	-.062	.062	-.140	.603*	1.000	-.652*
	Hierarchy	Correlation Coefficient Sig. (2-tailed)	.841	.841	.647	.029	.	.016
Hierarchy	Hierarchy	Correlation Coefficient Sig. (2-tailed)	.599*	-.599*	-.298	-.866**	-.652*	1.000
			.031	.031	.324	.000	.016	.

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

* . Correlation is significant at the 0.05 level (2-tailed).

Appendix 11(c): Non-parametric correlation between preferred organizational culture profile and existence duration of companies

Correlations

N=13		more_than_20	less_than_20	P_clan	P_adhocracy	P_market	P_hierarchy
Spearman's rho	more_than_20	1.000	-1.000**	-.207	-.434	-.041	.352
				.497	.139	.893	.238
	less_than_20	-1.000**	1.000	.207	.434	.041	-.352
				.497	.139	.893	.238
	P_clan	-.207	.207	1.000	-.133	-.322	-.205
		.497	.497		.665	.283	.501
	P_adhocracy	-.434	.434	-.133	1.000	.443	-.728**
		.139	.139	.665		.130	.005
	P_market	-.041	.041	-.322	.443	1.000	-.666*
		.893	.893	.283	.130		.013
	P_hierarchy	.352	-.352	-.205	-.728**	-.666*	1.000
		.238	.238	.501	.005	.013	

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

* . Correlation is significant at the 0.05 level (2-tailed).

Appendix 11(d): Non-parametric correlation between actual organizational culture profile and size of companies

Correlations

N=13		more_than_500	Less_than_500	Clan	Adhocracy	Market	Hierarchy
Spearman's rho	more_than_500	1.000	-1.000**	-.381	-.617*	-.275	.614*
	Less_than_500		1.000	.381	.617*	.275	-.614*
	Clan	-.381	.381	1.000	.064	-.140	-.298
	Adhocracy	.199	.199		.836	.647	.324
	Market	-.617*	.617*	.064	1.000	.603	-.866**
	Hierarchy	.025	.025	.836		.029	.000
	more_than_500	1.000	-.275	-.140	.603*	1.000	-.652*
	Less_than_500		.275	.647	.029		.016
	Clan	-.381	.381	1.000	-.866**	-.652*	1.000
	Adhocracy	.199	.199		.000	.016	
	Market	-.617*	.617*	.064	1.000	1.000	
	Hierarchy	.025	.025	.836			
	more_than_500	1.000	-.614*	-.298	-.866**	-.652*	1.000
	Less_than_500		.614*	.324	.000	.016	
	Clan	-.381	.381	1.000	-.866**	-.652*	1.000
	Adhocracy	.199	.199		.000	.016	
	Market	-.617*	.617*	.064	1.000	1.000	
	Hierarchy	.025	.025	.836			

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

* . Correlation is significant at the 0.05 level (2-tailed).

Appendix 11(e): Non-parametric correlation between preferred organizational culture profile and size of companies

Correlations

	N=13	more_than_500	Less_than_500	P_clan	P_adhocracy	P_market	P_hierarchy
Spearman's rho							
more_than_500	Correlation Coefficient Sig. (2-tailed)	1.000	-1.000**	-.212	-.465	-.212	.467
Less_than_500	Correlation Coefficient Sig. (2-tailed)	-1.000**	1.000	.212	.465	.212	-.467
P_clan	Correlation Coefficient Sig. (2-tailed)	-.212	.212	1.000	-.133	-.322	-.205
P_adhocracy	Correlation Coefficient Sig. (2-tailed)	.465	.486	-.133	1.000	.443	-.728**
P_market	Correlation Coefficient Sig. (2-tailed)	-.212	.486	-.322	.443	1.000	-.666*
P_hierarchy	Correlation Coefficient Sig. (2-tailed)	.467	-.467	-.205	-.728**	-.666*	1.000

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

* . Correlation is significant at the 0.05 level (2-tailed).

Appendix 11(f): Non-parametric correlation between actual organizational culture profile and annual turnover of company

Correlations

N=13		more_than_300M	less_than_300M	Clan	Adhocracy	Market	Hierarchy
Spearman's rho	more_than_300M	1.000	-1.000**	-.330	.187	.165	-.165
	Sig. (2-tailed)	.	.	.270	.541	.590	.590
less_than_300M	Correlation Coefficient	-1.000**	1.000	.330	-.187	-.165	.165
	Sig. (2-tailed)	.	.	.270	.541	.590	.590
Clan	Correlation Coefficient	-.330	.330	1.000	.064	-.140	-.298
	Sig. (2-tailed)	.270	.270	.	.836	.647	.324
Adhocracy	Correlation Coefficient	.187	-.187	.064	1.000	.603	-.866**
	Sig. (2-tailed)	.541	.541	.836	.	.029	.000
Market	Correlation Coefficient	.165	-.165	-.140	.603*	1.000	-.652*
	Sig. (2-tailed)	.590	.590	.647	.029	.	.016
Hierarchy	Correlation Coefficient	-.165	.165	-.298	-.866**	-.652*	1.000
	Sig. (2-tailed)	.590	.590	.324	.000	.016	.

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

* . Correlation is significant at the 0.05 level (2-tailed).

Appendix 11(g): Non-parametric correlation between preferred organizational culture profile and annual turnover of company

		correlation						
N=13		more_than_300M	less_than_300M	P_clan	P_adhocracy	P_market	P_hierarchy	
Spearman's rho	more_than_300M	1.000	-1.000**	-.581*	.206	.373	.000	
				.037	.499	.209	1.000	
	less_than_300M	-1.000**	1.000	.581*	-.206	-.373	.000	
				.037	.499	.209	1.000	
	P_clan	-.581*	.581*	1.000	-.133	-.322	-.205	
		.037	.037		.665	.283	.501	
	P_adhocracy	.206	-.206	-.133	1.000	.443	-.728**	
		.499	.499	.665		.130	.005	
	P_market	.373	-.373	-.322	.443	1.000	-.666*	
		.209	.209	.283	.130		.013	
	P_hierarchy	.000	.000	-.205	-.728**	-.666*	1.000	
		1.000	1.000	.501	.005	.013		

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

* . Correlation is significant at the 0.05 level (2-tailed).

Appendix 11(h): Non-parametric correlation between actual organizational culture profile and actual conflict solving approach

Correlations

	Clan	Adhocracy	Market	Hierarchy	Integrating	Obliging	Avoiding	Dominating	Compromising
Spearman's rho	Clan	1.000	-.140	-.298	.549	-.071	-.568*	-.490	.490
	Correlation Coefficient								
	Sig. (2-tailed)		.647	.324	.052	.819	.043	.089	.089
	N	13	13	13	13	13	13	13	13
Adhocracy	Adhocracy	.064	.603*	-.866**	.324	-.130	-.304	-.299	.171
	Correlation Coefficient								
	Sig. (2-tailed)	.836	.029	.000	.281	.673	.313	.321	.577
	N	13	13	13	13	13	13	13	13
Market	Market	-.140	.603*	-.652*	.230	.208	.331	.066	.018
	Correlation Coefficient								
	Sig. (2-tailed)	.647	.029	.016	.449	.496	.269	.830	.954
	N	13	13	13	13	13	13	13	13
Hierarchy	Hierarchy	-.298	-.866**	-.652*	1.000	-.011	.364	.415	-.213
	Correlation Coefficient								
	Sig. (2-tailed)	.324	.000	.016	.061	.971	.221	.158	.485
	N	13	13	13	13	13	13	13	13
Integrating	Integrating	.549	.324	.230	-.533	.081	-.321	.058	.676*
	Correlation Coefficient								
	Sig. (2-tailed)	.052	.281	.449	.061	.793	.285	.850	.011
	N	13	13	13	13	13	13	13	13

Appendix 11(i): Non-parametric correlation between actual organizational culture profile and organizational commitment

Correlations

N=13		Clan	Adhocracy	Market	Hierarchy	AC	CC	NC
Spearman's rho	Clan	1.000	.064	-.140	-.298	.430	-.721**	.058
			.836	.647	.324	.143	.005	.851
	N	13	13	13	13	13	13	13
Adhocracy	Adhocracy	.064	1.000	.603*	-.866**	.166	-.221	.082
		.836		.029	.000	.587	.468	.790
	N	13	13	13	13	13	13	13
Market	Market	-.140	.603*	1.000	-.652*	-.127	.276	-.378
		.647	.029		.016	.680	.361	.203
	N	13	13	13	13	13	13	13
Hierarchy	Hierarchy	-.298	-.866**	-.652*	1.000	-.074	.253	.138
		.324	.000	.016		.809	.405	.653
	N	13	13	13	13	13	13	13
AC	AC	.430	.166	-.127	-.074	1.000	-.123	.560*
		.143	.587	.680	.809		.689	.047
	N	13	13	13	13	13	13	13

CC	Correlation Coefficient	-.721**	-.221	.276	.253	-.123	1.000	-.151
	Sig. (2-tailed)	.005	.468	.361	.405	.689	.	.623
	N	13	13	13	13	13	13	13
NC	Correlation Coefficient	.058	.082	-.378	.138	.560*	-.151	1.000
	Sig. (2-tailed)	.851	.790	.203	.653	.047	.623	.
	N	13	13	13	13	13	13	13

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

* . Correlation is significant at the 0.05 level (2-tailed).

Appendix 11(j): Non-parametric correlation between actual conflict solving approach and organizational commitment

correlation

	Integrating	Obliging	Avoiding	Dominating	Compromising	AC	CC	NC
Spearman's rho	Integrating	1.000	.081	-.321	.058	.676*	-.163	.108
	Correlation Coefficient							
	Sig. (2-tailed)		.793	.285	.850	.011	.595	.725
	N	13	13	13	13	13	13	13
Obliging	Obliging	.081	1.000	.528	.133	-.342	.235	-.266
	Correlation Coefficient							
	Sig. (2-tailed)	.793		.063	.665	.253	.440	.379
	N	13	13	13	13	13	13	13
Avoiding	Avoiding	-.321	.528	1.000	.532	-.412	.584*	-.449
	Correlation Coefficient							
	Sig. (2-tailed)	.285	.063		.061	.162	.036	.124
	N	13	13	13	13	13	13	13
Dominating	Dominating	.058	.133	.532	1.000	.091	.778**	-.033
	Correlation Coefficient							
	Sig. (2-tailed)	.850	.665	.061		.767	.002	.915
	N	13	13	13	13	13	13	13
Compromising	Compromising	.676*	-.342	-.412	.091	1.000	.805**	.207
	Correlation Coefficient							
	Sig. (2-tailed)	.011	.253	.162	.767		.001	.496
	N	13	13	13	13	13	13	13

AC	Correlation Coefficient	.530	-.338	-.531	.223	.805**	1.000	-.123	.560*
	Sig. (2-tailed)	.063	.259	.062	.464	.001	.	.689	.047
	N	13	13	13	13	13	13	13	13
CC	Correlation Coefficient	-.163	.235	.584*	.778**	-.199	-.123	1.000	-.151
	Sig. (2-tailed)	.595	.440	.036	.002	.514	.689	.	.623
	N	13	13	13	13	13	13	13	13
NC	Correlation Coefficient	.108	-.266	-.449	-.033	.207	.560*	-.151	1.000
	Sig. (2-tailed)	.725	.379	.124	.915	.496	.047	.623	.
	N	13	13	13	13	13	13	13	13

*. Correlation is significant at the 0.05 level (2-tailed).

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